Zip-Code Economics
What local data reveal about the economy at large

Are markets efficient? Fama and Thaler debate
A negotiations expert rates Trump
What comes after the Brexit vote?
“Never underestimate middle-aged citizens, in their ability to learn something new and apply it on the job.”
This is the age of big data. But large agglomerations of information can obscure fascinating nuggets of diversity. Economists are mining small data sets, down to the level of US zip codes, and observing and learning from the variability they find, as our cover story (page 22) explains. They are bringing a fresh perspective to questions such as, who really benefits from tax cuts? How effective was quantitative easing? And, what drives health-care spending? By examining these issues on a local level, they are gathering evidence that can inform larger policy decisions. These small areas of focus, says Chicago Booth’s Owen Zidar, have become “labs of democracy.”

It’s the little things
Zooming in on small details and interactions is a theme that runs through this issue. Take the observation that the US Federal Reserve is affecting market reaction with a few words, such as “for some time” and “at least as long.” Tweaks to the Fed’s language could help better manage market expectations, research suggests (page 7).

Short phrases such as “Bless his heart” or “Don’t get me wrong,” have become “a license to kill.” That’s in our seasonally adjusted Q&A with Chicago Booth’s Ann L. McGill (page 12).

The seemingly minor detail of what you eat for a snack could have outsized influence on a negotiation, or a marketing campaign (page 16). Small can be big.

Common ground: Fama and Thaler
And big differences can mask small, but critical, areas of consensus. One of the biggest disputes in economics is between the idea that markets are efficient and the suggestion that they reflect people’s deep-rooted behavioral biases. Is there any overlap between these two perspectives? Zoom in, and you’ll find common ground.

Two of the biggest names representing the two sides of the debate are senior members of the Booth faculty: Eugene F. Fama, winner of the 2013 Nobel Memorial Prize in Economic Sciences, and Richard H. Thaler, one of the founding fathers of behavioral economics. Although they work in the same building, have offices on the same floor, and play the occasional round of golf together, their views clash. Fama developed the efficient-markets hypothesis. Thaler argues that prices can be wrong, and markets can be inefficient.

In this issue, the two giants of economics explore these issues, but also establish some areas where they agree. Read an excerpt from their conversation (page 82), then watch the full video on our website, Review.ChicagoBooth.edu.

While we’re fascinated by small details, we’re not ignoring the big issues too, such as immigration (page 16) and Brexit (page 59). These conversations are ongoing on our recently redesigned website and our Facebook, Twitter, and LinkedIn pages. Please join us. We welcome discussion and differing ideas, big and small.
Note to Yellen: Knock off the time-based guidance
When companies start to disclose, it’s hard to stop
What’s Singapore’s secret sauce?
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ZIP-CODE ECONOMICS
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Networking differently could increase your salary
The number of connections you have is only one part of the story
By David Jon Phillips

Informing consumers is harder than it looks
When transparency and disclosure don’t make shoppers smarter
By Howard R. Gold

What can we learn from this disaster?
Historical events hold lessons for modern economic development
By Dee Gill

Sailors and suppliers
Trade credit and risk sharing on the high seas
By Boggy

Anya Kleymenova, assistant professor of accounting, worked as a competition and financial economist in London and Washington, DC, before conducting part of her PhD research at the Bank of England, where she studied the effects of regulatory changes on banks’ risk-taking and contracting behavior. At Chicago Booth, she specializes in financial institutions, disclosure, and regulatory effects. (Page 15)

Erik Hurst, V. Duane Rath Professor of Economics, is a macroeconomist studying housing markets, labor markets, and household financial behavior. His work has been covered extensively in the New York Times, the Washington Post, and the Economist. Selected as this year’s Convocation speaker at Booth, he used the opportunity to highlight some of his recent research on the US labor market—and his son’s love of video games. (Pages 22, 59, 74)
Richard Hornbeck, professor of economics, is an applied microeconomist whose research focuses on the historical development of the US economy. History, he says, provides perspective on what is universal and unusual about the modern economy. In his office at Booth, he keeps pieces of barbed wire that he received from a colleague after researching the role of barbed wire in the establishment of western US property rights and agricultural development. (Page 44)

George Wu, John P. and Lillian A. Gould Professor of Behavioral Science, teaches advanced negotiations at Chicago Booth. A widely published researcher, Wu is a former department editor of Management Science, sits on numerous editorial boards, and is a past president of the Society for Judgment and Decision Making. He is also the faculty director of Booth’s Harry L. Davis Center for Leadership. (Page 55)
SAINTS AND CEOS

In response to, 'Who Get into the C-Suite?' (Summer 2016)

"The people who become CEOs get things done," [Steve Kaplan] says . . . "If you're a saint, you're probably not going to become CEO. You have to make tough decisions that are going to ruffle some feathers."

The [quote] suggests that to become CEO you will need to be less rigid on ethics or morals—I totally disagree with this notion.

—Rick LeBlanc, Los Angeles

Thriving in adversity is what being a saint is all about. I think someone needs to become more familiar with the qualifications.

—Denny Merrel, Phoenix

A true saint tells the truth and makes just decisions. That’s tough enough. Don’t mistake meekness for weakness.

—Deborah Porter, Canton, Michigan

WE CAN’T GET ALONG

In response to, 'Thank the financial crisis for today’s partisan politics' (Summer 2016)

Oh, it started well before the financial crisis.

—Ed Ross, Heber Springs, Arkansas

Gross, you reinforce the stereotype of Bernie Bros.
Thousands of us Bernie diehards are not male and not white. Thanks for forgetting us.

—Ivy Czekanski, Chicago

STILL WAITING FOR A STRONG PRESS

In response to, 'Why a strong economy needs a strong press' (Summer 2016)

When are we going to get a strong press?

—Owen Heckathorn, Des Moines, Iowa

We’re NEVER going to get there with FOR-profit news organizations.

—Dai Che, Seattle
Chicago Booth Executive Education offers a new content-rich Big Data and Marketing Analytics program. Led by esteemed Booth faculty and located in downtown Chicago, this three-day course uses The Chicago Approach™ to help you navigate through the complexities of big data, empowering you to make empirical marketing decisions.

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YOU CAN ALWAYS CONNECT WITH CHICAGO BOOTH.
The most powerful voice in financial markets arguably belongs to the US Federal Reserve, which can send all manner of tradable assets zinging with seemingly mundane comments.

Lately the Fed’s words have been moving markets in unintended ways, according to a study by a group of economists working on and off Wall Street. Since 2011, forward guidance—regular Fed statements intended to manage market expectations about potential interest-rate changes—has led investors to discount macroeconomic events that would normally affect the price of assets, according to the research. Their inattention, in turn, eventually undermines the Fed’s mission of optimal monetary policy.
Analyzing 20 years of Fed communications, the researchers trace the problem to a subtle shift in the content of forward guidance. During most of those years, the study finds, forward guidance essentially told investors which microeconomic data would trigger the Fed to raise interest rates. But in times of economic darkness, such as the post-financial crisis years from 2011 to 2015, the Fed also offered strong hints about the calendar timing of potential rate hikes.

The study concludes that data-based guidance typically does a better job of efficiently managing market expectations than time-based guidance. “We expect rates will remain low until the labor market improves,” for example, leads markets to respond rationally to the release of new unemployment figures. Time-based guidance, such as: “We expect rates to remain low through mid-2015,” makes actual events less relevant and investors less certain about how the Fed will respond to those events. It can lead to Fed credibility issues if the data don’t pan out as expected and rate changes need to be delayed or sped up, and those credibility issues can hamper economic growth.

The research—by Michael Feroli of J. P. Morgan Chase, David Greenlaw of Morgan Stanley, Peter Hooper of Deutsche Bank Securities, Frederic Mishkin of Columbia University, and Chicago...
Booth’s Amir Sufi—sheds light on the problems of managing monetary policy at the zero lower bound, where nominal interest rates are already near zero. It’s difficult territory for central banks, because they cannot use their most popular and powerful tool for sparking economic growth: cutting short-term interest rates. The situation forces central bankers to rely on less direct stimulants, such as words that convince markets to act in certain ways.

The study describes how Fed speak, with the addition of time-based forward guidance, became a core monetary-policy tool in the days after the 2007–10 financial crisis. With unemployment stalled at 9 percent, and short-term interest rates too low to cut further, the Fed started adding phrases such as “we expect rates to remain low at least through 2013” to reassure investors when ordinary guidance did not.

The researchers conclude that time-based guidance is appropriate at such times, when the Fed is out of options. But they argue that these conditions do not describe the current situation in the United States, and that the Fed should drop time references and return to more-data-driven guidance.

The authors concede that almost all of the Fed’s time-based guidance already comes with data-based qualifications. But in the mainstream financial press, any mention of a timeline in guidance tends to overshadow the broader message. The study offers, by example, a quote from a July 10, 2015, speech by Fed Chair Janet Yellen:

“Based on my outlook, I expect that it will be appropriate at some point later this year to take the first step to raise the federal funds rate and thus begin normalizing monetary policy. But I want to emphasize that the course of the economy and inflation remain highly uncertain, and unanticipated developments could delay or accelerate this first step.”

The Financial Times, the New York Times and the Wall Street Journal reacted, respectively, with the following headlines: “Yellen Reiterates Case for 2015 Rate Rise,” “Yellen Expects Fed to Raise Rates This Year,” and “Janet Yellen: Fed on Track for 2015 Rate Hike.” —Dee Gill


WHEN COMPANIES START TO DISCLOSE, IT’S HARD TO STOP

Since the 2007–10 financial crisis, investors have been demanding more information and voluntary disclosure from companies. Research by Chicago Booth PhD candidate Frank Zhou suggests that once companies start to release more information, their voluntary disclosures can become persistent.

Zhou created a model that captures a disclosure cycle driven by investor learning. The cycle starts with investors being uncertain or pessimistic about a company’s profitability, which makes it more likely for a company to disclose information about unrealized forthcoming earnings. As investors learn from these disclosures, that in turn further affects what and how much information a company is willing to offer up.

“The model shows that investor learning affects disclosure in two ways,” he writes. First, when investors are more pessimistic, a company is more likely to voluntarily disclose information as the company—regardless of how it’s doing—tries to convey good news. Second, when investors are more uncertain about what to think, the likelihood of disclosure also increases.

According to Zhou’s model, the economic effects of investor learning are comparable to those of both firm profitability and managers’ information precision. And once started, a cycle of disclosure can be hard to break. Suppose a company is 10 percent more likely to make a voluntary disclosure this year because of pessimistic investors. The next year, on average, the company is also 10 percent more likely to make another voluntary disclosure. The effect declines to 8 percent in the fifth year.

“If realized earnings fall short of investors’ expectations, the earnings shortfall will affect investors’ future beliefs and, by extension, managers’ disclosure decisions in future years,” Zhou writes.—Natasha Gural

During the Great Recession, low interest rates and stimulus programs gave banks in the United States and Europe access to cheaper money. In theory, this lower cost of capital meant that they could extend more credit to people who would, in turn, rev up the economy with spending and investment. But research indicates banks were least inclined to lend to the consumers who were most inclined to borrow, raising questions about the effectiveness of this form of economic stimulus.

Using panel data on 8.5 million credit cards issued between 2008 and 2013, Sumit Agarwal of the National University of Singapore, Souphala Chomsisengphet of the US Office of the Comptroller of the Currency, Chicago Booth’s Neale Mahoney, and Johannes Stroebel of NYU studied how lowering the cost of borrowing affected banks’ propensity to lend to people in different credit-score tiers, as well as how changes in credit limits affected the behavior of people in those tiers.

They find that most of the additional credit offered by banks during the Great Recession went to consumers who needed it the least. Most additional credit offered by banks during the Great Recession went to consumers who needed it the least.

Do banks give credit where credit’s needed?

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They find that most of the additional credit offered by banks during the Great Recession went to consumers who needed it the least—and for whom it had the smallest impact on spending. Researchers estimate that optimal credit limits for borrowers with FICO credit scores (used to gauge creditworthiness) below 660 increased by only $239 for each percentage-point reduction in banks’ cost of funds, compared to a $1,211 increase for borrowers with scores above 740.

While access to more credit led to higher levels of borrowing across the board, households with lower FICO scores increased their borrowing by a larger margin and retained their debt over a longer period of time. These lower-score borrowers likely used the boost in credit for immediate spending,
Lending to the small spenders

Low interest rates and stimulus programs were supposed to get credit to people who would rev up the economy. But research suggests most of the additional credit went to people who needed it least, and for whom it had the smallest impact on spending.

Marginal propensity to borrow

When banks’ cost of funds fell one percentage point, people with the lowest FICO scores saw their credit limits rise $239.

When banks’ cost of funds fell one percentage point, people with the highest FICO scores saw their limits rise $1,211, but were far less likely to borrow.

The size of the circles reflects the change in credit limits when banks’ cost of funds falls one percentage point.

People with the highest FICO scores saw their limits rise $1,211, but were far less likely to borrow.

$239
$305
$564
$1,211

FICO scores
≤660
661–700
701–740
>740

Source: Agarwal et al., 2016

and then carried the debt forward, paying it down gradually.

Consumers with midlevel credit scores, on the other hand, took advantage of 0 percent introductory interest offers to buy one-time, big-ticket items, quickly paying down the debt by the time teaser rates expired. The most-creditworthy consumers simply shifted debt around opportunistically between cards without taking on new debt. These consumers weren’t motivated to borrow by the offer of additional credit, since they weren’t credit constrained in the first place.

While noting that their study does not evaluate the longer-term social impact of higher leverage for low-FICO-score households, the researchers conclude that “bank-mediated stimulus will only raise aggregate borrowing if credit expansions are passed through to low FICO score households.”—Kate Marshall Dole


UBER’S DAVID PLOUFFE HAS ADVICE FOR THE TAXI INDUSTRY

“If I were advising the taxi companies—and they don’t want advice from me—it would be this: something big is happening out there. In the next five to seven years, you’re going to see a huge number of people leaving their cars at home. They’re coming into cities. We estimate here in the United States, 50 percent of our trips are one-way. Think about that. They’re using us for part of their journey. They’re not using us for the rest. Anybody that’s in the business of moving people around—public transportation, bike share, car share, taxis—has an opportunity (to compete) for that.”

—Uber board member David Plouffe, speaking at the Stigler Center for the Study of the Economy and the State in April 2016.
Should we start a sentence with something like, “I’m sorry, but…”? People include phrases like that in their conversations before saying something negative. Intervening in the flow of information in this way makes you more persuasive and likable. Linguists call these “dispreferred markers.”

Where do you see these markers? I notice them in online product reviews, for instance. I think most of us are aware that some people are pre-irritated in life: they just want to vent their frustrations and anger. If somebody is presenting you with negative information, you have to determine, “Is this person a crank?” A dispreferred marker is a signal that says, “I am not a crank, I know that presenting negative information is off-putting.” It’s a way of being a good conversational partner and not sounding like a curmudgeon.

Is there a downside to using them? Have you spent time in the American south? You’ll hear, “Bless his heart.” Or just about anywhere it might be, “Don’t get me wrong.” If you hear someone say one of these, just dive under the desk. They have become a license to kill. I think the general lesson is to recognize that what’s important is not what you’re saying but how people will react to what you’re saying. This is true of persuasion more generally. Good persuasion involves thinking about what other people think. Persuasion is in the other person’s head.
Why curiosity gets the better of us

In Greek mythology, Pandora opened a jar and released all the evils of humanity. Research suggests that our curiosity continues to get us into trouble.

“Curiosity is well recognized as a human blessing, facilitating learning, propelling discoveries, and enriching life,” says Chicago Booth’s Christopher K. Hsee. “Our research indicates that curiosity can also be a human curse, leading people to suffer predictably miserable consequences without apparent benefit other than resolving their curiosity.”

Hsee and Bowen Ruan of the University of Wisconsin–Madison surmised that people facing a situation that was uncertain (and more often than not negative) would be more likely to investigate that situation than people facing a more certain situation.

To test this hypothesis, they observed college students in a lab who thought they were waiting for an experiment to begin. The researchers put some colored pens on the table and told the students the pens had been left from a previous experiment.

The researchers told the students that green pens were innocuous, red pens would deliver an electric shock if clicked, and yellow pens might deliver a shock if clicked, but it wasn’t a sure thing. Some pens did generate electric shocks of approximately 60 volts.

“Participants clicked more of the uncertain-shock pens than both the certain-shock pens and the certain-no-shock pens. Apparently, their desire to resolve the uncertainty (curiosity) led them to click those pens, and thereby exposed them to painful electric shocks,” the researchers write.

The researchers replicated the results of the pen study in other studies that replaced electric shocks with disgusting pictures of insects and the excruciating noise of nails scratching on a chalkboard.

Our irresistible urge to know may lead us into unpleasant places, but opening the mythical jar won’t necessarily make us feel better. People who encountered uncertainty and acted to resolve it reported worse overall feelings than people in the “certain” camp.

“Our research sheds light on why humans, including scientists, seek information such as how to manipulate the human genome and how to develop new weapons of mass destruction,” says Hsee. “The obvious reason for these activities is to benefit ourselves, e.g., to improve our health and our security. But is it also possible that humans pursue these activities just in order to satisfy our curiosity without sufficient attention to potential risks?”—Alice G. Walton


Shocking behavior

In a study, researchers presented participants with 10 pens, some rigged to deliver mild electric shocks. In some cases, they told participants which pens would deliver the shocks.

In other cases, they didn’t tell participants which pens would shock them. The finding: people were more likely to click pens when they didn’t know whether or not the pens would shock them.

Source: Hsee and Ruan, 2016

KEY INSIGHT

MORALITY: MORE IMPORTANT THAN INTELLIGENCE

It’s more important to be moral than it is to be likable or smart, according to research by Chicago Booth postdoctoral researcher Justin F. Landy, Lancaster University’s Jared Piazza, and University of Pennsylvania’s Geoffrey P. Goodwin. Moral character “is perhaps the only kind of trait that is unambiguously positive,” says Landy. A person’s morality, or lack thereof, can color how people think about other qualities such as friendliness and intelligence. In immoral people, even qualities such as intelligence can be seen as bad.

—Alice G. Walton

Extending jobless benefits won’t increase the unemployment rate

Unemployment insurance is a safety net designed to keep unemployed Americans on their feet while they’re looking for work. Most states offer it for 26 weeks, but in cases of high unemployment, the federal government can fund extensions, as it did in many states during the Great Recession. Extending unemployment benefits is contentious, as critics say it gives unemployed people less incentive to look for jobs. But Harvard’s Gabriel Chodorow-Reich and University of Minnesota’s Loukas Karabarbounis suggest that extending unemployment insurance from 26 weeks to 99 weeks had little effect, raising state unemployment rates, but only by 0.3 percent or less.

States that receive extensions naturally have the highest levels of unemployment to begin with, so the researchers took advantage of an imperfection in the system: because the unemployment rate as measured by the US Bureau of Labor Statistics is often imprecise and later revised, there are some cases in which a state that shouldn’t qualify for an extension of benefits nonetheless receives one, and vice versa. The researchers looked at how erroneous application or omission of benefits extensions affected state unemployment rates. “Our results . . . suggest that concerns about large macroeconomic effects of unemployment insurance are not warranted,” they write.—Brian Wallheimer

Worried about outsized executive pay, US regulators crafted rules aimed at driving down compensation. But research suggests the move had the opposite result—more disclosure led to higher executive pay.

The research, by Stanford’s Brandon Gipper, who is a recent Chicago Booth PhD recipient, focuses on rules instituted by the US Securities and Exchange Commission in 2006, when it started requiring companies to include a compensation discussion and analysis section in securities filings. These rules represented a significant step in a steady, decades-long march of disclosure regulations designed “to enhance shareholder oversight and prevent managers from receiving unearned compensation, which could result in lower pay,” writes Gipper.

Companies adopted the 2006 rules on a rolling schedule, based on when their fiscal years ended. Then the compensation-disclosure requirements were partially eliminated in 2012, as part of the Jumpstart Our Business Startups (JOBS) Act. This allowed Gipper to take a clean look at the rules’ effects. He finds, in looking at the first group to adopt the rules (companies whose fiscal years ended in December), total compensation rose by 14 percent after the regulations were instituted. A big part of that increase came in the form of cash raises, which represented more than half—8 percentage points—of the increase. The average manager’s cash pay rose by $60,000.

The main beneficiaries of raises included managers who had been in executive positions for a short period of time, less than four years, along with those who worked for smaller companies and in industries where pay varied more overall, Gipper’s analysis indicates.

Compensation disclosures have had their intended effects in the public sector. Princeton’s Alexandre Mas finds that when cities were forced to disclose more about city managers’ salaries, populist outcry forced pay down 8 percent.

