



Opening the Black Box of Upper Echelons: Drivers of Poor Information Processing During the Financial

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Motivation

- Why most directors in banks in the forefront of the financial crisis did not have the foresight to predict the problems of taking on too much risk?
- Lack of heterogeneity and of differentiated viewpoints in boards?





Theoretical Background

⊙ Theory of upper echelons

- Understanding the mental models of top managers in explaining the choices they make
- Responses depend on the interpretation of the situation

⊙ Psychological economics

- Cognitive and emotional constraints of individuals should be included into mainstream economic theory
- Under risk and uncertainty individuals use simple rules of thumb or heuristics and human decisions can be constrained by emotions

⊙ Contributions of psychological economics

- Few studies in theory of upper echelon ask if executive characteristics dependent on the situation, i.e. they limit field of vision, select perceptions and interpretations, and thus affect choices

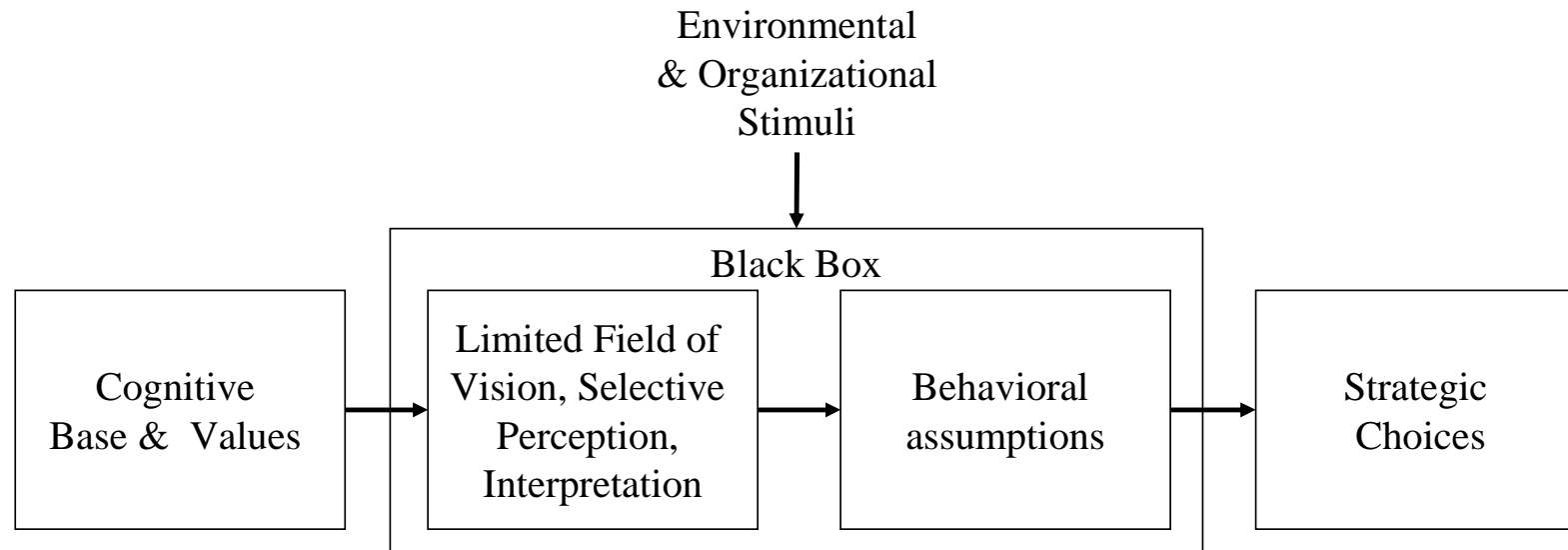
Research Gap: Theory vs. Empirical Investigations



