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Does 'Ban the Box' Help or Hurt Low-Skilled Workers?

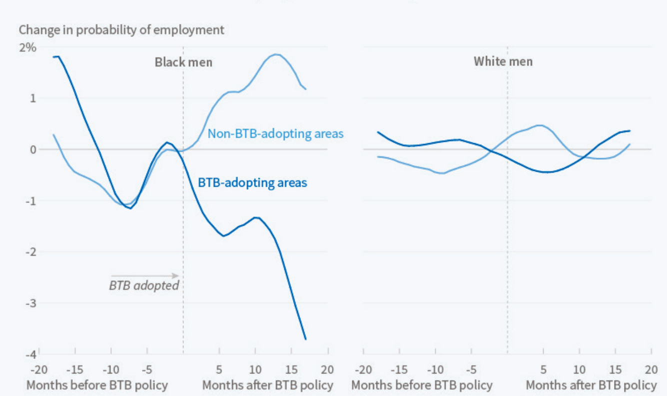
A person who can't get a job upon release from prison is more likely to break the law again. But employers don't want to hire ex-offenders — particularly those released recently — because as a group they are less prepared for work life, in worse health, and more likely to misbehave than non-offenders. One proposed way to help ex-offenders find employment and thereby reduce recidivism is "ban the box" (BTB) legislation that forbids employers from including a criminal-record check box on job applications. Because blacks and Hispanics are significantly more likely than whites to be incarcerated during their lifetimes, some BTB proponents claim that this legislation will also reduce racial disparities in employment.

That may not happen, however. In **Does "Ban the Box" Help or Hurt Low-Skilled Workers? Statistical Discrimination and Employment Outcomes When Criminal Histories Are Hidden** (NBER Working Paper No. 22469), Jennifer L. Doleac and Benjamin Hansen conclude that BTB policies actually reduce work opportunities for young, low-skilled black and Hispanic men with clean records.

"Advocates for these policies seem to think that in the absence of information, employers will assume the best about all job applicants," the researchers write. "This is often not the case." Instead, they report that employers who want to avoid hiring recently incarcerated individuals appear to adopt a strategy of statistical discrimination when denied data about applicants' criminal records: They curtail their interviewing of candidates in demographic groups that contain the greatest numbers of recently released ex-offenders — young, low-skilled, non-college-educated black and Hispanic men.

> Legislation to help convicts find jobs after release from prison is associated with reduced job-finding prospects for non-offending black and Hispanic young men without college degrees.

'Ban the Box' Decreased Employment of Young, Low-Skilled Black Men



Sample is men aged 25-34 with no college degree

Source: Authors' calculations using 2004-2014 Current Population Survey

The researchers analyze individual-level data from the monthly U.S. Current Population Survey from 2004 to 2014 to explore the impact of state and local BTB policies on the probability of employment for black and Hispanic men aged 25–34 without college degrees. Using variation in when different jurisdictions adopted BTB laws to measure employment effects, they conclude that BTB legislation reduced the probability of employment by 5.1 percent among black men and 2.9 percent among Hispanic men.

The size of the BTB effect was smaller in areas of the country where these groups constituted a larger share of the population (the South for blacks, the West for Hispanics), and larger elsewhere. BTB reduced black men's employment probabilities by 7.4 percent in the Northeast, 7.5 percent in the Midwest, and 8.8 percent in the West; similar, albeit lesser, effects were seen for Hispanic men in the Northeast, Midwest, and South.

"These results suggest that the larger the black or Hispanic population, the less likely employers are to use race/ethnicity as a proxy for criminality," the researchers write. The effect also increased when unemployment rates were high. Employment probabilities increased significantly under BTB for highly educated black women and for older, low-skilled black men. Positive but statistically insignificant effects were also seen for whites.

These results are consistent with numerous other studies that have examined the effects of limiting employers' information about employees. "Policymakers cannot simply wish away employers' concerns about hiring those with criminal records," the researchers conclude. "Policies that directly address those concerns—for instance, by providing more information about job applicants with records, or improving the average ex-offender's job-readiness—could have greater benefits without the unintended consequences found here."

