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Effects of Distribution Channel Types and Determinants Influencing the Market Share of National Brands and Private Labels

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Presenter

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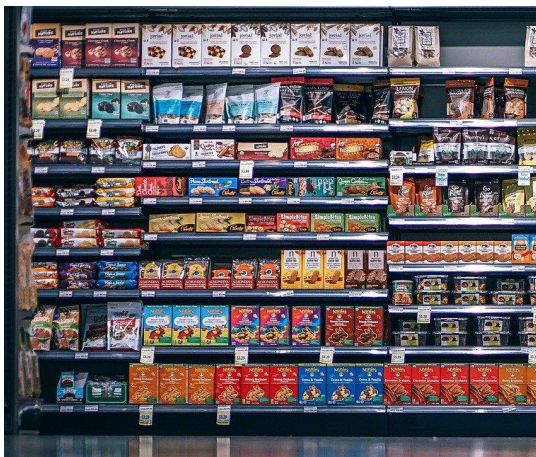
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Overview

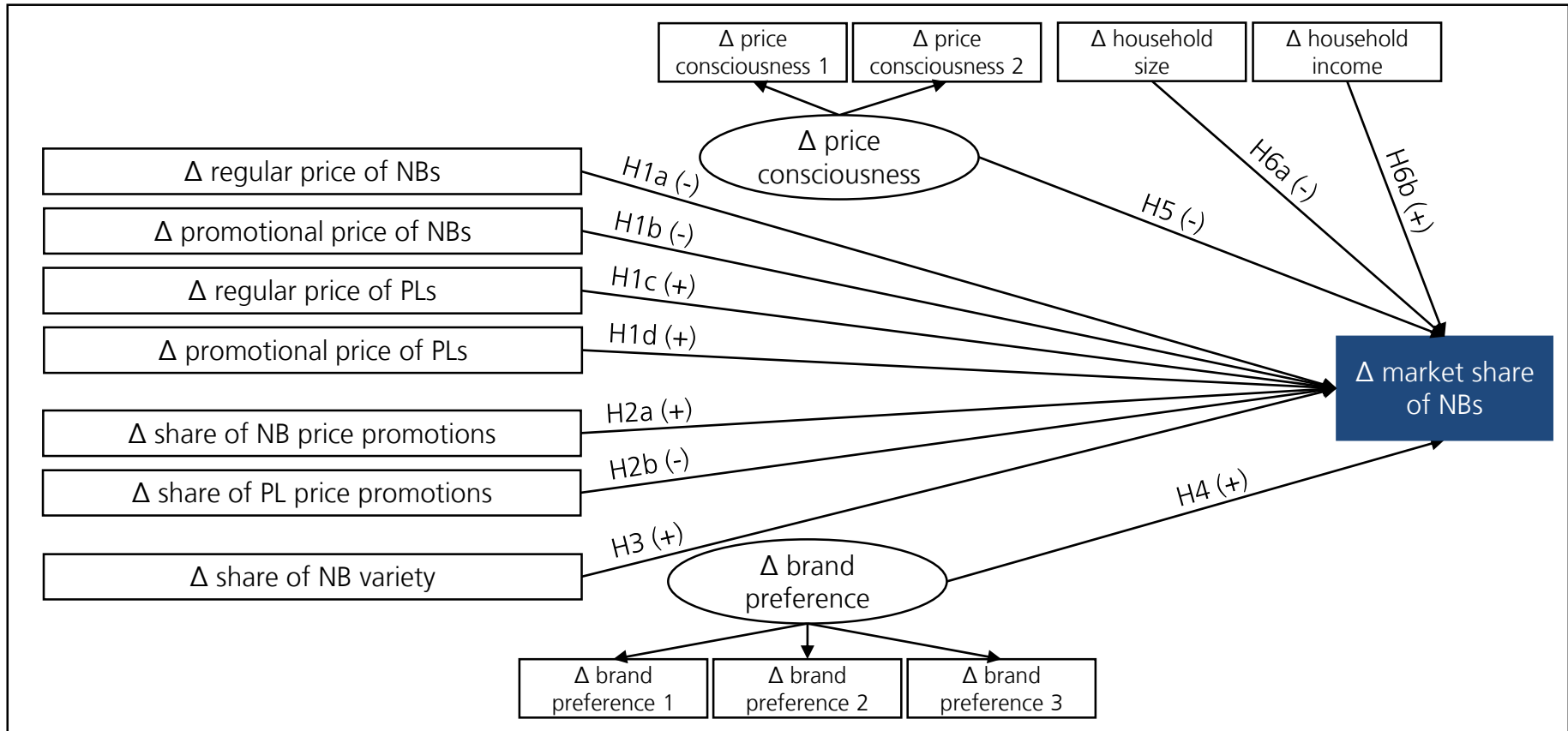
1. Research Questions
2. Research Model
3. Hypotheses Overview
4. Empirical Analysis
5. Discussion:
 - What's new?
 - What's confirmed?
 - What's most surprising?
 - What limits the results?

1. Research Questions

- How can purchase of national brands (NBs) be influenced in competition with private labels (PLs)?
- Which determinants affect the purchase of NBs?
- Are there similarities differences between types of distribution channels?



