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Financial Product Development:

A Marketing-Finance Approach

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Thursday October 8, 2015

GSBE Marketing-Finance Symposium

"The Whole is Greater Than the Sum of Its Parts (III)"

Overview of Presentation

- Why a Marketing-Finance approach to Financial Product Development?
- With whom have we collaborated until now and on what topics?
- What kind of research on financial product development do we do?
  - Two examples (by far not exhaustive…):
  - Understanding Investors' Decisions to Purchase Innovative Products
  - Financial and Non-Financial Attributes of Pension Fund Structures
- Final remarks
- Research in progress
- …your questions!

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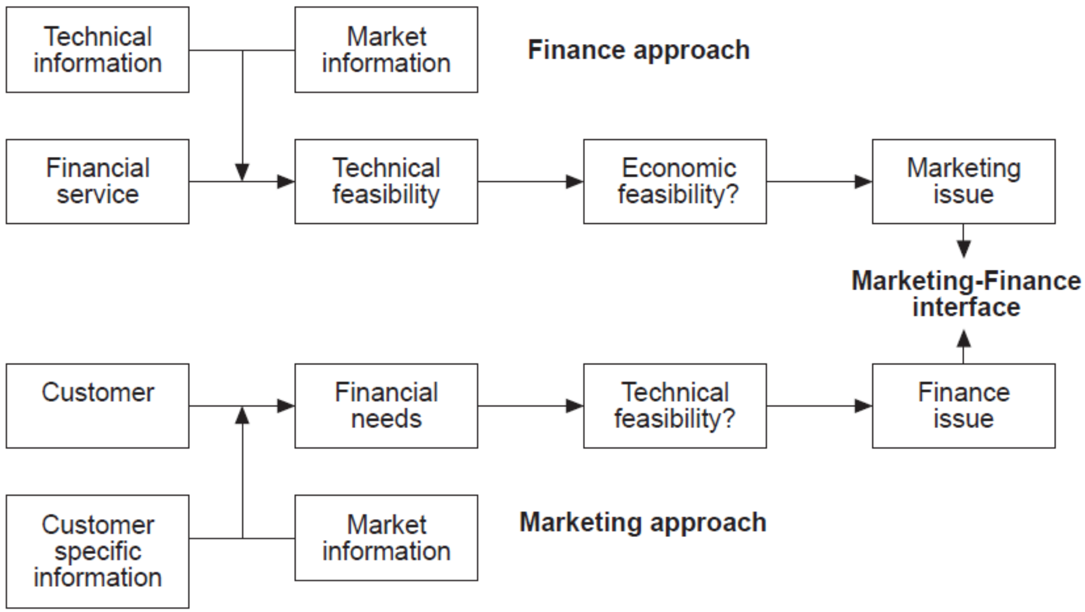
Why a Marketing-Finance Approach to Financial Product Development?

- Marketing informs you about consumer needs and how to address them.
- Finance tells which consumer solutions are technically possible and viable.



Pennings, Wetzels, Meulenberg (1999), *European Journal of Marketing*, 33 (5/6), pp. 531-547.

Why a Marketing-Finance Approach to Financial Product Development?

- Not everything that is technically possible, is desirable from consumer protection point of view, while products consumers need may not succeed:
  - Sometimes fine line between investing and gambling (e.g., turbo’s, speeders…).
  - Consumers typically have difficulty interpreting risk,
  - Consumers have a hard time identifying with their future selves (pensions!),
  - Many retirees are house-rich and cash-poor, but no demand for reverse mortgages,
- In the Marketing-Finance Research Lab, we combine the best and brightest minds from both marketing and finance to connect with industry and regulators to generate actionable insights, based on solid academic research.

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With whom have we collaborated until now?