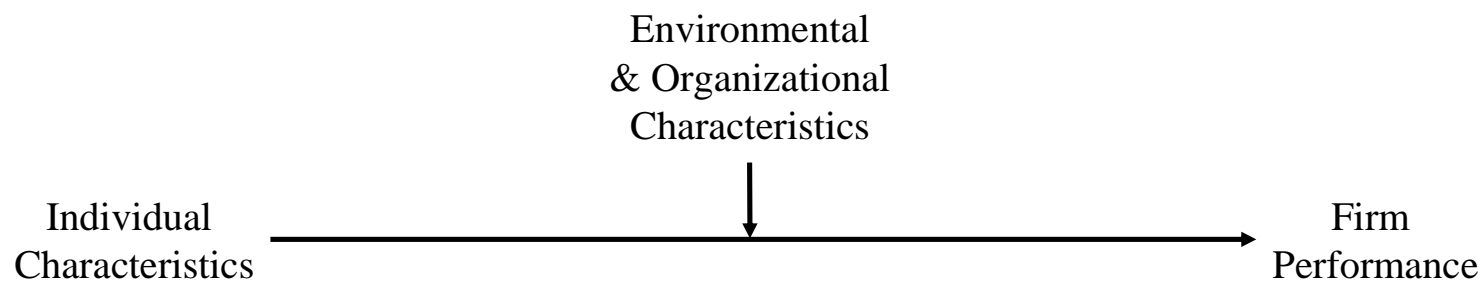
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Theoretical Model:



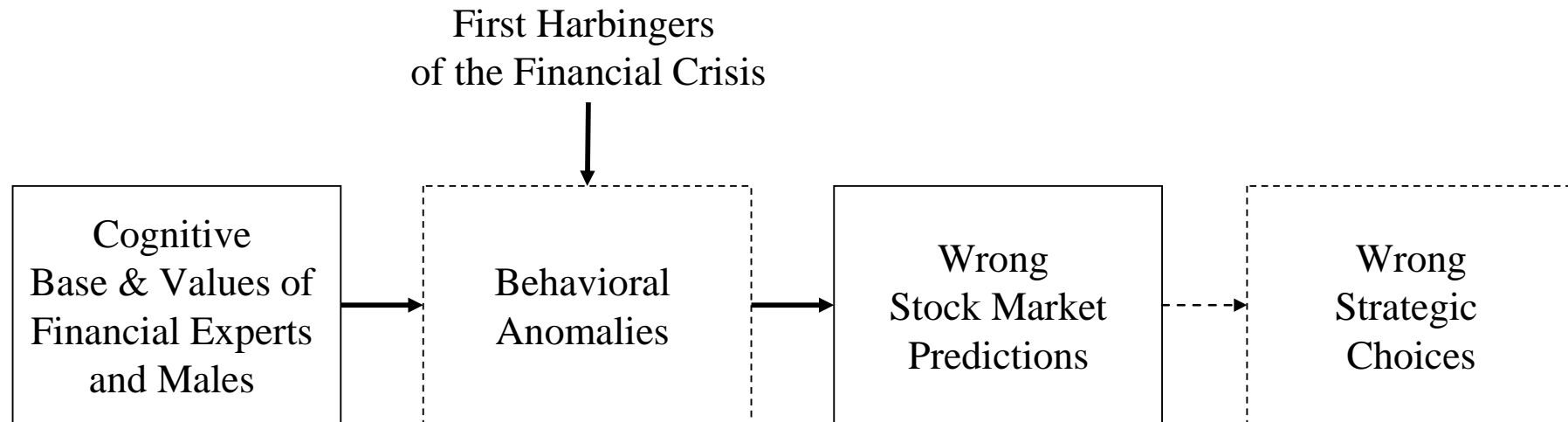
Empirical Model:



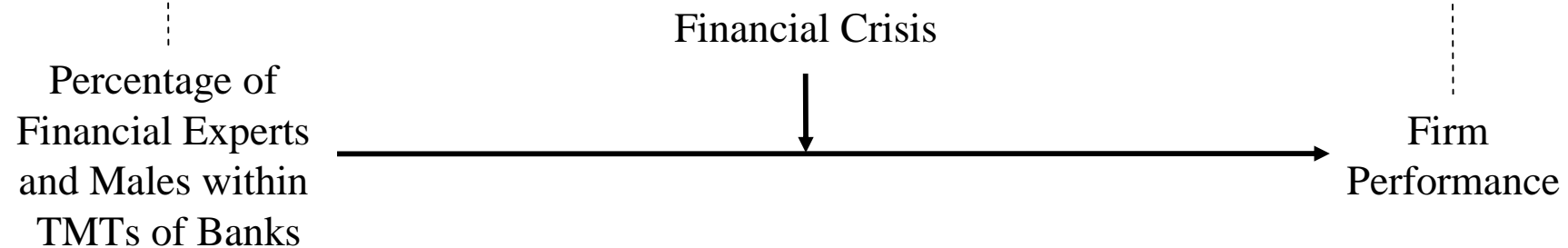


Research Contributions

Study 1: Micro-processes



Study 2: Macro-organizational phenomena



Micro-processes of information processing



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- ⊙ H1. In situations of uncertainty after which the market goes into decline non-financial experts make better stock market forecasts than financial experts.
(Availability or representativeness bias, Overconfidence, Anchoring, Illusion of control)
- ⊙ H2. In situations of uncertainty after which the market goes into decline women make better stock market forecasts than men.
(Lower risk aversion, lower Overconfidence)