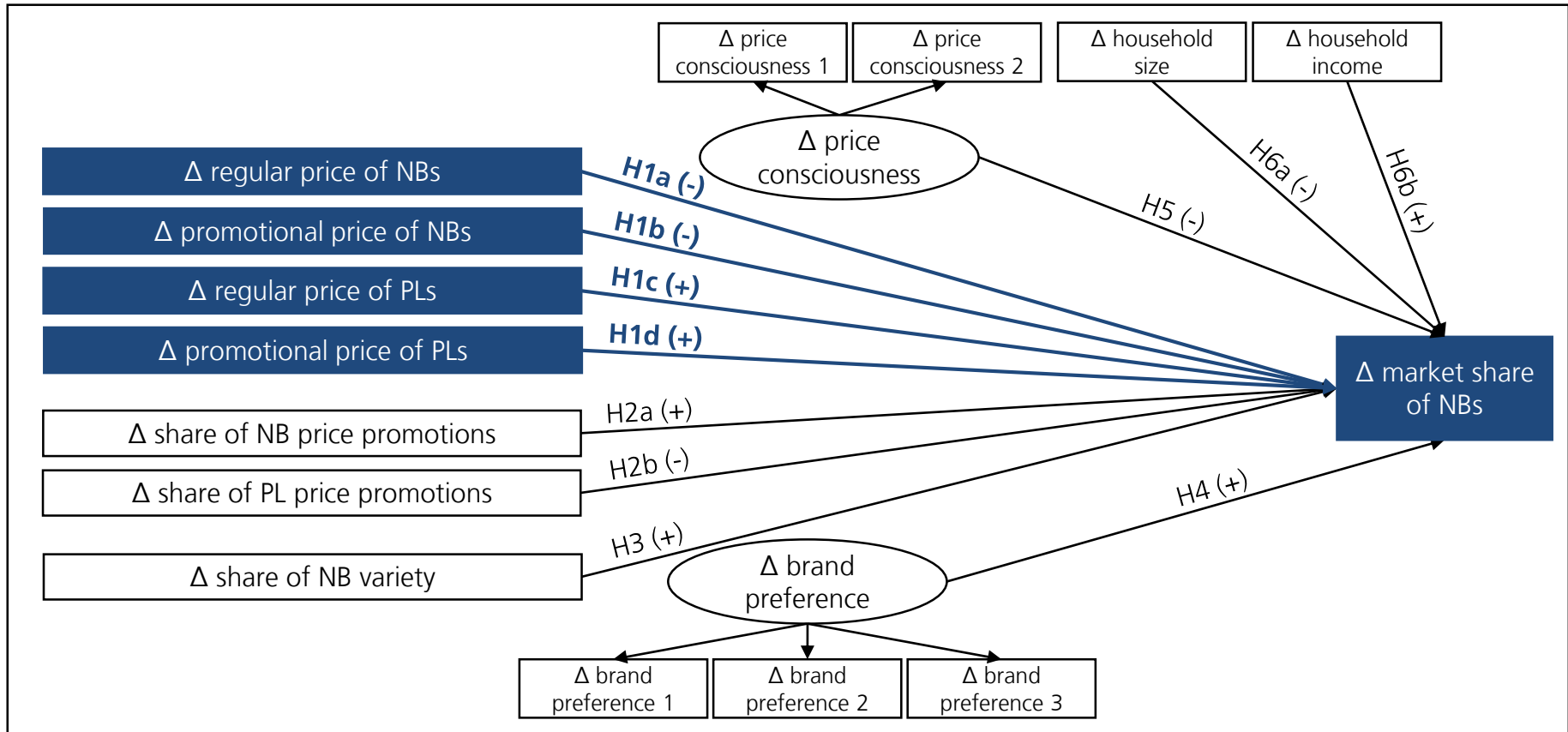
2. Research Model



Multi group analysis:

H7: The impact of the determinants of the market share of NBs show significant differences between the types of distribution channels (discounters, supermarkets, hypermarkets).

