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## Private Equity and Employment

Do private equity transactions result in job losses or create new employment opportunities? In **Private Equity and Employment** (NBER Working Paper No. 17399), authors **Steven Davis, John Haltiwanger, Ron Jarmin, Josh Lerner, and Javier Miranda** analyze data from the U.S. Census Bureau's Longitudinal Business Database for the period 1980 to 2005. They track U.S. private equity transactions at 3,200 target firms and their 150,000 establishments—that is, specific factories, offices, retail outlets, and other distinct physical locations where business takes place—before and after acquisition, comparing outcomes at target firms to outcomes at “controls” that are similar in terms of industry, size, age, and prior growth.

The authors find that relative to a control group, employment at target

establishments declines 3 percent over the two years following a buyout and 6 percent over five years. The job losses

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“Private equity buyouts catalyze the creative destruction process as measured by both gross job flows and the purchase-and-sale of business establishments.”

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are concentrated among public-to-private buyouts and among transactions involving firms in the service and retail sectors: the largest employment losses occur at firms engaged in retail trade.

In contrast, independently owned firms exhibit large employment gains relative to the controls in the wake of buyouts, mainly because they undertake more acquisitions. There are more private equity buyouts of independent firms than public-to-private transactions, and they account for a larger share of jobs.

While private equity buyouts accelerate job losses at target firms relative to

controls, they also lead to the more rapid creation of new job positions, particularly in the form of new jobs at new establish-

ments. In fact, the sum of gross job losses and gross job gains at target firms exceeds that of the controls by 13.5 percentage points over the two years following a buyout. About 43 percent of the extra job reallocation reflects a more rapid pace of employment adjustments; the rest reflects acquisitions and divestitures. Overall, net relative job losses at target firms are less than 1 percent of initial employment. These findings provide evidence that private equity buyouts catalyze the creative destruction process as measured by both gross job flows and the purchase-and-sale of business establishments.

—Lester Picker

## Exercise, Physical Activity, and Exertion over the Business Cycle

In the United States, people get a substantial fraction of their exercise on the job, especially if those jobs are relatively physically demanding, for example in such sectors as construction, mining, and manufacturing. For the average individual between the ages of 25 and 55, work is responsible for about 26 percent of total daily physical

activity. Among less-than-college educated males, work-related physical exer-

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“Unemployed workers do not increase their recreational physical activity enough to make up for the physical activity that was demanded by their lost jobs.”

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tion rises to 33 percent of total daily physical activity.

In **Exercise, Physical Activity,**

**and Exertion over the Business Cycle** (NBER Working Paper No. 17406),

**Gregory Colman** and **Dhaval Dave** calculate that, on average, unemployed workers do not increase their recreational

physical activity enough to make up for the physical activity that was demanded by their lost jobs. Their analysis is based on individual records from the American Time Use surveys between 2003 and 2010. These surveys consist of a detailed diary on time use from 4AM to 4PM on the interview day.

The authors use the standardized metabolic equivalent of task (MET) measures that are available for a wide variety of activities and occupations along with the information in each person's diary on the minutes spent performing specific activities like eating, sleeping, roller-

blading, and work. They then compute total daily energy expenditure and compare the results before and after the most recent recession. They further control for various observed and unobserved factors, essentially comparing individuals' daily exertion within states over time as they were being affected by the business cycle, which is measured through the monthly state-specific employment rate.

Comparing population means before and after the recession which began in late 2007, the authors find that as unemployment rose, people did devote more time to recreational exercise, but that

most of the time formerly spent at work was redirected towards housework, television watching, sleeping, and other relatively low MET activities. Their analysis confirms that while recreational exercise increased as a result of unemployment, total daily physical exertion declined. This effect was particularly significant because many of the largest layoffs were in physically active occupations like construction and manufacturing, affecting low-educated males who are particularly at risk of chronic and frequent bouts of unemployment, unhealthy behaviors, and poorer health outcomes.

—Linda Gorman

## Who Makes Financial Decisions within Private Companies?

Within firms, which executives are the key decision-makers with respect to investment choices? In **Capital Allocation and Delegation of Decision-Making Authority within Firms** (NBER Working Paper No. 17370), authors **John Graham, Campbell Harvey, and Manju Puri** find that the amount that CEOs delegate decision authority varies by the type of corporate decision. For example, CEOs are more likely to dominate merger and acquisition decisions than they are other investment and financing decisions. In contrast, they are more likely to delegate at least part of the decision process to others when it comes to their company's capital structure, payouts, investments, and capital allocation. They're also more likely to delegate when their companies are large or complex, but less likely when they have special knowledge of a project, an MBA degree, long tenure as CEO, or pay that's more performance-based than at the average corporation.