Macro-org. phenomena of information processing

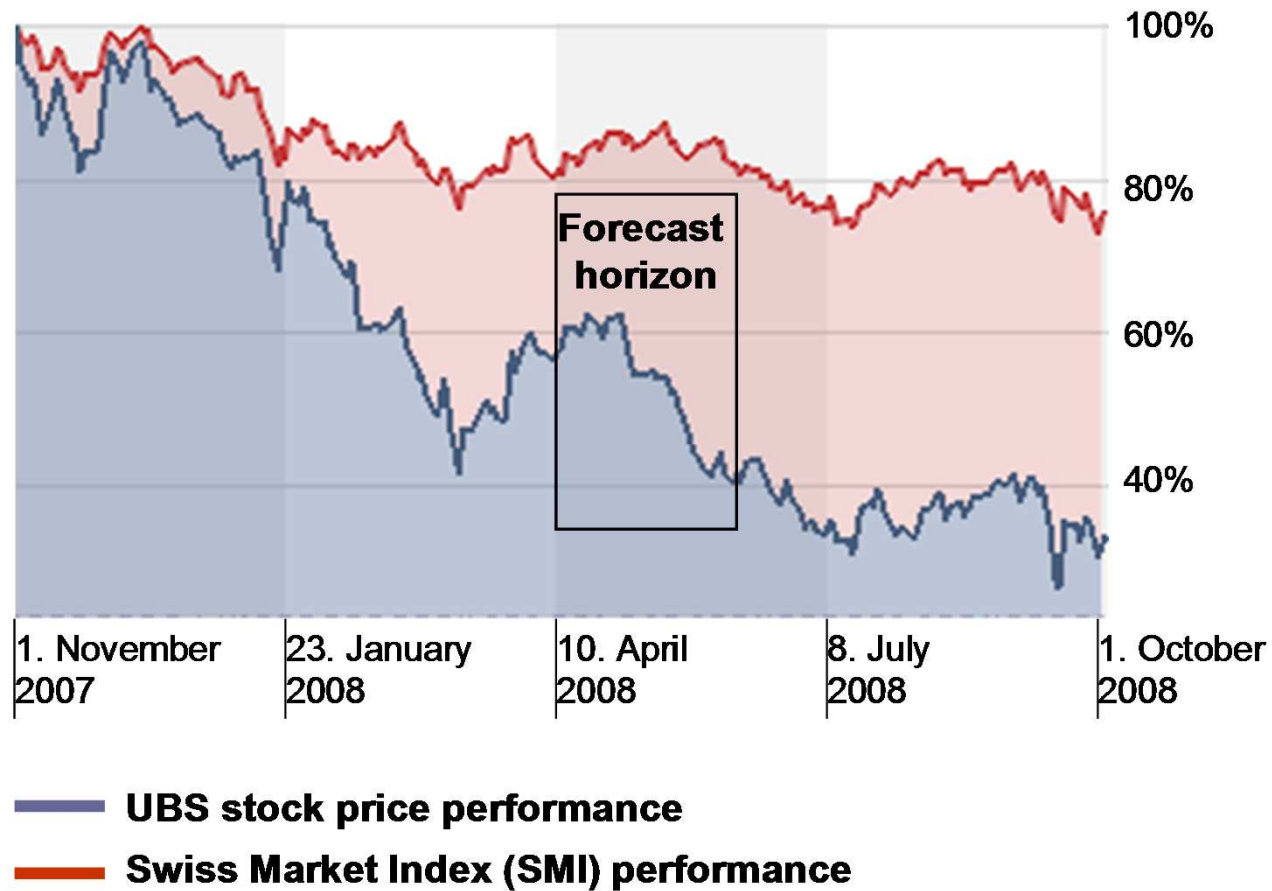


- ⊙ Focus on dominant coalition, i.e. TMT composition
- ⊙ H3. The higher the percentage of males and financial experts within a TMT, the lower the stock market performance of the firm in situations of uncertainty, after which the market goes into decline.
(fast & good decisions of experts and persons with lower risk-aversion & low group think effects)
- ⊙ The higher the percentage of males and financial experts within a TMT, the higher the stock market performance of the firm in situations of certainty in which the market is stable or grows.
(expectations of males, experts are more biased & Group think effects)

