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Do Women Avoid Salary Negotiations?

Past studies demonstrate that women earn approximately three-quarters of what men earn and that women represent only 2.5 percent of the highest-paid positions at U.S. firms. Researchers have long sought to identify the source of these wage gaps, which might be differences in human capital, workplace practices such as maternal-leave policies, general discrimination, and differences in competitiveness. Some evidence also suggests that men and women differ in the way that they negotiate for wages, and that women are less likely to engage in salary negotiations at all.

In **Do Women Avoid Salary Negotiations? Evidence from a Large Scale Natural Field Experiment** (NBER Working Paper No. 18511), co-authors **Andreas Leibbrandt** and **John List** report on an extensive nine-city field study which involved advertisements for actual administrative-assistant jobs. They find that in responding to these ads, men are more apt to initiate wage negotiations when there is no explicit statement at the outset that wages are negotiable. Men also generally prefer positions for which the "rules of wage determination" are left ambiguous. However, women become more aggressive in negotiating wages when the advertisement explicitly states that wages are negotiable; this erases and even reverses the gender differences.

"Ambiguity about the possibility of wage negotiations may discourage women from applying to some positions and contribute to gender wage gaps."

This experiment had four job categories for applicants: a gender-neutral one that explicitly said wages were negotiable and a gender-neutral one that was ambiguous about whether wages were negotiable, both for administrative help in fundraising, and a "masculine" one that explicitly said wages were negotiable and a "masculine" one that was ambiguous about whether wages were negotiable, both for administrative duties in areas heavily skewed toward sports, such as basketball, football, and NASCAR. The advertisements were posted on Internet job boards between November 2011and February 2012 in Atlanta, Dallas, Denver, Houston, Los Angeles, Portland, San Francisco, San Diego, and Washington D.C. Nearly 2,500 job seekers responded to the initial postings. Each interested person was asked to submit a resume and to answer a questionnaire before they could proceed with the application process.

Although the ads were either ambiguous or explicit about whether wages were open to negotiations, the posted wage (usually $17.60/hour) was identical across job ads and slightly higher than the median wage for comparable jobs in most of the cities. Some of the responses initiated by job seekers included: "The wage of $17.60/hr. does not really meet my expectations. My desired wage would be closer to $20/hr" or "My desired wage is $21/hr, but I am open to negotiation." From these inquiries, the authors could determine how men and women approached job openings under different circumstances.

Men tended to apply more often for the "masculine" jobs, but the authors were able to reduce this gender gap in applications by 45 percent merely by adding information that wages were "negotiable." They conclude that ambiguity about the possibility of wage negotiations may discourage women from applying to some positions and contribute to gender wage gaps.

Because the job-application process for this study was conducted largely through "impersonal" emails, the authors' findings appear to be consistent with past research suggesting that women are at least as likely to negotiate as men when face-to-face communication with other parties is limited. As the number of jobs that are filled in such impersonal ways increases, women may benefit by negotiating higher wages, thus narrowing the gender wage gap.

— Jay Fitzgerald

The Federal Reserve, Emerging Markets, and Capital Controls

In **The Federal Reserve, Emerging Markets, and Capital Controls: A High Frequency Empirical Investigation** (NBER Working Paper No. 18557) **Sebastian Edwards** concludes that changes in Federal Reserve policy on interest rates over the last decade have affected domestic short-term interest rates in seven emerging economies in Latin America and Asia. The extent of transmission of interest rate shocks differs across the various countries. Edwards also finds that capital controls are not an effective tool for isolating emerging countries from global interest rate disturbances.

All of the countries that Edwards studies — Brazil, Chile, Colombia, Mexico, Indonesia, Korea, and the Philippines — had flexible exchange rates during the period he analyzes, and they followed some kind of inflation targeting. These countries also had different degrees of capital mobility during the first decade of the 2000s. On a scale from 1 to 10, where 10 denotes unrestricted mobility of capital, capital mobility ranged from a high of 8.4 in Chile in early 2008 to a low of 2.9 in Colombia in 2002.