But Gipper has a theory about why compensation disclosures had the opposite effect in a corporate context. When companies published the incentive structures and realized performance of executives, they made it easier for headhunters to match executives with hiring firms and for executives to advocate for raises. For shareholders, disclosure produced an unintended consequence that may be costly. —Chana R. Schoenberger

# Does Limiting Bankers’ Pay Work?

**When it comes** to assigning blame for the 2007–10 financial crisis and ensuing global downturn, many have pointed to bankers and their pay packages—arguing that compensation incentives caused bankers to take on too much risk. The United Kingdom, the United States, and the European Union have attempted to counter this with regulation that curbs short-term incentives. This has led to safer, healthier banking—but not without some costs, suggests research by Chicago Booth’s Anya Kleymenova and London Business School’s İrem Tuna.

The UK was the first to introduce compensation regulation, which allowed Kleymenova and Tuna to study the effects of compensation regulation on banks’ CEO compensation contracts and on banks’ risk-taking behavior. They find that the new regulation generally reduced risk-taking by financial institutions—as measured by banks’ asset volatility, lending, and leverage. However, the regulation had several unintended consequences—among them, increased CEO turnover at UK banks. Because finance requires a high degree of specialization, this indicates a potential loss of talent.—Dee Gill

Go to Review.ChicagoBooth.edu to read the full version of this article.


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**How more pay disclosure has pushed up executive compensation**

- **14%** Rise in total compensation after SEC disclosure rules came into effect in 2006
- **8%** More than half of that came in the form of cash raises

**Source:** Gipper
IN A HEATED NEGOTIATION? TRY EATING LIKE YOUR OPPONENT

WHEN TWO strangers eat the same thing, their similar food choice can be a bond that increases trust and cooperation, research suggests. Advertisers and negotiators may be able to use this tendency strategically.

Food has long brought people together and been a popular topic for sociologists, who have argued, among other things, that people prefer to share a meal rather than eat alone.

Chicago Booth’s Ayelet Fishbach and Kaitlin Woolley, a Booth PhD candidate, combine this exploration of food with behavioral-science research about how mirroring another person’s behavior promotes socialization. They find that when people have limited information about each other, eating the same food can increase camaraderie. That, in turn, can lead to trust and cooperation.

In lab experiments, the researchers had two strangers play a game in which one person acted as an investor and the other a fund manager. The “investor” was more likely to invest in the fund manager when they had first eaten similar foods. Strangers who ate similar foods also were able to resolve a mock strike faster and with fewer costs.

One study contained a clear lesson for advertisers. In it, a participant ate a candy bar while watching short video testimonials that purported to show consumers reviewing two products, a stain remover and office software. When the participants saw people eating the same candy bar that they were eating, they tended to like the consumers more—and were more inclined to trust the product information. “One suggestion for marketers advertising non-food products is to also include people in their promotional videos consuming popular foods,” the researchers write.

They offer some caveats—including that the same effect might not hold if people are eating a similar food that one or both dislikes—but point to potential applications. A conference planner could promote cooperation by offering a limited number of food choices to attendees. Dating services could similarly serve fewer options to promote closeness. In sales calls, business meetings, and even job interviews conducted over meals, people can use similar foods to increase social connections.—Natasha Gural


How immigration boosts foreign investment

Research suggests that being open to migrants today brings future economic benefits.

There’s a long-term economic argument for welcoming immigrants: they attract foreign investment, research suggests. American counties that historically received more migrants from a given
country were significantly more likely to later receive investments from that country, according to research by Stockholm University’s Konrad B. Burchardi, Chicago Booth’s Tarek Alexander Hassan, and Toulouse School of Economics’ Thomas Chaney.

The researchers tracked 130 years’ worth of US immigration data at the county level. Their estimates suggest that doubling the number of residents with ancestry from a particular country would increase the probability of foreign direct investment from that country by 4 percent.

Doubling the number of residents with ancestry from a given country relative to the mean of the sample doubles the likelihood that at least one company from that country invests in a local firm.

Hassan says foreign companies may want to invest in the United States but face significant barriers, including language, complicated tax laws, and complex regulations. Having social or cultural ties to an immigrant population can break down those walls.

“If there’s a personal connection, it’s much easier to overcome all of these problems,” Hassan says.

This tendency helps explain why foreign direct investment often diverges from economic fundamentals such as tax breaks, lower wages, or shipping costs and instead follows the same paths as historical migrations.

“Taken together, our results suggest that receiving migration from a foreign country has a positive long-term effect on the ability of local firms to interact economically with the migrants’ country of origin,” the authors write.

The findings feed into current discussions about immigration and the willingness of countries to take in migrants fleeing violence. While countries such as Syria are not stable enough to invest in the US today, that is likely to change over time.

The authors point to previous immigration policies that had a significant impact on foreign direct investment in the US, including the Chinese Exclusion Act, which banned Chinese immigration from 1882 to 1943 and stifled Chinese immigration until the 1960s. They say those immigrants, had they been allowed in, could have spurred foreign investment in 69 percent of Massachusetts counties rather than the 43 percent that received investment from abroad.

—Brian Wallheimer

Did the 150-hour rule produce better accountants?

In the wake of several scandals in the 1980s, the US accounting industry created a 150-hour rule, which required CPA candidates to take at least 150 academic credits, and pass an exam, before receiving accreditation. Presumably highly educated accountants would be capable of spotting red flags sooner. But research by Chicago Booth’s John Barrios finds that the rule only slightly improved passing rates on the exam—and may have prevented many people from becoming accountants.

KEY COLORS:

Did the 150-hour rule produce better accountants?

The additional education seemed to help candidates on the exam . . .

AUDITING SECTION

BEFORE
150-hour rule

AFTER
150-hour rule

LAW SECTION

THEORY SECTION

PRACTICE SECTION

The additional education seemed to help candidates on the exam . . .

AMBIGUOUS QUALITY IMPLICATIONS

Accountants subjected to the 150-hour rule were more likely to be hired by a Big Four accounting firm, to specialize in tax, and to spend more of their career in public accounting. . .

. . . but they were not promoted any faster than those who were grandfathered in, and they left the profession at higher rates.
**DATAPoints**

**Glen Glutes in Savor the Sweat**

Based on research by Ayelet Fishbach and Kaitlin Woolley

By Andy Warner

Bronze’s Gym, Tuesday night.

Hey there! I’m Glen Glutes, chief fitness instructor at the world famous Bronze’s Gym!

I noticed a few months ago that people were cutting their workouts short—or skipping them entirely.

But our classes were proven to be effective at helping clients cut weight and add muscle.

I couldn’t figure out what was going wrong!

Then I curled up with some research that described a common mistake people make when pursuing goals.

When folks anticipate doing an activity, they tend to underestimate how important it is to actually enjoy it.
Clients were coming to us motivated solely by their desire to be healthier. It was only once they started working out that they realized the value of intrinsic incentives.

Intrinsic incentives are what you enjoy during the activity. Like the release of endorphins during a workout... ...and the stress relief that comes with it.

Research shows intrinsic incentives are an important driver of persistence in a task. And when people choose an activity with no intrinsic incentives, they're more likely to regret it.

Whatever goal you're working toward, you should try to find activities you enjoy to help you achieve it.

Then when you're engaged in those activities, try to focus on the happiness you're feeling rather than the distant goal.

We encouraged our clients to focus on the intrinsic pleasures of exercise, and what do you know? Not an empty exercise bike in sight!

The End!
What local data reveal about the economy at large

BY DEE GILL

To understand the US economy, you could start by looking at the national unemployment rate, the US Federal Reserve’s target interest rate, or perhaps long-term rates of growth in the GDP.

Or you could look right outside your door: at the bank down the street, the doctor’s office on the corner, or the new car parked two driveways down.

Researchers are interested in huge issues that affect us all, regardless of where we live, but often they’re finding the answers to these big questions embedded within small data sets focused not nationally but rather at the state, city, or even zip-code level. By analyzing variations in local and regional economies, they are increasingly uncovering insights obscured by the big picture.

Within the United States, regions have become “labs of democracy,” as Chicago Booth’s Owen Zidar puts it, enabling researchers to study contrasting approaches to problem-solving.

Why does health care cost so much? Zoom in from charts of national average health-care costs to data on a single patient moving from McAllen, Texas, to
The 2007–10 financial crisis stung individuals across the economic spectrum and around the globe—but some people felt it more acutely than others. Even within the US, certain geographic areas experienced a steeper decline, and were slower to recover, than others. So why did some regions fare comparatively badly? One factor seems to be the ease with which lenders can foreclose on homeowners.

Princeton’s Atif R. Mian, Chicago Booth’s Amir Sufi, and University of British Columbia’s Francesco Trebbi find that certain foreclosure laws help explain regional differentiation in the severity of the crisis—and that rewriting some of them might shorten the next national recession.

Foreclosure laws vary by state and can be divided between those that require lenders to sue borrowers in court before they can sell the foreclosed property—known as judicial foreclosure—and those that don’t. The researchers studied the effect of judicial foreclosure by examining foreclosure activity in zip codes located near each other but in neighboring states with contrasting foreclosure laws. They find that at times of crisis, slowing down the foreclosure process and making it more expensive for lenders made a substantial difference in the rate of foreclosure. “During the heart of the foreclosure crisis in 2008 and 2009, a delinquent homeowner in a non-judicial foreclosure state was more than twice as
likely to experience foreclosure on a delinquent home," they write.

More foreclosures create a more plentiful housing supply, which during a crisis means further downward pressure on housing prices at a time when real-estate values are already falling, the researchers argue. Those declining prices, in turn, can have ramifications for the rest of the economy. During the 2007-10 financial crisis, when mortgage delinquency rates peaked at more than 10 percent, home prices and new-auto sales plunged further in states that allowed banks to foreclose on homeowners without suing them first.

**Law of the land**

Some states require lenders to sue borrowers before they can sell a foreclosed property.

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<thead>
<tr>
<th>FORECLOSURES PER DELINQUENCY (%)</th>
<th>States where foreclosure is more difficult</th>
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<tbody>
<tr>
<td>Vermont</td>
<td>New York</td>
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<td>New York</td>
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<td>Colorado</td>
<td>Arizona</td>
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Source: Mian et al., 2015. Chart reprinted with permission from John Wiley and Sons.
an hour of work in New York is, on average, more productive than an hour of work in most other cities, in part because of the industries located there. The local demand for labor, currently being expressed as higher wages, should attract workers from low-productivity jobs elsewhere. More workers in a higher-productivity setting would mean greater gross domestic productivity.

But something is preventing workers from, say, Brownsville, Texas, from moving to cities such as San Jose, where average wages were twice as high as Brownsville’s in 2009. The researchers identify a likely culprit: limited local housing markets caused by overly restrictive land-use regulations.

Scarce housing in high-productivity regions creates an impediment to workers who might otherwise relocate there. San Jose, San Francisco, and New York have housing supplies that rank among the least flexible in the country: San Jose, for example, grew by fewer than 8,000 residences in 2013, as opposed to 51,000 new dwellings in Houston. They also have land-use restrictions that are more onerous than average. By limiting urban density—imposing maximum building heights or minimum lot sizes, for example—these restrictions also create impediments to growth and “de facto limit the number of US workers who have access to the most productive of American cities,” the authors write.

Relaxing some of these restrictions in San Jose, San Francisco, and New York, Hsieh and Moretti argue, would help alleviate the inefficient allocation of labor reflected in those cities’ relatively high wage levels. They calculate the resulting boost in aggregate productivity would give the US economy a welcome jolt, raising the national GDP by 9.5 percent.

Central banks around the world responded to the financial crisis that began in 2007 with quantitative easing—buying securities, such as government bonds, from banks and other institutions in the hope of encouraging them to make more loans and thereby stimulate the economy.

But while quantitative easing may have stimulated national economies, in the US it amplified regional inequality, benefiting the economically healthiest parts of the country more than the hardest-hit regions, according to Martin Beraja, a postdoctoral scholar at Princeton; Andreas Fuster of the Federal Reserve Bank of New York; and Chicago Booth’s Erik Hurst and Joseph S. Vavra.

The researchers analyzed home-mortgage activity and new-car purchases by metropolitan area following QE1, the Fed’s program to buy $600 billion of housing-related securities starting in 2008.

QE1 lowered interest rates and created a boom in mortgage originations, but the policy did not stimulate economic activity evenly across the country, according to the researchers. Almost all the mortgage activity came from refinancing, rather than from people buying and selling homes.
These loans sparked consumer spending: new-car sales, a common proxy for consumer spending, rose most in the metro areas where refinancing rates were highest.

But refinancing, which often lowers monthly payments and allows people to remove equity from their home, was not uniformly available across the US. Conventional home mortgages typically require loan-to-value ratios below 0.8—a ratio many existing mortgages in hard-hit regions exceeded when home prices fell, leaving the most economically damaged regions with the least amount of home equity to tap for refinancing. Those regions also had the largest declines in home prices and the largest increases in unemployment rates between January 2007 and November 2008.

QE1 exacerbated the disparity between the strongest regions economically and the weakest. The economic benefits of the program flowed mainly to cities such as Boston and Dallas, which fared relatively well in the financial crisis; metropolises such as Los Angeles, Miami, Las Vegas, and Phoenix, which saw housing values plunge and unemployment soar, benefited less.

In contrast to the national economy, at the state level, local wages were strongly correlated with local economic activity. States that experienced smaller employment declines during the crisis had much larger wage and consumer-price increases than harder-hit regions. Similarly, local employment rates were key to a region’s price growth.

Why the disparity between state and national economic behavior? The researchers find that individual states are particularly sensitive to demand shocks, such as a decline in household wealth. In fact, changes in demand explain most of the economic differences across states, according to the study. But it takes a combination of demand and supply shocks, such as a credit crunch that results in a drop in manufacturing output, to explain the patterns in employment, prices, and wages for the economy in aggregate.

Hurst explains that when economists do cross region analysis, they compare two parts of a country, such as the United States’ midwest and its west coast. While that’s a fine way to illustrate differences between the two areas, economists doing this can overlook a force—such as a national policy intended to boost growth—that affects both regions.

Regional trends differ from national patterns both in the kinds of economic shocks that move them and the size of their reactions to those shocks. These differences, the researchers conclude, present challenges in using regional variation to understand the forces that shape the national economy.

**THE LIMITS OF ZIP-CODE ECONOMICS**

Although studying and comparing local economies can yield useful insights, there are limits to what the findings can tell us about the broader economy.

In fact, incongruity between local and aggregate economic trends helps explain a puzzle of the US economy during the Great Recession: why consumer prices and wages continued to grow even as the employment rate fell sharply. Investigating the relationship between employment rates, prices, and wages between 2006 and 2011, Martin Beraja, a post-doctoral scholar at Princeton, Chicago Booth’s Erik Hurst, and University of Chicago PhD candidate Juan Ospina observe that national patterns differed from regional ones.

In contrast to the national economy, at the
TAX BREAKS DON’T TRICKLE DOWN

Trickle-down economics suggests that tax cuts for wealthy citizens energize ailing economies, as recipients of the cuts use their windfalls to hire workers. And conventional wisdom among policy makers and economists contends that the main beneficiaries of corporate tax breaks are workers, who see wages increase.

But some research suggests that if you want to create jobs, it’s better to cut taxes for the bottom 90 percent of earners. “People often point to the early 1980s as evidence for trickle-down economics, but there are important confounding factors, such as monetary policy and tax cuts for lower-income groups that occurred at the same time,” says Zidar. “Ultimately, there simply are not that many data points at the national level, so there is an inherent amount of uncertainty in the link between tax cuts for different groups and subsequent economic activity.”

To gauge the effects of tax cuts for the wealthy, Zidar gathered local data such as state-level employment statistics and individual incomes. Using individual tax returns, he analyzed how federal income-tax changes affected individuals of varying income levels as well as the economies of their home states. If tax cuts for

Where the wealthy are

If tax cuts for high earners sparked economic activity, states with high percentages of high-income taxpayers would grow faster. But research finds that tax cuts for lower-income people sparked more economic activity.

<table>
<thead>
<tr>
<th>SHARE OF TAXPAYERS IN THE TOP 10% NATIONALLY</th>
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<tbody>
<tr>
<td>6% or less</td>
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<tr>
<td>6.1%-8%</td>
</tr>
<tr>
<td>8.1%-10%</td>
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<tr>
<td>10.1%-12%</td>
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<tr>
<td>More than 12%</td>
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Source: Zidar, 2015
In times of economic recession, governments have an interest in democratizing the pain. Within the US, tax collections from healthy areas pay for programs in more-depressed regions. Although these tax policies are often controversial, keeping hard-hit areas from spiraling into intractable depressions mitigates the long-term economic damage for the country as a whole.

Using data from 106 metropolitan areas, economists have uncovered a more subtle way that economically strong parts of the US can, and do, transfer significant wealth to weaker regions. Nationally standardized mortgage rates, they conclude, effectively send billions of dollars from relatively healthy regions to struggling communities during economic downturns.

The researchers—Hurst, Vavra, Chicago Booth’s Amit Seru, and Chicago Harris’s Benjamin Keys—analyzed 18 million individual mortgage loans securitized by Fannie Mae and Freddie Mac, the US government-sponsored enterprises, between 1999 and 2012, as well as metro-regional data on borrowing, such as loan-default rates. Mortgage originators rely on Fannie and Freddie, created to expand the secondary mortgage market, to securitize the vast majority of US home loans, which gives these government-backed entities indirect control over the rules and rates for lending.

Corporations, they find, often choose locations where their businesses are most productive rather than the least taxed.
Money on the move

By having one mortgage rate for all regions, Fannie Mae and Freddie Mac essentially transfer billions of dollars from stronger regions to weaker ones. The northwest, coastal California, and midwest regions paid the largest transfers to other areas.

AVERAGE TRANSFERS IN SELECTED METRO AREAS, FOR LOANS ORIGINATED IN 2007–09

Positive transfers: $0 - $300  $301 - $500  Greater than $500
Negative transfers: $0 - $300  $301 - $500  Greater than $500

Source: Hurst et al., 2015
For three decades, the US has spent more money per capita on health care than any other developed country, with increasingly worse health outcomes. Exactly why is unclear, and important to determine.

Conventional wisdom has it that bills are high because doctors order excessive tests and treatments, in which case policies could discourage such excess as a way to cut costs. But a group of economists—MIT’s Amy Finkelstein and Heidi Williams and Stanford’s Matthew Gentzkow—analyzed individual health-care costs at the local level. Their results suggest that patients are a bigger factor in high health-care costs than conventional wisdom predicts. Addressing those patient-driven costs could require a different set of policies and incentives.

The researchers’ model suggests that this nationalized mortgage rate had a profound effect on struggling regions during the recession. National mortgage rates allowed individuals who could not afford to pay free-market interest rates to buy homes in depressed areas, and their buying helped stabilize crashing housing markets. Artificially low rates in these regions also meant that more households could subsidize their cash flow with home-equity loans, even as employers cut jobs and banks limited credit.

The model, which accounts for household-behavior changes in response to mortgage-policy changes, calculates that the national rate effectively transferred $20.7 billion from healthy to struggling metro areas between 2000 and 2010, or $1,800 per household from the richest areas to the poorest. By comparison, the authors note that the per-household figure is bigger than the tax rebates the government gave out as economy-boosting tactics in the 2001 and 2008 recessions.

Researchers also looked at prime jumbo loans, which generally meet the criteria for Fannie and Freddie loans but are securitized privately because of size.

The data provided details on each borrower and property, including credit scores, payment histories, locations, and loan-to-value ratios. With these data, the researchers built a model that displays how the richest regions of the country helped the poorest during the recession.

Specifically, the researchers demonstrate that Fannie and Freddie set a national mortgage interest rate that is artificially high in economically stronger areas and artificially low in weaker areas. Unlike private lenders, the researchers illustrate, Fannie and Freddie do not consider regional risk factors when setting interest rates, even though local characteristics are strong indicators of future default. Instead, Fannie and Freddie charge borrowers with similar characteristics, such as credit scores and loan-to-value ratios, the same rates, regardless of whether their community is booming or devastated.

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Their results suggest that patients are a bigger factor in high health-care costs than conventional wisdom predicts. Addressing those patient-driven costs could require a different set of policies and incentives.

The researchers observe big differences in health-care costs between US regions. The average Medicare enrollee in McAllen, Texas, spent $13,648 in 2010, while the average enrollee in demographically similar El Paso, Texas, spent about $8,714. A Miami enrollee cost the government about twice as much as one in Minneapolis.
Where health-care costs really add up
Researchers observe big differences in health-care costs between US regions.