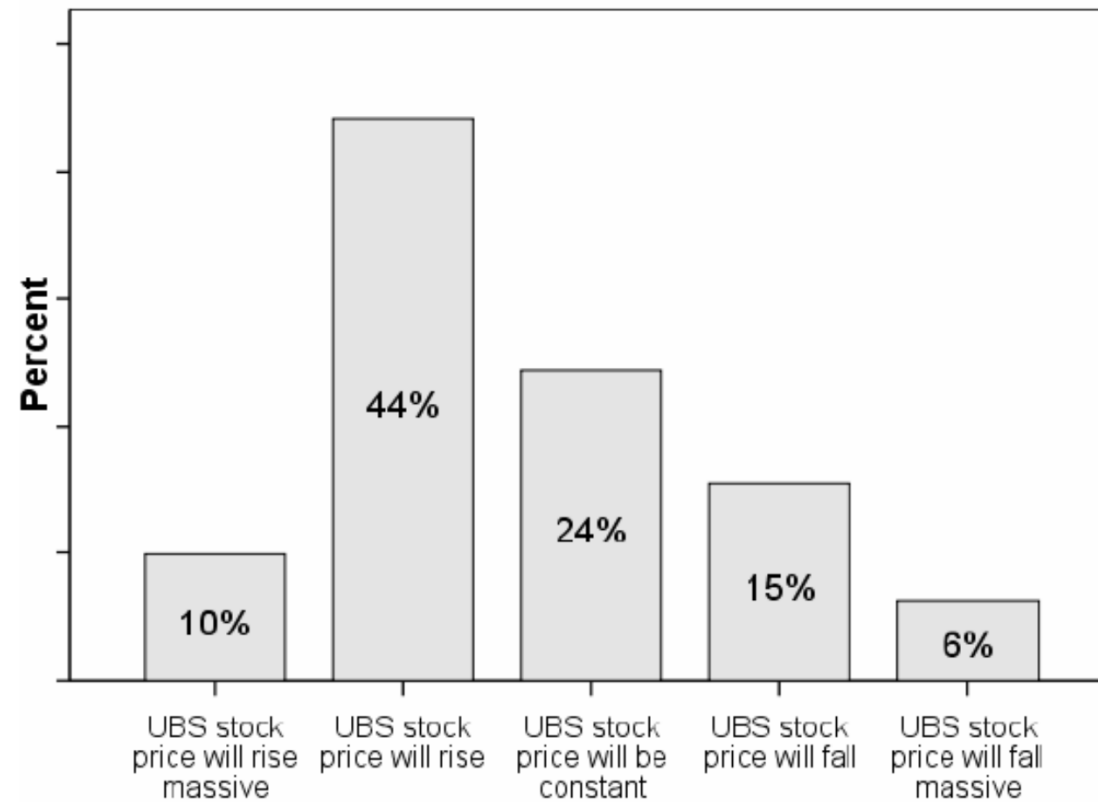
Study 1: Micro-processes of information processing



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Study 1: Dependent Variable



What do you think: How the UBS stock price will develop within the next two months?



