Discussion by Pietro Reichlin of

Managerial incentives, Capital Reallocation, and the Business Cycle

by

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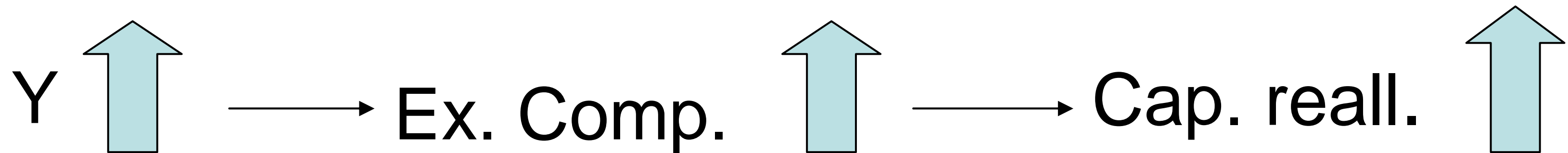
Stylized facts the model tries to explain:

- Executive compensation
- CEO turnover (capital reallocation)

are procyclical + causation:



Main features of the model:

Investors: have no information on project types that managers are allocated to

Managers:

- get private non material benefits
- are subject to limited liability
- their reservation wage increases with n. of managers

Contracting problem:

How best reallocate capital among good and bad project types when type is private information of the manager (adverse selection)

Capital reallocation?

In an initial sub-period capital is distributed equally among project types and…

it is reallocated in a second sub-period after managers learn productivity of project and contracts are selected

Contracting problem

$$\max \sum_j \pi_j d_j \quad \text{s.t.:}$$

$$\sum_j \pi_j d_j \le \sum_j \pi_j (a_j + b) k_j - v \qquad \text{(PC)}$$

$$\sum_j \pi_j k_j \le k \qquad \text{(RC)}$$

$$d_j \le a_j k_j \qquad (\text{LL}_j)$$

$$(a_j + b) k_j - d_j \ge (a_j + b) k_i - d_{ij} \qquad (\text{IC}_j)$$

$$k_j \ge 0, \qquad d_{ij} \le a_j k_i$$

Optimality implies:

$$d_{ij} = a_j k_i, \qquad j \neq i \in \{H, L\}$$

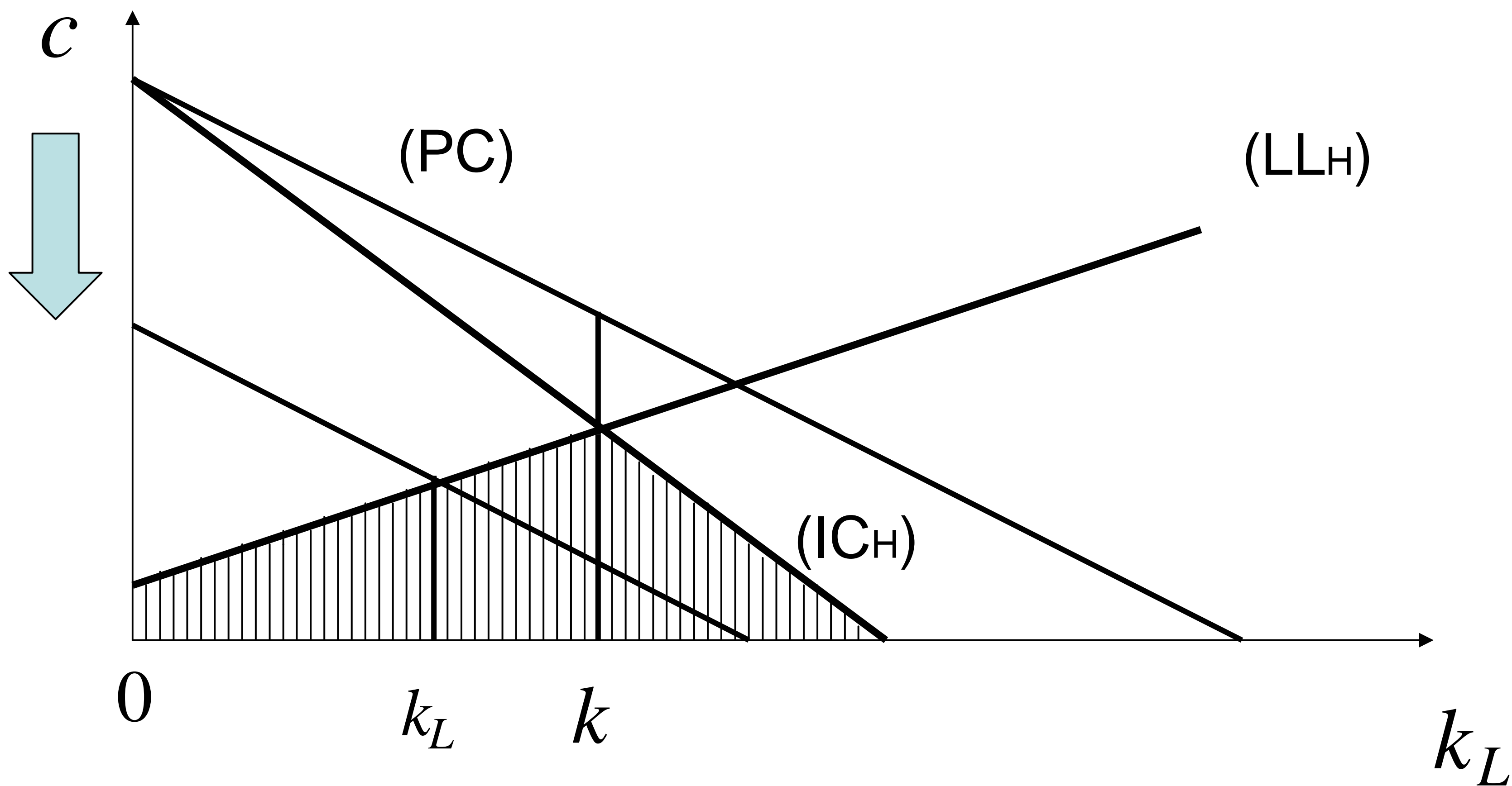
$$d_L = a_L k_L - b \min\{k_H - k_L, 0\}$$