Finkelstein, Gentzkow, and Williams separated physician-driven costs from patient-driven costs in various “hospital referral regions”—zones of care defined by zip code. They used individual claim information from 2.5 million Medicare patients who received benefits between 1998 and 2008—500,000 of whom relocated from one referral region to another, and 2 million of whom did not. The researchers could see medical details such as diagnosis, type and cost of care, and Medicare reimbursement; the data also included patient-specific information such as gender, race, age, and zip code of residence.

The researchers studied this data to compare how patients used health care before and after they moved between high-cost and low-cost zones. They reasoned that if regional variation in spending was completely explained by some areas having sicker patients than others, patients should have no change in health-care costs when they moved. However, if practitioners were one cause of higher or lower costs, the patients’ bills would adjust when they relocated.

Their analysis finds that patients moving from a low-utilization area to a high one reported dramatically higher health-care costs starting in the first year after a move. Similarly, moving from a high to a low area dramatically cut costs starting in the first year. While these changes around the move date were large, they did not bring the newcomer’s utilization up or down to the average utilization levels of the area.

The study estimates that overall, patient-specific factors such as patient health and patient demand (preferences for more intensive care, for example) drive 40–50 percent of the geographic differences in health-care costs, and the remaining 50–60 percent of variation is due to place-specific factors, such as doctor practice patterns and characteristics of health-care organizations.

Go to Review.ChicagoBooth.edu to see citations for research in this article and sidebar.
Networking differently could increase your salary

It’s fine to accumulate contacts, but notice how you network.

BY DAVID JON PHILLIPS
ILLUSTRATION BY JAVIER JAÉN

Meet Catherine—Cat for short. A composite character based on information about nearly 350 successful investment bankers, she represents the top 1 percent of earners at her large, global firm. Cat is friendly and highly regarded by her colleagues. She has an impressive educational pedigree as well as a large network of contacts. Yet so do many of her colleagues, who look just as good on paper and have similar networks. What is it that sets her apart?
For almost four decades, researchers have been studying why some people have an advantage that results from their social contacts and networks. Countless studies have established that it’s important to have valued contacts, and that it’s helpful to build networks that span organizational boundaries, across coworkers, clients, suppliers, and so on. Managers who build bridges rather than cliques earn more than their peers; they’re promoted faster and are happier at their jobs.

Cat followed researchers’ advice and built up a diverse network of important contacts. Many of her colleagues did the same. But Chicago Booth’s Ronald S. Burt and Tulane University’s Jennifer L. Merluzzi have identified a network pattern that contributes to Cat’s success, and is reflected in her pay. The pattern: “network oscillation.”

**Build a network bridge**

“NYSE President: I owe every job I’ve ever had to networking” reads a *Fortune* headline from 2015. “Your net worth is only as good as your network,” claims UK writer Rishi Chowdhury, in *Business Insider*. Many readers react to such headlines by accumulating more contacts on LinkedIn, exchanging more business cards, and setting up more luncheons.

Having a large network is one thing; the structure of that network, however, is even more important. “This is because not all connections are equally valuable,” Merluzzi explains. “Simply focusing on connection collection is incomplete.” The number of connections you have, online or in real life, is only one part of the story.

Another important part of networking is bridging, reaching people outside of your work silo. “Silo” is a sociology term, not one used by the researchers, but it’s instructive here. When employees are grouped together into silos—whether by project or department or location—they get better at what they do, require less instruction and supervision, and ultimately help the organization become more efficient. But there’s a cost to siloing. As people develop specialties, “information inside that group becomes very sticky and tacit—it is difficult to translate to others outside of the group,” says Merluzzi. When information gets stuck in one place, it can lead people at an organization to duplicate efforts—or even work against each other. “Imagine the success of a product line that was developed with little input from customer support, manufacturing, or marketing,” she says.

Burt, Merluzzi, and others have found that this disconnection creates an opportunity for people who can build bridges to and from these sticky clusters of information, bridging what Burt terms “structural holes.” Network brokers can bring together otherwise disconnected people who can share valuable and hard-to-get information. Moreover, because they know people in various silos, they can, more than others, identify and communicate where the information would be valuable.

Since the 1970s, researchers have been exploring what it means to bridge these gaps. “Relations with contacts in otherwise disconnected groups provide a competitive advantage in detecting and developing rewarding opportunities,” writes Burt, along with University College London’s Martin Kilduff and Erasmus University’s Stefano Tasselli, in a 2013 paper. Scores of studies have shown this to be true, including a global study involving stock analysts, investment bankers, and managers, in which Burt demonstrated that network brokers were paid more, were promoted more quickly, and were more likely to receive kudos.

**But closed networks have value**

But silos have advantages too, and they go beyond efficiency. As a participant in a “closed network structure,” in the parlance of sociology, you become deeply engaged, developing specialized expertise as well as strong connections with your closest colleagues. Because information moves quickly within these closed cliques, everyone in your group can readily identify a troublemaker or slacker, and as a result, you and your colleagues will be more careful about making trouble or slacking. Building a good reputation is also crucial in a closed-group environment and so, over time, and as you develop relationships, you take great efforts to become credible and trustworthy. While members of other departments may admire your work but quickly forget your name, your colleagues in a closed network have longer memories—their lasting opinions and those of your mutual acquaintances will further motivate you to maintain your reputation.

Bob has the network that many students and executives think they should have, but Cat has more of a network advantage.
This silo effect can have economic benefits. Stanford’s Avner Greif suggested in a 1989 paper that trust and reputations established in closed networks helped pave the way for 11th century medieval trade. To expand their reaches, merchants employed individuals to serve as overseas agents, but it was tough to keep tabs on these agents or keep them from cheating. The merchants formed coalitions, shared information, and pledged to never hire an agent who cheated another coalition member. For a more modern example, Merluzzi suggests thinking about Amazon or eBay. Sellers earn reputation scores, and while a one-time seller might unload a faulty product on someone, an established seller with high scores wouldn’t want to risk the reputational hit. “In the same way, the risk of buying a used car from a close cousin is much reduced compared to buying from a stranger,” she says. “Imagine that cousin having to face not only you but all the other relatives, knowing he sold you a lemon. There is a big cost, not just to the cousin’s relationship with you but with all of your other mutual family members. Thanksgiving dinner would not be pleasant.”

Sociologists and management scholars have filled volumes comparing the two network structures they term “brokerage” and “closure,” popularly referred to as bridging and bonding. In these matchups, brokerage has tended to win out. Of course, this is context specific—a company that values innovation and new ideas will be more likely to value brokerage, and a company that prioritizes operational efficiency will prefer closure. Yet according to a variety of performance measures, people who can connect valuable, otherwise disconnected contacts in different areas of a firm—in other words, brokers—“tend to do better than people who only talk to the same set of people with the same set of knowledge,” says Merluzzi. “These brokers have gained valuable social capital.”

These two networks may look the same, but . . .

Researchers created composite characters, Bob and Cat, to illustrate what makes some people more successful. Bob and Cat are both bankers with identical networks, but they built their networks differently—and Cat’s network gives her a greater advantage.

**BOB**

Bob connects across many groups without deeply engaging.

**CAT**

Cat spends two months embedded in a group, then spends the next two months connecting with a variety of people.

Source: Burt and Merluzzi
Burt has taught social capital of brokerage and closure to thousands of business-school students, as well as to corporate executives at companies all over the world, and he’s noticed that most students leave his class believing strongly in the power of brokerage. Yet when he looked at various measures of an executive’s performance—salary, promotions, job satisfaction, or something else—it became clear that not all brokers did well. Some excelled, and others failed to realize benefits from the same network structure.

Burt and Merluzzi’s study explains why. The short answer: the most-successful people take advantage of both systems—sometimes they broker, and other times they dive into closed networks. In fact, without this movement back and forth, their networks give them no advantage at all.

**How bankers oscillate**

The researchers arrived at this conclusion by studying the networks of investment bankers. In the mid 1990s, an executive at a large global investment-banking firm asked Burt to help identify why its top women were leaving, and how to prevent it. The firm gave Burt access to a trove of proprietary data pertaining to about 350 of its top-tier investment bankers. These were senior people who were eligible for an annual bonus and whose compensation ranged from a few hundred thousand dollars to several million.

Every year, as part of the bonus evaluation process, the firm conducted a survey in which it asked bankers to identify people they had worked closely with in the prior year, and to anonymously rate their experiences with those colleagues as poor, good, very good, or outstanding. The ratings were translated into scores that were used to inform decisions about bonuses and promotions. Burt gathered four years’ worth of these annual ratings, as well as salary and bonus information for the bankers.

As this is sensitive data, the researchers don’t disclose the name of the bank in their findings, and all salary information is masked. (To obscure exact dollar amounts, Burt and Merluzzi standardized all salary data.) The researchers used the evaluation data to create sociograms, network maps showing the bankers’ connections and the strength of those connections.

Investment bankers proved ideal subjects for a study of brokerage and closure in networking. The bankers in the study typically worked in teams on discrete projects—while advising companies on potential mergers, for instance. In a textbook case of a closed network, team members generally worked closely while on a project, collectively logging long hours and even spending free time together at social or work-related events. When a project ended, the team broke up. Some bankers immediately found another project to work on, while others waited. In some cases, bankers worked part time within the firm or consulted while looking for their next assignment, Burt says. After a period of time, they found a team and devoted themselves to that project.

Analyzing salary and bonus packages as well as year-end performance surveys proved revealing for Burt and Merluzzi. Bankers who were able to move between brokering and working in closed networks

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**How to network: Three takeaways**

Research has long established that a person can benefit from building a broad network, and from engaging deeply in a tightly connected group. But Burt and Merluzzi suggest that the most successful people are those who can move in and out of these two different networks over time. What this means for your career:

1. **Spending time deeply engaged in a group allows you to develop specialized expertise and foster strong connections with colleagues, which in turn helps you build a positive reputation among a set of coworkers.**

2. **Regularly reaching out to new contacts outside of your close-knit group helps you gain access to new opportunities, projects, and ideas so that you stay relevant and continue to add value.**

3. **Reaching out to broader network connections also facilitates access to new groups, with which you can deeply engage in the future.**
during the year reaped the greatest rewards. These individuals formed ties across the organization, gaining access to new projects and opportunities. But once they found an opportunity, they quit brokering and engaged deeply in their new project. When that project ended, they once again tapped into their broad network of contacts at the firm to find the next interesting project. Swinging between working intensely on a project and networking more widely did have a cost: these bankers sometimes saw their reputations suffer while they were on the bench. But the hit was temporary. And the compensation data show that these oscillating bankers made the most money over time.

A case of Cat and Bob

The researchers present the actions of two hypothetical executives, Catherine, whom we met earlier, and Robert (Bob). Bob is your classic network broker—he talks with different people every month, and his contacts don’t know each other. He learns a lot of information this way, and most people he meets develop a positive impression of him. Because he moves from one project to another, though, his colleagues do not know him as well. Nevertheless, he has the network that, as Burt noted, many students and executives think they should have. “The way Bob plays his job is with respect to a broad audience,” says Burt.

Cat, by contrast, spends two months in a tight-knit group working with other analysts, then spends two months connecting with a variety of people to find the next best project in the firm, and so on.

The annual survey conducted as part of the bonus evaluation process allowed the researchers to essentially map a network of the organization and show who was connected, and how. Doing this, they could recognize the Cats from the Bobs. At a single point in time, Cat may have a similar network to Bob’s; however, she builds hers differently. Cat gains the same information Bob has, but by engaging in closed networks, she also builds a strong reputation within those groups—a reputation that’s slower to evaporate than Bob’s. Because people she’s worked closely with have seen her work and contributions, they like and trust her. When she brings them new information, they listen—and they tell others about her.

Several other reasons could explain Cat’s advantage. Brokerage and closure make Cat more nimble, able to quickly respond to new information, with the benefit of insider knowledge.

Because Bob continually connects across groups without ever deeply engaging, he is a perpetual outsider. Cat, more accustomed to change, is constantly moving in and out of groups. This in turn can make her more flexible and able to adapt to new ideas. There’s another possibility: while both Bob and Cat have a large set of diverse contacts, Cat is better able to reanimate her wide-reaching contacts when the need arises. Because she spent time inside groups, her contacts are more likely to have mutual acquaintances, making it easier for Cat to call on them in the future.

It’s easy to see how Cat’s behavior could translate in different industries. Let’s say that Cat, instead of being an investment banker, is an engineer who worked on several teams within Apple, including the group that developed the iPhone 6s. That model set a first-weekend iPhone sales record at its debut, but at that point, Cat had already spent a few months talking to other group leads within Apple to find another project. By brokering with people in various other departments, and even outside of the company, Cat may know what other products are coming down the pipeline. And because she has worked closely with some of the people in those groups, she may have a well-developed understanding of those products, or relationships with people who can help educate her. Cat will bring an informed perspective to the next product meeting—and might come back with the next hit, earning her accolades, a spot on that product team, and a higher salary.

Employees of all kinds can take a lesson from Cat, by learning to move between networking broadly and diving deeply into teams over time. Companies can also learn from Cat, by encouraging employees to build Cat-like networks. Doing so could help individuals, and their employers, stay nimble.

Go to Review.ChicagoBooth.edu to see citations for research in this article.
# Nutrition Facts

**Serving Size**: 6 pgs  
**Servings Per Container**: 1

## Amount Per Serving

**Words**: 2,027  
**Paragraphs**: 49

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- **Periods**: 22%
- **Question Marks**: 2%
- **Exclamation Points**: 0%

*Percent daily values based on a 5,700-word diet. Your daily values may be higher or lower depending on your literary needs.*

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Informing consumers is harder than it looks

The principles of transparency and disclosure are visible everywhere from fast-food menus to financial regulation. But if lawmakers don’t carefully consider the behavior of both markets and consumers, better information may not translate to better outcomes.

BY HOWARD R. GOLD
Disclosure and transparency are at the heart of many countries’ securities regulations, campaign-finance laws, and corporate-governance initiatives. They’re also behind local and federal efforts to compel restaurants to reveal the calorie counts of menu items and force pharmaceutical companies to advertise potential side effects of certain drugs.

But some researchers find that increasingly, businesses and regulators are reaching the limits of transparency, either because consumers aren’t getting the message or are misinterpreting it, or because the market itself prevents consumers from fully acting on the information they receive.

“Disclosure alone doesn’t always have beneficial effects,” says Chicago Booth’s Oleg Urminsky. “I don’t think disclosure is a cure-all.”

In three studies supported by Chicago Booth’s Initiative on Global Markets, researchers discovered that how people react to disclosure depends not only on the information they receive, but how they receive it and what, if any, limitations they face in using it. But disclosure doesn’t just affect customer behavior; some of the studies also find evidence that when they’re forced to be transparent, businesses make other adjustments as well, adding further complexity to the question of disclosure’s real effects.

### When calories don’t count

Public-health officials have traditionally viewed calorie labeling as a tool in the battle against obesity, whose prevalence in the United States nearly tripled between the early 1960s and 2010, according to the National Institute of Diabetes and Digestive and Kidney Diseases.

Letting consumers know what they’re eating, the thinking goes, encourages them to consume healthier food with fewer calories. But the evidence of calorie labeling’s ability to actually influence behavior is mixed and inconsistent.

A well-known 2010 study of Starbucks stores in New York City, which requires chains to post calorie counts, reported a 6 percent decrease in food calories consumed, though there was no change in beverage purchases. A 2011 review of literature concluded that “calorie labeling does not have the intended effect of decreasing calorie purchasing or consumption.”

Urminsky, along with recent Chicago Booth PhD recipient Indranil Goswami, wanted to find out why. They conducted three studies with more than 2,000 adult participants, who were either visitors to a Chicago-area museum or online survey respondents. The researchers offered their test subjects choices among various packaged foods, with some subjects seeing packages with no nutritional labeling, and others seeing labels of varying size and content.

Because each label format displayed nutritional information differently, Urminsky and Goswami could test which elements of nutritional labels had a stronger effect on consumer choice. But the researchers also gave some subjects what they describe as “mere reminders”—prompts to help them remember the importance of eating healthier food with fewer calories without providing additional information.

Urminsky and Goswami find that “visually salient” calorie labels—those featuring the calorie count prominently, such as by using bigger fonts or bright-red lettering—“are more effective in reducing calorie choices than standard industry disclosures.” But so were noninformative “mere reminders.”

“Our argument is that mere disclosure—such as sticking calorie count in a small spot somewhere on the package—most of the time is not going to have much of an effect,” Urminsky explains. “Putting it in in a really noticeable way is likely to have a pretty substantial effect.”

But the effective labeling “works primarily as a reminder, prompting people to consider nutrition, rather than by providing new information.”

It’s a subtle but important distinction, says Urminsky. “A main part of that effect—we estimate about two-thirds—is going to be determined not by the fact that you got through to them the information you were trying to convey about calories, but . . . by reminding them, ‘Hey, when you make your decision, please think about calories.’”

That goes beyond the cornerstone of “transparency” thinking—that if you give consumers the
right information, they'll make decisions that will benefit their health and welfare. Study subjects were influenced less by the specific content of the information than by being made conscious of calories and their consequences. In fact, in some cases, when consumers’ beliefs about nutrition differed from actual calorie content, they tended to follow their beliefs and ignore the facts.

Urminsky suggests that making calorie labels more prominent and readable will go a long way to addressing some of their shortcomings. But he thinks researchers and policy makers need to better understand how labeling actually affects consumers.

“I think it’s worth having a conversation that asks, ‘If we’re ramping up the font size of the calorie information, what is that doing?’” he says. “Is it just making us more effective at conveying information, or is it also going beyond purely conveying information to actually have a reminder or implied prescriptive component as well?”

“The way in which you give people information could convey a recommendation,” he says, “but even if it doesn’t convey a recommendation, it affects how we think.”

Roadside attractions
Roadside signs are another form of labeling. They can prompt motorists to fasten their seat belts, pay attention to roadwork ahead, or patronize nearby merchants or shopping centers.

In 2007, the Italian parliament began requiring gasoline retailers located near Italy’s Autostrade, the highway system that traverses the country, to post their prices on electronic signs along the motorway and update them as they change. Each sign shows the price of gasoline charged by several nearby service stations, allowing drivers to comparison shop for gas.

The goal: increase price transparency for the benefit of drivers, and also promote competition.

Chicago Booth’s Pradeep K. Chintagunta and Federico Rossi of Bocconi University in Milan studied what happened to gas prices between October 2008 and May 2009. Gasoline is a commodity, and Chintagunta explains that “in circumstances where the products are, in fact, identical, then it makes sense to say the more information the consumer has, the better off the consumer will be.”

Prices charged by gas stations near the Autostrade did indeed decrease—by 1 euro cent per liter, equivalent to 20 percent of the stations’ margins. However, the policy was most effective for service stations only a short distance from the signs.

Furthermore, only a small group of frequent shoppers—fewer than 10 percent of all the consumers, according to the researchers’ estimates—seemed to use the price information available to choose the stations with the lowest prices.

Some logistical complications may be to blame. “Although you’re providing these signs, it’s not clear you’re getting the full benefit for a couple of reasons,” Chintagunta explains. “One is people are driving too fast and can’t read the prices, and a second is, keep in mind, people are entering and exiting the highway in between the signs and so are missing these signs. For these people, you are not going to see much of an effect, because they are not exposed to these signs at all.”

The research suggests that to give the public the maximum benefit of greater transparency, policy makers have to consider not only what information consumers receive but how—and if—they’ll be able to put it to use.

Food for thought
When asked to pick a chicken sandwich, study participants chose the lowest-calorie option if calorie counts were presented prominently. But simply reminding people to consider nutrition also inspired healthier choices.

<table>
<thead>
<tr>
<th>Calorie information not presented alongside ingredients</th>
<th>Calorie information presented in large, bold font</th>
<th>Participant asked to estimate calories</th>
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<tr>
<td>529</td>
<td>484</td>
<td>498</td>
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Source: Goswami and Urminsky, 2015
Shopping for surgeries
Health care is a highly complex industry, making up about 18 percent of US GDP. It encompasses hospital emergency rooms, nursing homes, highly trained specialists, and elective procedures such as cosmetic surgery.

But despite—or perhaps because of—its complexity, it too has become a market where regulators have pushed for greater price transparency, and where researchers are examining how disclosure can affect consumer behavior.

Hans B. Christensen and Mark G. Maffett of Chicago Booth and Eric Floyd of Rice University focused on regulations adopted by 27 US states that require hospitals to disclose pricing on publicly visible state websites, allowing patients to compare the average charges for common procedures across hospitals within the state.

They studied five procedures, some elective and some urgent: cesarean sections, knee replacements, hip replacements, appendectomies, and uterine procedures. Using data from MarketScan and the Nationwide Inpatient Sample, they examined both hospital charges (the prices hospitals initially bill) and actual payments (the prices patients ultimately pay) for these procedures made by privately insured and self-paying patients.

