

# When two experts are better than one: The example of shareholder voting

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ESEM, Rotterdam, August 2024

# Motivation

- Many committees make decisions by majority voting e.g., within organizations (clubs, universities, parties...) or political bodies (municipal councils, parliaments,...)
- There are proposals with strong uncertainty and common interest
- Voting can efficiently aggregate dispersed information

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- “help” : our contribution

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- Leading example: shareholders who vote on an issue

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PA:= proxy advisory firm, e.g. ISS or Glass Lewis
- 3 One key point of contention:  
**PAs may crowd out shareholders' research incentives!**

Under which conditions does the presence of a proxy advisor (PA) improve the decision quality of shareholder meetings?

## Effects of proxy advisory firms, theoretically

- Malenko & Malenko (2019, J. Finance)
- Ma & Xiong (2021, Rev. Corp. Finan. Stud.)
- Levit & Tsoy (2022, AEJ-Micro)
- Malenko, Malenko, & Spatt (2023, WP)

## Strategic shareholder voting

- Maug & Rydquist (2009)
- Meierowitz & Pi (2022)
- ...

## Strategic voting with common interest

- Feddersen & Pesendorfer (1996, AER; 1997 Econometrica)
- Kawamura & Vlaseros (2017, J. Public Econ.)
- Iaryczower, Shi, and Shum (2018)
- ...

# Our Main Findings

Under two assumptions, a PA

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- and *improves* corporate decision quality,

both in symmetric and in asymmetric equilibria.

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Assumptions:

- 1 Board and proxy advisor are similarly well-informed.
- 2 Proxy advice arrives sufficiently early.



# Intuition behind our approach

- Consider a PA that is approximately as well informed as the board.
- If this PA disagrees with the board, own research pays off.
- SHs book the PA to identify contentious issues where research is helpful.
- This improves efficiency, compared to rubberstamping the board's proposal.

# Julius Baer Gruppe AG

## Key Takeaways

ISS has recommended AGAINST Julius Baer's remuneration report due to concerns about the compensation structure for senior management as well as the level of disclosure provided.

### ISS QuickScore

#### GOVERNANCE

3

Scores indicate decile rank relative to index or region. A decile score of 1 indicates lower governance risk, while a 10 indicates higher governance risk.

**Meeting Type:** Annual

**Meeting Date:** 10 April 2013

**Meeting ID:** 764363

**Swiss Exchange:** BAER

**Index:** FTSE EuroFirst 300

**Sector:**

Asset Management & Custody Banks

**GICS:** 40203010

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## Agenda & Recommendations

Policy: Europe

Incorporated: Switzerland

Item	Code	Proposal	Board Rec.	ISS Rec.
<b>MANAGEMENT PROPOSALS</b>				
1.1	M0105	Accept Financial Statements and Statutory Reports	FOR	FOR
1.2	M0550	Approve Remuneration Report	FOR	AGAINST
2	M0152	Approve Allocation of Income and Dividends of CHF 0.60 per Share	FOR	FOR
3	M0260	Approve Discharge of Board and Senior Management	FOR	FOR
4.1	M0201	Reelect Daniel J. Sauter as Director	FOR	FOR
4.2	M0201	Reelect Claire Giraut as Director	FOR	FOR
4.3	M0201	Reelect Gilbert Achermann as Director	FOR	FOR
4.4	M0201	Reelect Andreas Amschward as Director	FOR	FOR
4.5	M0201	Reelect Leonhard H. Fischer as Director	FOR	FOR
4.6	M0201	Reelect Gareth Penny as Director	FOR	FOR
5	M0101	Ratify KPMG as Auditors	FOR	FOR

