

BONUS CULTURE

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(joint with Roland Bénabou, Princeton)

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A. TAXONOMY FOR CORPORATE SOCIAL RESPONSIBILITY

[Bénabou-Tirole “Individual and Corporate Social Responsibility” Coase lecture
LSE/*Economica* 2010]

CSR: Catch-all phrase

Vision 1: win-win (“doing well by doing good”)

“CSR \implies more profitable”.

- Naive version: free lunch. But who would sacrifice profit in order to do harm?
- More interesting version: better governance so as to promote long-term vision. Maximization of intertemporal profit often correlated with third -party welfare (environment, risk-taking ...).

Vision 2: delegated philanthropy

Firm as a channel for expression of citizens' values.

Stakeholders willing to pay more for fair-trade product, to receive lower wage (or return on investment) for working (investing) in ethical firm.

Again *profit maximization*.

Vision 3: corporate philanthropy

Sacrifice in profit.

[Friedman and Reich very opposed, for different reasons.]

B. DOES MARKET EXCHANGE CROWD OUT MORAL VALUES?

- ✓ Known that there is little concern for fairness (allocation of surplus between the two sides of market) when there is competition.

[E.g., Roth et al (1991)]

- ✓ But what about *externalities on third parties*?

Potential crowding out channel; competition supplies excuse to seller: “If I don’t do it, someone else will”.

Pretty rational if consequentialist preferences

[possibility of multiple Nash equilibria.]

Two enlightening laboratory experiments

(1) *Falk-Szech (2013) "Morals and Markets" (Science)*

Market exchange \implies loss of life of a mouse
(no such harm if no exchange).

Repeated market interaction \implies lower concern about external
impact of market exchange

[Explanation? Pluralistic ignorance? Bénabou-Tirole on "Laws and Norms" (2013):
learning about (absence of) "goodness of society" and change in norm?]

(2) *Bartling-Weber (2013) "Do Markets Erode Social Responsibility?"*

- ✓ Sellers and buyers can exchange
 - either a product without negative externality on third party
 - or a lower-manufacturing-cost product creating externality on third party

(or no product at all).

- ✓ In equilibrium, about 45% trade higher-cost product.

Key results:

- (1) Sellers and buyers share burden from preventing negative externality
- (2) Increased competition among sellers does not erode social responsibility.

Interpretation?

- (1) \implies both visions 2 and 3 are involved (but seller here is an individual, not a manager responding to a board)
- (2) Competition: buyer bears higher fraction of cost of good behavior
[Bénabou-Tirole (2006): overjustification effect?]

INTRODUCTION TO BONUS CULTURE

- Recent years: explosion of compensation (in levels and variance), especially performance-based pay, in many sectors.
[Lemieux et al (*QJE* 2009): parallel rise in incentive pay and earnings inequality much broader than just finance. Other papers document this as well.]
- Large bonuses and salaries needed, it is typically said, to “retain talent” or “attract top performers” in finance, corporations, medicine, academia, as well as to incentivize them to perform to the best of their high abilities.
- Controversial on equity grounds and efficiency grounds (below).

- This trend is almost contemporary with pervasive revelations of poor actual performance (e.g., banking, many industries), severe moral hazard, outright fraud.
- Somewhat paradoxical, since competition is usually thought of as efficiency-promoting
 - Papers “defending” high pay packages: based on competitive, efficient allocation of managers to firms
[Rosen 1981, Gabaix-Landier 2008]
 - Papers criticizing them based on market failures:
 - capture (CEOs “setting their own pay”)
[Bertrand-Mullainathan 2001, Bebchuk-Fried 2004]
 - externalities on the rest of society (consumers, environment, taxpayers): risk taking, say
[Bolton et al 2006, Besley-Ghatak 2011].

Pros: screening and incentivization

- ✓ Lazear *AER* (2000): Piece-rate also have a *sorting role*. Piece rate compensation selects productive workers in and unproductive ones out.

