

Stability of risk attitudes and media coverage of economic news



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What explains within-individual variance in risk attitudes?

- Measurement error
- Systematic changes
 - Age
 - Changes in personal life (often endogenous)
 - Exogenous shocks in the environment
 - ⇒ News capture exogenous shocks as the public perceives them

Does economic news coverage affect self-stated risk attitudes?

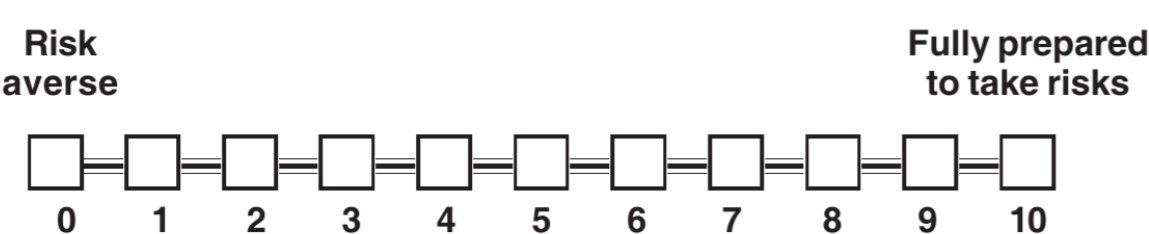
Data

- Mediatenor:
 - Number of economic news items in leading daily media (2003-2012)
 - Distinction between positive, negative and ambiguous items
 - Yearly (moving) average of news items, monthly deviations from the yearly averages



- GSOEP:
 - Self-stated willingness to take risks (7 waves, 2004-2012)
 - Worries, control variables
 - Exact interview date

Are you generally a person who is fully prepared to take risks or do you try to avoid taking risks?
 Please tick a box on the scale, where the value 0 means: "risk averse" and the value 10 means: "fully prepared to take risks".
 You can use the values in between to make your estimate.



Methods

Fixed effects regressions on risk attitudes r for individual i at time t

Main results

$$r_{it} = \alpha + \beta' \text{News}_{it}^Y + \gamma' (\text{News}_{it}^M - \text{News}_{it}^Y) + \delta' X_{it} + u_i + \epsilon_{it}, \quad (1)$$

Good news share:

$$r_{it} = \alpha + \beta \text{news}_{it}^j + \gamma \text{share}_{it}^j + \lambda (\text{news}_{it}^j \text{share}_{it}^j) + \delta' X_{it} + u_i + \epsilon_{it}, \quad \text{for } j = Y, M \quad (2)$$

Heterogeneous effects:

$$r_{it} = \alpha + \beta' \text{News}_{it}^Y + \gamma' (\text{News}_{it}^M - \text{News}_{it}^Y) + \pi' (\text{News}_{it}^Y v_i) + \lambda' (\text{News}_{it}^M - \text{News}_{it}^Y) v_i + \delta' X_{it} + u_i + \epsilon_{it}, \quad (3)$$

Result highlights

- Self-stated risk preferences systematically relate to economic news reports
- Long lasting changes in news are more important predictors than recent shocks
- More news in general are negatively related to risk taking if bad news prevail
- If good news prevail during the month before the interview, more news are related positively to risk attitudes
- Demographic and socioeconomic factors, as well as personality traits, influence the scope of adjustment to news in the long run
- Risk perception may mediate the relation between news coverage and risk attitudes