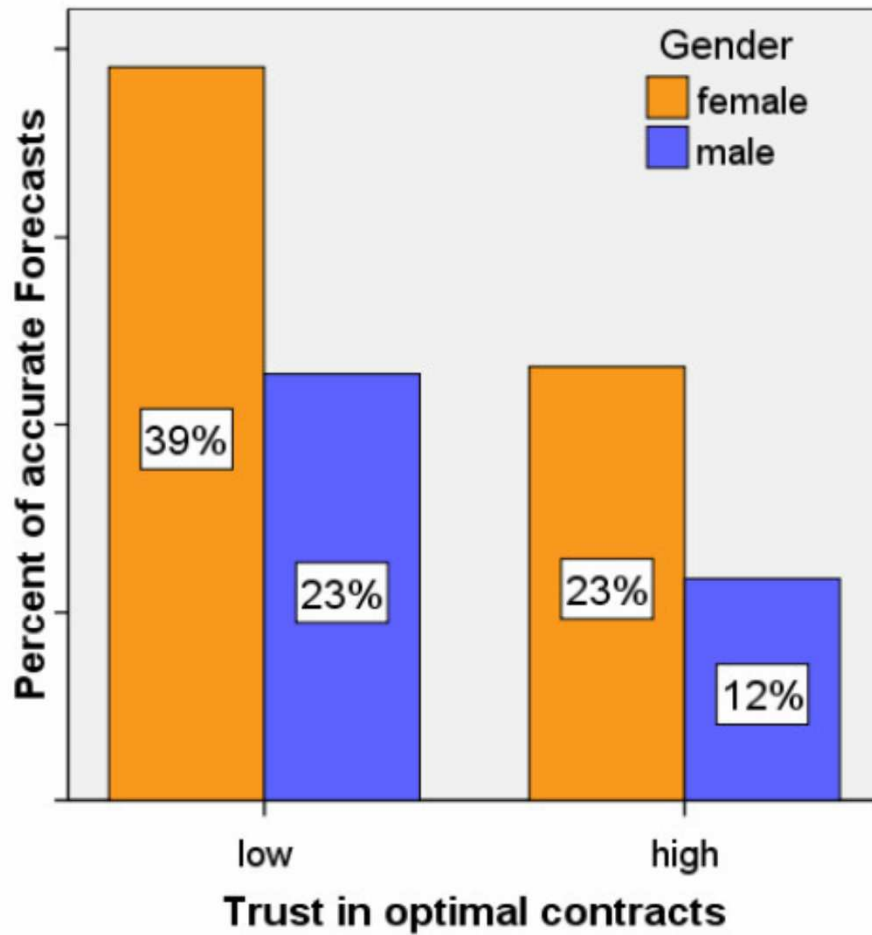
Study 1: Main Results

	OLS Regression			Clustered OLS Regression			Ordinal Regression (Logit)		
	B	SD	Sig.	B	SD	Sig.	B	SD	Sig.
(Constant)	4.07	.28	**	4.07	.28	**			
Threshold [1; stock price will rise massive]							-4.65	.55	**
Threshold [2; stock price will rise]							-2.21	.51	**
Threshold [3; stock price will be constant]							-1.04	.50	**
Threshold [4; stock price will fall]							.47	.52	
Knowledge									
Stock market & finance courses	-0.34	.11	**	-0.22	.11	**	-0.60	.20	**
Beliefs									
Trust in optimal contracts	-0.24	.08	**	-0.21	.09	**	-0.35	.15	**
Demographics									
Male	-0.31	.11	**	-0.31	.14	**	-0.45	.20	**
R/ Pseudo-R		.28			.23			.26	
R-Square/ Cox and Snell		.08			.05			.07	
Adj. R-Square/ McFadden		.07			.04			.03	
F-Value/ Chi-Square		11.38	**		7.24	**		27.64	**
N		411			411			411	

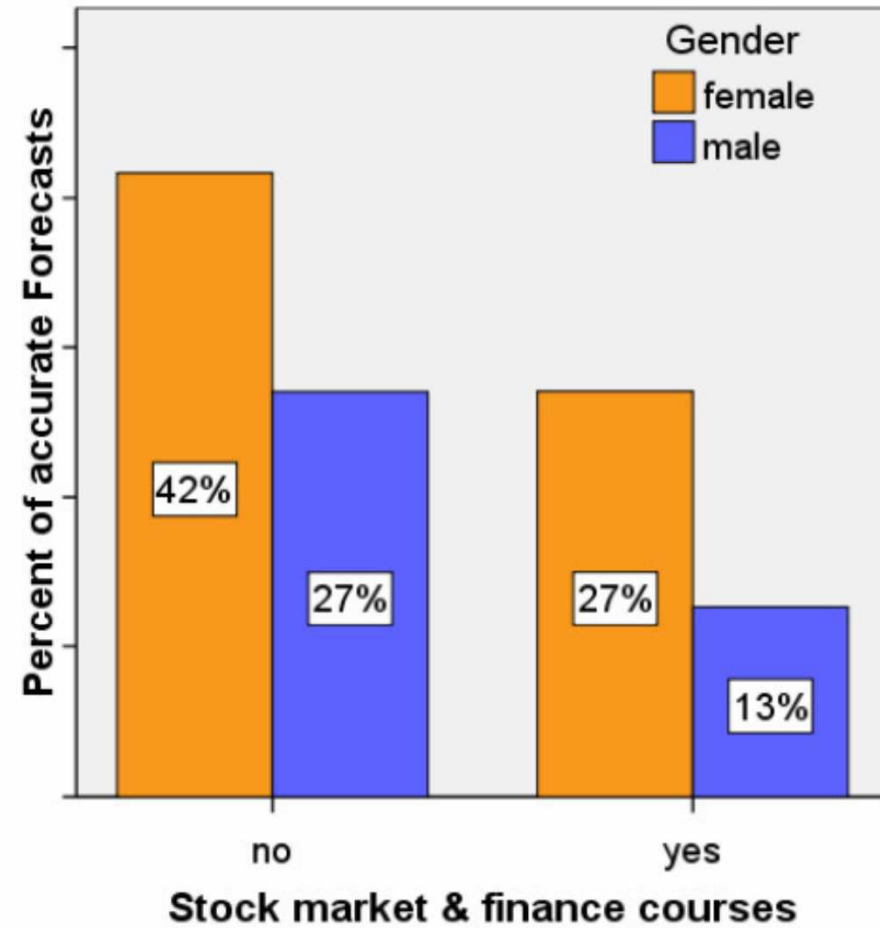
Legend: Dependent variable accuracy of forecasting prediction of the change in the UBS stock price in the next 2 months. *p < 0.05, **p < 0.01.