Several features of the health-care market made it

<table>
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<th>Hospital charges</th>
<th>Payments by privately insured patients</th>
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<tr>
<td></td>
<td>Average price ($) 2003–10</td>
<td>Effect of price transparency on charges (%) 2003–10</td>
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<tr>
<td>Appendectomy</td>
<td>Low: 6,552</td>
<td>High: 68,509</td>
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<td>C-section</td>
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<td>Uterine procedure</td>
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<td>Hip replacement</td>
<td>Low: 17,578</td>
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<td>All procedures</td>
<td>Low: All procedures</td>
<td>High: All procedures</td>
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Sources: Christensen et al., 2013

Same procedures, but very different prices
Twenty-seven states require hospitals to disclose pricing on publicly visible state websites. But there is still a wide variation in the prices charged in those states for hospital procedures.
distinct from, say, gasoline stations on the Autostrade, which sell a commodity at nearly identical prices.

First, there was wide price dispersion for identical procedures. In the sample the researchers studied, the cost of appendectomies ranged from $6,652 to $68,509.

Second, only 12 percent of US health-care payments in 2013 were made by consumers; the government and private insurers paid more than 80 percent. Except for elective procedures, consumers’ expenditures typically comprise co-payments and deductibles rather than full out-of-pocket payment to health-care providers. Since consumers generally don’t pay directly, they have less incentive to shop for the lowest price, Christensen says.

Third, patients often choose hospitals based on where their physicians have admitting privileges, so to some degree, physicians become the gatekeepers.

Finally, during medical emergencies, patients have little time or incentive to shop around for the most economical hospital or provider.

After controlling for some of the US health-care market’s quirks, Christensen, Maffett, and Floyd still are able to document a 6.4 percent decrease in charges for disclosed procedures in those states that implemented transparency regulation. But these charge reductions did not lead to declines in actual prices. In fact, the drop in charges wasn’t due to patients’ comparison shopping. “The bulk of the observed reduction in charges is attributable to hospitals reducing their prices rather than patients switching to cheaper hospitals,” they write.

The hospitals that tended to reduce prices the most were those that charged the most before they had to post their prices. So, the hospitals that charged $68,000 for appendectomies were more likely to cut their prices than the ones that charged $6,000.

The researchers discovered that the biggest decline in charges came from not-for-profit hospitals and those that served large lower-income populations, “where reputational costs of perceived overcharging are likely the highest.” No hospital wants to be known for gouging the poor.

Providers were cutting prices more because of what competitors were doing than because of what consumers were demanding. And yet, because of the unusual price structure in health care, hospitals could accommodate price cuts by reducing discounts to insurers and other contracted third-party providers and thus, in the words of the researchers, “avoid passing these charge reductions on to patients” and “mitigate reputational costs without sacrificing profits.”

“If you look only at these charged prices, then you may well conclude that the regulation works because the intention was to lower prices, and now people can shop around for lower prices,” says Christensen. “But what we really find is there is probably no social benefit, because they’re able to offset [the lower prices with discounts].”

Transparency, he continues, “is a broad policy instrument that has been used in many, many places. What we’re trying to say is that it is not obvious that it works everywhere, and this illustrates that, to some extent, because this is just a very different market.

“You need to consider the specific incentives and structures of the market when you design this. The high-level takeaway is, you have to consider the underlying incentives before you can decide whether [transparency] works or not.”

Like the studies of calorie labeling and the Autostrade, Christensen, Maffett, and Floyd’s work underscores the practical limitations of disclosure. However laudable a goal transparency may be, in the real world, it works imperfectly and doesn’t always translate directly into smarter consumer decisions.

Collectively, the research demonstrates that politicians and regulators have to carefully consider where and how to push for greater transparency if they hope to make it an engine for greater consumer welfare. — hans b. christensen
The Great Boston Fire of 1872 claimed 20 lives and destroyed 776 buildings.
Historical events hold lessons for modern economic development.

BY DEE GILL

What can we learn from this disaster?
In November 9, 1872, an alarm sounded in south central Boston. A fire had started in the basement of a commercial warehouse, and it consumed one building and quickly spread. By the time the fire was contained the following morning, it had claimed 20 lives and destroyed 776 buildings, wiping out 11 percent of the total assessed value of all Boston real estate and personal property. “Whole blocks were literally mowed down by the flames like wheat before the reaper’s scythe,” wrote the Boston Daily Globe, under the headline, “DEVASTATION!”

With damages that amounted to $75 million, this 19th-century fire represented a major disaster for the time. “If that many buildings were burned in a downtown urban area today, it would be enormous news, and perhaps even seen as more catastrophic than it was then,” says Chicago Booth’s Richard Hornbeck.

While the fire has faded into history, its aftermath contains lessons directly applicable to modern economic development. By studying Boston’s fire and other historic events, Hornbeck and his colleagues are observing what can help areas, poor or rich, grow and reach their economic potential. Destruction, it seems, can lead to progress—if conditions are right.

**A fire released pent-up demand**

Economic development is big business in the United States, with federal, state, and local agencies all trying to promote investments, joint ventures, technology centers, and anything else that can boost jobs and development. Cities are epicenters of this development, and development case studies abound. The Initiative for a Competitive Inner City, a national nonprofit founded by Harvard’s Michael E. Porter, highlights some on its website, including the revitalization of San Francisco’s Tenderloin district.

Historic events offer a different, longer-term perspective on development. Boston, for example, highlights the power of collective action. In 1872, the city was full of post-Civil War merchants and entrepreneurs, whose work was on display in ads touting sewing machines, schools, and spectacles “highly recommended for Physicians and Scientific men.” While business was growing, many businesses were constrained—literally, by a lack of upgraded commercial space. Real-estate prices were rising, and building owners saw no pressing need to sink money into improvements. The clothiers, spectacle makers, and other business owners made do, at least until the fire inspired a mass redevelopment.

To understand and quantify the impact of the Boston fire, Hornbeck and Yale University’s Daniel Keniston used data from before and after the fire to create a model of Boston’s land and property values between 1867 and 1894. For each plot in or near the burned area, Hornbeck and Keniston collected and digitized city tax data that contained details such as land value, building value, size, owner name, and occupant characteristics. They also collected some real-estate-sales data. They find striking increases in land value in burned and nearby unburned areas—increases that were similar to, or moderately greater than, the actual value of buildings burned in the fire. (See “Red-hot real estate,” page 48.)

Landowners’ reaction to the fire drove these increases. Prior to the fire, a landowner who considered investing in upgrades may have been worried about seeing a return on his investment. After the fire, however, he had less reason to worry. The fire cleared a large area and forced many people to rebuild, with the private sector and insurance payouts funding reconstruction. And with many people constructing buildings at once, landowners willing to invest saw a stronger return on their investment than existed before.

It helped that developers replaced buildings that were destroyed with bigger, nicer, and ultimately more-valuable spaces. The Boston Evening Transcript admired the variety of marble, granite, and sandstone in the new construction, while Boston’s Advertiser commented on “a beauty and elegance combined with a thoroughness of construction which will substantiate Boston’s claim of possessing the finest architecture of any American city.”

Upgraded buildings were worth more, but the mass activity led land values to rise substantially too—in part because the new construction inspired other
landowners, even in adjoining areas, to improve their own properties. “The reconstruction of buildings benefited other nearby buildings, which created a multiplier effect to the betterment of the overall area,” says Hornbeck. The effect lasted five to six blocks, and included hundreds of buildings.

By the time a national recession hit in force a few years later, Boston was once again thriving. And the data suggest that Boston’s prefire real-estate situation had been holding back economic growth. The fire released pent-up demand that had existed in the economy. As devastating as the disaster was, it made it possible for Boston to evolve into a city ready for the 20th century.

A flood revealed cultural constraints
While the Boston fire presents one historical example to learn from, a flood a half-century later and 1,500 miles away presents another. From the 1927 flood of the Mississippi River delta, researchers see another example of an area’s trajectory influencing economic growth. In this case, the social, political, and legal systems of the area held back development.

In 1927, months of heavy rains pushed the Mississippi River to overwhelm the levee system that had been built to contain and tame what Mark Twain called the “lawless stream.” Water breached the levees in 145 places, spreading over 26,000 square miles of Louisiana, Mississippi, and Arkansas. Walls of rushing water swept away houses and towns, drowning animals and people. The flooding left hundreds of thousands of people homeless, destroyed 36 percent of farmland, and caused $400 million in property damage, more than $4 billion in today’s dollars. In the aftermath of the flood, banks failed, and many thousands of people were left impoverished.

Hornbeck and Columbia University’s Suresh Naidu use data from the time to home in on a factor that had been constraining economic growth in the southern delta: white landowners’ reluctance to mechanize. That reluctance was tied in to the availability of low-paid, mostly black workers.
Red-hot real estate

In and around the area of Boston that burned, land values spiked in the following two decades.

In the delta, white plantation owners had crafted a system that gave them a strong incentive to cling to their old ways. After slavery was abolished in the US in 1865, many white landowners with political influence in the region continued to employ black families and workers as low-paid sharecroppers. Blacks, restricted by a lack of literacy and civil rights, remained cheap labor.

As the Mississippi’s waters rose, the white delta landowners fought to keep black workers in place. As historian John M. Barry recounts in Rising Tide: The Great Mississippi Flood of 1927 and How It Changed America, landowners worked aggressively to prevent blacks from leaving the area. Concerned about losing their workforce, the landowners enlisted armed troops to round up many blacks and force them into substandard camps that were practically prisons. Across the southern US, blacks were made to work for no pay, were fed inferior food, and in some cases were whipped or killed.

Despite the attempts to keep them from leaving, many black workers did move north. “Flooded areas lost black population due to the combined effects from temporary displacement and a decline in the opportunity cost of migration, a breakdown of trust between planters and black workers, and a shift in black social networks toward favoring migration,” Hornbeck and Naidu write.

And the landowners’ resistance to change had a significant cost. While delta landowners were clinging to cheap labor, northern farmers mechanized, adopting more-efficient machines and technologies such as the mechanical wheat thresher. Those more-efficient machines led northern landowners to create larger, more productive farms.

In the delta, planters did adapt and mechanize when black workers moved. In counties that experienced flooding, the black population fell 14 percent between 1920 and 1930, according to the data. In flooded areas, the value of farm equipment and machinery increased substantially between 1927 and 1940, more than it did on nonflooded farms. “Relative increases in agricultural capital continued through 1970,” write the researchers, who analyzed data through that year. But the money they invested in farm equipment took a while to translate into profits. In flooded areas, property values didn’t grow significantly until the 1940s and 1950s.

Bostonians’ collective action helped boost their economy. In the delta, however,
landowners coordinated efforts to stave off progress. “Landowners in Boston benefited when others reconstructed buildings, whereas farmers in the delta didn’t benefit much from the mechanization of other farmers,” says Hornbeck. In retrospect, the economic aftermath of the two disasters looks very different.

Lessons for today’s cities
Research into redevelopment commonly looks at urban-renewal projects in poor areas, where outside incentives are needed to jump-start projects. For example, Vanderbilt’s William J. Collins and Washington and Lee University’s Katharine L. Shester studied the effect of Title I of the US Housing Act of 1949, a federal program that supported 2,100 urban-renewal projects—many of which involved clearing and selling land in areas considered blighted.

But the examples provided by Boston and the Mississippi delta highlight the importance of an area’s underlying economic trajectory, which can be heavily influenced by its political, legal, or social situation. These episodes provide a way to look at larger forces that drive development. “You learn a lot about a society through its reaction after a disaster,” says Hornbeck.

The findings suggest that city planners and developers trying to kick-start growth need to identify the forces that are shaping an area and defining its trajectory. Planners should focus on identifying and removing any constraints, which could include regulations, politics, culture, or the environment. In Dust Bowl-era Oklahoma, another period Hornbeck has studied, few people sought to adapt to drought and erosion, despite government intervention programs. The area experienced large and permanent declines in land values.

The historical examples further teach us about the importance of coordination. In Boston, the fire inspired collective action, but cities seeking to clear land for redevelopment are sometimes stymied by a small number of people who don’t want to move and can hold up the process of redevelopment, says David Albouy, of the University of Illinois. “It’s hard to get all the relevant actors moving at the same time,” he says.

Albouy, who studies urban economics, says that today’s prime urban areas face constraints remarkably similar to those of 19th-century Boston. In cities across the globe, high housing prices are making it difficult for people to work in and contribute to the local economies. A shortage of affordable office space can cost a city jobs. Big construction projects run into opposition and strict land-use regulations. Much of this is true even for modern Boston. “Boston needs to rebuild parts of its downtown core,” Albouy says, adding that the entire country would benefit if Boston revisited its strict rules about which buildings are worth preserving.

Change can be painful, even when lives aren’t at stake. But when conditions are right for growth, the research suggests, painful destruction can give way to development and progress.
No, Mr. Starbuck, I don’t understand it one bit!

Gather the men!

Look here, a gold doubloon nailed to the mast.

And this doubloon is the reward to the first man who can explain to me...
Instead of borrowing money from the bank, distributors often ask their suppliers to wait for payment, for 10 days, a month, or even longer. In effect, the suppliers are lending the distributors money. But I don’t see why I should give anyone my whale oil on credit!

Maybe the supplier knows more about the business than a bank!

Maybe the suppliers are offering credit to set themselves apart from the competition!

Maybe the buyer wants to check the goods before paying for them!

Maybe they do it for liquidity?

Maybe the supplier can monitor the distributor better than a bank can!
But none of those theories explains why firms use both trade credit and traditional banking.

Who are you?

John R. Birge, captain. I'm a professor at Chicago Booth, but sometimes I grow grim about the mouth and I head for sea.

My research suggests that... is a way for suppliers to share risk with their distributors.

Why would I want to share risk with those devil lamp salesmen?

I didn't see them sharing my risk when my leg was chewed off by Moby Dick!
But sharing risk allows you to sell more whale oil, or at a higher price. It's a risk-reward proposition: because you share in the risk, you access the reward. It also prevents double marginalization—two companies don't have to mark up the same product to avoid the same risk.

Hmm...

My model says that businesses should first use trade credit, and resort to banking once their suppliers raise the interest rates too high.

You've convinced me. Trade credit it is. Now let's find some whales to hunt.

Wait, we're not searching for the white whale?

Heavens no! Chasing that beast is far too much risk. I have a wife at home, you know.

As for suppliers, we make a quick buck lending, and lower cost for our product by sharing the risk.
Information adds value

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For Donald Trump, deal making is more than an activity. It shapes his identity—he boasts that he was born with the negotiator’s mind-set—and is a central part of his pitch to be the next president of the United States.

But does Trump’s negotiating technique stand up to scrutiny? And how would his style of negotiating extend to the realm of international relations or to showdowns with representatives of Congress? His 1987 best seller *Trump: The Art of the Deal* provides some guidance. Although I have taught negotiation to MBA students for more than 20 years, I confess that I had not read the book until recently.

It opens with a good sense of how much Trump both enjoys negotiating and views it as his very essence. “I don’t do it for the money,” he writes. “I’ve got enough, much more than I’ll ever need. I do it to do it. Deals are my art form.”

He has hammered this theme on the campaign trail, attacking the Obama administration for its weakness in dealing with other countries, in particular for
being soft on China when it comes to trade and allowing Iran to hoodwink the west on its nuclear ambitions. If he were elected president, things would be very different, he suggests. "We'd have an experienced deal maker in the White House.

I am agnostic about whether or not Trump is a master deal maker. But even Trump doesn't actually know how good a negotiator he is. Few professionals know that about themselves. That's because, unlike students in the classroom negotiation exercises that I teach in my MBA classes, we don't really get much feedback about how well we perform in negotiations in our daily lives.

Consider business deals. If corporate leaders strike an agreement, they don't then sit down for an open and honest postmortem that might reveal if the deal could have been better for one of them. In a merger, for instance, no one really knows the other side's bottom line: the target company might have accepted a lot less, and the acquiring company might have paid a lot more, but we cannot be sure how much more, since such information remains confidential. And perhaps a different deal structure would have produced value for both the buyer and the seller.

The result is that it's very easy to walk out of a negotiation telling yourself that you are a much better negotiator than you really are. It's self-reinforcing: people who think they're good negotiators persist in believing just that. If you failed to strike an agreement, you conclude that no deal was possible. If the deal netted you $20 million more than walking away, it seems self-evident that that's the best you could have achieved. Research I have conducted with Duke's Richard Larrick suggests exactly this. Negotiators walk out of a negotiation believing that they have claimed 65 percent of the pie. The correct answer should be 50 percent, unless you live in Lake Wobegon.

Self-defined "good negotiators" tend to ascribe their success to their traits—being aggressive, talking a lot, being a good listener, or whatever else they think contributed to their success. But playing up any of those traits in future bargaining may not be a good idea.

Indeed, having one set negotiating style can backfire. There are behaviors that are clearly important for good negotiating, but the problem is that those behaviors change across negotiations. One way of behaving can be effective in one negotiation, but ineffective in another setting. Some negotiations are about listening. Some require you to be more aggressive. Some are about being analytical. Some are exercises in creativity. Some are about developing good relationships.

It is probably no surprise that Trump's overall tone in The Art of the Deal is pugnacious. One of his key pieces of advice is to "Fight back." He casts negotiation as a zero-sum game, with a clear winner and a clear loser.

But like any approach to negotiation, that attitude only works some of the time. It may be successful if you're trying to drive a hard bargain in a pure price negotiation. But it may fail flat if the negotiation requires that one party really listens to the other, that they collectively try to solve a problem, or that they figure out how to craft imaginative trades.

The pugnacious tone also points to a big missing piece in The Art of the Deal as a primer for negotiation: the lack of any discussion about the role of relationships in negotiation and the process of discovering joint gains. Relationships are critically important in negotiations, because in most important business situations, the final agreement or contract just defines the potential value of a deal. The ultimate value requires implementing the deal, and that depends on people's ability to work together.

To be fair to Trump, it's possible to go too far in stressing the importance of relationships. Sometimes people do so much to preserve a professional relationship that they give everything away. It is perfectly possible to be tough and also negotiate with the sort of integrity and respect that helps build and preserve business relationships.

Another danger of treating every negotiation as a zero-sum game is that you may gain in the short run while sacrificing greater gains in the longer run. A common negotiating trick in this regard is the pretend mistake. It works like this: after two people strike a deal, one says he has to check his calculations, and on doing so, admits that he made a mistake and apologizes. "But if you could throw in free shipping," he continues, "we still have a deal."

It's a great trick, one that people use because it often works in the short run. But in the longer run, it could be exposed as a deceptive technique that threatens to destroy a relationship. Driving a hard bargain is like a sugar high: the thrill doesn't last, and the long-term effects are harmful.
### Should you take Trump’s advice?