This study incorporates responses from 950 CEOs and 525 CFOs in U.S.-based companies—as well as a smaller sample of Asian and European senior executives—and it also offers a rare opportunity to study the decision processes of private companies. Nearly 88 percent of the firms are private; the companies' overall mean sales revenue is \$551

million. Nearly half of the CEOs (46.5 percent) surveyed said they made M&A decisions without any input or with very

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“CEOs are more likely to...delegate at least part of the decision process to others when it comes to their company's capital structure, payouts, investments, and capital allocation [than when a merger or acquisition is involved].”

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little input from others. About four-in-ten (39.5 percent) did the same for capital-structure decisions. Other areas were less dominated by CEOs: payout (38.7 percent), capital allocation (38.1 percent), and investment (36.3 percent).

In companies that have made at least two acquisitions in the past two years, CEOs are more likely to share decision authority on capital structure and capital allocation decisions. “This [sharing decision authority] result is consistent with the common view that executives of acquiring firms spend a disproportionate amount of their time integrating new business units into their firms,” the authors write. But “CEOs are not inclined to share the merger and acquisition decision itself, even when their firm has recently made multiple acquisitions.”

As for what tools CEOs use to allocate capital within their firms, nearly 79 percent say that net present value (NPV) rankings are important or very important. More than 71 percent of U.S. CEOs pointed to the reputation

of divisional managers. Approximately half of CEOs listed their “gut feel” as being important in deciding how to allo-

cate capital across divisions. “We find this [gut feel] response to be very interesting because it highlights the subjective nature of corporate investment and (perhaps) of decision making more generally,” the authors write. “[S]ignificantly more CEOs of small firms rely on their gut feel to make decisions (49 percent of small firm CEOs rely on gut feel versus 38 percent of large firms).”

The authors also look at a smaller sample of European and Asian companies and note two differences. A significantly higher proportion of foreign executives (18 percent of CEOs and 36 percent of CFOs, compared with 10 percent of CEOs and about 25 percent of CFOs for American firms) acknowledged that corporate politics affect capital allocation. Also, nearly one in seven foreign CEOs—roughly double the share of U.S. CEOs—said that their company tries to balance capital allocation evenly across divisions.

—Laurent Belsie

## Race and Ethnicity in the College Classroom

One of the most persistent features of the educational system in the United States is the achievement gap between minority students and non-minority students. African-American, Latino, and Native-American students have substantially lower test scores, grades, high school completion rates, college attendance rates, and college graduation rates than non-minority students.

In **A Community College Instructor like Me: Race and Ethnicity Interactions in the Classroom** (NBER Working Paper No. 17381), authors **Robert Fairlie, Florian Hoffmann, and Philip Oreopoulos** test whether minority instructors have a positive effect on the academic achievement of minority students at the college level. The authors analyze detailed demographic information on instructors and students from De Anza College, a large community college in the San Francisco Bay area of California. De Anza is one of the most ethnically diverse community colleges in the United States.

Community colleges currently enroll more than half of all minority students attending public universities

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“Minority students perform better in classes when their instructors are of the same race or ethnicity.”

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and nearly half of all students attending public universities in the United States. In addition to providing workforce training, they serve as an important gateway to four-year colleges, and thus are a crucial part of the post-secondary educational system in the United States.

The researchers find that minority students perform better in classes when their instructors are of the same race or ethnicity. Blacks, Hispanics, Asians, and Native Americans are 2.9 percentage points more likely to pass courses with instructors of similar background. These effects represent roughly half of the total gaps in classroom outcomes between white and underrepresented minority students at the college.

Moreover, the effects are particularly large for Black students. The class dropout rate is 6 percentage points lower

for Black students relative to Whites when the course is taught by a Black instructor. And, conditional on completing the course, the relative fraction of Black students attaining a B-average or better is 13 percentage points higher than it would be otherwise.

These results suggest that the academic achievement gap between White and underrepresented minority college students would decrease by hiring more minority instructors. However, since all students appear to react positively when matched to instructors of a similar race or ethnicity, part of the decrease in the minority gap would come from worsening academic achievement for Whites.