—Deborah Kreuze

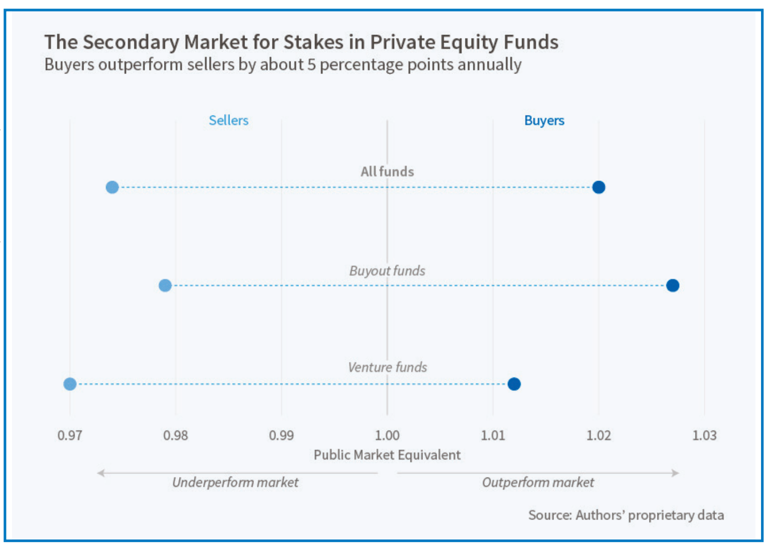
The Liquidity Cost of Private Equity Investments

Substantial transactions costs are associated with investing in private equity funds, which are generally illiquid. Investors who wish to sell their positions in these funds tend to bear those transaction costs, according to **The Liquidity Cost of Private Equity Investments: Evidence from Secondary Market Transactions** (NBER Working Paper No. 22404). On average, buyers of these positions outperform sellers by a market-adjusted five percentage points per year.

Sellers tend to be traditional institutional investors, such as endowments and pension funds. When their liquidity needs or portfolio strategies change, they are eager to sell to buyers, who are mostly funds of funds, set up expressly to buy private equity investments.

"Transactions costs appear to be relatively high, most likely because of a limited number of participants and the asymmetric information about both funds and their portfolio firms," Taylor D. Nadauld, Berk A. Sensoy, Keith Vorkink, and Michael S. Weisbach report. "The liquidity cost of investing in this market [private equity] is substantial and one that investors should take account of when considering investing..."

Secondary market buyers of private equity limited partner stakes on average outperform sellers, but the market provides liquidity, enabling sellers to make otherwise impossible portfolio changes.



Using privately obtained data from a leading intermediary in the secondary market for private equity stakes, the researchers measure the average cost of transactions between 2006 and 2014. The average discount to the net asset value (NAV) in these transactions was 13.8 percent, including the sale of very young funds during the financial crisis and very old funds after it. The discount for the most common type of sale—funds between four and nine years old—averaged nine percent.

Because NAVs aren't market-based valuations and, in some cases, can be manipulated by issuers, the researchers also study another measure, called the public market equivalent (PME), which equals the sum of the fund's discounted cash distributions to investors divided by the discounted cash investors put in. The discount rate is the cumulative return on the public equity market from the fund's inception to the cash flow being invested. A PME greater than 1 indicates a private equity fund outperformed this market. The PME is attractive because it eliminates the bias that could be associated with good vs. bad market timing in private equity transactions.

The analysis of PME data suggests that buyers still come out ahead, albeit with a smaller advantage. Using all transactions from 2006 to 2014, buyers averaged an annualized 1.02 PME (better, in other words, than if they had invested in the public stock market) compared with an annualized 0.97 PME for sellers — worse than public stocks. In the most common type of transaction, involving funds four to nine years old, buyers' average PME was 1.01 versus sellers' 0.98. These numbers suggest that buyers outperformed sellers by about five percentage points in the first instance and three percentage points in the second.

The researchers observe that these differences are consistent with market microstructure theories, such as asymmetric information. For example, NAV discounts tend to be larger for smaller funds and smaller transactions, where the information costs per dollar invested are higher. NAV discounts and the differences between buyers' and sellers' returns are also larger when the economy is poor and there is less capital for purchases.

"The secondary market for limited partner stakes in private equity [funds] appears to be one in which buyers receive returns for supplying liquidity," the researchers conclude. "Sellers benefit because they are able to make strategic changes in their portfolios that, given the time horizon of private equity investments, would be impossible in the absence of a secondary market."