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<th>THE ADVICE</th>
<th>TRUMP RECOMMENDS</th>
<th>WU RESPONDS</th>
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<tr>
<td>Think big</td>
<td>“I like thinking big. I always have. To me it’s very simple: if you’re going to be thinking anyway, you might as well think big.”</td>
<td>“Thinking big is good advice. Many negotiators are not ambitious enough. They focus on what they need to get in order to make a deal, not what they could get. And my research has shown that negotiators often believe they have gotten a larger share of the pie than they actually have. But if people are unrealistic about what they can get, they may turn down good opportunities.”</td>
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<td>Protect the downside and the upside will take care of itself</td>
<td>“I always go into the deal anticipating the worst. If you plan for the worst—if you can live with the worst—the good will always take care of itself.”</td>
<td>“It’s certainly a good idea to be prudent and to make sure you can live with the downside. Research has shown that decision makers are often surprised when bad outcomes occur. I’m not sure at all, though, that the upside simply takes care of itself.”</td>
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<td>Maximize the options</td>
<td>“I never get too attached to one deal or one approach . . . I keep a lot of balls in the air, because most deals fall out, no matter how promising they seem at first.”</td>
<td>“Yes, but this is pretty basic advice. Negotiation 101. Your biggest source of leverage in a negotiation is your other options.”</td>
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<td>Know your market</td>
<td>“I like to think I have that instinct. That’s why I don’t hire a lot of number-crunchers, and I don’t trust fancy marketing surveys. I do my own surveys and draw my own conclusions.”</td>
<td>“Knowing your market is hard. That’s why I teach my students not to trust their instincts. Whether it’s number crunchers or any other kind of expert, it’s useful to have people with different perspectives on the marketplace.”</td>
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<td>Use your leverage</td>
<td>“The worst thing you can possibly do in a deal is seem desperate to make it. That makes the other guy smell blood, and then you’re dead.”</td>
<td>“This is correct, but basic and vague. Of course you should use your leverage. He gives no guidance on how to identify the sources of leverage and how to use them.”</td>
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<td>Enhance your location</td>
<td>“Perhaps the most misunderstood concept in all of real estate is that the key to success is location, location, location. . . . First of all, you don’t necessarily need the best location. What you need is the best deal.”</td>
<td>“In some sense this is also about outside options. You’re trying to maximize your surplus, regardless of whether you have a big top-line number and high costs, or a lower number at the top and lower costs.”</td>
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<td>Get the word out</td>
<td>“One thing I’ve learned about the press is that they’re always hungry for a good story, and the more sensational the better. . . . if you are a little different, a little outrageous, or if you do things that are bold or controversial, the press is going to write about you.”</td>
<td>“Negotiators have to recognize when they should involve other parties—the media, internal stakeholders, people who put pressure on your counterparty, etc. You need to understand which other parties could be involved in the negotiation, how and when to get them, and whether to keep them out. But it can’t always be good to have the media involved.”</td>
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<td>Fight back</td>
<td>“In most cases I’m very easy to get along with. I’m very good to people who are good to me. But when people treat me badly or unfairly or try to take advantage of me, my general attitude, all my life, has been to fight back very hard.”</td>
<td>“In negotiations, you need a credible threat that you might fight back. But fighting back is not the only option. Sometimes trying to work things out is better, either directly with your partner or through some dispute resolution process. In other situations, it simply may not make economic sense to fight back.”</td>
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<td>Deliver the goods</td>
<td>“You can’t con people, at least not for long. You can create excitement, you can do wonderful promotion and get all kinds of press, and you can throw in a little hyperbole. But if you don’t deliver the goods, people will eventually catch on.”</td>
<td>“It seems hard to dispute that, though it’s not really a negotiating tip.”</td>
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<td>Contain the costs</td>
<td>“I believe in spending what you have to. But I also believe in not spending more than you should.”</td>
<td>“That’s not about negotiating either. It’s more of a general management point.”</td>
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<td>Have fun</td>
<td>“Money was never a big motivation for me, except as a way to keep score. The real excitement is playing the game.”</td>
<td>“You don’t necessarily have to have fun, but there is an important point here: people perform much better when they don’t fear negotiation. Walking into a negotiation shouldn’t be like going to the dentist.”</td>
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Because there is no single format for negotiations, it’s hard to think about a simple recipe for being a good negotiator. And yet Donald Trump claims to have such a recipe. In The Art of the Deal, he offers 11 tips to make you a better negotiator. Some of these tips are sensible, but obvious and well known. Others are suspect, vague, and unsubtle. (See “Should you take Trump’s advice?” page 57.)

Even the idea of offering negotiating tips goes against one of Trump’s own maxims in The Art of the Deal: that great negotiators are born, not made. He writes, More than anything else, I think deal-making is an ability you’re born with. It’s in the genes. I don’t say that egotistically. It’s not about being brilliant. It does take a certain intelligence, but mostly it’s about instincts. You can take the smartest kid at Wharton, the one who gets straight A’s and has a 170 IQ, and if he doesn’t have the instincts, he’ll never be a successful entrepreneur.

For Trump, then, bargaining is less about being smart than about using your instinct. I take issue with the idea that good negotiators are born, not made. Even if we can agree that better-tuned instincts can make you a better negotiator, it’s also true that some instincts keep you from improving as a negotiator. Consider sports. Success for athletes often means finding the right coach to help them overcome instincts and improve technique. The same is true of professionals. Psychological science has documented many biases and cognitive traps that individuals can avoid through training or improved decision processes.

Even if Trump does believe—as many universities, and business schools in particular, long have—that negotiating skills can be taught, his instruction to aspiring deal makers tends toward the abstract. He writes, for example, that leverage often requires imagination, and salesmanship.” While that may be valid (if somewhat intuitive and even obvious), it is pretty empty advice without any sense of what it is we need to imagine and sell. What are the sources of leverage in negotiations? How do we use them? Many sources of leverage are not immediately obvious, yet Trump offers nothing to help the reader figure out how to identify them.

Trump has clearly built a business empire, apparently on the notion that all negotiations are tug-of-war battles for money, resources, and power.

If you enter a negotiation feeling as if you have leverage, it’s more likely to turn out well for you than if you feel that you’re powerless. More importantly, though, it’s critical to think about what you need to do to make it seem that you are more powerful than the other party, whether or not that is accurate. In many ways, leverage is the perception that the other side is in a weaker position. It’s about perception and not necessarily reality. Mastering the issue of leverage entails understanding how psychology can be harnessed to effectively shape your counterpart’s perceptions. That sort of preparation requires a deep understanding of the situation, the people involved, and psychology.

For example, in my MBA class, I tell students that one source of leverage in bargaining is recognizing why “negotiation traps” work. Consider two people haggling over a price. The buyer says “$29,” and the seller responds, “$30.” Now imagine that the buyer says, “Let’s split the difference—$29.50,” and the seller replies, “Can’t do that. But I can if we split the difference again—$29.75.” In many cases, that trick works, and the buyer caves in. Many of my students confess that they would cave, too. When I probe why, two things always come up. First, people give in because there’s not much money involved. What’s an extra quarter? Secondly, people are tired, and they want to get the deal done. At that point, I stop the discussion and ask, “You’re tired. What else is true?” Eventually, but not immediately, someone interjects that the person who used the trick is also tired. One tired person has turned his exhaustion into leverage, knowing that his negotiating partner is just as eager to be done. After the debrief, my MBAs realize that in such cases, the spotlight can be shone the other way as well. There are lots of similar examples of nonobvious sources of leverage.

Trump has clearly built a business empire, apparently on the notion that all negotiations are tug-of-war battles for money, resources, and power. Whether such an approach would work well in the Oval Office is now up to American voters.

George Wu is John P. and Lillian A. Gould Professor of Behavioral Science at Chicago Booth.

Go to Review.ChicagoBooth.edu to see citations for research in this article.
What comes after the Brexit vote?
The consequences will be varied and complex.

The United Kingdom’s vote to leave the European Union has sent tremors and aftershocks rumbling around the globe, generating speculation and debate on topics that span economics, finance, and public policy: immigration and globalization, uncertainty and safe havens, the single market and the City. As might be expected of a seismic event, the Brexit referendum has created a cloud of debris that makes it difficult to see what’s ahead: Is it the further fragmentation of the EU? Or a British recession as a result of reduced opportunities for trade? Perhaps a wave of antiglobalization sentiment across the developed world.

To help divine what to expect, we asked members of the Chicago Booth faculty what they thought about the implications of the vote. CBR collected each response, whether written or given via interview, in the weeks following the vote. The faculty members’ thoughts, excerpted here, range from pessimistic to encouraging, but all reflect the myriad choices the British government has still to make, and the dramatic economic consequences that may result.

More Brexit coverage
To see more, visit Review.ChicagoBooth.edu, where we’ve posted videos featuring more from these interviews.
The outcome of the Brexit vote is clearly bad news for the UK. At the macroeconomic level, if Britain loses access to the single market, that’s going to harm the British economy. Until the negotiations about the single market are completed, there will be a lot of policy uncertainty about what kind of deal we’re going to end up with, and until then, investment in Britain will be lower. There will also be less spending. Hopefully, the large drop in the pound that we have seen will be strong enough to offset this blow to the British economy.

One opportunity for the UK, the easy opportunity to preserve access to the single market, is to follow the so-called Norway model. In other words, join the European economic area, which currently includes not only Norway but also other non-EU countries such as Iceland and Liechtenstein. However, I do not think this is a viable solution for Britain in the long run. Yes, it would preserve access to the single market, but it would come at the expense of free movement of labor, which British voters clearly don’t want, by revealed preference. Britain would also have to continue paying into the EU budget, which they don’t like. And Britain would have to abide by the EU rules, over which it would have no say, which I don’t see the British liking at all.

The Brexit vote is also bad news for the rest of Europe. Brexit, if it takes place, will reverse the long-term process of European integration, which has contributed significantly to peace and prosperity in Europe. Losing Britain will be bad for the EU, both externally and internally.

Externally, the UK has been a strong member of the EU; it’s been able to contribute militarily, and it’s been able to...
AMIR SUFI

A bigger pie, but some left starving

What Brexit shows more than anything else is that policies associated with globalization—in particular free trade and removal of restrictions on immigration—have been met by certain groups with resistance. These groups are angry about these policies, and it makes a lot of sense that the vote went the way it did given this anger. We will see an increase in these nationalistic, anti-immigrant, antitrade-type votes across the board in almost all the advanced countries.

One of the big problems economists have had is that these policies they have been advocating—more trade, more immigration—which I agree make the size of the pie larger and are the right policies in the long run, have negative distributional consequences. Some groups are negatively affected, and economists and policy makers mostly ignore these effects. We now have solid evidence showing the negative consequences of globalization on certain groups. For example, in the United States we know counties that previously produced goods that end up being exported by China into the US have been devastated. We see higher unemployment, higher suicide rates, and even higher opioid addiction.

Economists and policy makers often think policies that increase the size of the pie will automatically benefit everyone, and that’s just counterfactual. If you are going to get the true fruits of some of the policies associated with globalization, you have to think seriously about the groups within a country that are adversely affected by those policies. You cannot just assume everything will work out for these groups.

Lubos Pastor serves on the governing board of the National Bank of Slovakia, Slovakia’s central bank. Slovakia is a member of the European Union. Pastor spoke in his personal capacity.
STEVEN J. DAVIS

Brexit has upside potential for both the UK and the EU

There are considerable downside risks to what might happen in the wake of the referendum, but Brexit also presents some important upside opportunities for the UK. It will have the opportunity to take a freer hand in its own trade policy, its own immigration policy, its own regulatory policy. If it takes advantage of that freedom to construct a regulatory environment that facilitates the formation of new businesses and the creation of new jobs, that’s likely to be good for workers across the spectrum in the UK economy.

However, if Brexit is the first step toward an inward retreat with respect to trade, capital flows, immigration, and so on, that’s likely to choke off growth prospects for the UK for some time to come.

One big political issue is how well and how soon the EU and the UK will establish a new trade arrangement. The sooner the better, in my view. The Economic Policy Uncertainty Index for the UK is at historically high levels. (The index quantifies newspaper coverage of policy-related economic uncertainty.) Until the EU and the UK come to a new understanding about trade, that uncertainty will forestall long-term investments, hiring decisions, and other activity. That will spill over to the entire UK economy if it persists.

Just as there are opportunities for the UK, this could have a positive impact on the EU. For one thing, the referendum and the larger dissatisfaction in many EU countries suggest that the EU suffers from a shortfall of democratic accountability. It’s easier to blame the EU for your economic troubles when you don’t really have a strong say in how it functions. I would encourage folks in the EU to think about how they can restore both the perception and reality of greater accountability to the citizens of EU member countries.

Many of the aspects of globalization that come with EU membership can be achieved without something akin to political integration. There’s been a long-standing trajectory since the end of World War II of trade agreements and organizations that have promoted greater trade globalization while respecting the sovereignty of individual countries. It would be wise to step back and unpack the elements of globalization and ask, “Which ones can we promote in a way that’s likely to be most beneficial economically and most hospitable to the electorates in democratic societies?”

LUIGI ZINGALES

We need to restore public trust in expert opinion

CHRISTIAN LEUZ

The vote is an opportunity for the EU to find new resolve

Since the referendum, it has become clear that the negative economic consequences of a Brexit are real and potentially severe, just as many economists and experts predicted. For the UK, an important political question is whether or not it can and
As an example of voters’ irrationality. I fear the vote for “Remain,” they probably ger. Not only did these forecasts fail to pessimistic as to be accused of scaremon- fact, many were willing to make forecasts so mist justifying a departure from the EU. In is a growing mistrust toward experts. In the Most pundits and pollsters missed the reason for it. Even the betting market, newspapers to predict and understand the flipside, more time could also allow the UK and the EU to mitigate the Brexit fallout. For the UK going forward, there will be strong political forces pulling toward a breakup. It is not clear to me how one can respect the will of the people expressed in the referendum, yet deny Scotland another independence referendum of its own if the UK follows through with a Brexit. A similar issue could arise in Northern Ireland. As the EU is largely a political project, it is also essential to view things through a political lens, rather than just from an economic perspective. Politics often prevails over economics, as we saw in the Greek sovereign-debt crisis. Politics will also dom- inate the exit negotiations. Therefore, most of the Brexit consequences for the EU are, in my mind, political in nature as well. The biggest loss is the change in the balance of power within the EU. Here the UK played an important role as a liberal and free-markets force. Thus, future EU negotiations will be substantially different.

The Brexit vote should be used as an opportunity to find a new resolve. First and foremost, the EU and its leaders need to do a much better job communicating what the political project is all about. There are actually many successes that are worth emphasizing. There are more abstract ones, such as peace and a staunch defense of basic human rights. Conflicts of interest between countries are dealt with in an entirely different way, instead of the old saber rattling. But there are also concrete achievements. For instance, the EU and its predecessors played an important role in the demise of the dictatorships in southern Europe and the stability of those countries afterward. Another example are EU student exchanges such as the very successful Erasmus Programme (Europe- an Region Action Scheme for Mobility of University Students), which has offered millions of students the opportunity to study abroad and has done a lot for joint cultural understanding. In addition, there are concrete economic successes. For instance, the euro has had a profound effect on price competition within the eurozone, ultimately benefiting consumers.

But it is not just a matter of communica- tion. EU leaders must change as well. They need to recognize that Europe needs a more democratically legitimized foundation. The paternalistic attitude of current and former EU leaders that says, “Trust us. We know what is best for Europe,” will not work going forward. The recent rise of populism all over the EU illustrates that the leaders and elites have lost thought leadership, or the “sovereignty of interpretation” of what is happening in the world. EU leaders need to regain the trust of their people and to do so need to explain their plans and actions in a more transparent and extensive way. Ultimately, the EU needs more time. It is a project that should be judged in decades or perhaps even centuries, not years. But there is a real risk of losing the achievements of the last 50 years if European leaders do not stabilize the EU and rein in centrifugal forces.

One of the most important—and least discussed—aspects of the vote for Brexit has been the failure of most pollsters and newspapers to predict and understand the reasons for it. Even the betting market, generally much more reliable, got it wrong. This phenomenon is not unique to Brexit. Most pundits and pollsters missed the importance of Trump. Why?

What we have observed in Britain and what we are observing in the US with Trump is a growing mistrust toward experts. In the Brexit debate it was hard to find any econom- ist justifying a departure from the EU. In fact, many were willing to make forecasts so pessimistic as to be accused of scaremongering. Not only did these forecasts fail to rally the vote for “Remain,” they probably contributed to the victory of “Leave.” Some have lamented this phenomenon as an example of voters’ irrationality. I fear this has nothing to do with irrationality and has everything to do with mistrust, a mistrust that, while exaggerated, has a rational basis: the disconnect between the intel- lectual elite and the population at large.

Today wealth concentration allows a few rich individuals to singlehandedly fund think tanks, which have increasingly become loudspeakers of vested interests rather than centers for the elaboration of public policy. Campaign financing and future lobbying jobs are increasingly trans- forming elected officers from representa- tives of the people to “butlers of industrial interests,” to use a famous muckraking expression. Doctors are perceived to promote the medicines of the companies that sponsor their lunches; scientists to minimize the effect of pollutants produced by companies that fund their labs; econ- omists to defend the interests of banks that pay them hefty consulting fees. Even journalists, when they are not perceived to promote the interest of their advertisers and owners, are accused at least of turning a blind eye to certain problems.

Fault does not lie with people who mistrust the experts. We need to rebuild that trust. It is not sufficient that most doctors, intellectuals, and journalists do a fine job. We should have transparency rules in place to ensure that they are all free from conflicts of interest. We should have admission rules that favor not just ethnic diversity but economic and social diversity. We should have campaign-fi- nancing rules that free our representa- tives from the yoke of vested interests.

We need to create the conditions to undermine this mistrust of experts. This is the most important lesson from Brexit.

Excerpted from “The Real Lesson from Brexit,” originally posted on Promarket.org.
Erik Hurst
Brexit will harm lower-skilled workers in the UK

While many people are focusing on the consequences of Brexit, I find the causes to be equally troubling. Much of the pro-Brexit media coverage prior to the vote focused on limiting immigration into the UK. These arguments resonated because, as within the US, the labor market has remained quite weak for workers with lower levels of schooling. There was a belief that migrants entering Britain were partly responsible for the weak labor market there. In fact, many of the pro-Brexit arguments primarily focused on this issue in the weeks prior to the vote.

However, this belief turns out not to have merit. Immigration played, at most, only a small part in weak demand for lower-skilled workers. The decline in manufacturing, and in routine jobs more broadly—within both the US and UK—has depressed employment rates and wages for those workers without a bachelor’s degree. That has nothing to do with immigration. I predict that Brexit will actually make lower-skilled workers in Britain much worse off. Leaving the EU may curtail immigration, but it will likely further serve to reduce Britain’s manufacturing industry—because it will be harder to ship goods abroad.

One of the things I am most concerned with is that the stagnation of wages and declines in employment rates for lower-skilled workers are common across many industrialized countries. As these workers struggle, there is a strong...
The populist movement that wants to limit immigration and restrict trade across countries. We are seeing similar patterns within the US: Donald Trump is promoting policies that are similar in spirit to those promoted by the politicians supporting Brexit, policies that restrict both immigration and trade.

While it is likely that Brexit will have large effects on the UK and the European economy broadly, the underlying factors that led to support of the referendum are also very much present in the US economy. I am really not sure how these factors will play out within the US political landscape.

For more from Erik Hurst, see “Video killed the radio star,” page 74.

One idea that’s become associated with pro-Brexit sentiment is the notion that foreigners come into an area and take jobs or displace people who don’t have a lot of human capital. A number of people have looked long and hard at the data and the cost of migration, investigating this concern, and it is hard to find support for it. For example, if you look at the correlation between changes in unemployment and changes in migration in different areas of the UK, you don’t find any association, except at the very low end of the income distribution. The best work on this suggests immigration has a positive economic effect. It’s hard to find an economic rationale for the majority to have voted to essentially constrain migration; the reasons are all political.

Immigration has economic significance apart from the job market. My research suggests that if you accept migrants today, 30 years down the road, they will facilitate investment in their host country, particularly if their country of origin takes off economically. The social ties they create between their country of origin and their host country make that investment more likely. (For more on this research, see “How immigration boosts foreign investment,” page 16.)

The UK has already benefited from its rich mix of residents. London is a central position in the global social network. Lots of business done between Romania and the US, for example, goes through London. In a variety of ways, having an exchange of populations in the long run makes it much easier to interact economically. London is important in the world economy precisely because it has an ethnic mix. It’s one of the few places in the world where you can find a significant population from Bangladesh and a significant population from Romania, for example.

Overall, for the European economy, and the world economy, it’s going to be hard to substitute for London in that respect. There’s a lot of talk about Frankfurt and Paris benefiting significantly from this; we’ll see how that plays out, but London is a diverse place, and there’s really nothing similar in the rest of Europe, at least on that scale.

This idea of economic interaction also speaks to the dangers of the UK fragmenting as a result of Brexit. Putting a border somewhere is costly; we have plenty of research in economics that talks about the border effect. If you look at the amount of economic interaction between Seattle and San Francisco, for example, it’s orders-of-magnitude larger than the economic interaction between Seattle and Vancouver, Canada. All of that lack of economic interaction between Seattle and Vancouver means fewer jobs, fewer opportunities for people to do business, and fewer opportunities to create wealth for the economy. A breakup of the UK would be costly, both because of a long period of economic and political uncertainty, and because there will have to be a border somewhere.
Universal basic income isn’t a magic bullet—but it’s a start

A big trade on transfers could reduce waste and disincentives

A big trade on transfers could reduce waste and disincentives

A

Although it is hardly a new idea, universal basic income (UBI) has become something of a trendy idea for policy makers and policy pundits of late. Swiss voters considered—and overwhelmingly rejected—a referendum in June that would have guaranteed 2,500 Swiss francs to every adult and a smaller monthly income for children. Finland has cleared the way for a pilot project to test UBI next year. The renewed interest in minimum guaranteed income prompted Chicago Booth’s Initiative on Global Markets to poll its Economic Experts Panel on UBI, and Charles Murray to write a thoughtful piece on the subject in the Wall Street Journal.

Murray’s proposal in particular has a lot to recommend it. He suggests that “every American citizen age 21 and older would get [$10,000 per year] deposited electronically into a bank account in monthly installments.” He would add a $3,000-per-year health-insurance voucher. The most important part: UBI would completely replace social security, Medicare, agricultural subsidies, food stamps, and all other transfer programs.

Replacing transfers with a single direct payment to citizens has a number of advantages. First, it would reduce the dramatic waste in the current system. Moreover, the bulk of government spending does not currently go to people who are really poor: social security and Medicare go to old people, many of whom are quite well-off. Housing subsidies such as the mortgage interest deduction go to people with big mortgages and big tax rates—not poor people.