Study of Safelite Glass Company, which switched from hourly to piece rate (per wind shield installed). Increase in productivity by 44 %: about half from increased effort for given worker (MH). About half from in and out self-selection effects (AS).

- ✓ *“There are other reasons to care about top pay. One is incentives. The role of pay is not to get executives to work harder (most are workaholics already, toiling towards an appointment with the heart surgeon), but to recruit good managers and get them to take difficult decisions. Shutting a subsidiary, sacrificing a pet project or forgoing a tempting acquisition is not much fun. Without the spur of high pay, managers tend to avoid such things”.*

(The Economist, Special report on executive pay, 04/2012)

Cons: “bonus culture,” “culture of greed”

- *“It might sound surprising to a skeptical public, but culture was always a vital part of Goldman Sachs’s success. It revolved around **teamwork, integrity, a spirit of humility, and always doing right by our clients.** The culture was the secret sauce that made this place great and allowed us to earn our clients’ trust for 143 years. It wasn’t just about making money; this alone will not sustain a firm for so long. It had something to do with pride and belief in the organization. I am sad to say that I look around today and see virtually no trace of the culture that made me love working for this firm for many years. I no longer have the pride, or the belief...”*
- *“Weed out the morally bankrupt people, no matter how much money they make for the firm. And get the culture right again, so people want to work here for the right reasons. **People who care only about making money will not sustain this firm** –or the trust of its clients– for very much longer”.*

(Greg Smith, resigning Goldman Sachs executive director, 03/14/2012)

This work

- ✓ Labor market competition can interact with incentive structure inside firms to undermine work ethics – the extent to which agents “do the right thing” (for the firm; a fortiori for society).
- ✓ Increased competition for top employees:
 - technical change (general vs. firm-specific skills),
[Frydman: business vs engineering]
 - entry (for-profit hospitals)/ internationalization, reduced mobility costs,
 - deregulation of certain labor markets (Europe).

Frydman (2007): role of general skills and switching.

Fabbri-Marin (2011): role of global competition.

- ✓ Two mechanisms for destructive escalation of pay, each associated with different form of “work ethic”
 - Part I: multitasking + competition (this presentation)
 - Part II: corporate image + competition
- ✓ Common feature: increased competition makes it more difficult for firms to properly balance benefits and costs of high-powered incentives



“bonus culture” reduces efficiency, even output.

1. Model

- ✓ Agents (workers) exert efforts a, b in activities A, B

$$U(a, b; \theta, y, z) = va + (\theta + b)y + z - C(a, b).$$

Affine incentive scheme, z fixed wage and y bonus on task B
(nonlinear schemes give same results)

- ✓ Effort cost $C(a, b)$, strictly increasing & supermodular in (a, b)
- ✓ Activity A : long-term investments, cooperation, teamwork...
 - Not (easily) measurable \Rightarrow cannot be contracted upon
 - Effort a driven only by intrinsic motivation v : altruism, company spirit, love of job well done, etc.
 - Value v for this “ethical” task is common (here)

- ✓ *Activity B*: individual output, sales, patients treated, short-term revenue...
 - Measured \Rightarrow affine compensation scheme: $(\theta + b)y + z$
 - Productivity $\theta + b$, where talent θ is private information.

- “Talent” should be construed broadly:
 - ability on the job (knows previous circumstances better, ...)
 - willingness to focus on mission (rather than outside activities), to take tough/painful decisions
 - intensity of career concerns

- ✓ Two types: $\theta_H > \theta_L$, probabilities q_H and q_L .