Shaded areas indicate recommendations against board

► Items deserving attention due to contentious issues or controversy

# Model

## The firm

- faces decision  $A$  or  $B$  under uncertainty of the state of the world
- firm value will increase iff corporate decision matches the state
- true state:  $\theta \in \{A, B\}$ , with equal prior probability
- board proposes  $B$  based on signal with quality  $q_B \in (\frac{1}{2}, 1)$   
(i.e.,  $Pr[s_B = b | \theta = B] = q_B$  and  $Pr[s_B = b | \theta = A] = 1 - q_B$ )

## Proxy advisor (PA)

- receives signal of quality  $q_P \in (\frac{1}{2}, 1)$
- offers truthful vote recommendation for fee  $f$ 
  - robust to assuming strategic profit-maximizing PA

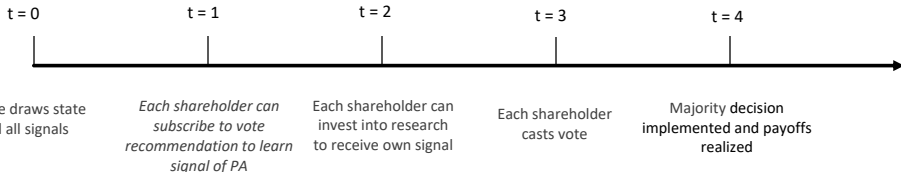
## Shareholders (SHs)

- $N (\geq 3, \text{ odd})$
- interested in firm value
- three decisions for each SH: ...

...three decisions for each SH:

- 1 subscribe/not to PA's offer  
paying  $f > 0$  for learning PA's signal of quality  $q_P \in (\frac{1}{2}, 1)$ ,
- 2 invest/not  $c > 0$  in research  
costs  $c$  for signal quality  $q_S \in (\frac{1}{2}, 1)$ ,
- 3 vote *yes/no* on board's proposal  
simple-majority rule applies; no abstention

Timeline



## Assumption (BIB)

*Board is better informed than single shareholder, i.e.*

$$\ell_S \leq \ell_B,$$

where  $\ell_S := \log\left(\frac{q_S}{1-q_S}\right)$  and  $\ell_B := \log\left(\frac{q_B}{1-q_B}\right)$ .

Conditional on state  $\theta$ , all signals are independent, and precision levels  $q_B$ ,  $q_P$ , and  $q_S$  are common knowledge.

## Assumption (PAF)

*PA's recommendation arrives BEFORE*

*SH's decision upon own research.*

- Equilibrium concept: Pure Perfect Bayesian Nash equilibria
- Equilibrium selection: Pareto-efficiency
- Outcome measure: decision quality  $\Pi(\sigma)$ 
  - $:=$  equilibrium probability that corporate decision will match  $\theta$
  - $\approx$  economic efficiency for small costs  $c$



# Results

# Symmetric Equilibria without PA

Let  $c > 0$  be sufficiently small.

## Proposition (SYM without PA)

*Assumption BIB  $\implies \exists$  symmetric equilibrium in which SHs invest in own research. Hence,  $\Pi(\sigma) \leq q_B$ .*

- Pareto-dominant symmetric equilibrium: “Rubber-stamping.”

- Suppose all SHs invest in own research and vote accordingly.
- If a SH is pivotal, all the other SHs' signals are in perfect balance!
- SH's own signal is worse than BD's signal.
- SH follows the board.
- Could save the cost by not investing in own research.
- Shown: Deviation from informed voting to rubber-stamping.

# Symmetric Equilibria with PA

Suppose BIB and PAF hold, costs  $c$  small, and fee  $f$  sufficiently smaller.