- Some examples of previous research collaborations with industry partners:
  - Bouwaandeel (marketing aspects of a real-estate crowdfunding platform)
  - ING Private Banking (new developments as to private wealth management)
  - Meetinvest AG (introduction of a new financial social media platform)
  - Netherlands Authority for the Financial Markets (execution-only investor behavior)
  - Deluxe Corporation (marketing aspects of a financial service innovation)
  - Deutsche Postbank (fraud prevention measures and customer relationships)
  - Sparkasse KölnBonn (consumer intention to purchase fee-based advice)
  - APG (consumer interest in non-financial attributes of pension fund investing)
  - COPA-COGECA (business co-op innovation)

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What do we want to know?

- Understand drivers of consumer adoption of financial service innovations.
- Focus on recently introduced, exchange-traded, investment products:
  - Leveraged structured investment products: “speeders”/”turbo’s”
  - Emergent market funds
  - Green funds
  - Non-western real estate funds
  - Index-based funds
- Products <5 years available on retail market at time of data collection (2009).

Hoffmann & Broekhuizen (2010). *International Journal of Research in Marketing*, 27 (4), pp. 342-355.

Why is this important?

- Societal relevance:
  - Adopting (innovative) financial products and services have long-term wealth effects.
  - Understanding drivers of adoption behavior may help consumers make wiser choices.
- Business relevance:
  - Successful product innovation is crucial for success in financial services sector.
  - Growing industry: ageing demographics + increased self-responsibility for retirement.
  - Success depends on consumer acceptance of new products.
  - Currently: consumers skeptical towards adopting new and complex financial products.

  → *New services failure rate > 80%*

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Why would consumers adopt new investment products: standard finance

- Adopt new product if this improves portfolio’s overall risk-return trade-off.
- Yet:
  - Consumers are often unable to adequately estimate risk and return.
  - Consumer preferences go beyond risk and return:
    - Trading as entertainment (Dorn & Huberman 2009)
    - Sensation seeking (Grinblatt & Keloharju 2009)
    - Preference for stocks providing status (Statman 2004)
    - Conforming to social norms (Hoffmann & Broekhuizen 2009)

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Why would consumers adopt new investment products: marketing-finance

- Psychological motivations are important to understand investor behavior.
- Marketing considers psychological motivations driving adoption decisions.
- Key psychological trait explaining adoption in marketing:
  - *Dispositional Innovativeness* (psychological predisposition to embrace new products)
- Innovators are first to accept new innovative products, and provide foundation for other consumers' adoption behavior by "word-of-mouth" and "social proof".

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What do we do in this study?

- Look at intrinsic and extrinsic motivations to approach/avoid new products:

	Intrinsic Motivations	Extrinsic Motivations
Motivations to approach innovative investment products	"Adopting new investment products is an inherently interesting or enjoyable activity in its own right." **Focal construct: Product-Category Involvement** Related concepts: • Trading as entertainment (Dorn and Sengmueller 2009) • Sensation seeking (Grinblatt and Keloharju 2009) • Aspirations/hope of riches (Statman 2002) • Fulfillment of social needs (Hoffmann and Broekhuizen 2009)	"Adopting new investment products is worthwhile because of the beneficial outcomes this activity can bring." **Focal construct: Market Mavenism** Related concepts: • Status (Statman 2004) • Self-enhancement: recognition as opinion leader / knowledgeable person / (Barberis and Xiong 2008; Dichter 1966)
Motivations to avoid innovative investment products	"Adopting new investment products in its own right is an activity to steer clear of." **Focal construct: Ambiguity Intolerance** Related concepts: • Status quo bias (Kahneman, Knetsch, and Thaler 1991) • Loss aversion (Benartzi and Thaler 1995) • Reluctance / suspicion (Foxall and Pallister 1998)	"Adopting new investment products is **not** worthwhile because of the detrimental outcomes this activity can bring." **Focal construct: Susceptibility to Normative Influence** Related concepts: • Conformity (De Bondt 1998) • Avoiding social punishment (Cialdini and Goldstein 2004; Hoffmann and Broekhuizen 2009) • Reputation loss (De Bondt and Forbes 1999)

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Method: data, sample, and research instrument

- Data collection:
  - Web-based survey to test conceptual model using real-life investor data.
- Sample:
  - 596 individual investors.
  - Average age 57 years, 9% women, 67% have at least college degree.
  - Characteristics in line with typical Dutch self-directed individual investor.
- Research instrument:
  - Measurement model has good fit (χ^2/df=2.1; GFI=.91; TLI=.91; RMSEA=.042).
  - Scales have reliability, unidimensionality, convergent and discriminant validity.