For this study, Edwards analyzes weekly data — most previous analyses have relied on either monthly or quarterly data. He studies only countries with flexible exchange rates, which has become increasingly common among emerging economies. He also uses a new index of capital mobility to analyze whether controls on financial flows affect the transmission of interest rates shocks, and he pays particular attention to the short-run dynamics of interest rate adjustments to global financial disturbances. Moreover, Edwards concentrates on the role of the steepness of the U.S. yield curve in explaining the international transmission of interest rates, and especially to how a policy aimed at "twisting" the yield curve — as announced by the Fed's Federal Open Market Committee on September 21, 2011 — may affect local interest rates.

He concludes that in the three Asian countries in the sample, Fed actions tend to be fully transmitted into interest rates, while in the Latin American countries, about one half of the U.S. interest rate change passes through to local interest rates. The adjustment process is also significantly faster in Asia than in Latin America. Edwards also finds that capital controls are not an effective tool for isolating emerging countries from global interest rate disturbances in the medium and longer run. Indeed, his analysis indicates that domestic interest rates in countries with a lower degree of international mobility of capital have been somewhat more sensitive to Fed policy shocks than interest rates in nations that are more integrated into the world capital market.

— Matt Nesvisky

"Changes in Federal Reserve policy on interest rates over the last decade have affected domestic short-term interest rates in seven emerging economies."

Higher Education, Merit-Based Scholarships, and Post-Baccalaureate Migration

Fifteen U.S. states currently have broad-based college merit scholarship programs. Based on either high school grade point averages or scores on college entrance exams, these in-state tuition scholarships are awarded to at least 30 percent of each state's graduating high school class. In total, the 15 states spend about $2,191 per recipient or $1.4 billion per year. The aid programs appear to slightly increase the probability that residents born in the state live there after college, but they may also decrease the probability that people attain a four-year college degree.

In **Higher Education, Merit-Based Scholarships, and Post-Baccalaureate Migration** (NBER Working Paper No. 18530), co-authors **Maria Fitzpatrick** and **Damon Jones** use Census and American Community Survey data to track college attendance, college completion, and residential decisions of 24-to-32 year olds between 1990 and 2010. After controlling for race, gender, and state unemployment rates, they find that merit aid eligibility is associated with a 1 percentage point increase in the proportion of people who are born in a state and remain residents of it until they are between 24 and 32 years old.

"... only a small fraction of the eligible population responds to merit aid by changing educational or migration decisions."

However, merit aid does not affect the proportion of people in that age group who remain resident *and* earn a BA degree. In fact, the data suggest that merit scholarships may slightly decrease BA degree attainment. So, unless BA completion rebounds after age 32, the authors conclude that by encouraging additional students to stay in-state for college, these merit scholarship programs may either be crowding out less able students or creating student-college mismatches that reduce the likelihood of graduating. Overall, their results suggest that at most 2 percent of the 30 percent of high school graduates targeted by merit scholarship programs change their degree attainment or ultimate migration patterns.

— Linda Gorman

The Asset Price Meltdown and the Wealth of the Middle Class

Median wealth in the United States declined by 0.7 percent from 2001 to 2004 and median non-home wealth (that is, total wealth minus home equity) fell by a staggering 27 percent during that period. Then, from 2004 to 2007, median wealth grew by 20 percent and median non-home wealth by 18 percent. After the "Great Recession" hit, house prices fell by 24 percent in real terms, stock prices by 26 percent, and median wealth by a staggering 47 percent between 2007 and 2010. The share of households with zero or negative net worth rose from 18.6 to 22.5 percent, and the share with zero or negative non-home wealth rose from 27.4 to 30.9 percent.

"The steep decline in median net worth between 2007 and 2010 was primarily due to the very high negative rate of return on net worth of the middle three wealth quintiles."

In **The Asset Price Meltdown and the Wealth of the Middle Class** (NBER Working Paper No. 18559), author **Edward Wolff** examines in detail how the middle class fared financially over the years 2007 to 2010, during a sharp decline in stock and real estate prices. The debt of the middle class had already increased significantly over the previous two decades, and Wolff studies whether the wealth position of these households deteriorated even further over the Great Recession. He investigates trends in wealth inequality from 2007 to 2010, changes in the racial wealth gap and wealth differences by age, and trends in homeownership rates, stock ownership, retirement accounts, and mortgage debt.