In addition, UBI would reduce the current system’s high disincentives for work. Murray’s plan does include a reduction in benefits based on earnings—your UBI starts dropping if you make $30,000 or more per year—but that reduction is capped at $3,500. That applies on top of the federal 25 percent marginal rate, 16 percent payroll tax, state income and payroll taxes, and so forth. So the disincentive is not zero, but the plan poses a lot less disincentive than many current programs.

The biggest problem in the argument is also the biggest selling point: we trade a check for complete elimination of everything else.

There are a lot of these “big trades” on the table, and there should be more. A big carbon tax, in return for complete elimination of all the regulatory nudges and crony energy-related subsidies. A hefty value-added consumption tax (VAT) in return for complete elimination of income, corporate, estate, and other taxes, and all deductions. Lots of infrastructure money in return for elimination of the Davis-Bacon Act, endless legal challenges, Environmental Protection Agency reviews, and other regulations. And so on.

In all these much simpler cases, the deal doesn’t get off the ground. Will the Right allow a big enough carbon tax? Will the Left really get rid of their subsidies? Will the Right really allow a large enough VAT? Will the Left really not just pile all the other taxes back on top? Making these deals is hard enough even when both sides admit the deal would be good. That case is going to be even harder here.

Social programs in their current form will remain tempting, because a flat basic income is not close to the so-called perfect-world social-insurance system, or even common sense. We want to give more help to people who need more help. Social security goes to old people, because old people objectively are less able to work. Disability goes to disabled people, because it’s harder for them to work as well. Unemployment insurance goes to people who just lost jobs, because we know they are more likely to have suffered a bad shock. Insurance payments go to people whose houses have burned down.

Social-insurance programs are indeed ineffective and bureaucratically bloated, and they do a terrible job of separating who really needs help from who doesn’t. But UBI takes a pretty extreme view that the project is completely hopeless, and that the government should do no conditioning at all, other than on reported income.

Even with this UBI, there will still be unfortunate people, they will still need help, and our electorate will still demand programs to help them. Disability has grown out of control, sure, but some people really are disabled. You’re going to give them $10,000 and turn your back? And what about the guy who takes his check, blows it all on a weekend of meth and beer, and now is lying in the gutter, his children homeless?

I don’t think our electorate is ready to completely forswear all bureaucratic help. Eliminating housing subsidies, agricultural subsidies, and corporate welfare are all great ideas on their own—if we could do those things, the US economy would be in a lot better shape than it is. But a bit of paternalism is pretty ingrained in social policies, and it isn’t necessarily a bad thing. I’m happier paying taxes to support food, clothes, and school for the kids, and basic housing, than I am to subsidize a beer-and-meth weekend. Murray already gives in, by restricting the first $3,000 (of $13,000 total) to a health-insurance voucher. If he’s going to get rid of social security, he should restrict the next $1,000 to a forced savings plan. If we’re going to get rid of all housing programs (a great idea), the next $2,000 should be a rent/mortgage voucher.
Universal basic income in practice

A number of city, state, and national governments have tried out some form of universal basic income, and several more are planning to experiment with the idea in the near future.

MANITOBA, CANADA
Offered “Mincome,” an experimental guaranteed income in the 1970s.

ALASKA
The Alaska Permanent Fund pays a dividend to most Alaska residents.

OAKLAND, CALIF.
Seed accelerator Y Combinator has announced a plan to provide a small group of Oakland residents with basic income for six to 12 months, in preparation for a larger experiment in the future.

NETHERLANDS
In 2017, several Dutch cities will start awarding basic income to select residents as part of an experiment.

SWITZERLAND
This year Switzerland voted down a proposal to introduce a national basic income.

FINLAND
The government will launch a two-year experiment in basic income starting in 2017.

MADHYA PRADESH, INDIA
Starting in 2011, more than 6,000 people received small payments for up to 17 months.

UGANDA
In a 2008 experiment, the government distributed roughly a year’s income to thousands of poor and underemployed youth.

Maybe some paternalism is justified as a precommitment: we know if people blow the money, we’ll enact social programs to help them after the fact. But there is a deeper problem, and I have a constructive solution.

In fact, Americans use far fewer benefits than they are eligible for. Many programs have 2 percent take-up rates. Lots of people eligible for Medicare, Obamacare subsidies, disability, food stamps, welfare, home heating subsidies, and so on, and so on, all the way down to Palo Alto’s income-based parking-permit system, don’t take advantage of the benefits. If each American took advantage of every subsidy and social program to which he or she is entitled, the country would be bankrupt in about 10 minutes.

Why are such programs underused? Well, filling out the forms is a pain. And, more importantly, most people really do use social programs for a limited time. Chalk it up to a stubborn ethic of independence or some remaining stigma attached to taking assistance; it’s an observable phenomenon. For now, I fear that welfare states fall apart when the social stigma of taking the money fades.

For now, the costs of participating in these social programs act to limit moral hazard. If it takes a few hours and trips down to an unpleasant bureaucratic office to get help, only people who really need it are likely to seek it. If there is some remaining social stigma to getting help, only people who really need it are likely to ask for it—and they’re more likely to get out as fast as possible.

If that sounds heartless, remember the objectives: money is limited. We want to use it to help people who really need it, and if we can do something to keep out the people who don’t really need it, we can be a lot more generous to those who do. If we impose some cost to getting help, we reveal who really needs it, and we can help those people a lot more.

So, my major suggestion for the project of UBI is: please, don’t automatically send the check to every American the minute they turn 21! Don’t send it to my kids! At least make people go down to a dull and dirty office, stand in line, fill out a long form, and repeat once a year.

We do have some experience with communities that live off government checks. We have more experience with places where lots of people don’t work. Welfare neighborhoods in the US in the 1970s through the mid-1990s. Europeans living on the dole. Molenbeek, Belgium. Saudi Arabia. By and large, places where most people live on government checks, or where large numbers of people do work, are not happy places.

UBI also threatens progress on the agenda to integrate people to markets. Labor markets are more and more regulated and restricted. Well, if people can all get $10,000 from the government, why fight for lower minimum wages for entry-level workers, looser occupational restrictions, and so forth? Keeping our current, highly restricted labor markets, and our awful education system for low-income people, and then sending those people checks because they’re not qualified to do legal work is what supposedly caring progressives advocate. But what an awful and hopeless life they leave people with.

A big trade remains attractive. Substantial cash grants and vouchers in place of many current programs—in place of middle-class subsidies, in place of corporate subsidies—offer substantially more help to people who need it, with far fewer distortions. But let’s not pretend a big trade will cure social ills. It very well could be an improvement; it would not be a panacea.

John H. Cochrane is distinguished senior fellow at Chicago Booth and a senior fellow of the Hoover Institution at Stanford University.

This essay originally appeared as a post on The Grumpy Economist blog, at johnhcochrane.blogspot.com. For more on replacing social-transfer programs with direct aid, see “The limits of what the state can—and should—do for the economy,” by George J. Stigler, on page 86.
Why it matters for LGBT entrepreneurs to come ‘out’

Openness is critical to building trust with funders

It’s commonplace to think that a person’s sexual orientation is a private matter and irrelevant in business. After Apple CEO Tim Cook came out as a gay man, a substantial portion of social media comments, tweets, and shares asked, “Why would he do this?” which seems to imply that, first, no one should care, and second, people don’t want to know Cook’s orientation.
But conventional wisdom is wrong. Research suggests that, for LGBT entrepreneurs at least, and perhaps others in their orbit, being “out” is relevant in many ways.

There have been only a handful of articles, conference and research papers, and chapters written about lesbian, gay, bisexual, and transgender (LGBT) entrepreneurs. In 2005, Syracuse University’s Minet Schindehutte and two coauthors published the largest study ever undertaken until that point of LGB entrepreneurs in the United States. Their data set included responses from more than 300 LGB founding business owners and clearly established that LGB entrepreneurs, when starting their companies, face greater obstacles than their straight counterparts. Being LGB adversely affected their ability to engage suppliers, obtain licenses, market their businesses, hire employees, and access loans from commercial banks.

And it’s harder for LGBT entrepreneurs to raise money from early-stage angel and venture-capital investors, according to comprehensive research I conducted this year in collaboration with my Chicago Booth colleague Mary Shea, and StartOut’s Vivienne Ming and Chris Sinton, on behalf of StartOut.org, a nonprofit founded in 2009 to empower LGBT entrepreneurs. Despite these numbers, many LGBT entrepreneurs profess that their orientation isn’t relevant to their start-ups. I believe it is.

We surveyed 140 early-stage growth entrepreneurs and culled public data sources to compare 6,703 LGBT growth founders with 92,096 entrepreneurs whose orientation was straight or unknown.

Two-thirds of survey participants had raised outside capital to help grow their businesses, or expected to raise capital in the coming 12 months, and 63 percent of them had come out to their prospective investors, the vast majority early on in discussions. The remaining 37 percent had chosen not to come out to investors, and nearly half of them said they didn’t consider it relevant. Twelve percent said they thought it might hurt them in the process.

Setting up shop

Being LGBT impacts where entrepreneurs choose to start companies. There is a clear migration away from intolerant locales toward states and cities with prodiversity policies, even when those states and cities are more expensive places to live and do business. And for every one average American who relocates, many more entrepreneurs and LGBT entrepreneurs migrate there, taking job creation with them.

**LGBT ENTREPRENEUR MIGRATION**

Number of times more likely than the average American that entrepreneurs and LGBT entrepreneurs will relocate to these locations:

<table>
<thead>
<tr>
<th>Location</th>
<th>Entrepreneurs</th>
<th>LGBT entrepreneurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.C.</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>CALIF.</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>MASS.</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>N.Y.</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>COLO.</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>WASH.</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>ILL.</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Deutsch et al., 2016
Coming out

More than half of LGBT entrepreneurs surveyed came out to their prospective investors, the vast majority early on in discussions.

WHEN DID YOU COME OUT TO YOUR INVESTOR?

- 79% Early in discussions
- 2% Post-term sheet
- 5% No answer
- 14% Post-investment

WHY DIDN'T YOU COME OUT TO YOUR INVESTOR?

- 47% Not relevant
- 6% Wouldn't help
- 12% Might hurt
- 35% Other/no answer


Impact of LGBT status on business performance

Is being out relevant in business? To answer that, we first need to address the relationship between being an LGBT entrepreneur and the performance of your business. In addition to the entrepreneurs, we surveyed 87 early-stage angel and venture-capital investors. Almost half of our sample said they had an openly LGBT founder or C-level executive team member in at least one of their portfolio companies. We asked those respondents how the performance of the LGBT entrepreneurs’ companies compared with that of the rest of their portfolio companies. The results from those who answered were as you might expect—a mixed response of “same,” “better,” “worse,” and “too early to tell.”

But our analysis suggests that being LGBT may impact the amount of money an entrepreneur is able to raise. We collected public data to establish baseline values for nearly 92,100 growth entrepreneurs in general, and compared that with data we collected on more than 6,700 LGBT entrepreneurs. Over the 10-year period of our analysis, LGBT-founded start-ups raised at least $23 billion, including angel and institutional investment. This is about 89 percent of what would be predicted from a similar population of entrepreneurs selected at random.

We interviewed entrepreneurs for the StartOut report, and two shed some light on this phenomenon:

I haven’t found it easy to get venture capitalists interested, although I don’t think it’s discrimination as much as just the business model we are working on . . . The whole thing is pretty gay. The way it comes up are that people, particularly investors, have said, ‘I don’t understand that niche market so I am not going to be able to invest.’ So that’s hard. Because with the vast majority of the venture capital and wealth of our country being controlled by straight white men, that makes it really challenging.

—Lesbian entrepreneur

In the absence of a strong network of LGBT investors, there is a gap of common experience. So common experience is something that can bridge a gap between people. You went to the same college; you both play volleyball. I don’t know what the representation percentage wise is among institutional investor and LGBT individuals. Based on my experience, my guess is that it’s not very representative.

—Gay entrepreneur

There is a clear migration away from intolerant locales toward states and cities with prodiversity policies and cultures.

So this creates a chasm in common experience between LGBT entrepreneurs and prospective investors.

—Gay entrepreneur

So it is entirely possible that merely being a member of the LGBT community may impact the performance of one’s entrepreneurial venture.

Location and migration

It is clear from the research that being LGBT also impacts where entrepreneurs choose to start their companies. There is a distinct migration away from intolerant locales toward states and cities with prodiversity policies and cultures. In our sample, states such as Arizona, Florida, Georgia, Missouri, New Mexico, Pennsylvania, South Carolina, and Tennessee lost most or all of their LGBT would-be entrepreneurs before these people established their companies (see “Setting up shop,” page 70).

In general, entrepreneurs are 12 times more likely than the average American to relocate to Washington, DC; for LGBT entrepreneurs, it’s double that. This pattern repeats across many states that are more progressive, despite the higher costs and often-stricter business regulations found there. LGBT entrepreneurs are almost four times as likely to move to California. They are 260 percent more likely to go to Massachusetts, 230 percent more likely to go to New York, and 221 percent more likely to go to Colorado.

This is definitely a diversity issue, not an entrepreneurship one. Fast Company’s research ranked the top five states for innovation, factoring in the number of start-ups per capita, the

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The only way to overcome the disadvantage of difference is through communication and relationship building.

When researchers compare the amount of angel and venture funding to where LGBT-led businesses are located, they see a split. LGBT entrepreneurs are not chasing capital. Diversity and tolerance, rather than funding, seem to drive their location decisions.

**HEADQUARTER LOCATIONS (%)**

<table>
<thead>
<tr>
<th>Region</th>
<th>LGBT entrepreneurs</th>
<th>VC dollars</th>
<th>Angel dollars</th>
<th>Firm starts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southeast</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
<td>50%</td>
</tr>
<tr>
<td>California</td>
<td>50%</td>
<td>40%</td>
<td>30%</td>
<td>20%</td>
</tr>
<tr>
<td>Great Lakes</td>
<td>10%</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>Texas</td>
<td>10%</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>Mid Atlantic</td>
<td>10%</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>Southwest</td>
<td>10%</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>New York</td>
<td>50%</td>
<td>40%</td>
<td>30%</td>
<td>20%</td>
</tr>
<tr>
<td>Great Plains</td>
<td>10%</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>New England</td>
<td>10%</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>Northwest</td>
<td>10%</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
</tr>
</tbody>
</table>


health of young firms, and the number of jobs created, among other things. Florida, Texas, Maryland, Arizona, and Alaska lead the list.

California comes in sixth. From sheer volume perspective, the top five states for new company launches in 2015 were California, Florida, Texas, New York, and Pennsylvania. LGBT entrepreneurs are not leaving because of a lack of entrepreneurial activity in their states.

What about funding potential?

When we compare the amount of angel and venture funding to where businesses in our sample are headquartered, we see that the LGBT entrepreneurs are not chasing capital. A disproportionate number of them are in New York, which sees much lower venture-capital and angel investment, relatively speaking.

This indicates that diversity and tolerance seem to motivate the entrepreneur’s location. However, for the 10 percent of entrepreneurs in our sample who moved their headquarters to a different state, LGBT friendliness is rarely the stated driver. While 78 percent of these entrepreneurs chose to move to California, New York, or Illinois, the most frequently cited reasons for making the move were economic drivers—although it is hard to imagine someone moving to California or New York to be in a cheaper location!

Nevertheless, 84 percent of the companies represented in our survey were located in cities that receive a perfect score on the Human Rights Campaign’s Municipal Equality Index, which factors in nondiscrimination laws, equality of employee benefits, and community relationships with the LGBT community.

Someone can choose an LGBT-friendly location to start a venture without necessarily publicly identifying with the LGBT community. But our report revealed two critical dimensions on which being out is relevant: the investor relationship and diversity benefits.

The investor-entrepreneur relationship

A plethora of academic and business research has established the importance of trust in business relationships, and has demonstrated that trust is easily granted to members of a shared affinity group. University of Illinois’s Ola Bengtsson and Wharton’s David Hsu find that having a shared ethnicity nearly doubles the chances of getting an investment from a particular investor. The only way to overcome the disadvantage of difference is through communication and relationship building. In our follow-up interviews with five early-stage investors, every single one stated that a good personal rapport was critical to a strong business relationship.

I invest in things that I think should exist, things created by people whose values and goals I share. Value rapport and personal rapport are tremendously important.

—New York angel investor

In the end, people will only confide in people they trust. They will reach out to
people with whom they like speaking and spending time. It’s all about having a genuine relationship with them.
—Silicon Valley VC

Generally you want to think that you are going to like [the founder]. You are going to spend a lot of time with the person. You are going to be in the trenches with them. If you get the feeling that you aren’t going to like them early in the deal, you probably shouldn’t do the deal. An investment is like a minimarriage.
—Midwest VC

In fact, more than one investor indicated that if they don’t get a good feeling about an entrepreneur, they pass on a deal.

In terms of founders we haven’t invested in, we get excited about the business, get excited about where it might go, but when you get to the true colors of the founder, you just sit there. You’re just like, ‘This is not comforting.’ You also have to be open and honest about it.
—New York VC

We also spoke with 10 founders who had chosen to obtain outside capital and asked them about the relationships they had with their investors. For the majority, the capital was essential for the survival of their young companies. For others, the capital was important in driving growth that could not have been achieved otherwise. Eight out of 10 described their relationships with their current investors as “close.”

I have a great relationship with [my investors], business and personal. Businesswise we have grown from the beginning when it was a colder relationship. You know. They were my investors; they were my colleagues; they were my partners; now they are my friends.
—Lesbian entrepreneur

Our lead investor led seed and stayed around. I feel strongly that he is investing for success. He has our back [and] gives us good advice and direction. I feel we have really good relationships with all of our investors.
—Gay entrepreneur

There are still risks associated with being out in the business world. In 28 states it is legal to fire an employee for being LGB. For transgender employees, the number of states is 31. A 2014 study by the HRC indicates that 53 percent of LGBT workers in the US hide their sexual identity at work. Another study by New York University’s Kenji Yoshino and Deloitte’s Christie Smith finds that 83 percent of LGBT persons “cover” some part of their sexual or gender orientation at work. LGBT entrepreneurs do not seem to be immune to these pressures. But in the investor-entrepreneur relationship, where being authentic and wholly present is critical in overcoming the barrier of difference, coming out can be one important way to build trust.

There is a certain honesty you will have to have with potential investors that establishes trust with that person. If that isn’t there, I would imagine, you are not going to get the investment.
—Gay entrepreneur

Inclusion in the diversity discussion
Recently Intel Capital announced a $125 million diversity investment fund for women and minorities. As GeekWire reported, “According to the company’s announcement, it was not considering LGBT start-ups because they didn’t fall under the federal government’s definition of ‘underrepresented minorities.’” Comcast’s Catalyst Fund is aimed at women and minorities, AOL’s BBG Ventures fund is for women, and the Indiana Diversity Investment Fund supports women, minorities, and veterans. As one of our survey participants put it, It would be super great if LGBT entrepreneurs were capable of receiving diversity consideration for government grants or loans.
—Gay entrepreneur

This will not happen until and unless entrepreneurs are willing to self-identify, and until more research is done to establish that the LGBT community belongs in the diversity conversation. Many in the LGBT community and progressive business people would prefer to believe that we are in an era of posthomophobia, in which we can all agree that who you choose to love shouldn’t matter in business. Perhaps someday it won’t. But for now, being a member of the LGBT community does matter. It matters in economic and social terms, and it impacts the entrepreneurial experience.

Waverly Deutsch is clinical professor of entrepreneurship at Chicago Booth.

Go to Review.ChicagoBooth.edu to see citations for research in this essay. Read the full report discussed on StartOut.org.
Video killed the radio star
How games, phones, and other tech innovations are changing the labor force

This essay is adapted from the speech given at the 527th Convocation at Booth this past June.

The first big graduation I remember was for my bachelor’s degree. My mom was there, and she had her Polaroid camera. She took 1,000 pictures that day—most of them blurry. I remember it well because we have these big picture books at home. Flipping through those books helps me to remember that day.

At today’s graduations, we have phones that can capture high-quality pictures and video, which we can share with friends and family in real time. On top of that, parts of the graduation itself, including my talk, are being videotaped by Booth. These videos will be posted online and preserved on YouTube forever—alongside a variety of cat videos.

Technology has not only changed the way we preserve the memories of graduations. During the past few decades, technology has fundamentally altered the way we work, the way we play, and the way we live. Much of my current research has focused on the way technology has changed labor markets.

