

IN THIS ISSUE

- Which CEO Characteristics and Abilities Matter?
- American Jobs and the Rise of Service Outsourcing to China and India
- The Prevalence and Effects of Occupational Licensing
- Understanding International Price Differences Using Barcode Data
- Currency Crises and Sudden Stops
- Air Pollution and Infant Health

Which CEO Characteristics and Abilities Matter?

In *Which CEO Characteristics and Abilities Matter?* (NBER Working Paper No. 14195), authors **Steven Kaplan**, **Mark Klebanov**, and **Morten Sorensen** study the characteristics and abilities of CEO candidates for companies involved in buyout (LBO) and venture capital (VC) transactions and relate those characteristics to hiring decisions, investment decisions, and company performance. The candidates are assessed on more than 30 individual characteristics. The authors find that two primary factors—one for general ability and one for team-related interpersonal skills versus execution skills—are important. Both LBO and VC firms tend to hire and invest in CEOs with greater general abilities. However, success is more strongly related to execution skills than to team-related skills. Also, the researchers find, success is only marginally related to incumbency.

The authors suggest that their results have several implications. First, it is possible to measure individual CEO talents and

skills over and above the usual observable variables like age, industry, and college SAT scores. Second, CEO talents and skills appear

“Success and performance are more strongly correlated with execution-type skills than with interpersonal and team-related skills.”

to matter because they are consistently correlated with hiring, investment, and performance. Third, success and performance are more strongly correlated with execution-type skills than with interpersonal and team-related skills. In other words, CEOs like Jack Welch appear to be more successful than CEOs like Jeff Immelt. This is consistent with other researchers’ results (in non-CEO contexts) showing that steadfastness—and traits such as unwavering resolve, fanatical drive, and workmanlike diligence—is more important than being a good listener. The authors’ findings are also consistent with results in the psychology literature that suggest that “conscientiousness” is the best predictor of performance, but they do not support previous find-

ings that successful CEOs exhibit compelling modesty, build strong teams, give credit to others, and take blame on themselves.

Finally, the authors point out that their results reflect buyout and VC-funded companies only. While these are two quite different groups, these types of companies may have specific needs and, therefore, the results may not generalize to all companies. Second, the performance data are coarse and potentially “noisy.” But, that said, the authors’ results correlate strongly with Peter Drucker’s description of the effective executive. The attributes Drucker describes are largely execution-related and appear to correspond well to the “efficient,” “persistent,” “proactive,” “commitment,” and “analytical” skills in this study.

—Lester Picker

American Jobs and the Rise of Service Outsourcing to China and India

With the rise of service work being outsourced to China and India has come something new for Americans: for the first time ever, educated U.S. workers are competing with educated but low-paid foreign workers. Despite the public concern about this development, though, there has been almost no rigorous research on the subject. Most previous studies have simply counted the number of workers who are in industries

or occupations that are exposed to offshore outsourcing. Many (but not all) of these studies then conclude from the resulting large numbers that bad things must be happening to American workers.

In **Much Ado about Nothing: American Jobs and the Rise of Service Outsourcing to China and India** (NBER Working Paper No. 14061), authors **Runjuan Liu** and **Daniel Trefler** study the actual, as

opposed to the conjectured effects, on U.S. labor markets. Using March-to-March matched Current Population Survey (CPS) data for 1996–2006, the authors examine the effects of offshore outsourcing as well as the reverse flow (termed “in-shoring”), which is the sale of services produced in the United States to unaffiliated buyers in China and India. They consider impacts on occupation and industry switching, weeks spent unem-

ployed as a share of weeks in the labor force, and earnings. They estimate very small positive effects of in-shoring and even smaller negative effects of offshore outsourcing. These effects are estimated with substantial precision. The net effect of in-shoring and offshore outsourcing is positive for U.S. workers, they find.

The authors quantify this net effect using something of a fear-mongering experiment, which they term the rapid-growth effect: they propose that over the next nine years, in-shoring and offshore outsourcing may continue to grow at rates experienced during 1996–2005 in business, professional, and technical services—that is, in segments where China and India have been particularly strong. Under that assumption, they estimate that for workers in occupations that are exposed to offshore outsourcing, occupational switching (at the 4-digit SIC-code level) would *decline* by 2 per-

cent; the share of weeks spent unemployed would *fall* by 0.1 percent; and earnings would *rise* by 1.5 percent. In other words, American workers on average would benefit. Of course, these numbers are not annual changes—they

for those who work in less skilled, white-collar jobs. As with all labor market impacts of international trade, there are winners and losers and, in the current United States, the losers tend to be the less educated.