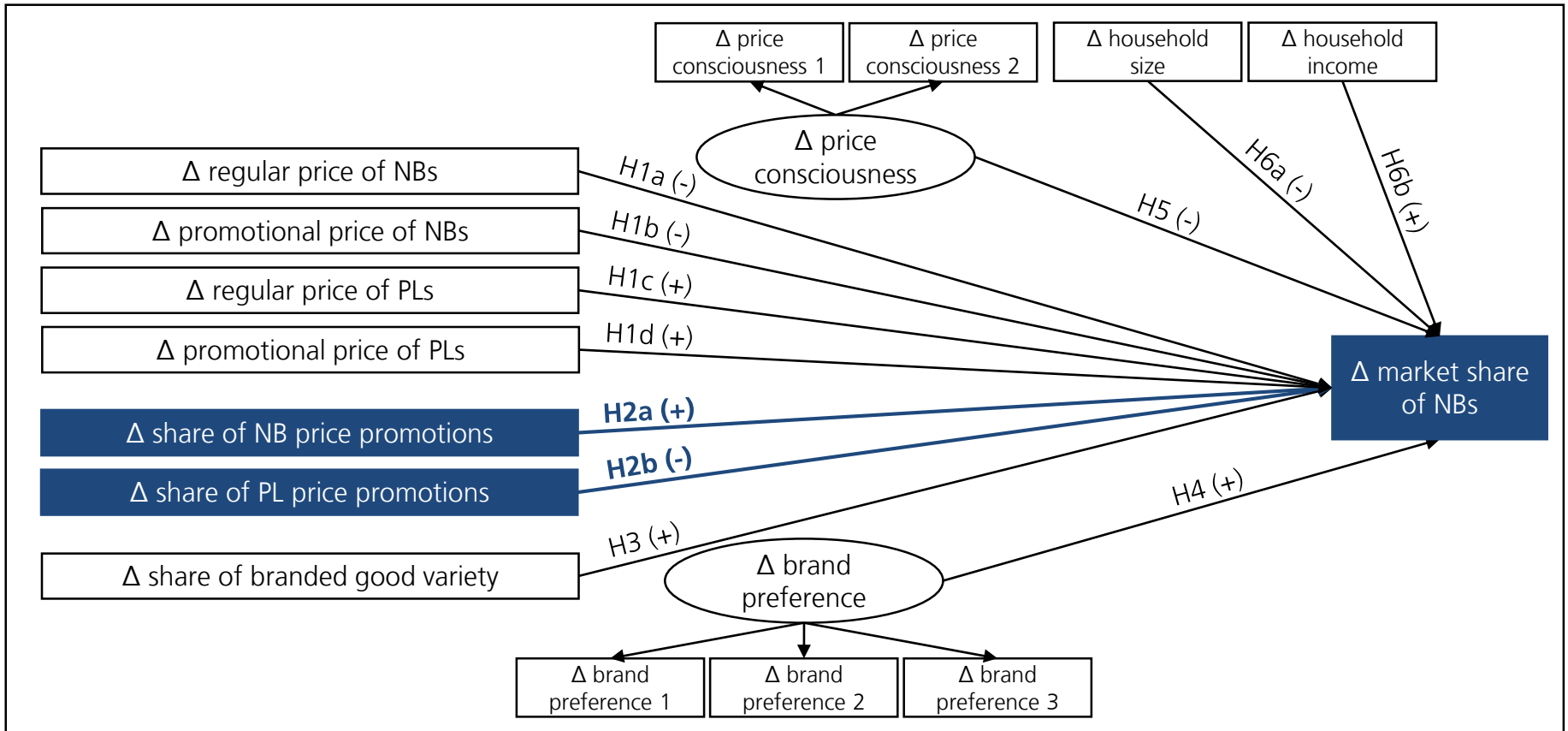
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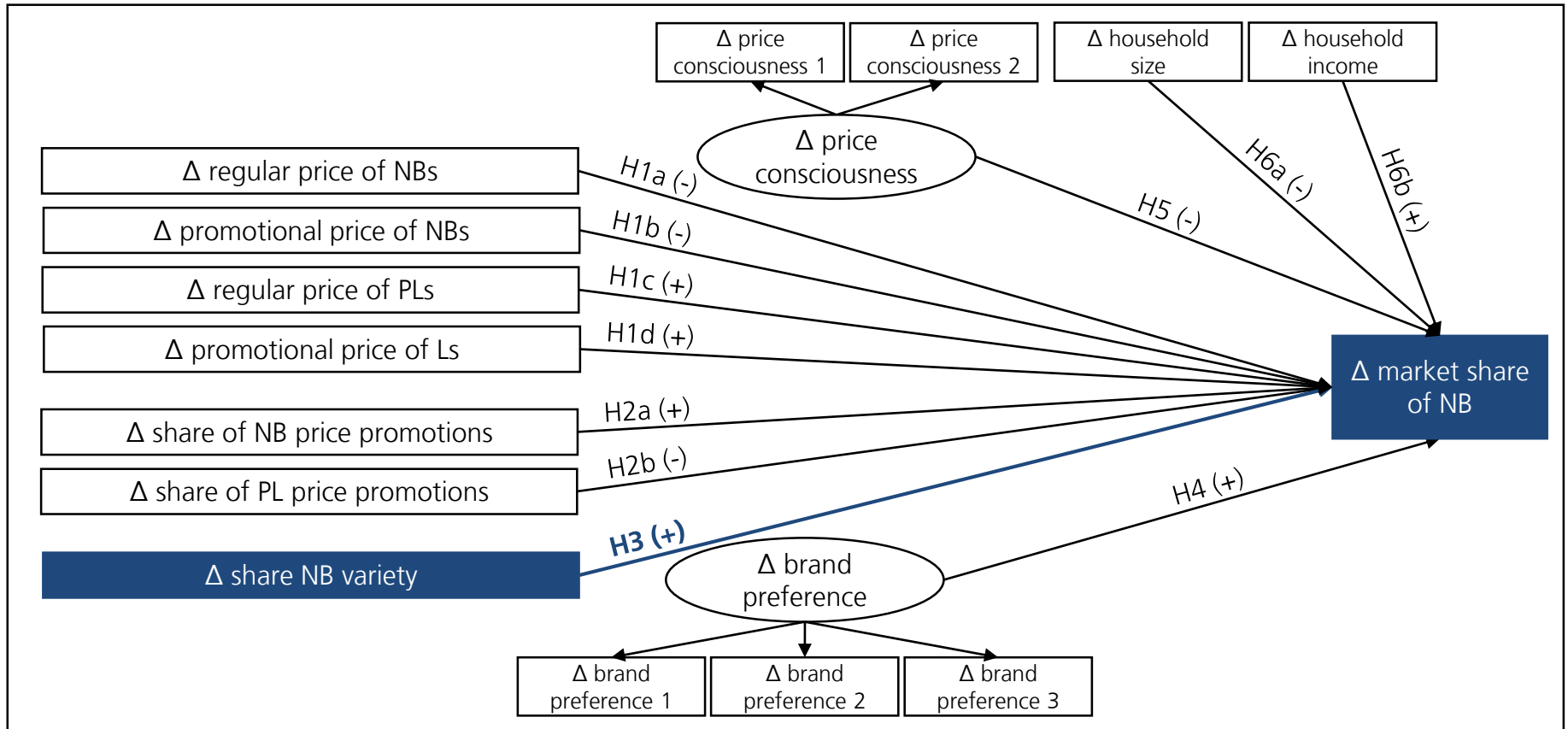