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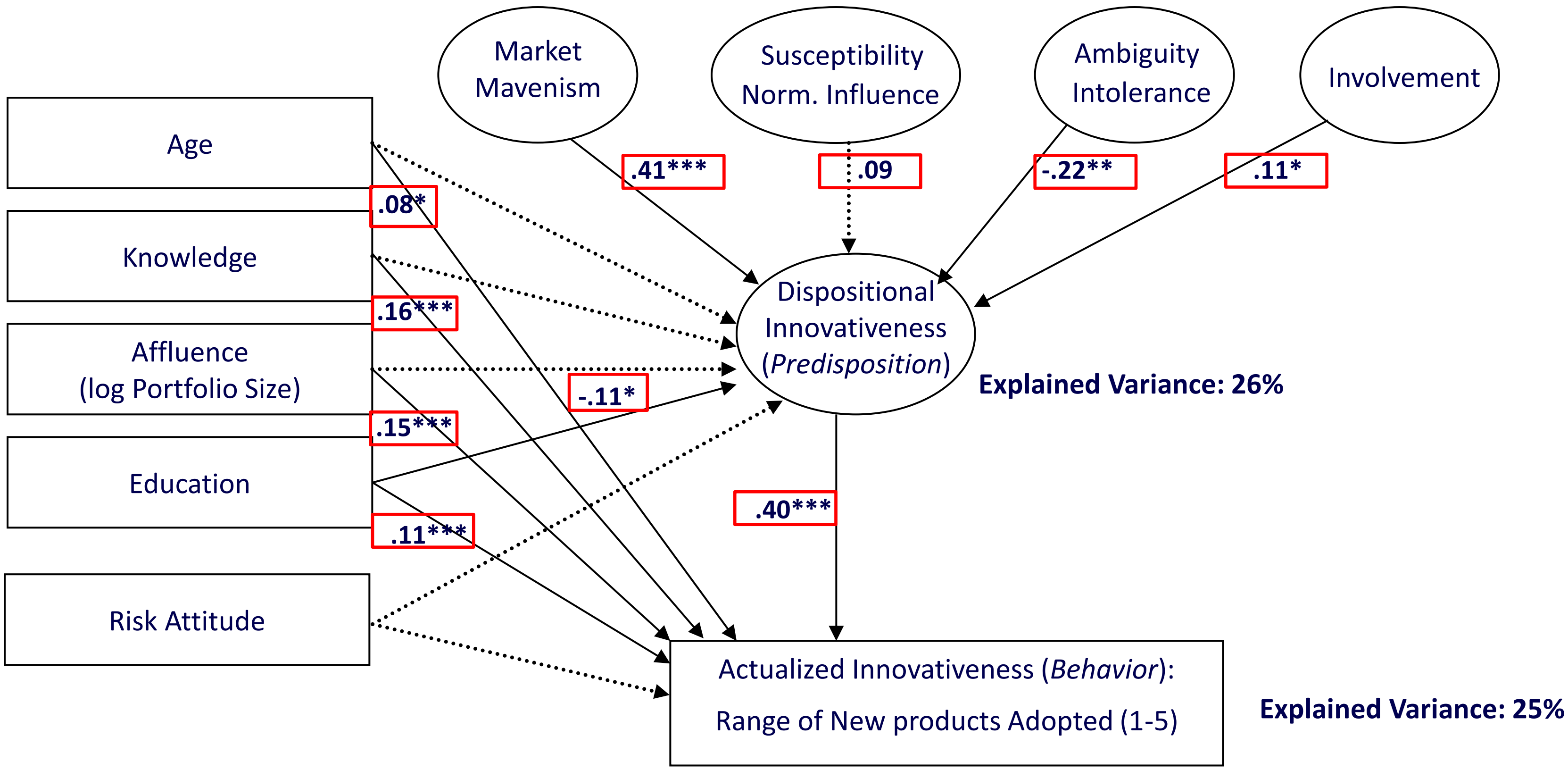
Structural model results