— Laurent Belsie

Unconventional Fiscal Policy and Consumption Spending

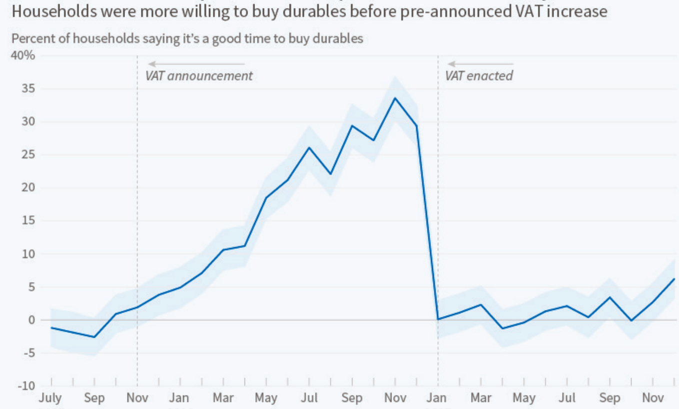
In November 2005, the German government announced plans to increase its value-added tax (VAT) from 16 percent to 19 percent in January 2007. The increase was imposed to bring Germany's deficit in line with European Union rules.

In **The Effect of Unconventional Fiscal Policy on Consumption Expenditure** (NBER Working Paper No. 22563), Francesco D'Acunto, Daniel Hoang, and Michael Weber report that between the VAT increase announcement and the time the increase took effect, German households increased their reported willingness to purchase durable goods by 34 percent relative to other European households. The researchers conclude that because household willingness to buy durable goods increases when people expect future price increases, pre-announced increases in consumption taxes can raise consumption expenditure. They call this an example of "unconventional fiscal policy."

German consumers' reaction to announcement of a future hike in the value-added tax suggests such announcements could be used to spur buying of durables.

Tax Announcement Spurred Consumption Intent in Germany

Households were more willing to buy durables before pre-announced VAT increase



Shading represents 95% confidence intervals

Source: Authors' calculations using GfK Consumer Climate MAXX survey data

The researchers' estimates are based on data from the GfK Consumer Climate MAXX survey, which contacts a representative sample of 2,000 German households each month to measure expectations about business-cycle conditions. Similar surveys are administered in France, Sweden, and the United Kingdom. From January 2000 to December 2013, the correlation between expectations about price increases and the readiness to spend on durable goods was 0.59. On average over the whole sample in all years, about 20 percent of households said it was a good time to buy durables, while 24 percent said it was a bad time. Most households reported that their financial situation had not changed in the previous year and that they did not expect a future change. The researchers found that households expecting higher prices were eight percent more likely to report that it was a good time to buy durable goods than households that did not expect price increases.

German households began to revise their expectations about price increases as soon as the tax increase announcement was made. Expectations of price increases fell dramatically right after the increase took effect in January 2007. To test whether the change in expectations was due to the tax increase announcement, the researchers compared the German household survey response to those in similar households in other countries.

There was no difference in reported readiness to spend on durable goods between German households and similar households in other countries before the VAT increase announcement. After the announcement, German households were 3.8 percent more likely to report that it was a good time to purchase durable goods. The effect increased throughout 2006, peaked at 34 percent in November 2006, and returned to roughly the pre-announcement level after the VAT increase took effect in January 2007. A "back-of-the-envelope calculation suggests the 3 percentage point increase in VAT resulted in 10.3 percent higher real durable consumption growth," the researchers write.

— Linda Gorman

A Role for Fossil Fuels in Renewable Energy Diffusion

Successful development of clean renewable energy requires dealing with the variable nature of renewables. Because peak production of wind and solar energy may not coincide with peak energy demand, particularly for electricity, either energy storage or a backup source of energy supply is needed to ensure a steady supply of power throughout each 24-hour cycle. With low-cost storage options not widely available, fast-reacting fossil fuel backup capacity is one way to fill the gaps between electricity demand and the supply of renewables. Examples of such capacity include most natural gas generation technologies, combined heat and power sources, and integrated gasification combined cycle power plants.

> Historically, the most successful countries in transitioning to renewable energy were those able to handle supply variability through fast-reacting fossil fuel generation systems

In **Bridging the Gap: Do Fast Reacting Fossil Technologies Facilitate Renewable Energy Diffusion?** (NBER Working Paper No. 22454), Elena Verdolini, Francesco Vona, and David Popp analyze renewable energy diffusion to highlight the importance of backup capacity. They point out that increased development of solar and wind power can increase demand for fast reacting fossil fuel capacity that can be turned on and off quickly. The need for such backup systems will become more burdensome as the penetration of renewables increases. Moving forward, the cost of these needed backup sources of energy has to be factored in for accurate calculations of the cost of transitioning to renewable energy to be made.