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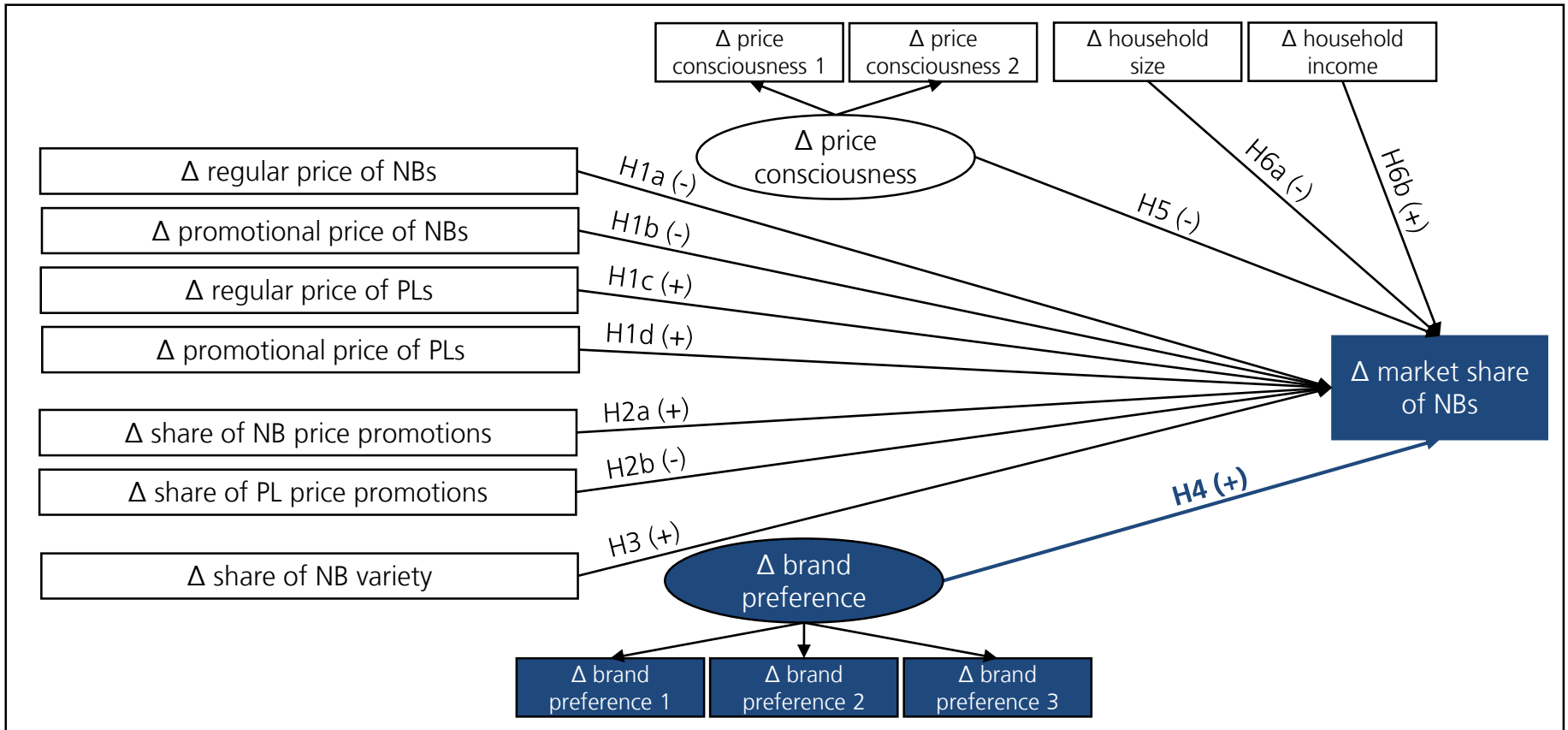
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