Wolff finds that the top wealth (and income) groups saw the percentage increase in their net worth (and non-home wealth and income) rise much faster from 1983 to 2010 than those in the lower end of the distribution. In fact, the average wealth of the poorest 40 percent declined from $6,200 (in 2010 dollars) in 1983 to negative $10,600 in 2010. The greatest gains in wealth and income were enjoyed by the upper 20 percent, particularly the top one percent, of the respective distributions. Between 1983 and 2010, the top one percent received 38 percent of the total growth in net worth.

Among the middle class (defined by the author as the middle three wealth quintiles), the debt-to-income ratio rose from 100 to 157 percent between 2001 and 2007. The debt-to-equity ratio rose from 32 to 61 percent. However, from 2007 to 2010, while the debt-to-equity ratio continued to advance to 71.5 percent, the debt-to-income ratio actually fell to 135 percent. The reason is the substantial retrenchment of average debt among the middle class over these years. Overall debt fell by 25 percent in real terms. The fact that the debt-to-equity ratio rose over these years was a reflection of the 47 percent drop in net worth.

Wolff explains that the key to understanding the plight of the middle class over the Great Recession was their high degree of leverage and the high concentration of assets in their home. The steep decline in median net worth between 2007 and 2010 was primarily due to the very high negative rate of return on net worth of the middle three wealth quintiles. This, in turn, was attributable to the precipitous fall in home prices and the very high degree of leverage of the middle wealth quintiles. High leverage also helps to explain why median wealth fell more than house (and stock) prices over these years and declined much more than median household income.

Wolff finds that the racial disparity in wealth holdings was almost exactly the same in 2007 as in 1983. However, the Great Recession hit African-American households much harder than whites. The losses suffered by black households from 2007 to 2010 are due to the fact that blacks had a higher share of homes in their portfolio than did whites and much higher leverage than whites.

The Great Recession also significantly affected Hispanic households. Their mean net worth was cut in half, as was their mean non-home wealth, their home ownership rate fell by 1.9 percentage points, and their net home equity plummeted by 48 percent. The losses suffered by Hispanic households over these three years are also mainly due to the large share of homes in their wealth portfolio and their high leverage rate. Another likely factor is that a high percentage of Hispanics bought their homes close to the housing cycle peak.

— Lester Picker

Macroeconomic Performance during Commodity Price Booms and Busts

Fluctuations in commodity prices often are associated with macroeconomic volatility and thus pose significant challenges for policymakers in commodity-producing nations. In **Macroeconomic Performance During Commodity Price Booms and Busts** (NBER Working Paper No. 18569), authors **Luis Felipe Céspedes** and **Andrés Velasco** investigate the macroeconomic response of a group of commodity-producing nations in episodes of large commodity price booms and busts. Because that response depends on the structural characteristics of the economy and the policy framework that is in place, the analysis focuses on the

> "A 60 percent increase in the commodity price index increases output by close to 1 percent."

response of economic activity and the real exchange rate to commodity price shocks, notably controlling for the role played by financial market depth and the exchange rate regime.

Using two different indexes of commodity prices, the authors identify more than 80 commodity price booms and busts in over 30 countries between 1960 and 2008. They estimate that a 60 percent increase in the commodity price index increases output by close to 1 percent with respect to trend output. More flexible exchange rate regimes are associated with smaller responses of output during commodity price episodes. Indeed, flexible exchange rate regimes tend to better insulate the economy from price shocks as the nominal exchange rate adjusts immediately to the real shock. The impact of those shocks on output tends to be larger for economies with less developed financial markets.

An increase of 60 percent in the price index is also associated with an increase in the investment rate of around 3.5 percentage points. The investment increase is larger for economies with higher financial depth. Furthermore, for the episodes before the 2000s, the presence of more developed financial markets appears to have mitigated the impact of commodity price shocks on credit.