The researchers analyze data on the installed capacity of renewable energy, including solar, wind, geothermal, ocean/tide/wave, and biomass, in 26 Organization for Economic Cooperation and Development (OECD) countries between 1990 and 2013. All other things equal, more renewable sources were installed in those countries with fast-reacting fossil fuel plants available to compensate for supply variability. A one percentage point increase in the share of fast-reacting fossil generation capacity in a country is associated, on average, with a 0.88 percentage point increase in the long-run share of renewable energy. The authors note that as the push for clean energy continues, it will be important to recognize the need for — and the costs of — complementary fast-reacting fossil backup technologies.

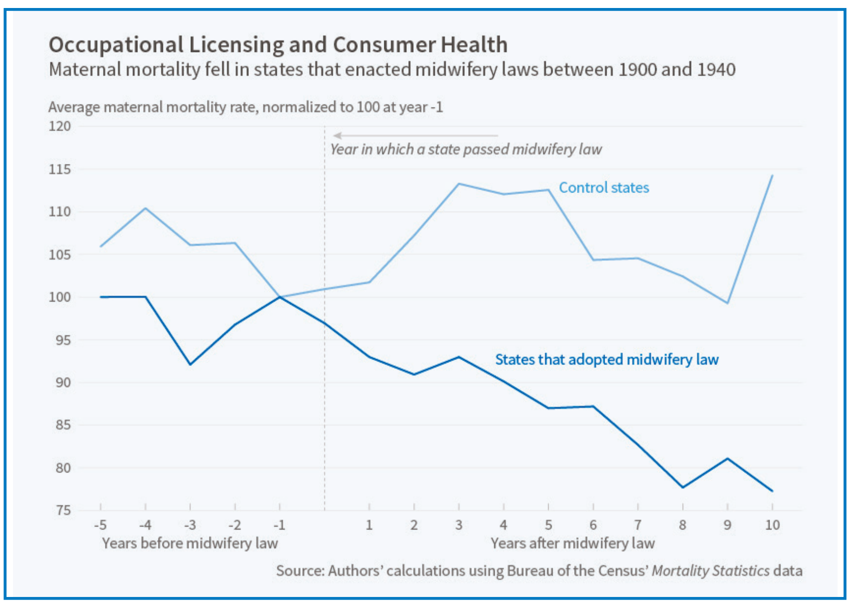
— Matt Nesvisky

Licensing of Midwives and Maternal Mortality

Debates over occupational licensing of workers, from real estate agents to manicurists to rehabilitation therapists, have tended to focus on the economic effects of such regulations on those getting licenses and on whether licensures increase or decrease costs for consumers.

> Requiring midwives to be licensed reduced maternal mortality significantly, and may have led to modest reductions in nonwhite infant mortality.

Often overlooked is whether the ostensible purpose of licensures — to protect the health and safety of consumers — is actually achieved. In **The Effect of Occupational Licensing on Consumer Welfare: Early Midwifery Laws and Maternal Mortality** (NBER Working Paper No. 22456), D. Mark Anderson, Ryan Brown, Kerwin Kofi Charles, and Daniel I. Rees explore this issue by investigating the history of the licensing of midwives during the early 20th Century. They find that the early-century movement to license midwives led to reduced maternal mortality, and, to a lesser extent, nonwhite infant mortality, suggesting that occupational licensures can indeed improve the quality of some services.



The researchers chose to study the midwifery profession because it was transformed from a largely untrained and unlicensed profession at the start of the 1900s into a largely regulated profession by 1940.

The movement toward licensing midwives began in the late 1800s in Illinois. In 1900, only eight states had some form of licensing requirements for midwives, who handled nearly half of all births in the United States. Between 1900 and 1920, 16 more states required licensing of midwives.

License requirements varied greatly from state to state. In Mississippi, license applicants were judged based on their character, cleanliness, and intelligence, but were not required to take an exam or graduate from a school. In other states, though, applicants were required to graduate from recognized schools of midwifery and to pass examinations.

Using newly digitized data originally published by the U.S. Bureau of the Census's *Mortality Statistics*, the researchers estimate the relationship between requiring midwives to be licensed and maternal mortality.