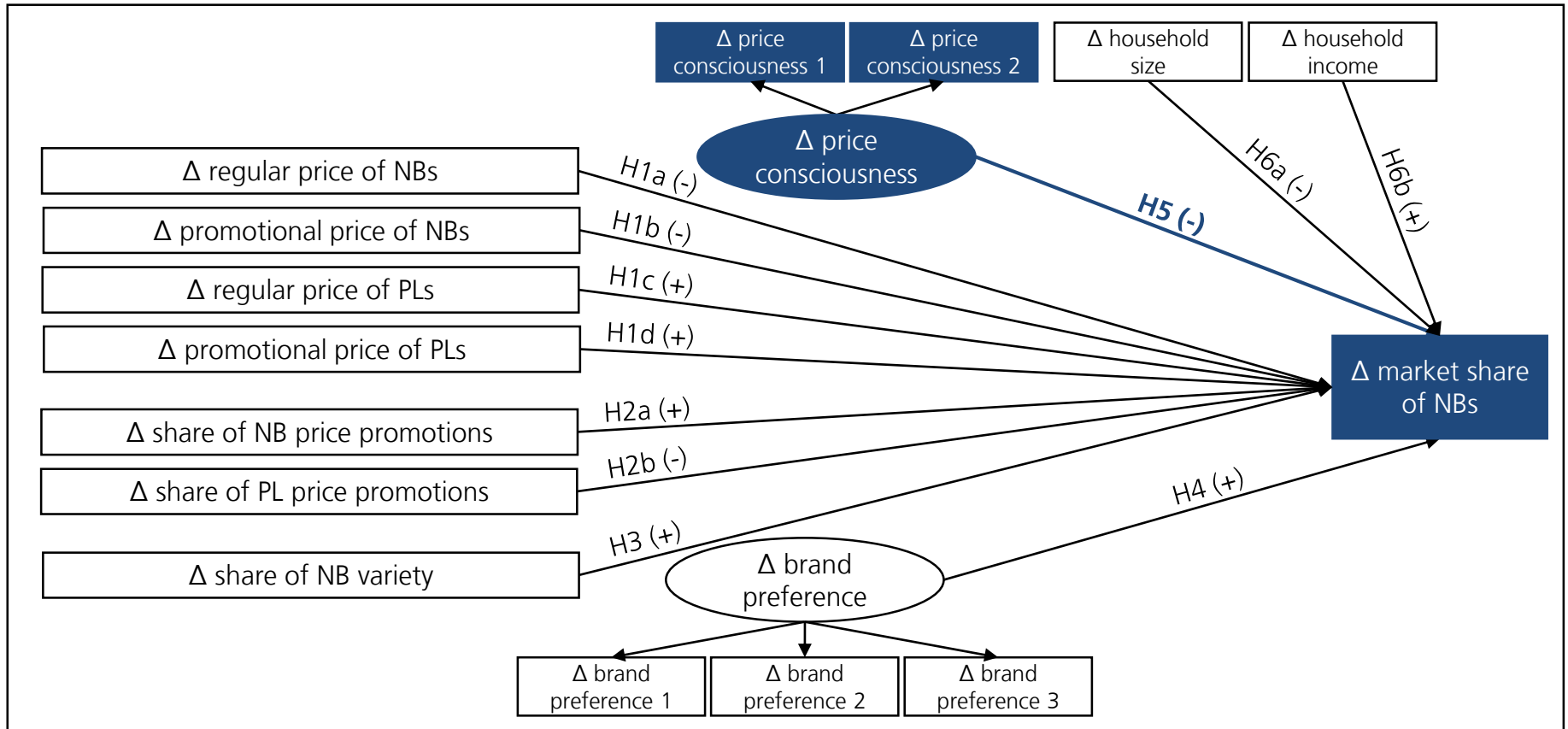
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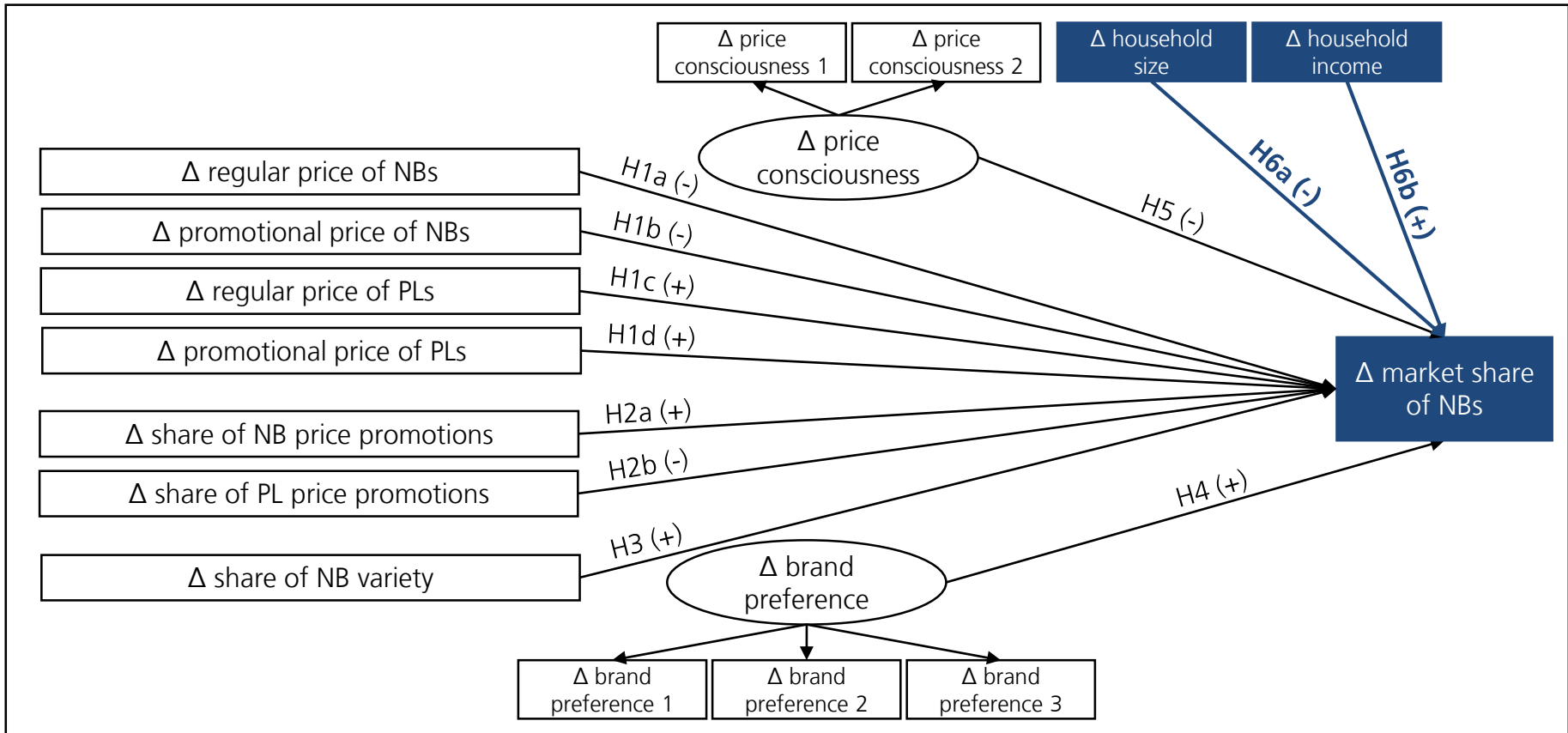