“[The authors] estimate very small positive effects of in-shoring and even smaller negative effects of offshore outsourcing. These effects are estimated with substantial precision. The net effect of in-shoring and offshore outsourcing is positive for U.S. workers.”

are changes over an entire nine-year period—and thus they represent only small benefits each year. Still, the authors point out that this extreme, fear-mongering exercise does not indicate adverse effects on U.S. workers.

There are nonetheless some darker spots in the U.S. labor market experience with offshore outsourcing. The effects tend to be negative for workers without a college degree, or

The authors acknowledge that the loss of one’s job can be enormously damaging both financially and psychologically. However, they point out that these darker spots should not obscure the big picture, which is of relatively small effects associated with offshore outsourcing.

—Lester Picker

The Prevalence and Effects of Occupational Licensing

In **The Prevalence and Effects of Occupational Licensing** (NBER Working Paper No. 14308), authors **Morris Kleiner** and **Alan Krueger** use newly available data from a nationally representative sample of Americans surveyed by the Gallup Organization to analyze the influence of occupational licensing in the labor market. To determine if a worker is in a licensed position, their survey asked: “Does your job require a license by a federal, state, or local government agency?”

The authors find that 29 percent of the workforce was required to hold a license in 2006, which is a higher percentage than that found in other studies that rely only on state-level occupational licensing data or data restricted to single states. Workers who have higher levels of education are more likely to work in jobs that require a license.

Union workers and government employees are more likely to have a license requirement than are nonunion or private sector employees. The authors suggest that working in a licensed job is associated with about 15 percent higher wages, other things being equal – about the same as estimates for the effect of unions. However, unlike unions, which reduce the variance in wages, licensing does not significantly affect wage dispersion for individuals in licensed jobs. If these results hold up to further scrutiny, then occupational licensing would turn out to be a more consequential phe-

nomenon for determining income than labor unions, given the prevalence of licensing.

Occupational licensing is one of the fastest growing, yet least understood, institutions in the U.S. labor market. The movement to a service-oriented economy from manufacturing, where unions and negotiating were prominent, created a demand for a “web of rules” in the workplace that licensing may have filled. While unions have declined, occupational licensing has grown over the last fifty years.

“The authors suggest that working in a licensed job is associated with about 15 percent higher wages, other things being equal – about the same as estimates for the effect of unions.”

U.S. occupational regulation generally takes three forms. The least restrictive form is registration, in which individuals file their names, addresses, and qualifications with a government agency before practicing their occupation. The registration process may include posting a bond or filing a fee. Next, certification permits any person to perform the relevant tasks, but the government or a private, nonprofit agency administers an examination and certifies those who have achieved the level of skill and knowledge for certification. For example, travel agents and car mechanics are generally certified but not licensed. The toughest form of regulation is licensure; this form of regulation is often referred to as “the right to

practice.” Under licensure laws, working in an occupation for compensation without first meeting government standards is illegal. In 2003 the Council of State Governments estimated that more than 800 occupations were licensed in at least one state, and more than 1,100 occupations were licensed, certified, or registered.

With the large and growing number of workers required to obtain an occupational license, and the apparently large effect of licens-

ing requirements on the labor market, the government may want to measure the extent of occupational licensing in a manner similar to information that is collected for unions. To help this effort, the authors are in the process of developing a small number of questions on occupational licensing that can be added to a labor force survey. These questions would help to answer more fully how much regulation is optimal, the effect of licensing on wages and productivity, and the type of regulation that is best suited for the emerging jobs in the workforce.

—Lester Picker

Understanding International Price Differences Using Barcode Data

In **Understanding International Price Differences Using Barcode Data** (NBER Working Paper No. 14017), **Christian Broda** and **David Weinstein** use a vast sample of U.S. and Canadian barcode records to challenge the existing evidence on three key results about international price deviations that have been documented in previous work. These results are that borders invariably mean flagrant violations of the law of one price (LOP); that distance matters greatly for understanding these deviations; and that rates of convergence back to purchasing power parity (PPP) are inconsistent with the evidence on nominal price stickiness. The authors claim that most previous studies used data on price indexes and price surveys that limited the ability of researchers to compare identical goods across locations. Using prices for thousands of identical goods that are sold in the United States and in Canada, they find that none of the three stylized facts survive closer scrutiny. Instead, their work supports simple pricing models “where the degree of market segmentation across the border is similar to that within borders.”