They find that requiring midwives to be licensed reduced maternal mortality by six percent. Licensure was associated with an almost seven percent reduction in maternal mortality caused by puerperal fever, the leading cause of maternal mortality at the time, suggesting that midwifery training in antiseptic techniques and other medical practices improved care. License requirement also led to a five percent reduction in maternal mortality from other causes, indicating that midwives had become more capable of handling other birthing complications.

In addition, the researchers found that requiring midwives to be licensed may have led to modest reductions in nonwhite infant mortality and mortality among children under the age of two from diarrhea.

The relationship between midwifery laws and maternal mortality was more pronounced in states that required applicants to pass an exam or graduate from a recognized school. The relationship between licensing and improved medical results was strongest in urban areas, which is consistent with anecdotal evidence that the enforcement of midwifery laws was less strict in rural areas and small towns.

— Jay Fitzgerald

To Change, or Not to Change? Just Flip a Coin

When faced with deciding whether to make a change, people may be too cautious for their own good. So Steven D. Levitt concludes on the basis of a study using social media and the toss of a virtual coin. Levitt presents his findings in **Heads or Tails: The Impact of a Coin Toss on Major Life Decisions and Subsequent Happiness** (NBER Working Paper No. 22487).

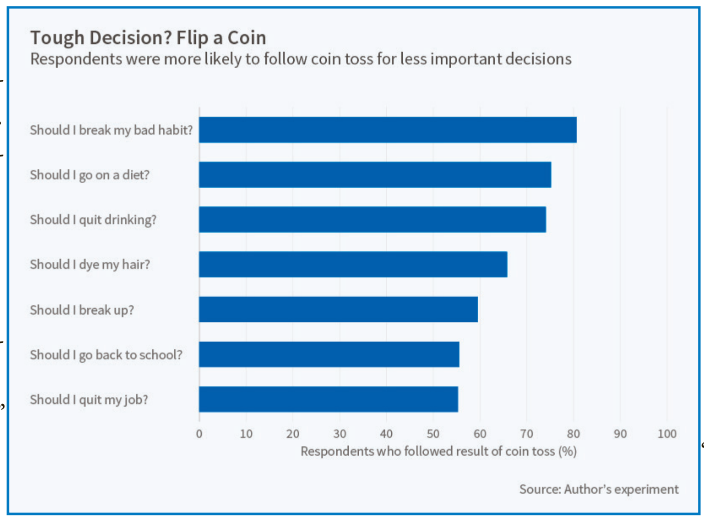
With a posting on his website, Levitt invited individuals who couldn't make up their minds about matters both major (like divorce) and minor (such as changing hair color) to avail themselves of a randomized coin toss. "Heads" would signify a recommendation for change.

"While it might seem implausible that anyone would come to such a website and flip a coin, much less follow the dictate of the coin toss, the results obtained speak to the contrary," Levitt reports, noting that more than 20,000 "coins" were flipped by participants during the year-long study.

Individuals whose virtual coin turned up heads were 25 percent more likely to make a change than those whose coin flip yielded tails. And, based on what they reported in two follow-up surveys over a six-month period, the nudge of a coin toss was just what these participants needed. Regardless of their responses to the coin tosses, participants who decided to make a change reported that they were substantially happier than those who did not.

> Study participants who made a change reported months later that they were "substantially happier" than those who did not.

Coin tossers were re-surveyed two months and sixth months after the initial coin toss. Additionally, before the coin toss, they were encouraged to identify a friend or family member to verify the outcomes. The third parties were also surveyed two months and six months after the coin toss.



Levitt points out that the coin-toss experiment provided a way to isolate change itself as the reason for greater happiness. "Before the coin toss, those who will get heads are, in expectation, identical in all respects to those who will get tails," he writes. Before making the coin toss, participants were asked to forecast the probability they would make a change. Comparing their predictions with their subsequent behavior offered further evidence of the impact of the coin toss.

Across the spectrum of predictions, those whose coin flip came up heads were more likely to have made a change than those whose coin turned up tails. The gap was narrowest among those who were most doubtful that they would make a change.

The coin toss was more influential in cases involving less important decisions. The highest compliance rate — more than 80 percent — was on the question, "Should I break my bad habit?" Only one question — "Should I move?" — seemed unaffected by the outcome of the coin toss.

Overall, Levitt writes, the coin study suggests "the presence of a substantial bias against making changes when it comes to important life decisions, as evidenced by that fact that those who do make a change report being no worse off after two months and much better off six months later."

— Steve Maast

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