## Proposition (SYM with PA)

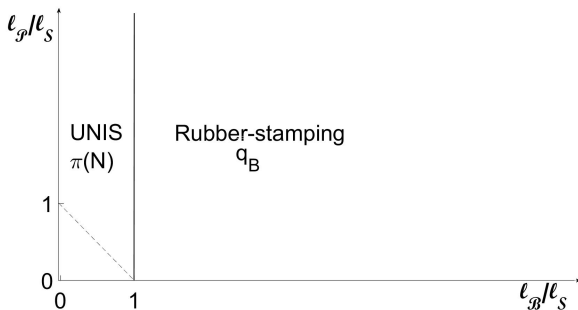
*PA with  $l_P \in (l_B - l_S, l_B + l_S) \implies \exists$  symmetric equilibrium in which SHs conditionally invest in research. We have  $\Pi(\sigma^{CAIS}) > q_B$ .*

Sketch of proof:

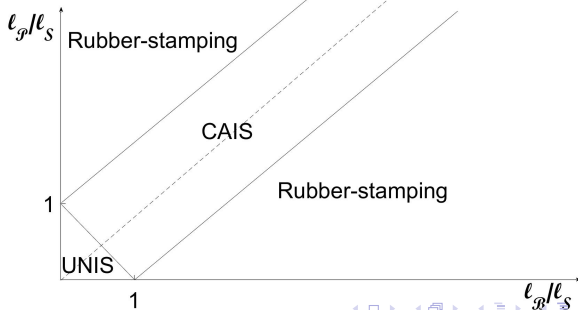
- $\sigma^{CAIS}$  (Conditional on Advice Investment in own Signal):
  1. Subscribe to PA
  2. after *for*-recommendation: vote *yes*  
after *against*-recommendation: invest in own signal
    - after favorable signal: vote *yes*
    - after negative signal: vote *no*

# Illustration: Pareto-Efficient Symmetric Equilibria

No PA



With PA



# Pareto-Efficient Asymmetric Equilibria

Suppose PAF holds, costs  $c$  small, and fee  $f$  sufficiently smaller.

## Proposition (ASYM)

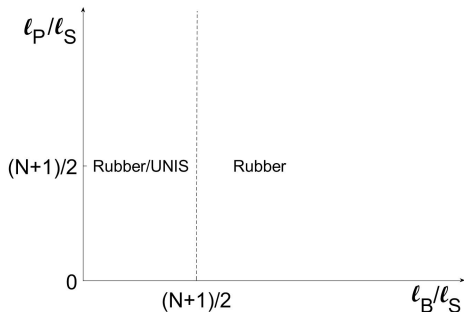
*Decision quality (in any Pareto-efficient equilibrium) with PA is weakly higher than (in any strategy profile) without PA, i.e.,*  
 $\Pi(\sigma^*) \geq \bar{\Pi}^{no-PA}$ .

# Sketch of Proof

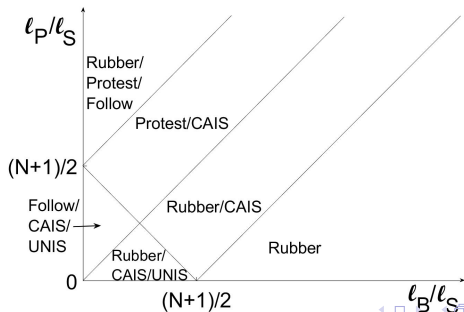
- Let  $S$  be the set of *minimal* strategy profiles.
  - All SHs fully condition on all information acquired.
  - Any reduction of information acquisition changes the decision quality with positive probability.
- Let  $S^* \subseteq S$  be the set of minimal strategy profiles that maximize decision quality.
- *Claim 1*: all strategy profiles in  $S^*$  must be equilibria for small enough costs  $c$  and  $f$ .
- *Claim 2*: all Pareto-efficient strategy profiles are in  $S^*$ .
  - Consider  $s \notin S^*$ .
  - Then either no maximal decision quality (Pareto-dominated by  $s' \in S^*$  for small enough costs).
  - Or not minimal – then Pareto-improvement by not acquiring the information on which SH does not condition.

# Pareto-Efficient Asymmetric Equilibria

No PA



With PA





# Discussion

# Possible Extension: Biased Board 1/2

Introduce bias of board.