Between 2000 and 2015, the employment rate for lower-skilled men and women between the ages of 21 and 55 fell by 7.5 percentage points. (I’m going to refer to “lower skilled” as anyone with less than a bachelor’s degree.) To be concrete, just over 84 percent of lower-skilled men aged 21-55 had a job in 2000. That number was under 77 percent in 2015. A 7.5 percentage point decline in employment rates is a massive change relative to historical levels. What I also want to stress is that the decline has been persistent. It was falling prior to the recession, fell sharply during the recession, and has barely rebounded after the recession.

The patterns for higher-skilled workers—those with a bachelor’s degree or more—have been much more muted. This group includes most of us in this room, and our labor market has been relatively strong relative to that of those with less schooling.

Can changes in technology help to explain the labor market for lower-skilled workers since the early 2000s? Many economists think the answer is yes. There is a large literature showing that technological advances have contributed to a sharp decline in manufacturing employment. Since 2000, the US economy has lost more than 8 million manufacturing jobs, despite manufacturing output going up.

US manufacturers have switched from labor-intensive production to capital-intensive production. Instead of hiring a worker for the assembly line, manufacturers now use machines to do the work. The new technology results in firms reducing their demand for lower-skilled labor. Lower-skilled workers are the ones being displaced by the increasing technology.

I am convinced that declining labor demand is part of the story for why employment rates for lower-skilled workers have fallen so sharply and persistently during the last 15 years. I am also confident that changing technology has played a role in this decline.

However, in my current research, I have been thinking about the role of technology on labor supply. This line of inquiry has received less attention from academics. Individuals make decisions about whether to work or not. Most people—including you . . . and me—do not like working for free. (I like to stress that point when talking in front of the deans.) That is why we have to pay people a wage to get them to work. When making our work decisions, we compare the benefit of work—the wage—against the cost of working. What is the cost of working? We give up leisure. The more attractive our leisure time, the less we’ll want to work, holding wages fixed.

Is it possible that technology has changed the value of leisure? I think the answer is a definite yes, and let
me give you an example of how I am experiencing this firsthand. I have a 12-year-old son at home, and we ration video games for him. He is allowed a couple of hours of video-game time on the weekend, when homework is done. However, if it were up to him, I have no doubt he would play video games 23-and-a-half hours per day. He told me so. If we didn’t ration video games, I am not sure he would ever eat. I am positive he wouldn’t shower.

Certain technologies—such as video games and social media and the internet—have increased the value of leisure time. Not only do people report them as being more fun than watching TV or going to the movies, they also say they’re more interactive. When my son plays video games, he often does so with his friends who are sitting in their living rooms, in their homes, avoiding their showers to the extent possible.

Are my son and his friends outliers? Many parents here probably recognize this behavior. But let me give you a little bit more data. As much as we have talked about the decline in employment rates for lower-skilled individuals aged 21–55, it’s even larger for younger, low-skilled men. For low-skilled men in their 20s, employment rates have fallen by about 10 percentage points over the last 15 years—from 82 percent in 2000 to only 72 percent in 2015. This decline is staggering. You might think it’s matched by a rise in school attendance for this age group. That is not the case.

The following may be the most shocking number I give you today: in 2015, 22 percent of lower-skilled men aged 21–30 had not worked at all during the prior 12 months. Think about that for a second. Every time I see it, that number blows my mind. In 2000, the fraction of young, lower-skilled men that didn’t work at all during the prior year was a little under 10 percent. Men in their 20s historically are a group with a strong attachment to the labor force. The decline in employment rates for low-skilled men in their 20s was larger than it was for all other sex, age, and skill groups during this same time period.

You may have a few questions in the back of your mind. If they are not working, where do these young, low-skilled men live? Our basements! According to recent data, 51 percent of lower-skilled men in their 20s live with a parent or close relative. That number was only 35 percent in 2000. In 2014, 70 percent of lower-skilled men in their 20s without a job lived with a parent or close relative.

If they are not working, how do these young men eat? We—the parents and relatives—feed them. When they are in our basements, they come up for food from time to time and raid our refrigerators. I have no information on whether or not they are showering.

Are these young, nonworking, lower-skilled men who are living in their parents’ basements married? You may be surprised to hear this: they are not. The age of marriage is increasing for this group. In summary, these younger, lower-skilled men are now less likely to work, less likely to marry, and more likely to live with parents or close relatives.

Part of my new research is documenting how these lower-skilled men who have left the labor force spend their nonworking time. Using time diaries put out by the Bureau of Labor Statistics, I can do this. On average, lower-skilled men in their 20s increased “leisure time” by about four hours per week between the early 2000s and 2015. All of us face the same time endowment, so if leisure time is increasing, something else is decreasing. The decline in time spent working facilitated the increase in leisure time for lower-skilled men. The way I measure leisure time is pretty broad; it includes participating in hobbies and hanging out with friends, exercising and watching TV, sleeping, playing games, reading, and so on.

Of that four-hours-per-week increase in leisure, three of those hours were spent playing video games! The average young, lower-skilled, nonemployed man in 2014 spent about two hours per day on video games. That is the average. Twenty-five percent reported playing at least three hours per day. About 10 percent reported playing for six hours per day. The life of these nonworking, lower-skilled young men...
looks like what my son wishes his life was like now: not in school, not at work, and lots of video games.

How do we know technology is causing the decline in employment for these young men? As of now, I don’t know for sure. But there are suggestive signs in the data that these young, low-skilled men are making some choice to stay home. If we go to surveys that track subjective well-being—surveys that ask people to assess their overall level of happiness—lower-skilled young men in 2014 reported being much happier on average than did lower-skilled men in the early 2000s. This increase in happiness is despite their employment rate falling by 10 percentage points and the increased propensity to be living in their parents’ basement.

These video games and technology innovations—iPhones, Facebook, and Instagram—are both cheap in relative terms, and fun. These technological innovations, therefore, have made leisure time more enjoyable. This acts like an increase in an individual’s reservation wage. For lower-skilled workers, with low market wages, it is now more attractive to take leisure. However, for higher-skilled workers, even though the value of leisure has increased, our wages are still high enough that we continue to work.

To summarize, technology for lower-skilled workers has both reduced labor demand and potentially reduced their labor supply by increasing their reservation wage.

At some level, I have made it appear that the declining employment rate for younger, lower-skilled workers is in part the result of this group enjoying their leisure time more. I think that may be true in the short run. But I am concerned about how this will play out in the long run. There is some evidence that these young, lower-skilled men who are happy in their 20s become much less happy in their 30s and 40s. They haven’t accumulated on-the-job skills because they spent their 20s idle. Many eventually get married and have kids. When this happens, living in their parents’ basements is no longer a viable option. Playing video games does not put food on their tables. It’s a bad combination: low labor demand plus the accumulated effects of low labor supply makes economic conditions for these aging workers pretty bleak.

These labor-market outcomes affect many facets of society. They affect the take-up rates of government transfer programs. They may explain voting patterns for certain candidates in recent periods. There is rising evidence that lower-skilled workers in their 30s and 40s are increasing their drug use. We have also seen increased suicide rates for lower-skilled workers in middle age. The effects of changing technology on the labor markets of lower-skilled workers will likely have repercussions within the US economy for years to come.

Ten to 20 years down the road, you will be leaders within the business community. As such, you will also be leaders within your relevant civic communities. And for many of you, your wealth—through your bribes, or “lobbying” as we tend to call it—will give you a tremendous amount of influence over policy makers. And when you exert that influence, you will tend to view the world through the lens of your circumstances and your experiences.

When you do so, I want you to remember that you are rare relative to the typical American. Only a little over 30 percent of people your age ever get a bachelor’s degree. Less than 10 percent get a master’s degree or more. Very few of those get it from prestigious institutions such as the University of Chicago. As we have talked about, your labor-market experiences on average will be dramatically different from those of the bulk of the American population. Technology and other economic forces have affected others differently from you. Keeping that in mind will allow you to have a broader perspective on the world that you are trying to influence, and hopefully it will improve your decision making.

The program lists the title of my talk as “Video killed the radio star.” Some of you may be familiar with that reference. For those who are not, Google it. Consider it my graduation gift to you. As you will see, it is directly related to what I have been talking about today.

I will conclude my talk the same way I conclude my course, by quoting from the pages of Spider-Man: “With great power comes great responsibility.” Use your power well.

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The effects of technology on lower-skilled workers will likely have repercussions within the US economy for years to come.
Do we really need more Cheetos?

Free markets have helped us meet our basic needs but can’t fix everything.

There’s a story I keep returning to during this remarkable election season. When my cousin Elaine was four or five years old, her aunt presented her with an egg for breakfast. It was the height, or more appropriately the trough, of the Great Depression, and she was living in the western Michigan farmhouse where six generations of my family have lived (including me).

To say that times were tough would risk giving them a nostalgic glow. There was no electricity, no indoor plumbing, and, if you were a child, nothing to do beyond your chores. Without any toys and little in the way of what we would today call adult supervision, Elaine says she would sit in the barnyard and “pound dirt,” marveling at the dust clouds that would subsequently engulf her.
Simple though it was, such diversion helped distract the little girl from the menace of stubborn hunger. This was a world where fruits and vegetables were an indulgence, meat more or less a delicacy, so most meals involved a meager marriage of bread and lard. That’s probably why the egg seemed so remarkable to Elaine. She remembers eating it (greedily, one suspects) and asking if she might have another. The look her aunt gave her suggested that she thought her not insolent so much as slightly insane.

I think about this story from time to time whenever I hear friends who consider themselves apostles of free-market principles go on at great length about the utter incomprehensibility of the present US presidential election. One party, they observe, has a candidate who has promised to strengthen social-welfare programs, rescind trade deals, raise the minimum wage, and punish companies who send jobs abroad. The other had Bernie Sanders.

From the vantage point of my friends, the popular proposals of both parties reflect such a wanton disregard for how the economy actually works that those who peddle them must be either knaves or fools. Indeed, as my friends see it, when it comes to the current malaise afflicting the American economy, there is nothing wrong with capitalism that a little more capitalism can’t fix. This is a fine sentiment so far as it goes. But watching the current election, I have begun to wonder if it misses the point entirely.

In my business-ethics class at Booth, I sometimes ask my students what problems capitalism can fix. The aim of the question is less to establish a comprehensive list than to remind them that capitalism can’t fix everything. Such an observation may seem superfluous—and with respect to my students, this is often the case—but insofar as we live in a world where free markets have done so much good, their most enthusiastic advocates can sometimes lose sight of the fact that they are always provisional in form, rather than a panacea.

The confusion is forgivable and easily explained. “[T]he economic problem, the struggle for subsistence, always has been hitherto the primary, most pressing problem of the human race,” John Maynard Keynes wrote not too long before Elaine received her egg. That struggle, he said, was one “not only of the human race, but of the whole of the biological kingdom from the beginnings of life in its most primitive forms. Thus we have been expressly evolved by nature—with all our impulses and deepest instincts—for the purpose of solving the economic problem.”

His brief sally into evolutionary biology notwithstanding, Keynes’s point about the primary significance of “the economic problem” is well taken. However many concerns one might have, a hungry belly tends to be the most pressing. Accordingly, for some time now the requirements of capitalism have earned pride of place for the system’s unique ability to supply the essential requirements of food, shelter, and clothing. Moreover, while it is true that many Americans still face considerable challenges gaining access to, let alone affording, a healthy diet—to wit, almost 45 million Americans, or 14 percent of the population, participate in the Supplemental Nutrition Assistance Program—when starvation has given way to the scourge of obesity as a primary public-health concern, the “struggle for subsistence,” by any conventional definition, seems more or less resolved.

Keynes anticipated this possibility. “[T]he economic problem is not—if we look into the future—the permanent problem of the human race,” he wrote in 1930. Indeed, he ventured that it might be solved within a century, in time for the grandchildren of his own generation to enjoy (albeit in the “lean and slippered pantaloons” of late middle age).

It seems unlikely that Keynes’s most famous prediction, the 15-hour workweek, will come about by 2030. Still, it is instructive to think through the consequences, as he saw them, of a resolution to “the economic problem” and their implications for what I am inclined to call a “postcyclical politics.” Above all else, Keynes said, we could expect a cultural crack up. Extreme poverty, even the dread thereof, has a tendency to focus the mind, conducing an armistice of sorts about the ultimate end of politics. Whatever else I might care about, if I cannot be confident of tomorrow’s supper, I will favor as a foremost priority any policy prescription that resolves that uncertainty. This does not mean that the details of the remedy will be obvious—a Marxist would contend the superiority of her solutions to those proffered by an adherent of Hayek. But the controversy makes for a politics of disputable means, rather than desired ends.

When, however, “the struggle for subsistence” recedes as an organizing
Economists are uniquely positioned to help think through the trade-offs between morals and markets, commerce and national character.

Take income inequality. When a people decides that gross disparities in wealth corrode democratic deliberation, threaten individual advancement, and thwart mutual respect, the solution seems unlikely to be consistent with the requirements of capitalism. To be sure, many people would deny that income inequality is actually a problem—or would hold that, even if it is, the concern is beyond the ambit of government action. But saying as much is tantamount to taking sides in a debate about proper ends rather than preferred means. At the same time, while productivity is never an end in itself, it loses its preeminence as a supporting argument in public-policy debates when “the struggle for subsistence” recedes. Indeed, to put it crudely, one may believe that more capitalism provides more and better Cheetos without also believing that more and better Cheetos is a particularly pressing need.

Now, to be sure, more and better Cheetos would have been a blessing to my cousin Elaine, and in places around the world where the standard of living flirts with subsistence, unalloyed capitalism continues to make its strongest claim on observers and participants alike. Here in America, however, as in other parts of the well-developed world, the claim is increasingly tentative. Advancements in goods and services are hardly unwelcome, but as an argument in public-policy debates, it no longer seems dispositive. To the most-fervent Trump supporters in the woebegone areas of the Rust Belt, a little less productivity for the nation as a whole probably may seem like a small price to pay for protecting good paying jobs at home. Similarly, for boosters of the Clinton campaign, if raising the capital-gains rate by a few points allows them to finance universal pre-K, it seems unlikely that the prospect of a marginal loss in market efficiency fills them with primal fear.

Maybe it should. Like any social system, economies are fragile things, and just because we have entered a postscarcity world doesn’t mean we won’t pass out of it again. That said, I have a hunch that Keynes was onto something when he predicted that “the fiercest contest and the most deeply felt divisions of opinion are likely to be waged in the coming years not round technical questions, where the arguments on either side are mainly economic, but round those which, for want of better words, may be called psychological or, perhaps, moral.”

If he is right, debates over free markets will come to more closely resemble philosophical arguments about the requirements of a free people—rather than practical discussions that assume the preeminent importance of greater efficiency. If so, economists may find themselves in the unusual role of helping us cultivate our appetite for inefficiency. Indeed, when an affluent people concludes that capitalism has begun to impinge upon shared notions of decency or fray the social fabric, economists are uniquely positioned to help them think through the trade-offs between morals and markets, commerce and national character.

I don’t envy them this responsibility, and not only because it requires a precision of mind I simply don’t possess. It thrusts economists into the middle of the most contentious types of disputes, those beyond a reckoning of common denominators.

How much productivity should we trade away for higher wages? What level of inefficiency is tolerable to ease inequality? How much growth should we give up for the common good? I have no idea, but if past is prologue, such questions form the next frontier of American politics.

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What is the efficient-markets hypothesis and how good a working model is it?

**Fama:** It’s a very simple statement: prices reflect all available information. Testing that turns out to be more difficult, but it’s a simple hypothesis.

**Thaler:** I like to distinguish two aspects of it. One is whether you can beat the market. The other is whether prices are correct.

**Fama:** It’s a model, so it’s not completely true. No models are completely true. They are approximations to the world. The question is: “For what purposes are they good approximations?” As far as I’m concerned, they’re good approximations for almost every purpose. I don’t know any investors who shouldn’t act as if markets are efficient. There are all kinds of tests, with respect to the response of prices to specific kinds of information, in which the hypothesis that prices adjust quickly to information looks very good. It’s a model—it’s not entirely always true, but it’s a good working model for most practical uses.

**Thaler:** For the first part—can you beat the market—we are in virtually complete agreement. Richard Thaler, you give the example of the 1987 crash, when stock prices fell 25 percent, as an example of how prices can be wrong in some sense. But aren’t efficient markets unpredictable?

**Thaler:** Yes, but unpredictable doesn’t mean rational. I don’t think anyone thinks that the value of the world economy fell 25 percent that day. Nothing happened. It’s not a day when World War III was declared.

**Fama:** It was a time when people were talking about perhaps an oncoming recession, which turned out not to have happened. In hindsight, that was a big mistake; but in hindsight, every price is wrong.

**Thaler:** Two of the biggest up days in history occurred that week, and three of the biggest down days occurred. And nothing was happening, other than the fact that people were talking about how markets were up and down like crazy. That’s one indirect way we can measure market efficiency. This was essentially the approach that was pioneered by [Yale’s] Robert Shiller. His argument was, “Prices
fluctuate too much to be explained by a rational process.”

Fama: Shiller’s model was based on the proposition that there is no variation through time in expected returns. But we know there is variation in expected returns. Risk aversion moves dramatically through time. It’s very high during bad periods and lower during good periods, and that affects the pricing of assets and expected returns.

Do bubbles exist? How do we define bubbles?

Thaler: I have two examples. The first is house prices. For a long period, house prices were roughly 20 times rental prices. Then, starting around 2000, they went up a lot, then they went back down after the financial crisis.

Fama: What’s the bubble? The up? The down? The subsequent up?

Thaler: We agree that it’s impossible to know for sure whether something’s a bubble. What we do know is that in markets such as Las Vegas; Scottsdale, Arizona; and south Florida, where prices were going up the most, expectations of future price appreciation were also the highest. That could be rational, but I’m skeptical about it.

My second example is the CUBA fund. It’s a closed-end mutual fund that has the ticker symbol CUBA but, of course, cannot invest in Cuba. That would be illegal, and there are no securities [in which to invest]. For many years, the CUBA fund traded at a discount of about 10–15 percent of net asset value, meaning that you could buy $100 worth of its assets for $85–$90. Then, all of a sudden, one day it sells for a 70 percent premium. That was the day President Obama announced his intention to relax relations with Cuba. So securities that you could buy for $90 on one day cost you $170 the next day. I call that a bubble.

Fama: That’s an anecdote. There’s a difference between anecdotes and evidence, right? I don’t deny that there exist anecdotes where there are problems. For bubbles, I want a systematic way of identifying them. It’s a simple proposition. You have to be able to predict that there is some end to it. All the tests people have done trying to do that don’t work. Statistically, people have not come up with ways of identifying bubbles.

Is this what a bubble looks like?

US house prices shared a stable relationship with rental prices for decades before radically departing from their mutual trajectory near the turn of the century.

House prices and rents

$250,000

$200,000

$150,000

$100,000

Government measure

Case-Shiller (started in 2000)

20x average yearly rent


Thaler: There’s no way to prove which one of us is right. These are the few cases where we can test whether the price and intrinsic value are the same. It shouldn’t be true that shares of the CUBA fund are selling at a 70 percent premium. I would say bubbles are when prices exceed a rational valuation of the securities being traded.

Fama: What’s the test of that?

Thaler: The only tests that are clean are these anecdotes, like closed-end funds, where we know the value of the assets, and we know the price, and we can see that they’re different.

If financial markets are inefficient, where are the biggest inefficiencies?

Thaler: It depends on which definition we’re using. Where are you most likely to be able to beat the market? With smaller firms? In less-developed countries? Although even with those, the advantage that active managers have is relatively small.

Fama: Things that are more systematically tested, that are indications of some degree of market inefficiency, are, for example: the accountants have long established that price adjustment to announcements of earnings is very quick, but not complete. Not enough to make any profits on, but so what? It’s still a slower adjustment that’s an indication that the market’s not completely efficient. The whole momentum phenomenon gives me problems. It could be explained by risk, but if it’s risk, it changes much too quickly for me to capture it in any asset-pricing models.

The point is not that markets are efficient. They’re not. It’s just a model. The question is, “How inefficient are they?” I tend to give more weight to systematic things like failure to adjust completely to earnings announcements, or momentum, than to anecdotes, which are curiosity items rather than evidence.

“Economics is behavioral, no doubt about it. The difference is your concern is irrational behavior; mine is just behavior.”

—EUGENE F. FAMA
The curious performance of the CUBA fund

After reliably trading at a discount, a fund with the ticker symbol CUBA experienced a spike in price after US President Barack Obama announced his intention to pursue a more friendly foreign policy with Cuba—news with no obvious relevance to the fund.

You agree about the fact that value stocks tend to outperform growth stocks, but you have different explanations. What are your explanations and evidence?

Fama: Value stocks are just riskier than growth stocks. You can’t really establish that unless you can tell me why this source of variance carries a different price per unit than other sources of variance. I think that’s an open issue at this point.