—Lester Picker

## Comparing the Investment Behavior of Public and Private Firms

Although private firms form a substantial part of the U.S. economy, most of the evidence on corporate investment at the firm level has been based on stock-market listed (or “public”) firms, mainly because of lack of available data. In **Comparing the Investment Behavior of Public and Private Firms** (NBER Working Paper No. 17394), co-authors **John Asker, Joan Farre-Mensa, and Alexander Ljungqvist** analyze a new dataset on around 250,000 private U.S. firms between 2001 and 2007 to compare their investment behavior to that of public firms that are similar in terms of size and industry.

Two intriguing new patterns emerge from this research. First, private firms invest substantially more than public firms of their size and industry do. On average, private firms invest nearly 10

percent of total assets each year compared to only 4 percent among public firms. Second, private firms are 3.5 times

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“Private firms invest substantially more...[and are] more responsive to changes in investment opportunities than are public firms.”

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more responsive to changes in investment opportunities than are public firms. The authors conclude that these findings can be interpreted as evidence of an important potential cost of a stock market listing, because the investment of public firms in their sample seems to be distorted relative to that of comparable private firms.

The observed difference in investment sensitivities does not appear to be driven by how old the company is, how investment opportunities are measured, or which characteristics the authors

match. In fact, to sidestep the need to directly measure investment opportunities, the authors use a change in tax

policy, which can be viewed as a shock to firms’ after-tax return on investment and thus to their investment opportunity sets. Their results still hold: a cut in state corporate income taxes induces private firms to increase investment by 7.2 percent of total assets, while public firms increase investment by only 1.6 percent of their assets.

To remove any bias related to matching the data on public and private firms, the authors study changes in investment for a given firm as it transitions from private to public status without raising

new capital. Their evidence suggests that IPO firms are significantly more sensitive to investment opportunities in the five years before they go public than in the five years afterward. Once they are public, their investment sensitivity becomes indistinguishable from that of observably similar, already-public firms.

What drives these differences in investment between public and private firms? The authors argue that going public weakens incentives for effective corporate governance because it leads to greater

dispersion of ownership. As a result, a public firm manager who derives utility from his firm's current stock price may have an incentive to influence that price by making "short-termist" investment decisions.

To shed further light on that issue, the authors explore how the difference in investment behavior between public and private firms varies with the sensitivity of share prices to earnings news. The idea is that the more sensitive share prices are to earnings news, the greater is the incen-

tive to distort investment, and hence the greater should be the difference between public and private firms' investment sensitivities. The authors find evidence to support that claim. They also observe that the share of public firms is significantly lower in industries where share prices are highly sensitive to earnings news, which suggests that investors and entrepreneurs view short-termism as a cost of being public.

—Claire Brunel

## The Political Economy of Deforestation in the Tropics

Tropical deforestation accounts for almost one-fifth of greenhouse gas emissions worldwide. Because of Indonesia's substantial deforestation, that country is thought to be the world's third largest producer of greenhouse gases, after the United States and China. In **The Political Economy of Deforestation in the Tropics** (NBER Working Paper No. 17417), co-authors **Robin Burgess, Matthew Hansen, Benjamin Olken, Peter Potapov, and Stefanie Sieber** find that Indonesia's decentralized and relatively weak governmental controls over forest resources in the post-Suharto era have contributed to illegal logging and widespread deforestation.

The researchers use a satellite-based dataset that tracks annual changes in forest cover during the period of dramatic institutional change (2001–8) that followed the end of the 32-year Suharto

regime. By combining detailed satellite imagery with data on competition between jurisdictions, on elections, and

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"Illegal logging...increases dramatically in the years leading up to local elections."

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on local resource rents, these researchers show that local political-economy factors can help to explain the pattern of tropical deforestation in Indonesia. They find that increases in the numbers of competing political jurisdictions, along with localized controls of resources, are associated with lower prices in local wood markets and increased deforestation. Moreover, illegal logging, thought to be a core problem for natural resources management in the tropics, increases dramatically in the years leading up to local elections. They also find that when local political leaders have access to rents from local oil and gas

reserves, that dampens their incentives to engage in illegal logging in the short term, but not in the medium term.

The results of this study suggest that in their efforts to encourage conservation in forest-rich countries like Indonesia, Brazil, and the Democratic Republic of Congo, policymakers should consider the incentives of the local officials and politicians who may be profiting from the exploitation of these resources. The authors here conclude that standard economic theories combined with innovative means of monitoring illegal extraction can offer powerful insights into what drives shortsighted and destructive resource management.

—Matt Nesvisky

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