Study 1: Main Results



CREMA



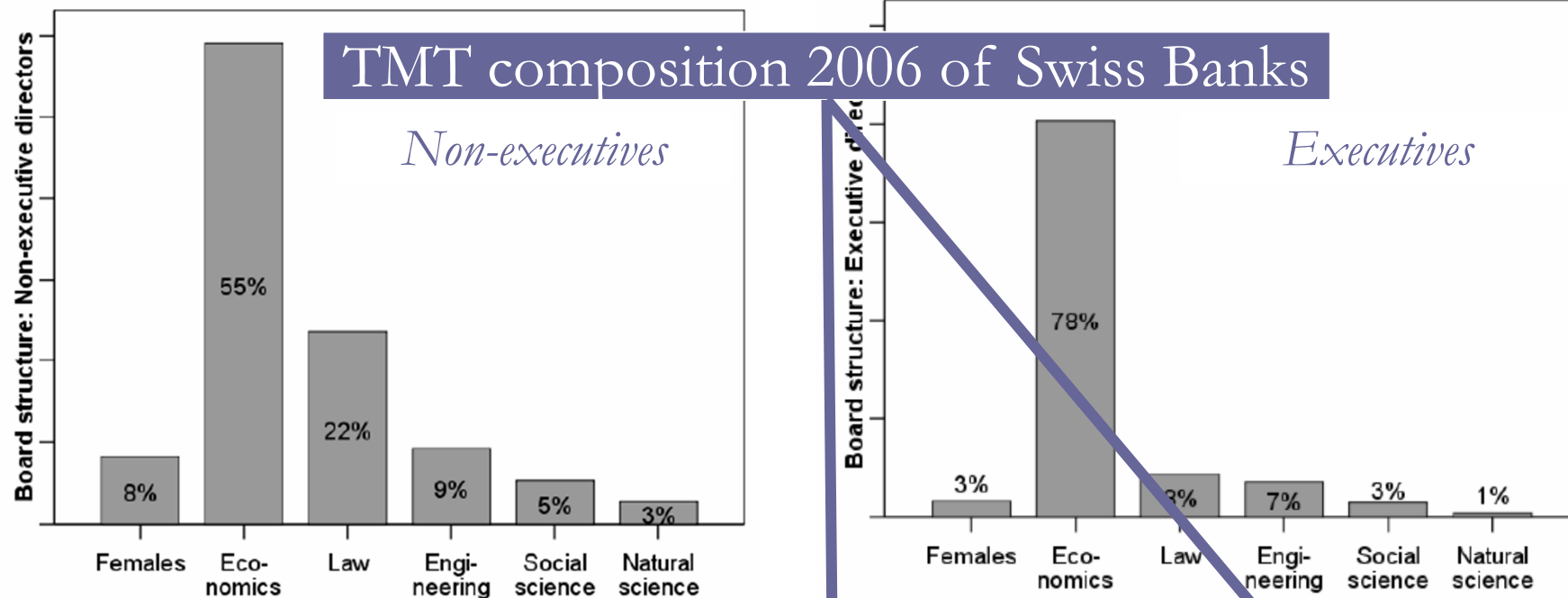
Study 2: Macro-org. phenom. of information processing