The authors also find that the rate of international reserve accumulation tends to reduce the appreciation of the real exchange rate in episodes of commodity price booms and busts. An accumulation of 10 percent of GDP in international reserves tends to be associated with depreciation in the real exchange rate of 5 percent. The authors argue that this result, combined with the fact that more flexible exchange rate regimes tend to be associated with more stable output dynamics, suggests that a mix of a more flexible exchange rate regime with exchange rate interventions might help to reduce macroeconomic volatility. Their analysis also suggests that the impact of commodity price shocks on the real exchange rate is reduced when the political system is more stable.

— Claire Brunel

Property Rights Gaps and CDS

When a nation is on the brink of sovereign default, there's always the risk that it will raid its private sector for tax revenue — or even take it over in search of funds. That's one reason that the credit risks of a nation's corporate sector tend to rise when the nation's sovereign default risks go up. But the strength of that relationship varies across corporations and nations, according to **Jennie Bai** and **Shang-Jin Wei**. In **When Is There a Strong Transfer Risk from the Sovereigns to the Corporates? Property Rights Gaps and CDS** (NBER Working Paper No. 18600), they find that when sovereign default risks rise, credit risks increase more for state-owned companies than non-state-owned companies, and more in nations with weak property rights institutions than in nations with strong ones. "Those institutions that place an effective check and balance on the government tend to weaken the connection between sovereign and corporate credit risks," the authors write. "On the other hand, institutions that are mainly designed to strengthen protection of creditor rights or minority shareholder rights do not appear to matter much in this context."

> "An increase of 100 basis points in the sovereign's CDS spread translates into a rise of 71 basis points in corporate CDS spreads."

As the sovereign debt crisis has unfolded, the market for sovereign credit default swaps (CDS) has grown rapidly. For example, in a single year — from March 2009 to March 2010 — the volume of outstanding Italian sovereign CDS grew 37.5 percent to $223.3 billion. For Spain, it rose 53.1 percent; for Greece, it doubled.

The authors study CDS spreads — rather than traditional bond-market data for nations and companies — for several reasons. Because a nation's CDS is denominated in foreign currency, inflation does not affect these spreads as it does sovereign debt. As over-the-counter market instruments, CDS prices are not easily manipulated by governments the way that government bond yields can be. And though they have a much shorter history than traditional bonds, corporate CDS offer a straight-forward comparison with sovereign risk without requiring adjustments for extraneous changes in corporate bond risk that aren't connected to changes in sovereign risk.

Examining governments and 2,745 corporations in 30 countries over two years, the authors find that an increase of 100 basis points in the sovereign's CDS spread translates into a rise of 71 basis points in corporate CDS spreads, all things being equal. The authors explain as follows: "If a government is short of money, it could either persuade the central bank to inflate away the government debt, or more likely, pass the debt problem onto the corporate sector by raising tax revenue." But the authors find that the strength of that relationship varies. For example, the strongest correlation is reflected by state-owned companies. Their elasticity is an average 47 basis points higher than that of non-state-owned companies.

The correlation also depends on the country. Of the 30 nations in the study, the five with the highest sovereign-corporate risk correlation are Malaysia, Philippines, South Korea, Mexico, and Russia. The five countries with the lowest correlation are the United States, Norway, Japan, Belgium, and Germany. The latter group all fall within the ranks of nations with the largest constraints on government expropriation of private property, including constraints on the executive and the importance of the rule of law. All five nations in the former group rank lower down.

It is possible that causation could flow the other way. A rise in corporate risk could lead to a rise in sovereign risk if, for example, a deterioration of corporate fundamentals in the private sector forced a government takeover. But by using "price discovery" tools, the authors find that is unlikely to be the case. In most cases sovereign CDS spreads are an important driver for corporate CDS spreads in nations with weak property-rights institutions (and less so in nations with strong property-rights institutions).

"Sovereign risk on average has a statistically and economically significant influence on corporate credit risk," the authors conclude. But "not all governments have an equal ability to expropriate the private sector. In particular, the 'transfer risks' are more subdued and constrained in countries with stronger property rights institutions."

— Laurent Belsie

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