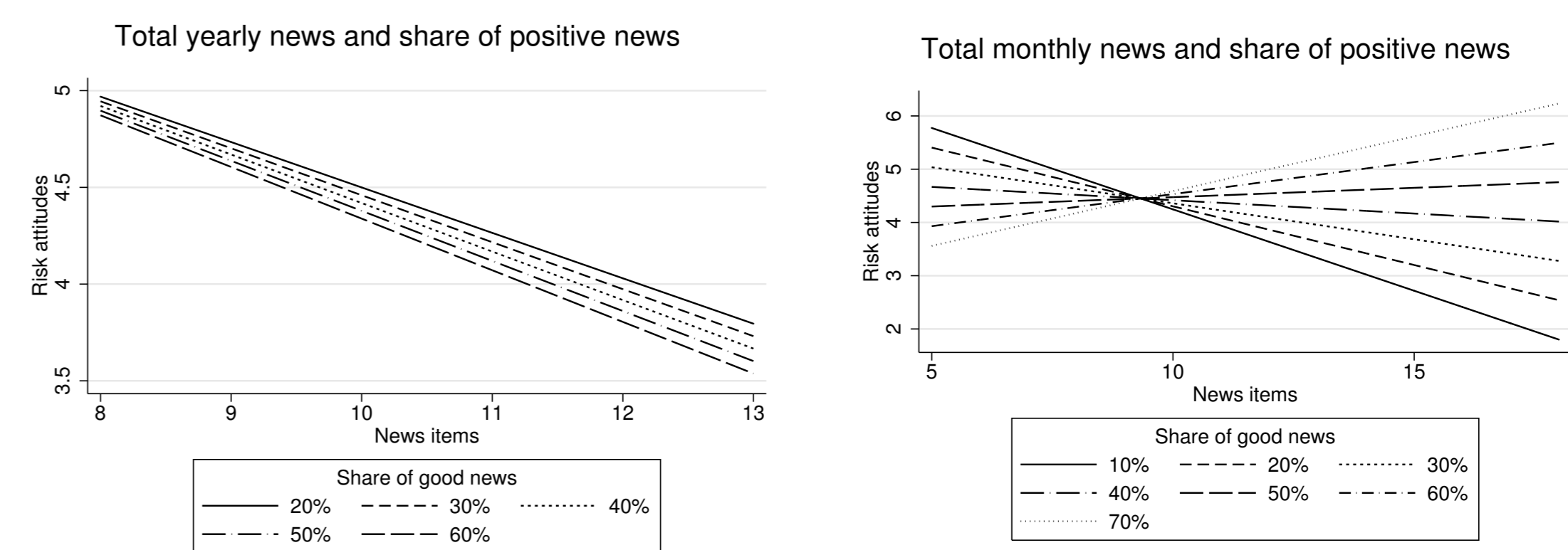
Results

Main results – Impact of economic news on risk attitudes:

VARIABLES	Risk Attitude r_{it}	Risk Attitude r_{it}	Risk Attitude r_{it}
year: bad news		-0.455*** (0.011)	-0.426*** (0.013)
year: good news		-0.607*** (0.017)	-0.602*** (0.022)
year: ambiguous news		-0.061*** (0.010)	-0.101*** (0.012)
month dev: bad news			-0.028*** (0.008)
month dev: good news			-0.071*** (0.013)
month dev: ambig. news			-0.008 (0.009)
Controls [†] and constant	yes	yes	yes
Observations	120,160	120,160	120,160
Number of individuals	30,855	30,855	30,855
Adjusted R-squared	0.004	0.045	0.046

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Positive share:



Heterogeneous effects:

VARIABLES	female Risk Attitude r_{it}	birth year Risk Attitude r_{it}	education Risk Attitude r_{it}	Big 5: O Risk Attitude r_{it}	Big 5: C Risk Attitude r_{it}	Big 5: E Risk Attitude r_{it}	Big 5: A Risk Attitude r_{it}	Big 5: N Risk Attitude r_{it}
v # year: bad news	0.033 (0.022)	-0.001 (0.001)	-0.046*** (0.011)	-0.065*** (0.012)	-0.077*** (0.012)	-0.052*** (0.011)	-0.058*** (0.012)	0.041*** (0.012)
v # year: good news	0.005 (0.036)	0.002** (0.001)	-0.105*** (0.018)	-0.100*** (0.019)	-0.127*** (0.019)	-0.099*** (0.019)	-0.079*** (0.019)	0.041** (0.019)
v # year: amb. news	-0.050** (0.022)	-0.002*** (0.001)	0.056*** (0.010)	0.008 (0.011)	-0.034*** (0.011)	-0.099 (0.011)	-0.019 (0.011)	0.036 (0.011)
v # month dev: bad news	0.024 (0.016)	0.000 (0.000)	0.016** (0.008)	0.009 (0.008)	0.011 (0.008)	0.008 (0.008)	-0.006 (0.008)	-0.001 (0.008)
v # month dev: good news	0.013 (0.025)	-0.001 (0.001)	0.003 (0.012)	-0.009 (0.013)	-0.006 (0.013)	-0.012 (0.013)	-0.016 (0.013)	0.014 (0.013)
v # month dev: amb. news	-0.028 (0.017)	-0.001 (0.001)	-0.005 (0.008)	-0.004 (0.009)	-0.031*** (0.009)	-0.000 (0.009)	-0.014 (0.009)	-0.008 (0.009)
News, year and month dev	yes	yes	yes	yes	yes	yes	yes	yes
Controls [†] and constant	yes	yes	yes	yes	yes	yes	yes	yes
Observations	120,160	120,160	114,956	113,536	113,470	113,678	113,673	113,702
Number of individuals	30,855	30,855	29,383	24,771	24,757	24,827	24,829	24,837
Adjusted R-squared	0.046	0.047	0.047	0.047	0.048	0.047	0.047	0.046

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Worries as potential mediators:

VARIABLES	Worries about:		
	economic development	own economic situation	job-security
year: bad news	0.092*** (0.003)	0.036*** (0.003)	0.053*** (0.004)
year: good news	-0.127*** (0.004)	-0.003 (0.004)	0.005 (0.006)
year: ambiguous news	-0.004 (0.003)	-0.017*** (0.003)	-0.027*** (0.004)
month dev: bad news	0.034*** (0.002)	0.004** (0.002)	0.001 (0.002)
month dev: good news	-0.025*** (0.003)	0.003 (0.003)	-0.002 (0.004)
month dev: ambig. news	-0.000 (0.002)	0.010*** (0.002)	0.012*** (0.003)
Controls [†] and constant	yes	yes	yes
Observations	157,782	157,755	89,266
Number of individuals	31,298	31,301	21,013
Adjusted R-squared	0.105	0.023	0.040

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Conclusions

- Evidence for a systematic impact of exogenous shocks on self-stated risk attitudes
- Media data as a promising measure to capture the perceived (economic) environment of individuals
- Next step, changes in risk behavior

[†] Controls include children in the household, unemployed, household income, marital status, self-stated health, month and year of the interview.