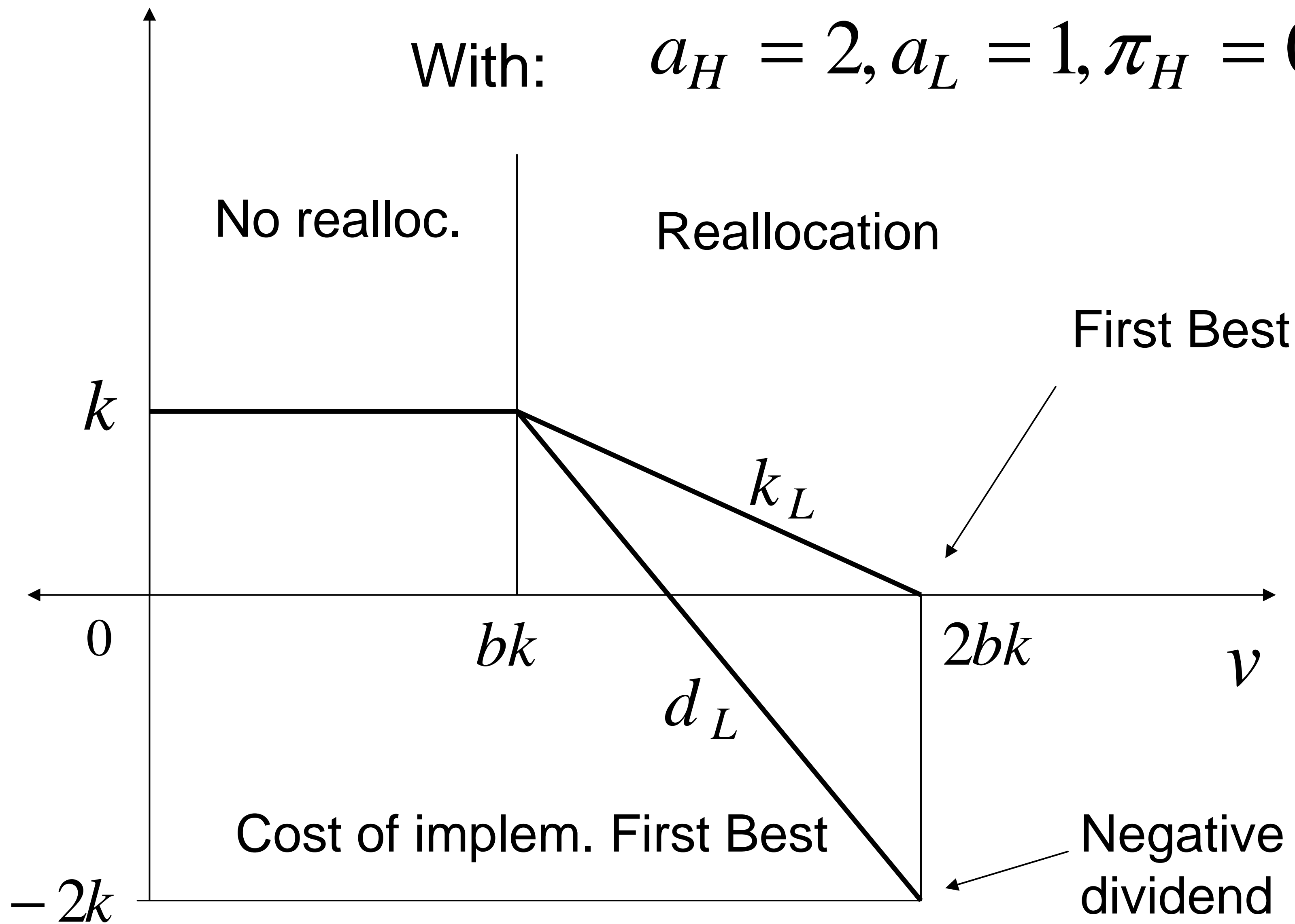
$$k_H \geq k_L$$

$\Rightarrow (\mathrm{IC}_{\mathrm{L}})$ **Satisfied with equality**

Assuming that b **is sufficiently high:**

Effect of increasing v





With: $a_H = 2, a_L = 1, \pi_H = 0.5$
No realloc.
Reallocation
First Best
k
k_L
0
bk
$2bk$
v
d_L
Cost of implem. First Best
Negative dividend
$-2k$

Negative dividends from underperforming firms? Investors give bonuses to managers to stay home

But neg. dividends are ex-post bonuses (given after uncertainty is realized)

Is this compatible with no commitment?

Closing the model

Initial investment in each project is fixed at k
Then, m = number of managers is perfectly correlated with output

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Crucial assumption: managers' reservation **wage (v) is increasing in m** (i.e., in output)

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*Then: **there is amplification of business cycle**:*

-- Reallocation when v (i.e., Y) is high

--Reallocation reduces losses from agency costs

Opposing view?

Kaplan (94): executive turnover negatively related
And cash comp. positively related to earnings
and sales

Inferior technologies can more easily turn
unprofitable and scrapped in recessions
(e.g., vintage capital model of Caballero-
Hammour, ‘94) *“Cleansing effect of recessions”*

Evidence on job reallocation: concentrated
during recessions

Models where b. cycle is amplified are mainly based on collateral. Here no collateral: just private information!

Alternative view:

Adverse selection: proportion of bad projects increases with borrowing costs

E.g.: Reichlin-Siconolfi (04): In upswing of cycle borrowing costs increase and lenders attract more bad projects

Final Remark:

Since $v'(m) > 0$ is very important: one would like this assumption to arise from deeper microfoundations

Alternative ass.: (1) Managers that are hired last (in the booming economy) are the less able,
(2) More managers enter the market in booms

I know this is inconsistent with data within this model since it implies countercyclical compensations! But addressing issue may still be interesting