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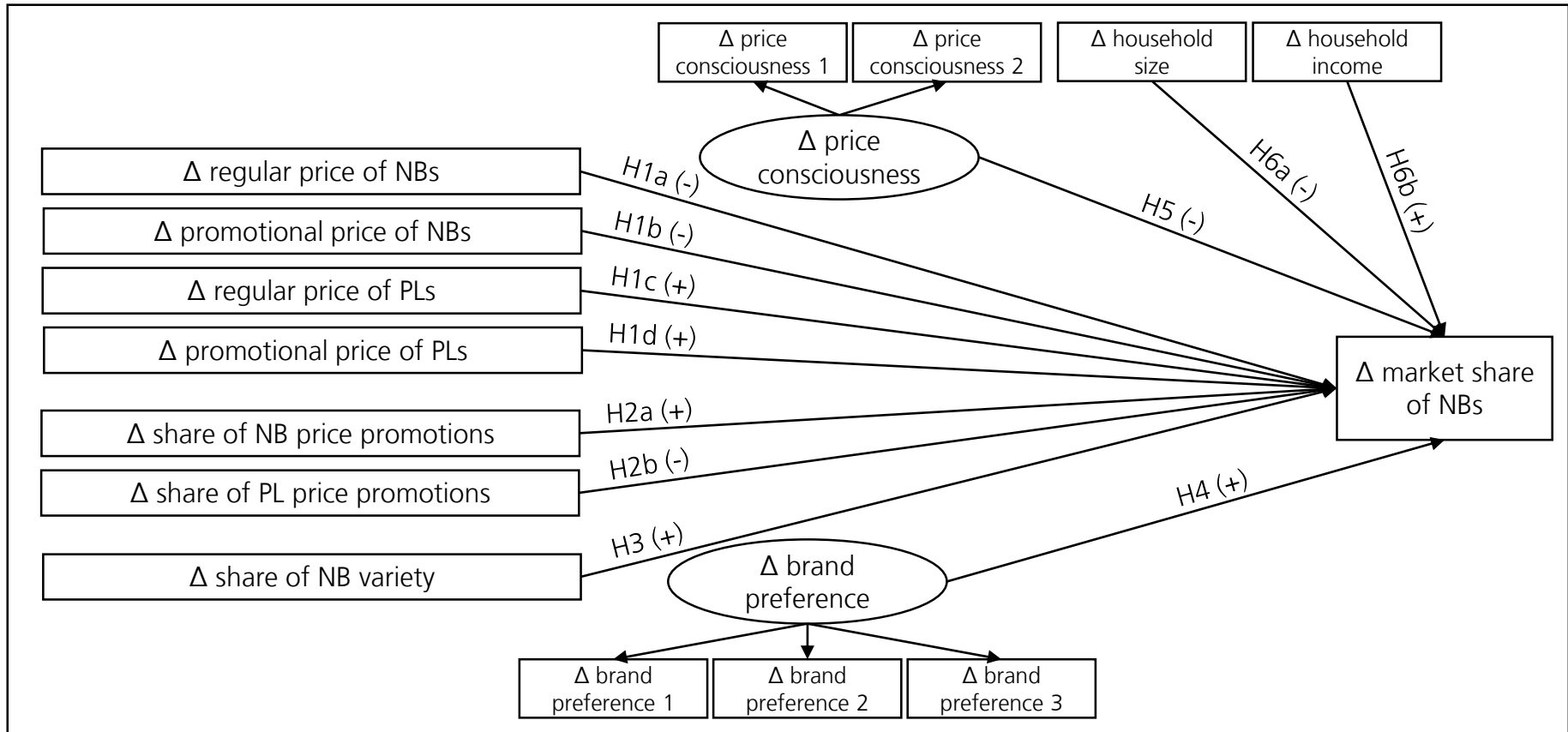
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Multi group analysis:

H7: The impact of the determinants of the market share of NBs show significant differences between the types of distribution channels (discounters, supermarkets, hypermarkets).

3. Hypotheses Overview

	independent variable	Literature
1	H1a Δ regular price of NBs	Putsis 1997; Cotterill and Putsis 2000; Rubio and Yagüe 2009; Sethuraman and Gielens 2014; Fornari et al. 2016; Olbrich et al. 2017
2	H1b Δ promotional price of NBs	
3	H1c Δ regular price of PLs	
4	H1d Δ promotional price of PLs	
5	H2a Δ share of NB price promotions	Blattberg, Briesch and Fox 1995; Nijs et al. 2001; Srinivasan et al. 2004; Sethuraman and Gielens 2014; Olbrich, Jansen and Hundt 2017
6	H2b Δ share of PL price promotions	
7	H3 Δ share of NB variety	Raju, Sethuraman and Dhar 1995; Baker, Baltzer and Mølleri 2006; Olbrich, Grewe and Orenstrat 2009
8	H4 Δ brand preference	Banks 1950; Padberg, Walker and Kepner 1967; Sriram, Chintagunta and Neelamegham 2006; Rubio and Yagüe 2009; Ebrahim et al. 2016
9	H5 Δ price consciousness	Sinha and Batra 1999; Jin and Suh 2005; Mostafa and Elseidi 2018
10	H6a Δ household size	Richardson et al. 1996; Cotterill and Putsis 2000; Lin and Chan 2003
11	H6b Δ household income	
12	H7 differences between the types of distribution channels	Cataluna et al. 2005, Schäfer 2010

dependent variable: Δ market share of NBs

4. Empirical Analysis – Data Collection

- household panel data from 2006 to 2015
- 7,211,154 sales, 98,326 households (about 30,000 at same time)
- types of distribution channels: discounters, supermarkets ($\leq 5,000$ m²), hypermarkets ($> 5,000$ m²)
- product groups: chocolate, coffee, hair shampoo, laundry detergent
- data sample:

household-Id	date	quantity	weight (gram)	revenue (Eurocent)	brand	NB/PL	normal price/ promotional price	brand preference 1	(...)
...									
100001	2006-11-08	2	200	276	<i>brand 1</i>	NB	regular price	1	...
100001	2006-11-08	1	100	65	<i>brand 2</i>	NB	regular price	1	...
100010	2007-10-30	1	200	99	<i>brand 3</i>	PL	regular price	3	...
138661	2008-04-24	2	500	398	<i>brand 2</i>	PL	promotional price	4	...
987314	2015-10-28	1	200	129	<i>brand 1</i>	PL	regular price	2	...
...									

4. Empirical Analysis – Results

		across channels	multi group analysis		
			discounters	supermarkets ($\leq 5,000$ m ²)	hypermarkets ($> 5,000$ m ²)
1	observations (= weeks * retailers' distribution channels)	8.886	3.364	2.396	3.126
2	R ²	.089	.091	.197	.114
3	Δ regular price of NBs	-.022**	-.053***b	.001 ^{a,c}	-.068***b
4	Δ promotional price of NBs	-.091***	-.118***b,c	-.066***a	-.100***a
5	Δ regular price of PLs	.123***	.098***b,c	.223***a,c	.156***a,b
6	Δ promotional price of PLs	.082***	.087***b,c	.090***a	.127***a
7	Δ share of NB price promotions	.126***	.170***b,c	.050*^{a,c}	.180***a,b
8	Δ share of PL price promotions	-.010	-.021	-.004	-.016
9	Δ share of NB variety	.185***	.118***b	.318***a	.190***
10	Δ brand preference	.057***	.051*^{b,c}	.102***a	.016 ^a
11	Δ price consciousness	.023	.009 ^c	.085**	.000 ^a
12	Δ household size	-.002	-.019	.004	.024
13	Δ household income	.030**	.061**^{b,c}	.020 ^a	-.014 ^a