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Managerial implications

- To target consumer innovators, who are crucial for new product success:
  - Create products consumers like to talk about and introduce to others (market mavenism)
  - Support word of mouth in company-controlled communities (e.g. online platforms)
  - Reduce uncertainty: accurate performance range estimates (ambiguity intolerance)
  - Increase involvement of (potential) clients with product category and specific products
  - Focus on life goals/events and education (involvement: understanding *and* interest)

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Conclusion

- Study provides theoretical explanation for *why* some consumers score higher on consumer innovativeness, and *how* this affects financial innovation adoption.
- Especially involved consumers who are not afraid of ambiguity and like to talk about new products and introduce them to others tend to innovate.
- Older, wealthier, better educated, and more knowledgeable investors more likely engage in financial services innovation and buy new investment products.
- Interestingly, consumers' risk attitude does not predict their adoption behavior!

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Background of Paper

- Prominent context to examine preferences for a complex financial service:
  - DB to DC shift promises increased portability of assets for pension fund clients,
  - Shift from DB to DC also increases personal responsibility for investment decisions,
  - Customers may not like these shifts, potentially leading to dissatisfaction and decreasing commitment, negatively influencing participation in these programs.
- Most employees remain in default plan long after automatic enrollment.
- Default bias could be overcome only through committed attempts to encourage active choice of individuals as driven by attribute preferences.

Kalogeras, Hoffmann, Mahr (2014). "Financial and Non-Financial Attributes of Pension Fund Structures: A Customer Perspective from the Netherlands." In: Harrison & Estelami, *The Routledge Companion to Financial Services Marketing*. New York, pp. 101-115.

Background of Paper

- Knowledge of (heterogeneous) preferences for structural aspects of fund crucial for re-designing programs and enhancing customer participation:
  - Pension fund policies that provide additional benefits (e.g., increases in retirement savings, lower administrative costs) may enhance customer retention.
  - How do customers evaluate aspects that make up a pension fund's structural design, which are hypothesized to be important for their commitment?
  - We run a conjoint study on customer preferences for key financial and non-financial attributes that make up the design of pension fund program.
- Both financial and non-financial attributes drive customer utility from pension fund participation. We assess impact of latent heterogeneity.

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Method, Model, and Data

- We combined qualitative and quantitative research techniques:
  - Step 1: in-depth interviews with pension fund experts (scholars and practitioners).
  - Step 2: focus-group discussions with customers of pension funds.
  - Step 3: use data of step 1 and 2 to design conjoint data-gathering instrument.
  - Step 4: examine empirically customer preferences for combinations of financial and non-financial attribute levels of a pension fund through large-scale survey (N= 912).
  - Step 5: examine empirically the impact of latent heterogeneity on customer preferences : application of a mixture modelling approach

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Method, Model, and Data

- Synthesis of literature review, expert consultation from academic and professional field, and focus group discussions with pension fund customers:

Attribute[a]	***Level***	***Previous Studies***
Financial Attributes		
Average Investment Performance [b]	4% 7% 10%	Grinblatt and Titman, 1992; Carhart, 1997; Srinivas, Whitehouse and Yermo, 2000; Sapp and Tiwari, 2004; Tapia, 2008; Andonov et al., 2011.
Coverage ratio [c]	90% 105% 120%	Bauer, et al., 2006, van Rooij, Kool, and Prast, 2007; Mercer, 2010; DNB, 2010; Siegmann, 2010.
Administrative Expenses [d]	0.3% 0.9% 1,5%	Barber and Odean, 2001; Wilcox, 2003; Bateman and Mitchell, 2004; Bikker and de Dreu, 2006; Bauer, Cremers, and Frehen, 2010.
Total Investment Portfolio [e]	<500 million 500 million – 10 billion >10 billion	Chen et al., 2004; Bauer, Cremers, and Frehen, 2010, Andonov Bauer, and Cremers, 2011; Dyck and Pomorski, 2011.
Non-Financial Attributes		
Socially Responsible Investing	Yes No	Kreander et al., 2005; Nilsson, Nordvall, and Isberg, 2010; Renneboog, ter Horst, and Zhang, 2011; Derwall et al., 2011; Bauer and Smeets, 2012.

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Conjoint Results

- Pension fund's structural design (dependent variable):

Attribute [a]	*Level*	*APWs*
Financial Attributes		
Average Investment Performance [c]	4%	-0.223***
	7%	0.097***
	10%	**0.126*** **
Covera ge ratio	90%	-0.324***
	105%	**0.198*** **
	120%	0.127***
Administrative Expenses	0.3%	0.042***
	0.9%	**0.092*** **
	1.5%	-0.133***
Total Investment Portfolio	<500 m illion	-0.078***
	500 million – 10 b illion	**0.043*** **
	>10 b illion	0.035***
Non -Financial Attributes		
Social ly Responsible Investing	Yes	**0.106*** **
	No	-0.106***

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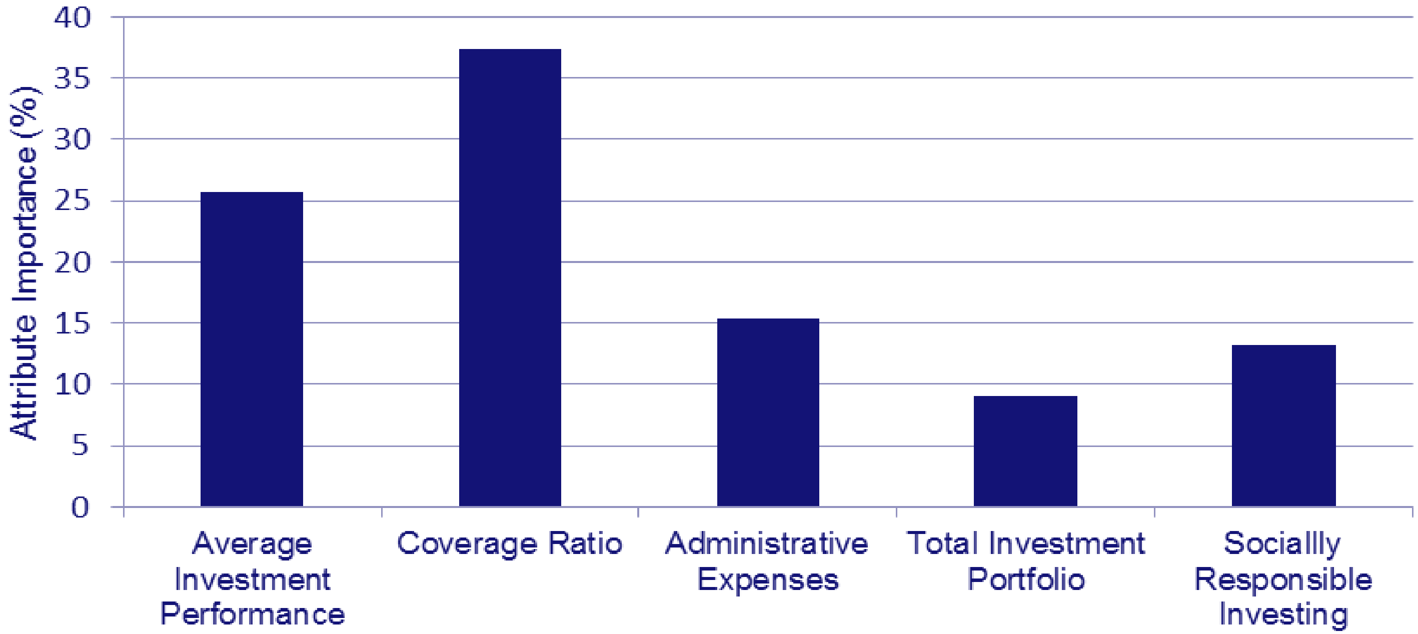
Conjoint Results

