

Too good to be truthful: Why competent advisers are fired

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Outline I

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Advice

- Advice is everywhere
 - financial advice
 - politicians and managers depend on adviser/consultants
 - consumer rely on sales personal
 - patients on physician
 - internet users on search engines
- incentives are not aligned
- infeasibility of incentive contracts
- repeated nature
- even best advice might turn out badly

Competent advisers are fired

- SEC bans Jack Goldman from financial services for life
 - buy recommendation for AT&T to get his kids into a prestigious preschool
- Wolfgang Bernhard is fired the day before starting as head of Mercedes-Benz
 - advocated a different strategy than the CEO in a board meeting
- Sultan Suleiman the Magnificent kills Grand Vizier Ibrahim Pasha and his son Mustafa after they ran successful military campaigns
- ...

This paper I

Claim

Advisers are fired **because** they are competent.

If perceived a bit less competent, they would have kept their job!

- low perceived competence: fire adviser
- uncertain competence:
 - risk of firing due to incompetence disciplines adviser
- high perceived competence:
 - no risk of being fired due to incompetence (any time soon)
 - free to push his own agenda
 - advice by highly competent adviser is not very useful
 - firing credible and necessary

This paper II



Figure: Reasons for firing a competent adviser (α : belief that A is competent)

Literature

- repeated cheap talk
 - sender observes state of the world (no types) (Renault et al. 2013, Park 2005...)
 - type of sender is honesty, not competence (Benabou and Laroque 1992, Sobel 1985) → no "too good"
- reputation for competence (Ottaviani and Sørensen 2006)
 - sender assumed to maximize perceived competence
- can reputation prevent opportunism? (Fama 1980, Holmström 1982...)
- ???

Model I

- in each period
 - ① adviser (A) recommends 1 of n options
 - ② decision maker (DM) follows recommendation; both observes whether hit or miss
 - ③ DM decides whether to continue or stop (outside option W_0)
- payoff
 - DM: hit gives 1, miss 0
 - each period 1 of n options is hit
 - each period A has 1 bonus option yielding 1, otherwise 0

Model II

- information
 - DM: options indistinguishable (prob $1/n$ to be bonus or hit for each)
 - A: knows bonus option
 - competent A: noisy signal regarding hit option
 - wolog: posterior $p_1 > p_2 > \dots > p_n > 0$
 - incompetent A: no information
 - $p_1 = p_2 = \dots = p_n = 1/n$
- discounting $\delta \in (0, 1)$
- DM's belief of facing competent A: α

Assumption

Outside option dominates incompetent advice but not best competent advice. $1/(n(1 - \delta)) < W_O < p_1/(1 - \delta)$

Strategies and solution concept

- Markov strategies with state variable α
 - $\beta^+(\alpha)$: prob to continue after hit
 - $\beta^-(\alpha)$: prob to continue after miss
- informative equilibria: competent A gives at least as good advice as incompetent A
- DM equilibrium strategy
 - continue if value is higher than outside option
 - mix only if value of continuing equals outside option

Intermediate result I

Lemma

An incompetent A recommends his bonus option for every α .

Intermediate result II

Lemma

A competent A uses a cutoff strategy $k(\alpha)$, i.e. A recommends the bonus option if it is among the $k(\alpha)$ first options and recommends option 1 otherwise.

- competent A might mix between to adjacent cutoff levels

Fire the incompetent

Proposition

In equilibrium, there exists an $\underline{\alpha} > 0$ such that DM ends the game whenever $\alpha < \underline{\alpha}$.

- assumption that outside option dominates eternal incompetent advice \rightarrow result for $\alpha = 0$
- continuity

Fire the competent: logic

- suppose DM continued for sure if $\alpha > \bar{\alpha}$
- for α close to 1, A is sure not to be fired in the next T periods
- A recommends bonus for α high enough
 - for T large enough recommending the bonus option for T periods dominates every strategy that requires not recommending the bonus option today
- then $\alpha = \alpha^+ = \alpha^-$
- DM's value at α is $1/(n(1 - \delta)) < W_O$
- contradicts that DM continues for all $\alpha > \bar{\alpha}$

Fire the competent: formal

Theorem (fire at the top)

There exists an $\varepsilon > 0$ such that in every equilibrium there exists a sequence of beliefs $(\alpha_i)_{i=1}^{\infty}$ converging to 1 where DM ends the game with at least ε probability at every element of the sequence.