Finding micro data to use in studying the international pricing of identical goods has long been a challenge, but Broda and Weinstein take advantage of the fact that the United States and Canada use the same barcode system. The researchers work with scanner data from the ACNielsen Homescan database. The uniqueness of these data is that they include price and quantity information for every UPC purchased in a demographically representative sample of households in *both* Canada and the United States. These goods include most supermarket items, a subsample of durable goods, and electronic products. There are over 500,000 UPCs sold in

each country every year. Since the data is available for different cities in the United States and regions in Canada, it allows for the comparison of identical goods and for their prices to vary across locations, both within and

“Underlying price changes of items within indexes vary greatly across locations, even for narrowly defined product categories (for example, eggs). Because more distant locations consume more disparate sets of goods, the increased dispersion in prices seen as the distance between cities grows is largely attributable to compositional effects.”

across borders. For the first time, this permits precise examination of the border effect. In particular, given that the quantities purchased are also included — a feature absent in the collection of national statistics data — the role of compositional effects can be studied.

Broda and Weinstein find that the law of one price and purchasing power parity, in their absolute forms, hold about as well across borders as within countries. The researchers confirm that the LOP is violated flagrantly in international data, but also across cities within the same country. Thus, for example, the observation that an identical can of soda sells at different prices in different countries is not very informative about border barriers, because prices also vary substantially even within borders.

The authors also find that international violations are not much larger than domestic ones. Broda and Weinstein believe that the aggregate indexes used in the earlier studies collapse the large within-country idiosyncratic variation of relative goods prices, while preserving the variation attributable to exchange rate movements. This has important implications for the interpretation of previous results.

Their analysis reveals only a small border effect with respect to deviations in the law

of one price. Broda and Weinstein find that the impact of distance on the price deviations among identical goods is only about one tenth that obtained using price-index data. They show that the set of common goods across cit-

ies varies systematically across space and borders. Therefore, unless all individual prices within an index move together, price indexes will appear to deviate across space and borders merely because the underlying weights and goods are different.

Moreover, the analysis using barcode data shows that underlying price changes of items within indexes vary greatly across locations, even for narrowly defined product categories (for example, eggs). Because more distant locations consume more disparate sets of goods, the increased dispersion in prices seen as the distance between cities grows is largely attributable to compositional effects in the set of goods used to compute city-specific price indexes.

Finally, the variation of price adjustment is present both within and across borders. These results imply that the relatively small price differences generated by the typical exchange rate movement will tend to be very persistent, but that larger ones will be short lived. This may have important implications for understanding why prices sometimes seem to respond to exchange rate changes but at other times do not.

—Matt Nesvisky

Currency Crises and Sudden Stops

Currency crises have plagued the last decade of the twentieth century, transcending national borders and regions. The Thai crisis, for example, engulfed Malaysia, Indonesia, and the Philippines within days, while the Russian crisis spread quickly to countries as far apart as Brazil and Pakistan. These events triggered an intense debate about the seemingly

contagious nature of crises and fueled a large and increasing body of empirical research on financial contagion.

Past work on contagion has focused on the ability of countries to access international capital markets in times of stress. In Latin America, for example, there is evidence that when there are capital outflows from the large

nations, the smaller countries in the region are also affected. Some researchers have examined the role of common creditors: foreign banks can exacerbate the original crisis by calling loans and restricting credit for the crisis country, but they can also propagate crises by calling loans to other nations as they rebalance the overall risk of their portfolio after the ini-

tial losses. In the aftermath of the 1982 Latin American debt crisis and the 1997 Asian crisis, for example, the countries most affected by capital flow reversals were the ones that borrowed from the same group of international banks as the immediate crisis nations.

In **Crises and Sudden Stops: Evidence from International Bond and Syndicated-Loan Markets** (NBER Working Paper No. 14249), author **Graciela Kaminsky** uses the gross primary issuance of international bonds and syndicated loans, rather than net capital inflows, as an indicator of emerging markets' access to the international capital market. While the absence of net capital inflows may reflect a lack of access to international capital markets, it also may reflect full access to these markets and offsetting inflows and outflows. In contrast, gross issuance captures the ability of a country to both access new credit and roll over maturing debt.

Using new data on 24 emerging-market

countries, Kaminsky examines the aftermath of the Mexican, Thai, and Russian crises and asks what type of economic, political, and

“Extensive integration in international capital markets exposes countries to sudden stops, even in the absence of domestic vulnerabilities.”

financial conditions trigger the largest reversals in international gross issuance. She finds that extensive integration in international capital markets exposes countries to sudden stops, even in the absence of domestic vulnerabilities. She also finds that larger reversals in gross issuance tend to occur in countries with banking and current account problems.