- Attributes' relative importance, based on range of part-worth estimates:



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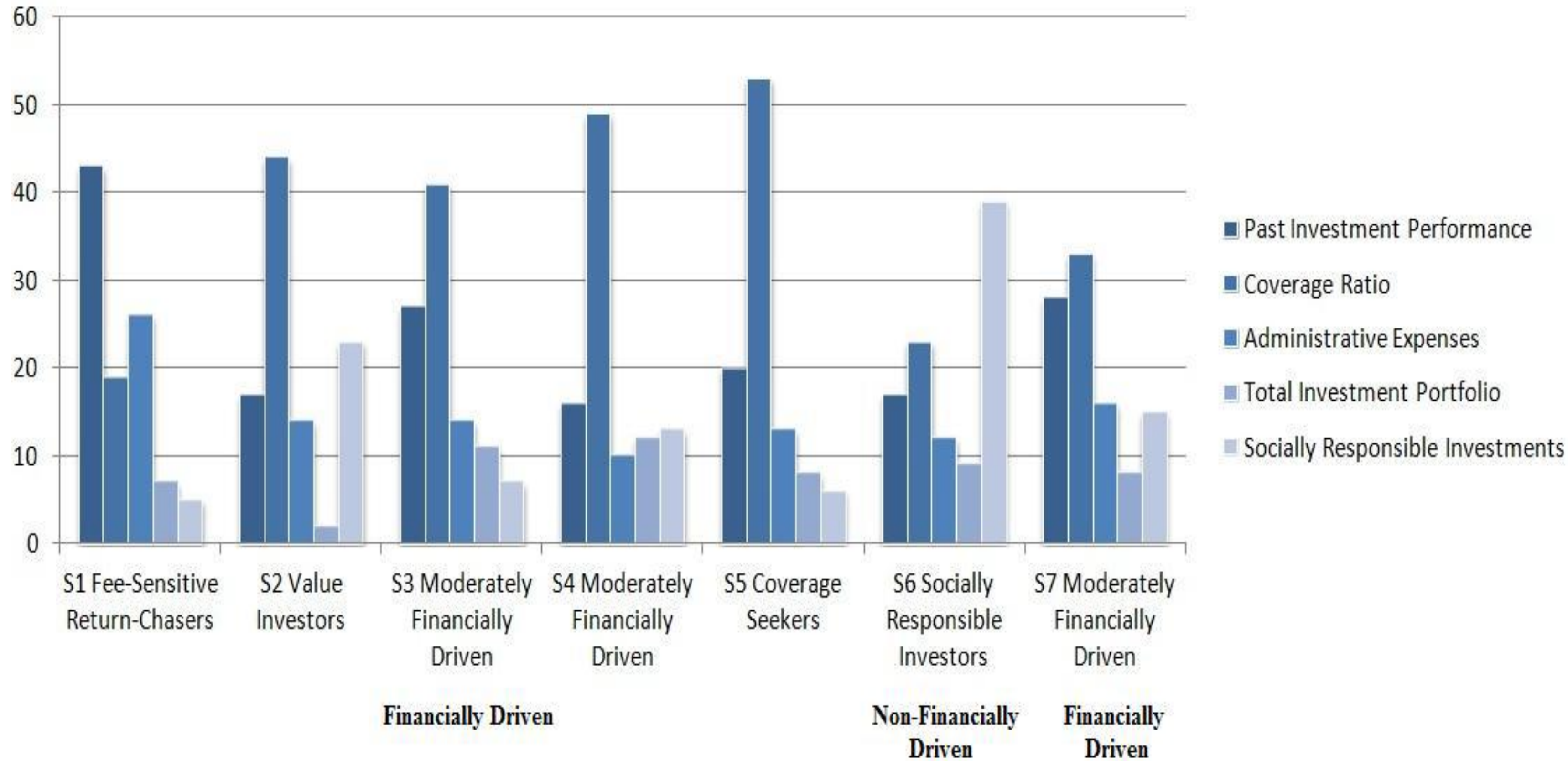
Pension Fund Customers' Heterogeneous Preferences