If equilibrium strategies are piecewise continuous, then there exists an $\bar{\alpha} < 1$ such that $W(\alpha) = W_O$ for almost all $\alpha > \bar{\alpha}$. Furthermore, there exists an $\varepsilon > 0$ such that DM continues with probability $\beta^-(\alpha) < 1 - \varepsilon$ in case the recommendation does not fit his needs for almost all $\alpha > \bar{\alpha}$.

Expected length of game

Theorem (finite length)

For every belief and every equilibrium, the expected length of the game is finite and bounded from above by

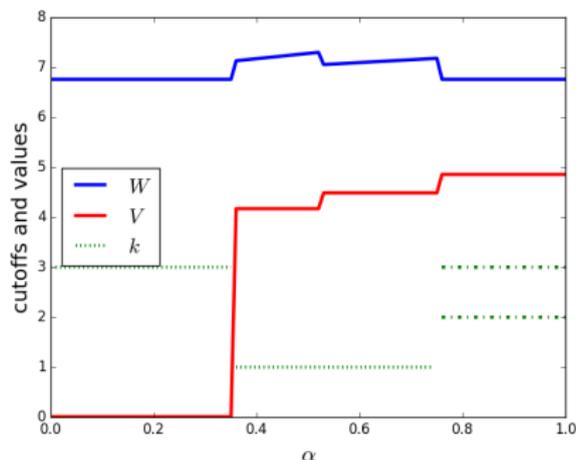
$$\bar{T} = T' \left(2 - \frac{1}{\log(1 - p_n^{T'}(1 - \delta))} \right)$$

where

$$T' = \left\lfloor 2 \frac{\log(1 - \delta)}{\log(\delta)} - 1 \right\rfloor.$$

Example I

- $n = 3$, $p_1 = 0.9$, $p_2 = 0.08$, $p_3 = 0.02$, $\delta = 0.95$ and $W_0 = 6.85$
- $\alpha \leq 0.35$: stop game
- $0.2 < \alpha < 0.75$: continue, $k(\alpha) = 1$ (best advice)
- $\alpha \geq 0.75$: continue if hit, mix if miss, A mixes



Commitment

Definition

An equilibrium is called **regular** if

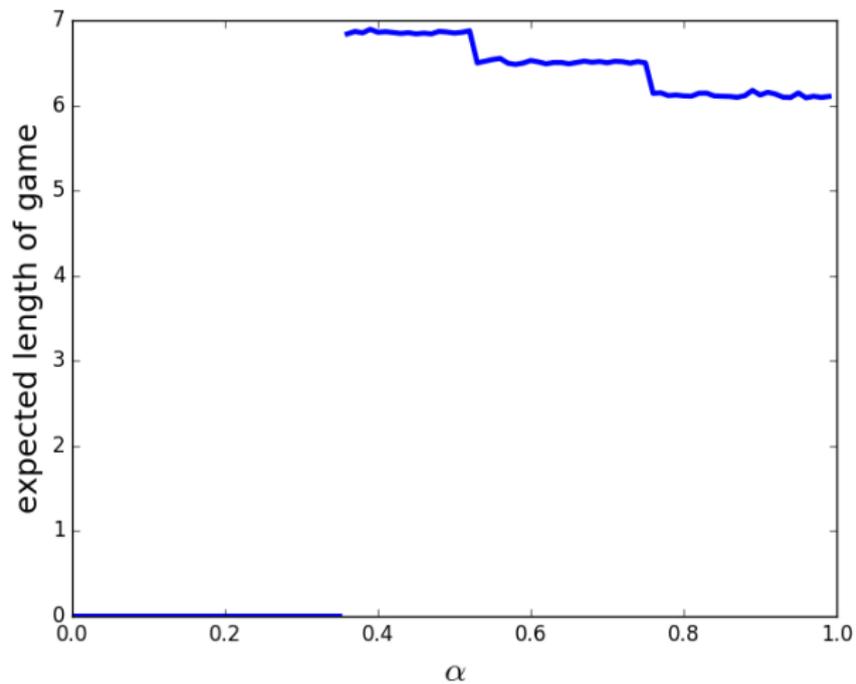
- players use piecewise continuous strategies,
- there exists an $\bar{\alpha} < 1$ such that $\beta^+(\alpha) = 1$ for $\alpha > \bar{\alpha}$ and $\beta^-(\alpha) < 1$ for $\alpha > \bar{\alpha}$ and
- A uses a mixed strategy for $\alpha > \bar{\alpha}$.