* p < .050; ** p < .010; *** p < .001

a = significant differences to the discounter (significance level: 5 %)

b = significant differences to the supermarket (significance level: 5 %)

c = significant differences to the hypermarket (significance level: 5 %)

4. Empirical Analysis – Hypotheses Review

	independent variable	dependent variable	hypotheses review
1	H1a Δ regular price of NBs	Δ market share of NBs	<i>weakly supported for discounters and hypermarkets</i>
2	H1b Δ promotional price of NBs		<i>supported</i>
3	H1c Δ regular price of PLs		<i>supported</i>
4	H1d Δ promotional price of PLs		<i>supported</i>
5	H2a Δ share of NB price promotions		<i>partly supported for discounters and hypermarkets (weakly supported for supermarkets)</i>
6	H2b Δ share of PL price promotions		<i>rejected (n.s.)</i>
7	H3 Δ share of NB variety		<i>supported</i>
8	H4 Δ brand preference		<i>partly supported for supermarkets</i>
9	H5 Δ price consciousness		<i>rejected (because of the positive sign)</i>
10	H6a Δ household size		<i>rejected (n.s.)</i>
11	H6b Δ household income		<i>partly supported for discounters</i>
differences between analysed groups (multi group analysis and Chi²-Test)			
12	H7 <i>differences between the types of distribution channels</i>		<i>partly supported for Δ regular price of PLs, Δ share of NB price promotions, Δ share of NB variety, and Δ brand preference</i>



5. Discussion – What's new?

- data over a long time period (10 years)
- intertemporal changes regarding the *determinants* and the *market share of NBs*
- differentiation between
 - *regular and promotional prices of NBs*
 - *regular and promotional prices of PLs*
- *using the changes in share of NB variety (instead of i.e. change in NB variety and change in PL variety)*
- differences and similarities regarding the influence in *types of distribution channels* (discounters, supermarkets, hypermarkets)



5. Discussion – What's confirmed?

- competition between NBs and PLs is (still) intense
- the *prices* and *promotional activities* are partly influencing the market share
- *share of NB variety* influences the market share

5. Discussion – What’s most surprising?

(1) *weak and not significant results*

- *changes in regular prices of NBs and changes in brand preference affect the market share of NBs only partly and very weak*
- *there is no significant influence regarding the change in share of PL price promotions*

	across channels	multi group analysis		
		discounters	supermarkets ($\leq 5,000$ m ²)	hypermarkets ($> 5,000$ m ²)
...
Δ regular price of branded goods	-.022**	-.053**b	.001 ^{a,c}	-.068**b
...
Δ share of PL price promotions	-.010	-.021	-.004	-.016
...
Δ brand preference	.057***	.051*^{b,c}	.102***^a	.016 ^a
...

* p < .050; ** p < .010; *** p < .001

...



5. Discussion – What's most surprising?

(1) *weak and not significant results*

explanation: *market share of NBs* is driven by promotional prices of NBs:

- It's **not** the
 - *decrease in regular prices of NBs* or the
 - *decrease in share of PL price promotions*
- that increase the market share of NBs.
- It's the
 - *decrease in promotional prices of NBs* and the
 - *increase in share of NB price promotions.*

5. Discussion – What’s most surprising?

(2) positive impact of *change in price consciousness*

explanation: *market share of NBs* is driven by promotional prices of NBs:

- the more *price consciousness* consumers are,
- the more often they may purchase *promotional priced NBs*.
- *And the less they may purchase regular priced NBs*.

→ *shift between regular priced NBs and promotional priced NBs*

→ *no/weak change in market share of NBs (in competition with PLs)*

	across channels	multi group analysis		
		discounters	supermarkets (≤ 5,000 m ²)	hypermarkets (> 5,000 m ²)
...
<i>Δ price consciousness</i>	.023	.009 ^c	.085**	.000 ^a
...

* p < .050; ** p < .010; *** p < .001

...

5. Discussion – What’s most surprising?

- The impact of changes in
 - *regular prices of PLs,*
 - *share of NBs price promotions,*
 - *share of NB variety, and*
 - *brand preference*
- *are (at least partly) different between the types of distribution channels.*

	...	multi group analysis		
		discounters	supermarkets (≤ 5,000 m ²)	hypermarkets (> 5,000 m ²)
...
Δ regular price of PLs		.098**b,c	.223***a,c	.156***a,b
Δ share of NB price promotions170***b,c	.050*a,c	.180***a,b
Δ share of NB variety		.118***b	.318***a	.190***
Δ brand preference051*b,c	.102***a	.016 ^a
...

* $p < .050$; ** $p < .010$; *** $p < .001$

a = significant differences to the discounter (significance level: 5 %)

b = significant differences to the supermarket (significance level: 5 %)

c = significant differences to the hypermarket (significance level: 5 %)

5. Discussion – What limits the results?

- prohibition of retail price maintenance
- analysis of four product groups
- not considered:
 - product positioning on the shelf
 - package sizes
 - limited editions



Comments, Proposals or
Ideas for Collaboration?



→ Contact Me!



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Photo: Hardy Welsch