Worker behavior and utilities

- ✓ When facing contract (y, z) , agent θ solves

$$U(y; \theta, z) = \max_{(a,b)} \{va + (\theta + b)y + z - C(a, b)\} \implies a(y) \downarrow, b(y) \uparrow$$

Bonus increase \implies more attention to task B
less attention to task A

- ✓ Outside option $\bar{U} \implies$ participation constraint:

$$U(y; \theta, z) \geq \bar{U}$$

Firms and social welfare

- ✓ Productivities A and B . Profit from worker θ under contract (y, z)

$$\Pi(\theta, y, z) = Aa(y) + (B - y) [\theta + b(y)] - z$$

- ✓ Social surplus from worker θ under contract (y, z)

$$W(\theta, y) = w(y) + B\theta$$

where $w(y)$ is the welfare driven by efforts:

$$w(y) = (A + v)a(y) + Bb(y)$$

Assume w strictly quasi-concave, maximum at y^* ,

$$w'(y^*) \equiv 0 \quad \text{type-independent}$$

3. Perfect competition

- ✓ Large number of firms compete for workers, free entry
 - Offers $\{y_i, z_i\}_{i \in \{L, H\}}$
- ✓ Find conditions for zero-profit, separating equilibrium allocation, then investigate existence and uniqueness.
- ✓ Separating equilibrium \Rightarrow contracts make zero profit.
- ✓ Now opposite distortion: gives too high-powered incentives to H types, so as to attract them, screen out L types.

$$y_L = y^* < y_H^c < B$$

Competitive outcome: HPIS

Welfare: monopsony versus competition

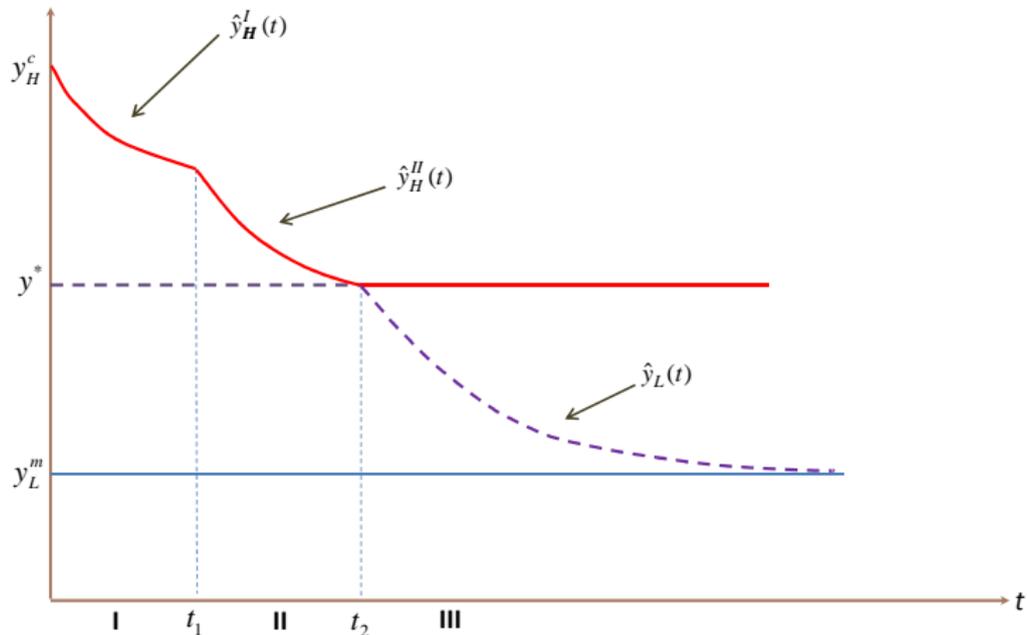
- ✓ *Single task* ($A = 0$): competitive equilibrium is efficient
- ✓ *Multitasking*: competition inefficient if
 - strong crowding out effect between tasks A and B (increase in b increases cost of effort a substantially),
 - A high,
 - few high types.

4. Imperfect Competition

- ✓ How does intensity of labor market competition affect level and structure of compensation, task allocations, profits, welfare? \implies Develop variant of Hotelling model to parametrize competitiveness.
- ✓ Parameter t of differentiation among employers
 - $t = 0$: perfect competition
 - $t \rightarrow \infty$: monopsonies.

