

All Clear for Takeoff:
Evidence from Airports on the Effects of Infrastructure
Privatization

Howell, Jang, Kim, and Weisbach

Discussion – Minnesota Corporate Finance Conference – May 2024

Erik Loualiche – University of Minnesota

Is Private Equity evil?

Is Private Equity evil?

Ziggy contemplating a
visit to the Vet



Is Private Equity evil?

Why Your Vet Bill Is So High

Corporations and private-equity funds have been rolling up smaller chains and previously independent practices.

By Helaine Olen

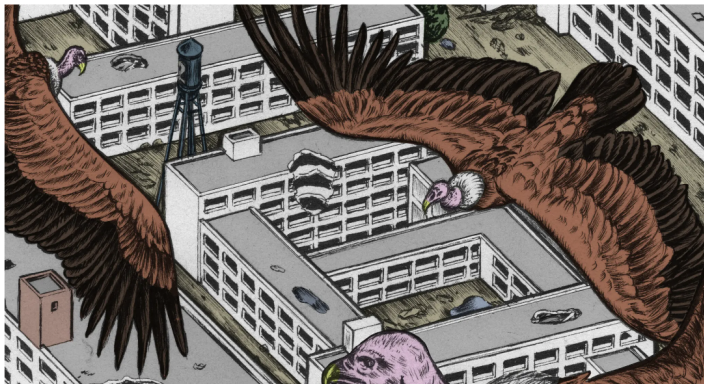


Illustration by Ben Kothe / The Atlantic. Source: Getty.

OPINION
GUEST ESSAY

Private Equity Is Gutting America — and Getting Away With It

April 28, 2023



PLUNDER

Private Equity's Plan
to Pillage America



BRENDAN BALLOU

PLUNDER: PRIVATE EQUITY'S PLAN TO PILLAGE AMERICA

Buy the book

Private equity surrounds you. Firms like Blackstone, Carlyle, and KKR are among the largest employers in America and hold assets that rival those of small countries. Yet few understand what these firms are or how they work.

In *Plunder*, Brendan Ballou explains how private equity has reshaped America's business by raising prices, reducing quality, cutting jobs, and shifting resources from manufacturing to unproductive parts of the economy. Ballou



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Edité par le GROUPEMENT ECONOMIQUE

Private Equity is evil: some evidence

POLITICO

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SPECIAL REPORT

‘They Were Traumatized’: How a Private Equity-Associated Lender Helped Precipitate a Nursing-Home Implosion

Advocates for elderly people say loans from private lenders are enabling nursing-home operators to take cash out of their homes, jeopardizing their finances.

Private Equity is evil: some evidence

The New York Times

Push for Profits Left Nursing Homes Struggling to Provide Care

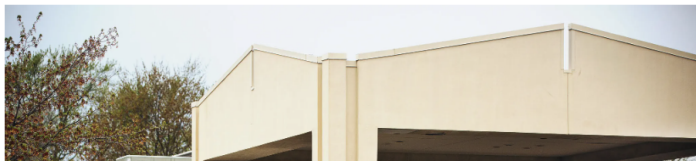
Some with private equity owners, focused on making money, were particularly ill equipped and understaffed to handle Covid-19.



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234



Private Equity is evil: some evidence

The Review of Financial Studies



Owner Incentives and Performance in Healthcare: Private Equity Investment in Nursing Homes

Atul Gupta

NBER and Wharton School, University of Pennsylvania, USA

Sabrina T. Howell

NBER and NYU Stern, USA

Constantine Yannelis

NBER and Chicago Booth, USA

Abhinav Gupta

NBER and UNC Kenan-Flagler Business School, USA

Amid an aging population and a growing role for private equity (PE) in the care of older adults, this paper studies how PE ownership affects U.S. nursing homes using patient-level Medicare data. We show that PE ownership leads to a patient cohort with lower health risk. However, after instrumenting for the patient-nursing home match, we find that PE ownership increases mortality by 11%. Declines in measures of patient well-being, nurse

Private Equity is evil: some evidence

The New York Times

TheUpshot

Serious Medical Errors Rose After Private Equity Firms Bought Hospitals

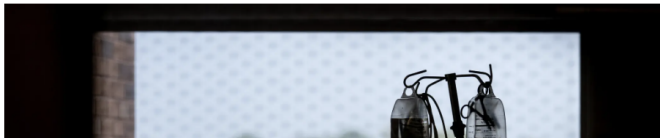
A new study shows an increase in the rate of inpatient complications, including infections and falls, though patients were no more likely to die.