- Mixture modelling approach accounts for latent heterogeneity in preferences:



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Impact of Drivers of Pension Fund Customers' Heterogeneity per *S*

Segment	Label	Significant Demographic Drivers	Significant Psychographic Drivers
S1	Fee -Sensitive Return Chasers	Age*** (31 -50) Financial Education*** (yes) Gender** (male)	Risk attitude *** (risk seeking)
S2	Value Investors	Age*** (61 -65)(18 -30 less likely)	Risk attitude *** (risk -averse)
S3	Moderately Financially Driven	Education***(LBO or MBO) Age** (18 -30) (31 -40 less likely)	
S4	Moderately Financially Driven	Financial Education*** (no)	
S5	Coverage Seekers	Education*** (LBO or MBO less likely)	
S6	Socially Responsible Investors	Gender *** (female)	Overconfidence ** (less)
S7	Moderately Financially Driven		Risk attitude *** (risk seeking)

*** denotes significance at p<0.01, ** denotes significant at p<0.05

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Managerial Implications

- Social responsibility is important, but customers’ preference for coverage ratio and average investment performance of funds suggests managers focus here.
- Accounting for customer heterogeneous preferences, managers may enhance the communication efforts of pension funds in several ways. For example:
  - Women and those relatively more overconfident more receptive to newsletter on SRI.
  - Middle-aged, financially educated, male, or relatively risk-seeking customers attach more value to a bulletin emphasizing past performance and low management fees.
  - Individuals nearing retirement, and those who are relatively risk-averse more likely to attach value to campaign emphasizing stable coverage ratio and SRI efforts of pension funds, rather than being informed about the highest investment returns.

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Conclusion

- First study to empirically identify relevance of financial and non financial attributes for pension fund structural design from customers' perspective.
- Customers desire mostly pension fund program with quite high coverage ratio and average investment performance, reasonable level of administrative expenses, SRI investment style, and a medium scale.
- Both demographic (e.g., age, education, gender) and psychographic drivers (e.g., risk attitude, overconfidence) have a significant impact on customer heterogeneous preferences structure for pension funds.

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Final Remarks

- Marketing-Finance interface relevant in financial product development.
- What consumers want, may not be good for them…
- …while what consumers need, may not be demanded.
- Marketing tells what consumers like, but can also *make* them like it…
- …while finance tells us whether the products are technically feasible.
- New financial products have to be developed while thinking about both marketing and financial aspects of consumer financial decision-making:
  - Psychographics oftem more predictable of behavior than demographics
  - Consumers seem to have difficulty grasping concept of (perceived) risk
  - Heterogenous preference structure requires tailored marketing campaigns

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Research in Progress

- How Past Performance Framing Impacts Investors' Belief Updating:
  - Manipulating portfolio evaluation periods can affect beliefs and behavior.
  - Displaying return experiences in a less volatile way could lead to smaller updates in investors' beliefs, giving them less reason to trade, thereby improving their returns.
  - Lab experiments, varying length of default return horizon shown.
- Measuring Distance Amongst Member-Investors Relationships:
  - Member-investors of cooperative business schemes
  - Ostracism construct
  - Field studies in Netherlands and Greece at micro-micro level

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