Proposition (imperfect competition)

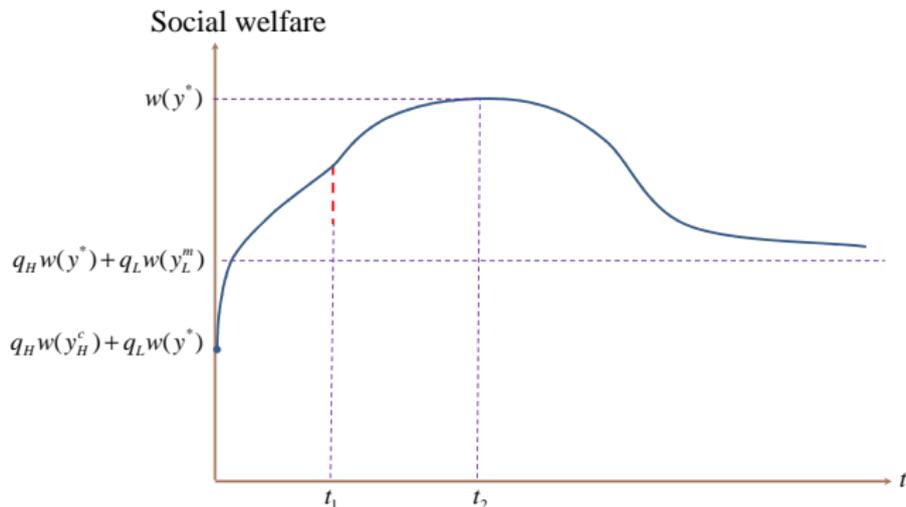
There exists unique $t_2 > t_1 > 0$ such that unique equilibrium is as below:



The optimal degree of competition

Proposition

Social welfare is hill-shaped as a function of the degree of competition in the labor market, reaching the first-best at t_2 where $y_L = y^* = y_H$.



Proposition (inequality)

Over regions I and II (high and medium competition), as competition becomes more intense:

- ✓ inequality in total pay $Y_H - Y_L$ rises
- ✓ so does the performance-based component.

Changes in performance pay account for more than 100 % of the rise in total inequality.

[more ambiguous in region III, the low -competition region]

5. Regulating compensation (perfect competition)

Suppose highly competitive labor market. Benefit of regulation depends on

- whether bonuses can be identified in total compensation
- whether other “currencies” can be used for compensation

[latitude to serve on other boards, own practice / consulting, lower lock-in]

Proposition (efficient bonus cap when no other currency)

If the regulator caps bonuses at y^* , the only equilibrium is a pooling one in which all firms offer, and all workers take, the single contract $(y^*, \pi(y^*) + (B - y^*)\bar{\theta})$, thereby restoring the first best.

Inefficient compensation

\$1 \rightarrow λ_i utility to type i with

$$1 > \lambda_H > \lambda_L.$$

Suppose further that

$$\frac{|w'(y_H^c)|}{\Delta\theta} < \frac{1 - \lambda_H}{\Delta\lambda},$$

(currency is not used in the absence of regulation),

and that

$$\frac{q_H}{q_L} < \frac{\Delta\lambda}{1 - \lambda_H}$$

(LCS allocation is IE and so the unique equilibrium).

Proposition (inefficient bonus cap)

Suppose bonus is capped at $\bar{y} \in [y^*, y_H^c]$. Then type L has bonus y^* and type H bonus \bar{y} .

Social welfare is increasing (in the Pareto sense) with \bar{y} .

Proposition (inefficient compensation cap)

Cap \bar{Y} that is binding for the high type. Again social welfare increasing (in the Pareto sense) with \bar{Y} .

Proposition (welfare compensation cap)

A small tax τ on total earnings always improves welfare:
 $dW/d\tau|_{\tau=0} > 0$.

6. Conclusion

Bonus culture as a byproduct of increase in competition for talent.

Alleys for research:

- asymmetries among competing firms (e.g., in term of observability)
 - private equity vs. banks
 - more generally, self selection into profession
- displacement of motivated workers: our next project.
Idea: workers have
 - heterogeneous preferences over ethics and money
 - care about their reputation.

Mechanism: discourage ethical workers to even enter the profession/firm.