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Private Equity is evil: some evidence

JAMA | **Original Investigation**

Changes in Hospital Adverse Events and Patient Outcomes Associated With Private Equity Acquisition

Sneha Kannan, MD; Joseph Dov Bruch, PhD; Zirui Song, MD, PhD

IMPORTANCE The effects of private equity acquisitions of US hospitals on the clinical quality of inpatient care and patient outcomes remain largely unknown.

OBJECTIVE To examine changes in hospital-acquired adverse events and hospitalization outcomes associated with private equity acquisitions of US hospitals.

DESIGN, SETTING, AND PARTICIPANTS Data from 100% Medicare Part A claims for 662 095 hospitalizations at 51 private equity-acquired hospitals were compared with data for 4 160 720 hospitalizations at 259 matched control hospitals (not acquired by private equity) for hospital stays between 2009 and 2019. An event study, difference-in-differences design was used to assess hospitalizations from 3 years before to 3 years after private equity acquisition using a linear model that was adjusted for patient and hospital attributes.

MAIN OUTCOMES AND MEASURES Hospital-acquired adverse events (synonymous with hospital-acquired conditions; the individual conditions were defined by the US Centers for Medicare & Medicaid Services as falls, infections, and other adverse events), patient mix, and hospitalization outcomes (including mortality, discharge disposition, length of stay, and readmissions).



Private Equity is evil: some "French" evidence



Journal of Financial Economics

Volume 102, Issue 2, November 2011, Pages 432-453



Growth LBOs ☆

[Quentin Boucly](#)^a, [David Sraer](#)^b  , [David Thesmar](#)^{a c}

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<https://doi.org/10.1016/j.jfineco.2011.05.014> ↗

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Abstract

Using a data set of 839 French deals, we look at the change in corporate

This paper

- Airport: semi-public infrastructure
- Examine outcome of PE and non-PE private deals
- Find that PE deals are comparatively on an upward trajectory
 - ▶ Operations LHS: passengers/flight, # passengers, # flights, # international routes
 - ▶ Quality: cancellation, low-costs carriers
 - ▶ Financials: income, revenue, capex

Plan

1 Methodology

2 Mechanisms

3 Public Infrastructure

How can we estimate the PE effects

Some challenges

- Selection: which deals are targeted by PE firms
- Data: some public information, but mostly private firms
- Sample size: not so many deals on existing airports, even fewer when matching comparables (close bids)

How can we estimate the PE effects

The Ideal Experiment

- Data Generating Process

$$y_i = \beta D_i + \theta' X_i + \varepsilon_i$$

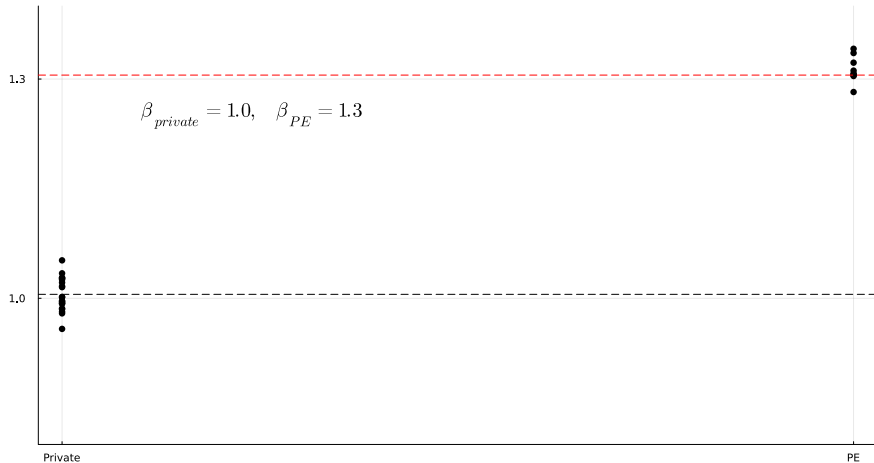
- ▶ $D_i \in \{0, 1, 2\}$ depending on type of deal
- ▶ X_i s are known controls