Because reversals typically are accompanied by large real depreciations and deep recessions, policymakers seek to avoid sharp downturns in capital flows. Therefore, some countries have introduced capital controls in the midst of crises. While capital controls may be effective short-term responses to sud-

den stops, they may have unintended long-term effects. In particular, capital controls protect inefficient domestic financial institu-

tions and thus may trigger even further financial vulnerabilities. Capital controls also may delay improvements in corporate governance of non-financial firms. As countries liberalize their capital accounts, domestic corporations start participating in international capital markets, mainly through cross-listing in major world stock exchanges with higher disclosure standards and under the jurisdiction of a superior legal system. This promotes transparency in firm management and can trigger improvements in corporate governance. Thus, imposing capital controls may heighten long-run financial vulnerabilities and lower long-term economic growth.

—Lester Picker

Air Pollution and Infant Health

In **Air Pollution and Infant Health: Lessons from New Jersey** (NBER Working Paper No. 14196), co-authors **Janet Currie**, **Matthew Neidell**, and **Johannes Schmieder** estimate how exposure to carbon monoxide, ozone, and particulate matter affected infant health in New Jersey during the 1990s. They combine information taken from birth certificates on mothers' address with data on air quality from New Jersey air pollution monitors. This research, in addition to a large sample size -- all infant births and deaths recorded by the New Jersey Department of Health from 1989 to 2003 -- has three innovative features: the researchers can select mothers living closest to air monitors; they can follow mothers over time to control for unobserved characteristics; and, they can examine the interaction between air pollution and smoking, or other predictors of poor infant health.

The authors find consistently negative effects of exposure to pollution, especially carbon monoxide, both during and after birth. The effects are considerably larger for smokers

“The authors find consistently negative effects of exposure to pollution, especially carbon monoxide, both during and after birth. The effects are considerably larger for smokers than for nonsmokers, and for older mothers. The effects of pollution also may be larger for babies born to mothers at risk for poor birth outcomes.”

than for nonsmokers, and for older mothers. The effects of pollution also may be larger for babies born to mothers at risk for poor birth outcomes because of chronic illness or other complications. When the sample was pared to include only children who had died in their first year, and their siblings, the resulting estimates suggest that a one unit increase in average maximum carbon monoxide increased the risk of infant death by an estimated 2.5 percent

from a base of 40 percent.

The authors point out that their estimates may understate the health impact from pollution exposure. Residence within 10 kilo-

meters is a relatively crude proxy for individual pollution exposure, and they did not measure any fetal losses that may have been caused by pollution. Given that automobiles are the main source of carbon monoxide emissions, they also note that their results “have important implications for the regulation of automobile emissions.”

—Linda Gorman

NBER

The National Bureau of Economic Research is a private nonprofit research organization founded in 1920 and devoted to objective quantitative analysis of the American economy. Its officers are:

James M. Poterba—President and Chief Executive Officer

John S. Clarkeson—Chairman

Kathleen B. Cooper—Vice Chairman

The **NBER Digest** summarizes selected Working Papers recently produced as part of the Bureau's program of research. Working Papers are intended to make preliminary research results available to economists in the hope of encouraging discussion and suggestions for revision. The **Digest** is issued for similar informational purposes and to stimulate discussion of Working Papers before their final publication. Neither the Working Papers nor the **Digest** has

been reviewed by the Board of Directors of the NBER.

The **Digest** is not copyrighted and may be reproduced freely with appropriate attribution of source. Please provide the NBER's Public Information Department with copies of anything reproduced.

Individual copies of the NBER Working Papers summarized here (and others) are available free of charge to Corporate Associates. For all others, there is a charge of \$5.00 per downloaded paper or \$10.00 per hard copy paper. Outside of the United States, add \$10.00 per order for postage and handling. Advance payment is required on all orders. To order, call the Publications Department at (617) 868-3900 or visit www.nber.org/papers. Please have the Working Paper Number(s) ready.

Subscriptions to the full NBER Working Paper series include all 700 or

more papers published each year. Subscriptions are free to Corporate Associates. For others within the United States, the standard rate for a full subscription is \$7000; for academic libraries and faculty members, \$5735. Higher rates apply for foreign orders. The on-line standard rate for a full subscription is \$1800 and the on-line academic rate is \$750.

Partial Working Paper subscriptions, delineated by program, are also available. For further information, see our Web site, or please write: National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398.

Requests for **Digest** subscriptions, changes of address, and cancellations should be sent to **Digest**, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Please include the current mailing label.