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TMT composition 2006 of Swiss Banks



Legend: Gender and key course elements of 290 non-executive directors

Legend: Gender and key course elements of 160 executive directors

Performance before the financial crisis (2006, 12 months)

Performance after the financial crisis (2008/9, 12 months)

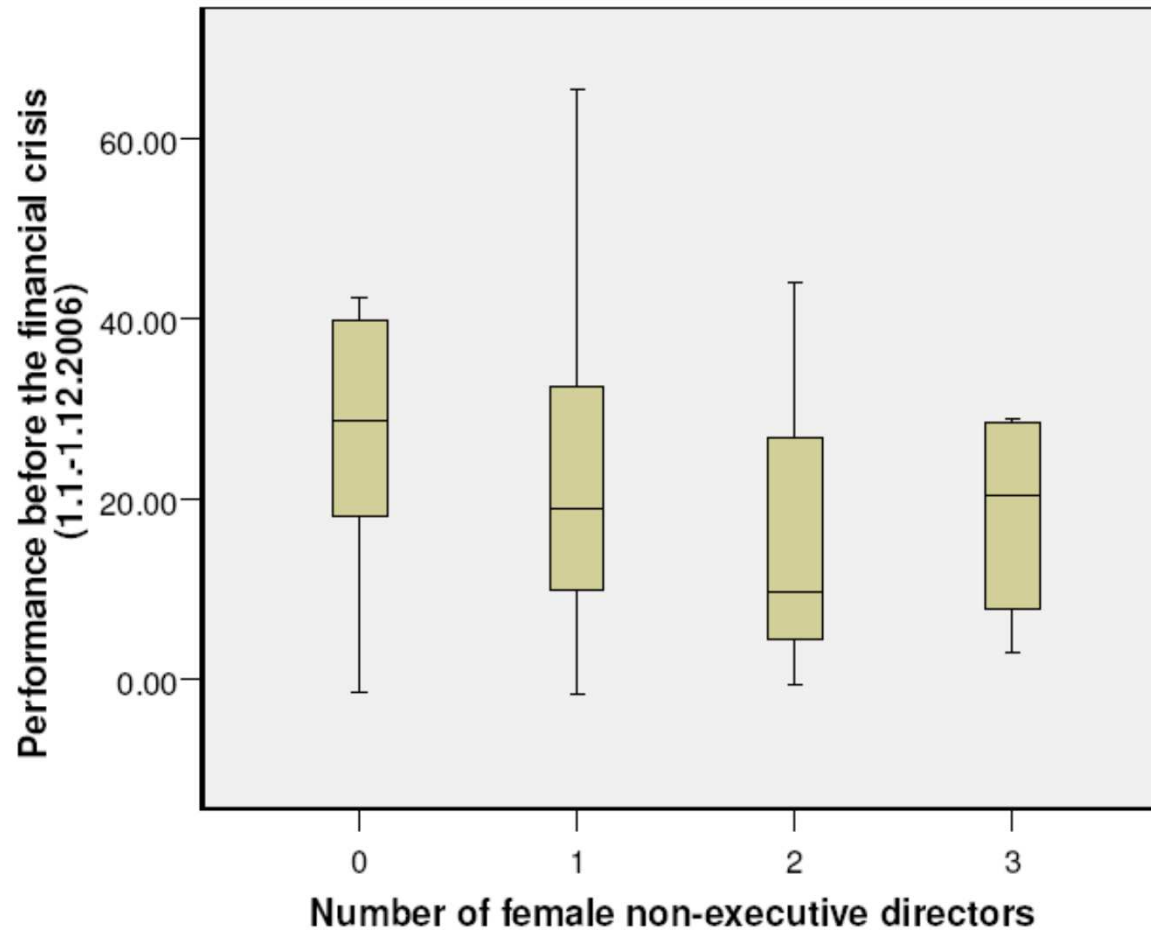
Study 2: Results for Non-executive directors