Proposition (Commitment)

In a regular equilibrium, $\lim_{\alpha \rightarrow 1} V(\alpha) < 1/(n(1-\delta))$

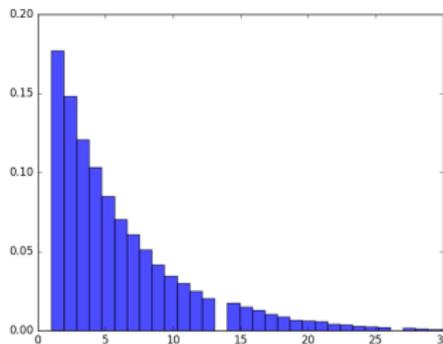
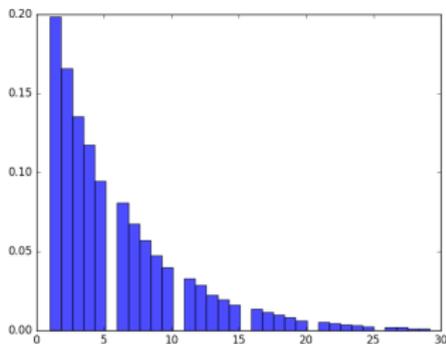
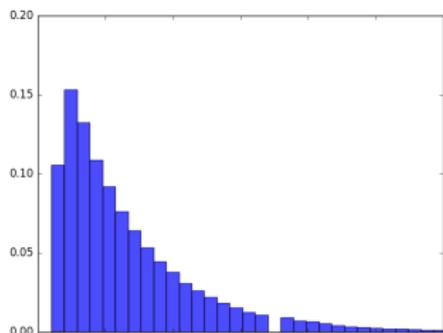
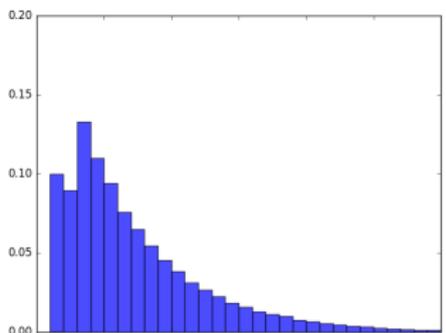
- A receives less than committing to "always best advice"

Example II



Example III

Distribution of game lengths for α : 0.4, 0.6, 0.8, 0.95



Discussion

- 2 reasons for firing (a competent expert)
 - perceived incompetence → hidden information
 - justified mistrust → moral hazard
- 2 inefficiencies
 - bad advise
 - firing of qualified experts
- what can overcome inefficiencies?
 - aligning incentives: "Global Analyst Research Settlements" 2003 required banks to separate investment banking and analysis
 - adviser commitment
 - (if δ is close to 1, the upper bound on game length becomes infinite)
- both hard to imagine in most applications (intrinsic misalignment, verifiability of signal)

Conclusion

- being perceived as very competent might get you fired
- DM benefits most from advice if he is unsure about competence
- inefficiency of firing competent advisers
- commitment problem
- non-monotonicity of advice quality in reputation
 - apparently overlooked by empirical literature e.g. on sell side analysts