- Ideally, I control for stuff and look at the average for each type of deal

$$\mathbf{E}\{y_i - \theta' X_i | D_i\}$$

How can we estimate the PE effects

The Ideal Experiment



How can we estimate the PE effects

The Not-Ideal Experiment

- Data Generating Process

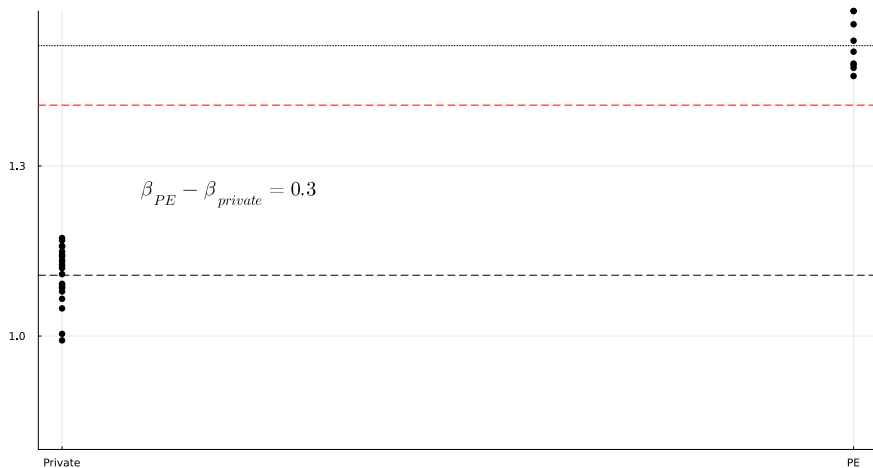
$$y_i = \beta D_i + \theta' X_i + \varepsilon_i$$

- I cannot control for X_i s (unobserved)
- I can remove a baseline (here the static government-owned)

$$\mathbf{E} \{y_i - \bar{y} | D_i\}$$

How can we estimate the PE effects

The Not-Ideal Experiment



How can we estimate the PE effects

Data

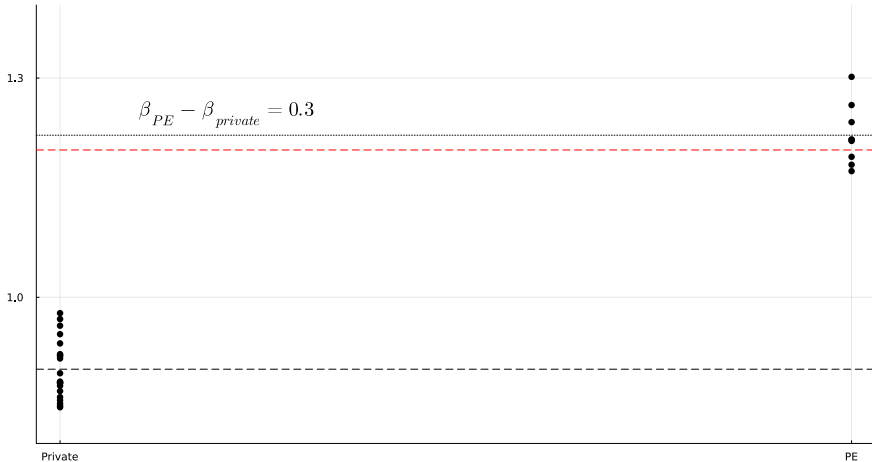
- Data Generating Process

$$y_i = \beta D_i + \theta'_i X_i + \varepsilon_i$$

- I can control for X_i s but imperfectly: $\theta_i = \theta \cdot (1 + \delta(D_i))$
 - ▶ δ_i introduces heterogenous effects by groups (deals)
 - ▶ I can only control for X_i but there is some noise in the δ_i
- Quick simulation for $\delta_i \simeq 10\%$