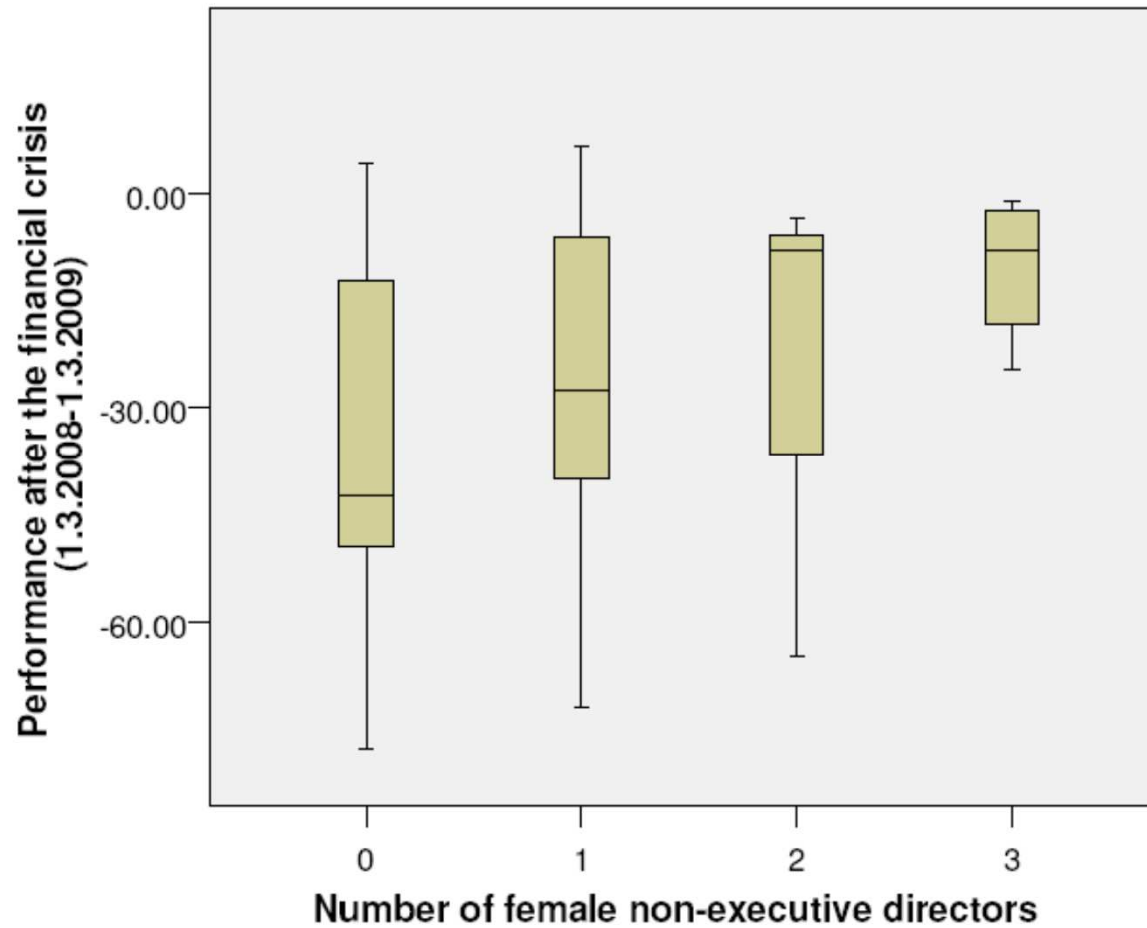
	Model I: Performance before the financial crisis (1.1.-1.12.2006)			Model II: Performance after the financial crisis (1.3.2008-1.3.2009)		
	B	SD	Sig.	B	SD	Sig.
(Constant)	44.38	12.52	**	-33.99	17.64	†
Non-executive directors						
Percent of Females	-24.02	38.01		39.70	53.56	
Percent of non-economists	-36.50	15.36	*	55.35	21.65	*
Control variables						
Number of employees (log.)	-.03	1.60		-4.07	2.26	†
Type of bank (1=canton)	-16.08	6.63	*	28.31	9.35	**
R		.57			.67	
R-Square		.32			.45	
Adj. R-Square		.21			.36	
F-Value		2.97	*		5.07	**
N		30			30	



Before the financial crisis



After the financial crisis





Conclusion

- ⊙ **Theoretical/Academic Implications:** An important moderator within the theory of upper echelons is financial market discipline during turbulent periods, explaining why the performance of homogenous TMTs is volatile and why the performance of diverse TMTs is sustainable. The theory can be strengthened by including the insights of psychological economics as a micro-foundation.
- ⊙ **Practitioner/Policy Implications:** For a sustainable performance, greater TMT diversity in public companies should be instituted by the board of directors.