- Symmetric bias in either direction
  - equivalent to noisier signal in current model
- Asymmetric bias: biased (more) into one direction (than into the other)
  - equivalent to noisier signal after particular proposal in current model
  - i.e., equilibrium in continuation game depends on which proposal the board makes

# Possible Extension: Profit-maximizing PA 1/2

Let PA strategically maximize profit.

- Starting in symmetric CAIS, there is no incentive for the PA to deviate to rationing its advice, other as in M & M.
  - SHs are homogeneous and play pure strategies.
- Starting in asymmetric CAIS/Protest or CAIS/Rubber, there is an incentive for the PA to ration its advice.
  - This restricts the number of shareholders playing CAIS in these equilibria.
  - PA must still serve a majority of SHs (otherwise no pivotality of own research).
  - Equilibrium is still CAIS/Protest or CAIS/Rubber.
  - Better corporate decision than without PA (in large parameter space).

## Possible Extension: Profit-maximizing PA 2/2

- Difference to M & M: PA does not compete with private information acquisition technology but complements it.
- Main message that PA (weakly) improves decision quality remains intact.
- Open question: What if we allow for capture? (Next project...)

Model can be used to evaluate various SEC guidance changes and EU regulatory changes.

- Timeline (timing *should* matter!)
  - November 2019 SEC draft rule: Companies get time to respond to PA.
  - This would have shortened the time available to investors.
  - Final July 2020 rule just requires PA to have a mechanism for investors to become aware of comments from companies.
  - In a rule adopted in July 2022, the SEC went even further: PAs now not required to engage with the companies that are the subjects of their advice. Motivation for the rule according to SEC Chairman Gary Gensler: proxy advisor clients should “receive independent proxy voting advice in a timely manner.”

- Interpretation of fiduciary duties
  - August 2019 SEC guidance: Simple rubber-stamping of proxy advice violates an investment advisor's fiduciary duties.
  - However, it remains to be seen whether the partial own research (optimal in the model) fulfills the fiduciary duties.

- Proxy advisor competence
  - August 2019 SEC and 2017 EU Shareholder Rights Directive: More disclosure by PA on methodology
  - July 2020 SEC guidance: Various rules, including potential to sue PA for poor reports.
  - July 2022 rule: The SEC removed the examples of situations in which the failure to disclose certain information in proxy voting advice may be considered misleading. Thus, arguably reduction in signal quality of the PA relative to July 2020.
  - Non-trivial effects in the model:
    - If PAF holds: Better informed PAs up to a certain level may encourage information acquisition by the shareholders and improve decision quality; for even higher information quality of the PA, substantially beyond the board's, the effect is reversed.
    - If instead proxy advice does not arrive sufficiently early, a competence-increasing regulation of the PA affects decision quality either negatively or not at all.

# Conclusion: Leading Example

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Then proxy advice and shareholders' own research work as *complements*.

A public signal can foster the incentives to invest in private signals.

If

- it is similarly informative as the prior proposal; and
- it arrives sufficiently early.

Then public signal and voters' private signals work as *complements*.



Thank you! [berno.buechel@unifr.ch](mailto:berno.buechel@unifr.ch)

Notes ...

# Sketch of Proof for Proposition (ASYM)

- Let  $S$  be the set of *minimal* strategy profiles.
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# Pareto-Efficient Asymmetric Equilibria

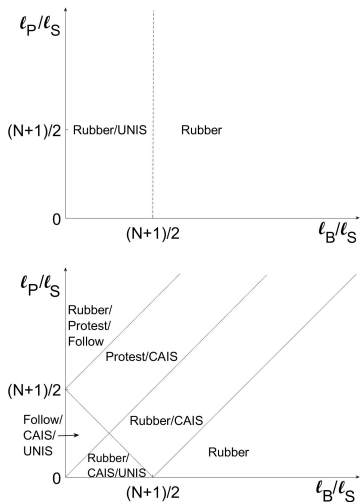


Abbildung: Pareto-efficient strategy profiles. Upper panel without a PA, lower panel with a PA

## Example: Symmetric Equilibria

- Let  $q_S = 0.6$ ,  $q_B = 0.75$ , and  $q_P = 0.7$ .
- Then  $\ell_B/\ell_S = 2.7$  and  $\ell_P/\ell_S = 2.1$ .