Thaler: I pretty much agree with that. I’ve looked hard to find ways in which value stocks are riskier than growth stocks, and I’ve been unable to find them. I think value firms look scary, and they get a premium for that.

Fama: They don’t have to look scary. Another story is that people just don’t like them. Economists don’t argue about taste. Value stocks tend to be companies that have few investment opportunities and aren’t very profitable. Maybe people just don’t like that type of company. That to me has more appeal than a mispricing story, because mispricing, at least in the standard economic framework, should eventually correct itself, whereas taste can go on forever.

Fama: I’m not saying I can call it that based on evidence. It just appeals to me more than a mispricing story.

Thaler: Suppose you say you like $20 bills, and you’re willing to take four $20 bills for $100: now that’s taste.

Fama: That’s an arbitrage.

Thaler: The question is, the people who dislike value stocks, and that’s just [because of] taste, and it’s wrong . . .

Fama: It’s not wrong. Remember now, we’re economists. You’re a behavioralist, that’s even worse. You don’t comment on people’s taste.

Thaler: I do when they say that they like four $20 bills better than a $100.

Fama: That’s an arbitrage. That’s different. Suppose I tell you I like apples better than oranges.

Thaler: Then that’s taste.

Fama: OK, that’s value stocks and growth stocks. I’m not arguing for it; I’m just saying it’s a possibility.

Thaler: We’re both affiliated with asset-management firms that invest in small-value stocks. We’re hoping to earn high returns—and do achieve that goal more often than not. If we’re buying those stocks because people don’t like them, we’re only going to make money if they change their minds.

Fama: Some people change their mind.

Thaler: I think you’re more behavioral than me now!

Fama: I’m an economist. Economics is behavioral, no doubt about it. The difference is your concern is irrational behavior; mine is just behavior.

Thaler: The distinction I make is whether behavior is predictable from a rational model. I’m willing to include behavior that is not predicted by a rational model.

Fama: I would agree with that.

Thaler: We’re both interested in understanding the world. I have some prurient interest in things like the CUBA
fund. I think we would both like to know what caused housing prices [to go] up so fast and then back down.

**Fama:** And then back up again.

**Thaler:** If those prices were wrong in some sense, it would be good to know . . . If I were the chair of the Fed, or in charge of Freddie Mac or Fannie Mae, if I saw the price of homes in places like Vegas and Scottsdale going up so fast in the early 2000s, I would be raising lending requirements.

**So policy makers should use bubbles as a way to step in?**

**Thaler:** Yes, but very gently. It’s not like I think policy makers know what’s going to happen; but if they see what looks disturbing, they can lean against the wind a little bit. That’s as far as I would go. We both agree that markets, good or bad, are the best thing we’ve got going. Nobody has devised a way of allocating resources that’s better.

**Fama:** We disagree about whether policy makers are likely to get it right, though. On balance, I think they are likely to cause more harm than good.

**What impact has behavioral science had on economics?**

**Fama:** Twenty years ago my criticism of behavioral finance was that it is really just a branch of efficient markets, because all they do is complain about the efficient-markets model. I’m probably the most important behavioral-finance person, because without me and the efficient-markets model, there is no behavioral finance. I still think there is no full-blowned testable behavioral asset-pricing model.

**Thaler:** The efficient-markets hypothesis remains the standard. That’s true of all economic models, but people don’t make decisions that way. In my managerial-decision-making class, I give [the students] rules at the end of class. One is, “Ignore sunk costs; assume everyone else doesn’t.” That’s my philosophy of life. I believe the rational model, and I think that a lot of people screw it up, and that we can build richer models with a better predictive power if we include the way people actually behave as opposed to [the behavior of] fictional “Econs” that are super smart and have no self-control problems. I don’t know anybody like that.

**Will there be an overarching theory of behavioral economics that other people can try to reject?**

**Thaler:** No. There won’t be a new overarching theory. We’ve got one. It just happens to be wrong.

**Fama:** Like all theories.

**Thaler:** It’s not going to be like the Copernican Revolution, where having the Earth in the middle was clearly wrong, and having the Sun in the middle was right. It’s going to be more like engineering. Physics, in its pure form with lots of assumptions, doesn’t build good bridges. You need engineering. That’s what the behavioral approach to economics is.

**How does this debate affect regular investors?**

**Fama:** When [Princeton’s] Daniel Kahneman got the Nobel Prize, he was asked how investors should behave. He basically said, “They should buy index funds.” The behavioralists come from a different perspective, because they think everybody is irrational, so the only way to make them rational is tell them what to do that’s possibly rational. Whereas I think the rational thing to do, because prices reflect available information pretty much, is to be a passive investor.

**Thaler:** If there’s a nonacademic point about this, it’s whether things like the rise of technology stocks in the late 1990s—in Gene’s honor I won’t refer to it as a bubble—are a misallocation of resources.

**Fama:** In hindsight it was.

**Thaler:** Was that a misallocation of resources? We would like to know that. We had Booth students quitting after one year to go out and make their billion, and most of them didn’t. As Gene would say, when ex post, it did look like a bubble. I’m not saying we can recognize [bubbles] when they’re happening, although I’m working on that, but I do think that we can have a pretty good hunch. A bubble-detection committee would be highly useful if it were reliable.

**Fama:** In general, it would be useful to know to what extent all economic outcomes are due to rational and irrational interplays. We don’t really know that...
The limits of what the state can—and should—do for the economy

BY GEORGE J. STIGLER

An argument for reducing government controls

There was an age when social dissatisfaction was kept in the house. All evils were ancient evils, and therefore necessary evils that served at least to keep men humble and patient. This resignation to imperfection has almost vanished in modern times—the hereafter in which all problems are solved has been moved up to two months after the next election. And government has become the leading figure in almost every economic reform. I propose to discuss what governments can do in economic life, and what they should do.

The question of what governments can do, what they are capable of doing, will strike many Americans, and for that matter most non-Americans, as an easy one. For it is a belief, now widely held and strongly held, that the government can, if it really puts its mind and heart to a task, do anything that is not palpably impossible. The government, we shall all admit, cannot really turn the number pi into a simple fraction by legislative mandate, nor can a joint resolution of the houses of Congress confer immortality. But with a will, the government can prolong human life appreciably by suitable medical and social-insurance programs.

This acceptance of the omnipotence of the state does not represent a generalization of experience; it is not a product of demonstrated effectiveness in bending events to the wise or foolish designs of policy. On the contrary, the belief is an article of faith, indeed an article of almost desperate faith. It is not an intrinsically absurd belief; there is no rigorous logical demonstration that the state cannot turn sows’ ears into silken purses. There is also no logical demonstration that all men cannot become saints, but the number of saintly men has not yet risen to the level where the census makes it a separate statistical category.

Our faith in the power of the state is a matter of desire rather than demonstration. When the state undertakes to achieve a goal and fails, we cannot bring ourselves to abandon the goal, nor do we seek alternative means of achieving it, for who is more powerful than a sovereign state? We demand, then, increased efforts of the state, tacitly assuming that where there is a will, there is a governmental way.

Yet we know very well that the sovereign state is not omnipotent. The inability of the state to perform certain economic tasks could be documented from some notorious failures. Our cotton program, for example, was intended to enrich poor cotton farmers, increase the efficiency of production, foster foreign markets, and stabilize domestic consumption. It is an open question whether 28 years of our farm program...
have done as much for poor cotton farmers as the trucking industry.

**What the state can do**

So what economic tasks can a state perform? I propose a set of rules that bear on the answer to that question.

**Rule 1:** The state cannot do anything quickly.

It would be unseemly to document at length the glacial pace of a bureaucracy in double step. Suffice it to say that if tomorrow a warehouse full of provisions labeled “For General Custer: Top Priority” were found, no one would have to be told whether the warehouse was publicly or privately owned.

A decent respect for due process lies behind some procedural delays, and poses a basic issue of the conflicting demands of justice and efficiency in economic regulation. But deliberation is intrinsic to large organizations: not only does absolute power corrupt absolutely, it delays fantastically. I would also note that initiative is the least prized of a civil servant’s virtues, because the political process allotst much greater penalties for failure than rewards for success.

**Rule 2:** When the national state performs detailed economic tasks, the responsible political authorities cannot possibly control the manner in which they are performed, whether directly by governmental agencies or indirectly by regulation of private enterprise.

The lack of control is due to the impossibility of the central authority either to know or to alter the details of a large enterprise. An organization of any size—and I measure size in terms of personnel—cannot prescribe conduct in sufficient detail to control effectively its routine operations: it is instructive that when the New York City subway workers wish to paralyze their transportation system, they can do so as effectively by following all the operating instructions in literal detail as by striking.

I estimate, in fact, that the federal government is at least 120 times as large as any organization can be and still keep some control over its general operations. It is simply absurd to believe that Congress could control the economic operations of the federal government; at most it can sample and scream. Since size is at the bottom of this rule, two corollaries are:

1. Political control over governmental activity is diminishing.

2. The control exercised by a small city is much greater than the control exercised over General Motors by its board of directors.

**Rule 3:** The democratic state strives to treat all citizens in the same manner; individual differences are ignored if remotely possible.

The striving for uniformity is partly due to a desire for equality of treatment, but much more to a desire for administrative simplicity. Thus men with a salary of $100,000 must belong to the Social Security system; professors in New York must take a literacy test to vote; the new automobile and the 1933 Essex must be inspected; the most poorly coordinated driver and the most skillful driver must obey the same speed limits; the same minimum wage must be paid to workers of highly different productivities; the man who gives a vaccination for smallpox must have the same medical credentials as a brain surgeon; the three-week-old child must have the same whiskey import allowance as a grown man; the same pension must be given to the pilot who flew 100 dangerous missions as to the pilot who tested a Pentagon swivel chair; the same procedure must be passed through to open a little bank in Podunk and the world’s largest bank in New York; the same subsidy per bale of cotton must be given to the hillbilly with two acres and the river valley baron with 5,000 acres. We ought to call him Uncle Same.

**Rule 4:** The ideal public policy, from the viewpoint of the state, is one with identifiable beneficiaries, each of whom is helped appreciably, at the cost of many unidentifiable persons, none of whom is hurt much.

The preference for a well-defined set of beneficiaries has a solid basis in the desire for votes, but it extends well beyond this prosaic value. The political system is not trustful of abstract analysis, nor, for that matter, are most people. A benefit of $50 to each of 1 million persons will always seem more desirable than a $1 benefit to each of 150 million people, because one can see a $50 check, and hence be surer of its existence. In fact, it is worth mentioning one corollary of Rule 4: no politician will worry much about anything that can’t be photographed. Another corollary is: if Texas wants it, give it.

The suspicion of abstract theory is of course well founded: most abstract theories recorded in history have been false. Unfortunately it is also an abstract
theory, and a silly one, that says one should believe only what one can see, and if the human race had adhered to it, we would still be pushing carts with square wheels. You do not need to be told that someone is always hurt by an economic policy, which is only a special case of the basic economic theorem that there is no such thing as a free lunch. On the other hand, I do not say that all political lunches are priced exorbitantly.

**Rule 5:** The state never knows when to quit.

One great invention of a private-enterprise system is bankruptcy, an institution for putting an eventual stop to costly failure. No such institution has yet been conceived of in the political process; an unsuccessful policy has no inherent termination.

The two sources of this tenacity in failure are the belief that the government must be able to solve a social problem, and the absence of objective measures of failure and success. The absence of measures of failure is due much more to the lack of enterprise of economists than to the nature of things. One small instance is the crop-forecasting service of the Department of Agriculture. This service began shortly after the Civil War, and it eventually involved thousands of reporters and a secrecy in preparation of forecasts that would thwart Central Intelligence. It was not until 1917 that a Columbia professor, Henry Moore, showed that the early season forecasts were almost as good as flipping a coin, and the later season forecasts were almost as good as running a regression equation on rainfall.

Let me emphasize as strongly as I can that each of these characteristics of the political process is a source of strength in some activities, as well as a limitation in other activities. If the state could move rapidly, contrary to Rule 1, and readily accepted abstract notions, contrary to Rule 4, our society would become the victim of every fad in morals and every popular fallacy in philosophy. But what are virtues in the preservation of our society and its basic liberties are not necessarily virtues in fixing the wages of labor or the number of channels a television set can receive.

These rules, and others that could be added, do not say that the state cannot socialize the growing of wheat or regulate the washing of shirts. What the rules say is that political action is social action, that political action displays reasonably stable behavioral characteristics, and that prescriptions of political behavior that disregard these characteristics are simply irresponsible. To say, after describing a social economic problem, that the state must do something about it is equivalent in rationality to calling for a dance to placate an angry spirit. The state can do many things, and must do certain absolutely fundamental things, but it is not an Aladdin’s lamp.

**What the state should do**

I turn now to the proper economic role for the state. I propose merely to sketch what I believe is the proper treatment of certain classes of important economic problems.

**Class 1: Monopoly**

The fear of monopoly exploitation underlies a vast network of public regulation—the control over the so-called public utilities, including the transportation and communication industries and banking institutions, as well as traditional antitrust policies. The proper methods of dealing with monopoly, in their order of acceptability, are three:

1. The maintenance or restoration of competition by the suitable merger-prevention policies, which we now fail to use in areas such as rail and air transport, and by the dissolution of monopolies. This method of once-and-for-all intervention provides the only really effective way of dealing with monopoly.

2. Where substantial competition cannot be achieved—and I do not ask for perfect competition—the entry into the field is often controlled by the state. For example, the TV channels are allocated by the Federal Communications Commission. Here, auctioning off the channels seems the only feasible method of capturing the inherent monopoly gains. The history of regulation gives no promise that such gains can be eliminated.

3. In the few remaining cases in which monopoly cannot be eliminated or sold to the monopolist, monopolies should be left alone, simply because there is no known method of effective control.

**Class 2: Poverty**

A community does not wish to have members living in poverty, whatever the causes of the poverty may be. The maximum level of socially tolerable

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In order to preserve the dignity and freedom of the individual in my society, I shall if I must pay the price of having some fail wholly to meet the challenge of freedom.
poverty will vary with the society’s wealth, so poor societies will stop short at preventing plain starvation, but Texans will demand, through the oil embargoes that Presidents Eisenhower and Kennedy found expedient to accept, also Cadillacs and psychiatrists in their minimum poverty budget. I consider treatment of poverty a highly proper function of the state, but would propose that it be dealt with according to two principles:

1. Direct aid should take the form of direct grants of money, and only this form. The present methods involve an unending chain of grants in kind: some subsidized housing, some subsidized medical care, some subsidized food, some rigged selling prices of cotton and wheat, some lunches for children, and so on. Not only are many of these policies grossly inefficient, they also impose gross limitations on the freedom of the poor. If the poor would rather spend their relief checks on food than on housing, I see no reason for denying them the right.

2. The basic problem of poverty from the social viewpoint, however, is not the alleviation of current need but equipping the people to become self-supporting. Here we have been extraordinarily phlegmatic and unimaginative in acquiring understanding of the basic problem of low productivity and in devising methods of increasing the skills and opportunities of the poor. We have become so single-minded in worshipping the curriculum of the good liberal-arts college that we have only a primitive system of industrial training. We tolerate widespread restrictionism on entry by unions, when it is the excluded entrants we should be worrying about.

Class 3: Economic distress
I define economic distress as experiencing a large fall in income, or failing to share in a general rise, but without reaching some generally accepted criterion of poverty. Of course the two differ only in degree. Much of our farm program, our oil program, our protective tariff system, our regional development schemes, our subsidies for metals and soon for commuters, are so motivated. Here my prescriptions would be:

1. Compensation for losses in the cases in which the distress is clearly and directly caused by governmental policy.

2. Exactly the same kind of treatment of distress as of poverty in other respects:

direct grants in the short run; policies to foster the mobility of resources in the long run.

Class 4: Consumer and worker protection
Since unpunished fraud is profitable, it must be punished. I doubt whether many people realize how strong are the remedies provided by traditional law, and in particular how effective the actions of people who have been defrauded. I am confident that research in this area would suggest methods of vastly increasing the role of self-policing in the economy.

It is otherwise with the alleviation of consumer incompetence: the belief is becoming strong that there is much fraud, or at least indefensible waste, that consumers are incompetent to discover. This belief is reflected in the Truth in Lending bill¹ that Senator Paul H. Douglas has been seeking. Even if this belief is well founded, my basic answer to this painful problem is: in order to preserve the dignity and freedom of the individual in my society, I shall if I must pay the price of having some fail wholly to meet the challenge of freedom. I find it odd that a society that once a generation will send most of its young men against enemy bullets to defend freedom will capitulate to a small handful of citizens unequal to its challenge.

This basic position does not imply that we should accept the institutions of 1900, or 1963, or any other year, as ideal in the protection they have given to men against fraud and danger. We should be prepared to examine any existing institution, or any proposal for change, with an open mind.

We should not, however, simply assume that there is a useful law for every problem, and we should not lazily accept remedies that take freedom from 97 men in order to give protection to three.

I should add, since I introduced the question, that I am in favor of truth in lending, and also in borrowing, and in selling, and in campaigning for office, and in lecturing to Swarthmore students, but not in courtship. Senator Douglas’s bill has my support the day he shows me, first, that it will achieve any significant results, and second, that these results are worth at least 10 percent of the social costs of enforcing the statute.

These classes do not exhaust the range of functions undertaken by modern states, but they will suffice to illustrate the positions that seem to me to best meet the values of our society and the known limitations on its political processes.

I consider myself courageous, or at least obtuse, in arguing for a reduction in governmental controls over economic life. You are surely desirous of improving this world, and it assuredly needs an immense amount of improvement. No method of displaying one’s public spiritedness is more popular than to notice a problem and pass a law. It combines ease, the warmth of benevolence, and a suitable disrespect for a less enlightened era. What I propose is, for most people, much less attractive: close study of the comparative performance of public and private economy, and the dispassionate appraisal of special remedies that is involved in compassion for the community at large.

¹The Truth in Lending Act was signed into law by President Lyndon Johnson in 1968, two years after Senator Douglas was voted out of office.

George J. Stigler, the 1982 recipient of the Nobel Memorial Prize in Economic Sciences, was the Charles R. Walgreen Distinguished Service Professor of American Institutions and director of the Walgreen Foundation at Chicago Booth. He died in 1991.
Much has changed on Wall Street since the 2007-10 financial crisis. Banks are subject to higher capital requirements and undergo regular stress tests. But the world’s largest financial institutions have grown since the crisis, swallowing up former rivals and smaller lenders. That has led to renewed calls to break up the global banking titans. One-third of the economists who make up the Initiative on Global Markets’ Economic Experts Panel thought that capping banks’ size would cut risk, while only 12 percent disagreed. But many were uncertain, and even more of them were unsure that a cap would benefit average Americans.
**Question A:** Capping US banks’ size so that no single bank could be larger than 4 percent of the sector’s domestic assets would lower systemic risk in the United States.

Markus Brunnermeier, *Princeton*
“Troublemakers Lehman & Bear Stearns were smaller banks. On the other hand, smaller banks are easier to dissolve and [have] less political influence.”
Response: Uncertain

Barry Eichengreen, *UC Berkeley*
“‘Too big to manage’ can be a problem. Not the only problem of course. Small banks can also fail, threatening financial stability.”
Response: Agree

Oliver Hart, *Harvard*
“With banks being smaller, no single bank’s failure would lead to serious contagion or undermine the confidence of investors and depositors.”
Response: Agree

Anil K Kashyap, *Chicago Booth*
“Shadow-banking risks would grow substantially if we go this route, and we already saw that they were at the heart of the last crisis.”
Response: Disagree

**Question B:** The US financial system would contribute more to the average American’s welfare if the size of US banks were capped so that none could be larger than 4 percent of the sector’s domestic assets.

Daron Acemoglu, *MIT*
“Against the benefits of lower systemic risk there is the loss of business to other financial centers. Global regulation would be better.”
Response: Uncertain

Judith Chevalier, *Yale*
“There are clearly some countervailing benefits to size.”
Response: Uncertain

Darrell Duffie, *Stanford*
“A 4 percent cap might be OK for now, but too low later, causing distortions. Require instead higher minimum capital ratios for larger banks.”
Response: Disagree

Kenneth Judd, *Stanford*
“I have antitrust concerns. If a bank’s 4 percent is concentrated in one region, then it may have excessive market power.”
Response: Uncertain
How effective are these low interest rates?

When the economy needed a jolt during the Great Recession, low interest rates and stimulus programs gave banks in the United States and Europe access to cheaper money. The theory was they would lend the money to people who would spend it and boost the economy. Research suggests that’s not what happened. Learn more about this model at Review.ChicagoBooth.edu and on page 10 of this issue.
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