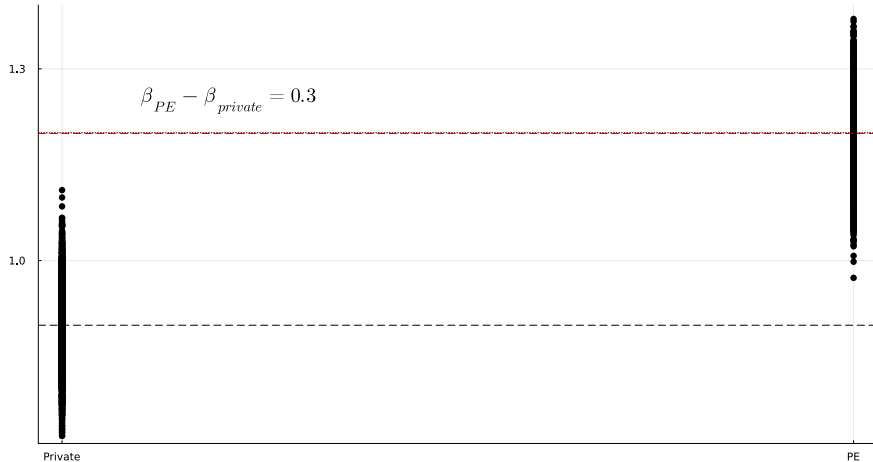
How can we estimate the PE effects

Data (small sample)



How can we estimate the PE effects

Data (large sample)



Some other quibbles

- Comparison between private and PE "finalists"
- Systematic differences in the price between the first and second bid?

Plan

1 Methodology

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3 Public Infrastructure

Airports

- Get revenues from airlines and other operations (largely function of passenger traffic)
- What does growth mean?
 - ▶ Extract more rents from airlines/passengers
 - ▶ Increase welfare for the local community

- Specific competitive structure
 - ▶ High fixed costs (land, regulation)
 - ▶ Natural monopoly: captive demand

Airports

An example of increased efficiency

- Adjust fee structure to favor larger planes (distort fixed vs. variable costs of operating a single flight)
- More efficient for the airports: fewer rotations etc.
- What about customers/suppliers
 - ▶ Risk shifted to airlines: larger planes means harder to fill, more revenue risk
 - ▶ Reduce "quality" for passengers (fewer scheduled flights?)

Some responses in the paper

- Increased quality perception (aggregate measure though)
- Increased volume
- See the results in more concentrated markets (with state flag carriers)

What does PE do?

What is special about PE ...

- ... and what does infrastructure investment reveal about PE?

- Financial structure: high incentives
- Knowledge
 - ▶ Better are streamlining operations ... but why?
 - ▶ Better connections ... through extensive deal-making or deal portfolio

- Public infrastructure projects are
 - ▶ Capital intensive
 - ▶ "Simple" operationally?
- How does this affect PE relative to the "standard" private sector?

Plan

1 Methodology

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Is public infrastructure special?

What is special about infrastructure?

- Natural monopolistic position
 - ▶ Utilities, education, roads, police ...
- Some degree of positive externalities
 - ▶ Agglomeration, knowledge spillovers, networks, coordination failures
- Naturally exposed to inefficiencies
 - ▶ No countervailing force from market competition
 - ▶ Implicit guarantee from government entity

Is public infrastructure special?

The Jensen view

- PE natural candidate to solve inefficiencies due to *Hard-powered incentives*
 - ▶ Public infrastructure are a good candidate for PE ownership
 - ▶ because PE firms are better at “optimizing” and restoring efficiency
- Competition is restored through ownership rather than through the goods market
- Still: why is PE better at bidding these projects than the private sector?
 - ▶ A world where we set up efficient recurring auctions for public infrastructure projects without PE firms
 - ▶ ... necessarily inefficient?

Is public infrastructure special?

Thinking about another margin: quality

- Price and quantity can be (are?) regulated (government contracts)
- Operations' decline translate into lower quality (e.g. flight delays and cancellation)
- Decline in quality leads to lower demand
 - ▶ Composition effect in demand: high-spending customers (main airlines) leave first
 - ▶ Who leaves a school district when quality goes down? (Hirschman, 1970)
- Usually, with competition: countervailing forces pushing efficiency back up
- Case of infrastructure: no such force
 - ▶ Lack of competition leads to some downward spiral
- Bidding for ownership (or lease contract) could restore some form from above
 - ▶ PE is just good at bidding (selection vs. operation)
 - ▶ PE is good at restructuring distressed assets

Final Thoughts

Interesting Paper! Go read it.

Take away

- PE is still evil. But not everywhere.
- Infrastructure projects have some specific features that make them suited for PE ownership