Decision quality		$N = 5$	$N = 21$	$N = 101$
No PA	$\Pi(\sigma) \leq q_B$	0.75	0.75	0.75
With PA	$\Pi(\sigma^{CAIS}) =$	0.798	0.855	0.917

[bb: Asymmetric in this example would mean: No PA,  $N - 2$  UNIS and 2 rubber; With PA,  $N - 4$  UNIS, 4 CAIS, 0 Rubber.]



## Proposition (ASYM without PA)

Let assumption BIB hold. and let  $c > 0$  be arbitrarily small.  
Suppose no PA is admitted.

- (i) If  $\frac{\ell_B}{\ell_S} \geq \frac{N+1}{2}$ , then there does not exist an equilibrium in which any shareholder invests in own research. Hence, decision quality in equilibrium is bounded by:  $\Pi(\sigma) \leq q_B$ .
- (ii) If  $\frac{\ell_B}{\ell_S} < \frac{N+1}{2}$ , then the number of shareholders who invest is at most  $z_1$ , with  $z_1 := N - \lfloor \frac{\ell_B}{\ell_S} \rfloor$ . Hence, decision quality in equilibrium is bounded by:  

$$\Pi(\sigma) \leq q_B \cdot \pi(z_1, z_1 - \frac{N-1}{2}) + (1 - q_B) \cdot \pi(z_1, \frac{N+1}{2}).$$

Pareto-efficient strategy profile in (ii):

- $N - z_1 = \lfloor \frac{\ell_B}{\ell_S} \rfloor$  SHs do not invest but vote for BD (Rubber-stamping)
- $z_1$  invest and vote signal (UNIS)

# Intuition behind Boundary Conditions without PA

- If SH invested in a private signal, then he votes for what it indicates.
- Let such a SH condition on pivotality: the number of yes-votes of the other SHs equals the number of their no-votes.
- It follows that the *net* number of *uninformed yes*-votes equals the *net* number of *informed no*-votes of others.
- Given  $\ell_B \geq \ell_P$ , voting *no* after a signal against board requires that the signals inferred from pivotality provide sufficient evidence against the BD's signal.
- Hence, the minimum net number of SHs' no-signals required to justify voting *no*,  $\lfloor \frac{\ell_B}{\ell_S} \rfloor$ , is a lower bound of the number of uninformed votes, given pivotality.
- If it exceeds the simple majority (Case (i)), then also the number of uninformed votes does. Hence no pivotality!
- Otherwise (Case (ii)), it still yields an upper bound of the number of SHs' signals and hence decision quality.

## Proposition (ASYM with PA)

Let Assumptions BIB and PAF hold. Let costs  $c > 0$  be arbitrarily small and let fee  $f$  be sufficiently smaller.

Suppose there is a PA with  $\frac{\ell_P}{\ell_S} \in (\frac{\ell_B}{\ell_S} - \frac{N+1}{2}, \frac{\ell_B}{\ell_S} + \frac{N+1}{2})$ . Then there exists an equilibrium in which the number of shareholders who invest or conditionally invest is  $z_2 (\geq \frac{N+1}{2})$ , with

$$z_2 := N - \lfloor \frac{|\ell_B - \ell_P|}{\ell_S} \rfloor.$$

Strategy profile:

- $\lfloor \frac{|\ell_B - \ell_P|}{\ell_S} \rfloor$  SHs do not buy PA, do not invest, and vote for/against BD (rubber-stamping, Protest)
- $z_2$  play CAIS

# Example: Asymmetric Equilibria

- Let  $q_S = 0.6$ ,  $q_B = 0.8$ , and  $q_P = 0.7$ .
- Then  $l_B/l_S = 3.4$  and  $l_P/l_S = 2.1$ .

Decision quality		$N = 5$	$N = 21$	$N = 101$
No PA	$\Pi(\sigma) \leq$	0.8	0.867	0.983
With PA	$\Pi(\sigma) \geq$	0.824	0.875	0.932

Model can be used to evaluate various SEC guidance changes and EU regulatory changes.

- Interpretation of fiduciary duties
  - August 2019 SEC guidance: Simple rubber-stamping of proxy advice is seen to violate an investment advisor's fiduciary duties to its clients.
  - Effectively implies PAF. Thus, PA more value generating.
  - Caveat: It remains to be seen whether the partial own research that is optimal in the model fulfills the fiduciary duties in the eyes of the SEC.
- Timeline
  - November 2019 SEC draft rule: Companies get time to respond to PA.
  - This would in turn have shortened the time available to investors.
  - Final July 2020 rule just requires PA to have a mechanism for investors to become aware of comments from companies.

- Proxy advisor competence
  - August 2019 SEC and 2017 EU Shareholder Rights Directive: More disclosure by PA on methodology
  - July 2020 SEC guidance: Various rules, including potential to sue PA for poor reports.
  - Non-trivial effects in the model:
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    - If instead proxy advice does not arrive sufficiently early, a competence-increasing regulation of the PA affects decision quality either negatively or not at all.

Under which conditions does the presence of a proxy advisor (PA) improve the decision quality of shareholder meetings?

- Proxy advice and shareholders' own investment can work as complements leading to a positive effect on the corporate decision quality.
- Potential Extensions:
  - Improvement without PAF? (Possible for  $N = 1!$ )
  - Heterogeneity in signal quality and / or size?
  - Conflicts of interest?

# Asymmetric Equilibria with PA

Conjecture: Let Assumptions BIB and PAF hold. Let costs  $c > 0$  be arbitrarily small and let fee  $f$  be sufficiently smaller.

Pareto-efficient equilibria are

- 1  $\tau^+ < \frac{N+1}{2}$  and  $l_B \geq l_P$ .  $\lfloor \tau^- \rfloor$  play Rubber,  $\lfloor \tau^+ \rfloor - \lfloor \tau^- \rfloor$  play CAIS, and  $N - \lfloor \tau^+ \rfloor$  play UNIS.
- 2  $\tau^+ < \frac{N+1}{2}$  and  $l_B \leq l_P$ .  $\lfloor \tau^- \rfloor$  play SNI (buy recommendation and follow it),  $\lfloor \tau^+ \rfloor - \lfloor \tau^- \rfloor$  play CAIS, and  $N - \lfloor \tau^+ \rfloor$  play UNIS.
- 3  $\tau^- \geq \frac{N+1}{2}$ .  $N$  play rubber. (bb: Or some combination of rubber and protest that makes proposal be always accepted).
- 4  $\tau^- < \frac{N+1}{2}$  and  $\tau^+ \geq \frac{N+1}{2}$  and  $l_B \geq l_P$ .  $\lfloor \tau^- \rfloor$  play Rubber,  $N - \lfloor \tau^- \rfloor$  play CAIS.
- 5  $-\tau^- < \frac{N+1}{2}$  and  $\tau^+ \geq \frac{N+1}{2}$  and  $l_B \leq l_P$ .  $\lfloor -\tau^- \rfloor$  (or  $-\lfloor \tau^- \rfloor$ ) play Protest,  $N - \lfloor -\tau^- \rfloor$  play CAIS.
- 6  $-\tau^- \geq \frac{N+1}{2}$ .  $\frac{N+1}{2}$  play Rubber,  $\frac{N+1}{2}$  play Protest, 1 plays SNI.