

## IN THIS ISSUE

- What Drives the Political Slant of Daily Newspapers?
- The Effect of Congressional Majorities on Financial Variables
- The Declining Gain from International Portfolio Diversification
- The Return to Capital in China

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## What Drives the Political Slant of Daily Newspapers?

Diversity of the press has been a goal of American government since Thomas Jefferson — and in this era of newspaper consolidation, it is again an area of concern. Americans need a range of viewpoints on the news to maintain a healthy democracy, according to the theory, so newspapers should remain in the hands of people with different outlooks and backgrounds. Though seemingly simple, this theory has proved surprisingly difficult to test. At the heart of the matter is a lack of an objective way to quantify the political positions of different news outlets.

In **What Drives Media Slant? Evidence From U.S. Daily Newspapers** (NBER Working Paper No. 12707), **Matthew Gentzkow** and **Jesse Shapiro** propose a solution to this measurement problem, developing a new technique for measuring the political slant of a news outlet. They go on to use their measure to argue that readers, not owners, play the most central role in determining a newspaper's slant. Media slant is a hard object to pin down, of course. To quantify it, the authors began by using data from the 2005 Congressional Record to identify the phrases that were most partisan, in the sense of being used much more often by members of one party than by members of the other. They came up with 1,000 such phrases, including "tax cut for the wealthiest" (used much more by Democrats than by Republicans) and "death tax" (used much more by Republicans).

They then counted the use of these partisan phrases in the news text of each of over 400 U.S. daily newspapers, and computed, for each newspaper, what type of congressperson (Democrat or Republican) uses language most similar

to that of the newspaper. Not surprisingly, they found that the language used by liberal congressmen also found its way into papers such as *The New York Times*, *Los Angeles Times*, and *Washington Post*. The language of conservatives was more apt to show up in the *Washington Times* and *The Wall Street Journal*.

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An illuminating example is the partisan divide over the tax on inherited wealth. In 2005, congressional Republicans, who generally oppose the tax, described it as a "death tax" 365 times, using the term "estate tax" only 46 times. Democrats did the reverse, saying "death tax" 35 times and "estate tax" 195 times. Similarly, the more liberal *Washington Post* used "estate tax" 10 times more often than it used death tax; the more conservative *Washington Times* used "estate tax" only twice as often.

Using the full range of phrases and newspapers, the authors find, contrary to conventional wisdom, that the ideology of the owners doesn't correlate in any significant way with the politi-

cal slant of their newspapers' coverage. When a single owner owns multiple papers, the authors find that each paper's language is tailored to its own market, rather than toeing a single, corporate line. Their data also show no significant relationship between a newspaper's slant and the political contributions made by its corporate owner. What instead has a big impact on newspaper bias is readers. The study found that the political outlook of a paper's readers explained about 20 percent of the variation in slant that the authors uncovered. No other factor showed such a strong correlation.

The reason for this is that owners find it more profitable to reflect the views of their readers than to impose their own perspective, the authors conclude. And, most of the newspapers studied were close to the ideological "sweet spot" that would maximize their profits, the authors calculate. Even a small deviation from this ideal bias would cut circulation by some 3 percent, so newspapers hew closely to the ideological stance that makes them the most money. "Our work shows that consumers play a fundamental role in determining the ideological positioning of media outlets," the authors write.

—Laurent Belsie

## The Effect of Congressional Majorities on Financial Variables

**I**n **Party Influence In Congress and the Economy** (NBER Working Paper No. 12751), authors **Erik Snowberg, Justin Wolfers, and Eric Zitzewitz** precisely measure financial market responses to changes in the majority party in the U.S. Congress. Their primary focus is the response of equity, currency, oil, and bond prices to changes in the probability that each party would gain a congressional majority in the 2006 midterm election. They then examine data from earlier midterm elections and compare their estimates of the effects of changes in congressional majorities to their own earlier estimates of the effect of a switch in the party of the president.

In the run-up to the 2006 midterm elections, “intrade.com” created two contracts tied to Republican majorities in Congress: one paid \$10 if Republicans held onto their majority in the Senate, the other paid the same if the GOP continued its control of the House. The latter contract traded at \$2 at the beginning of election night, suggesting that Republicans had a 20 percent chance of maintaining their majority in the House. At 5 p.m. EST, exit polls indicated a poor showing by Republicans. As vote tallies provided confirmation, the probability of Republican success sank to zero. By contrast, the probability of Republicans maintaining their majority in the Senate began at 70 percent on election night and fluctuated substantially thereafter, largely because of the extremely close tallies in Virginia and Missouri.

To quantify the economic effects of party majorities in Congress, the researchers paired prediction market data from intrade.com with prices for the December 2006 futures contract of various financial variables. They then regressed the changes in financial variables on the changes in the price of the contracts tracking the Republicans’ chances of maintaining their majorities.

They found that the estimated effect of a change in the majority party in the Senate on the S&P 500 was 0.17 percent, which while statistically significant was much smaller than the corresponding estimate of 2 percent for the Presidency in 2004. The effect of partisan majorities in the Senate on other financial variables was essentially

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zero. The relative unimportance of Congress for the economy relative to the Executive Branch is further underscored by the fact that the largest event in their financial data was a 0.6 percent rally in the S&P 500 and other indices following the post-election announcement of Donald Rumsfeld’s resignation from the cabinet.

The 2002 election is the only other midterm vote for which high frequency data from a liquid prediction market exists. The Intrade data suggest that on election night 2002, Republicans had a 90 percent chance of maintaining their majority in the House and a 40 percent chance of gaining a majority in the Senate. Throughout the tally, these probabilities increased as Republicans won majorities in both houses. The outcome for the House was so close to expectations that there was no useful election-night variation in the contract to analyze. However, there was enough variation in the Senate contract to estimate an impact on financial markets. Once again, these effects were significantly smaller than the effect of the party of the president.

The 1998 midterm election was too predictable to be of any use to the researchers, but the 1994 midterms offered enough of a surprise that the authors could correlate shifting probabilities with shifts in various financial, oil, and foreign currency

prices. Again, a change in the majority party in Congress had smaller effects on these prices than earlier or later changes in the party controlling the White House.

The authors conclude that the majority party in Congress has relatively little control over economic policy, at least as these economic levers

affect equity, bond, oil, and currency prices. This is not to deny an important role for Congress, they say, but simply to note little evidence of influence on economic aggregates. The evidence from the various midterm elections further suggests that, contrary to the popular view, markets show no preference for “divided government” (when different parties control Congress and the White House), rather than a politically unified government. The researchers point out that equity prices and bond yields rose in response to news of Republican majorities in the House and Senate (1994, 2002) despite the fact that these elections created divided and unified governments, respectively. Further, these variables fell in response to the Democratic majorities gained in 2006, which created a divided government.

The authors end their paper with two qualifications about their results: “First, as with other applications of the event study method, our approach estimates market expectations about future policy, rather than actual differences in these policies. And second, the financial variables we analyze do not speak directly to economic welfare or yield immediate normative implications.”

— Matt Nesvisky

## The Declining Gain from International Portfolio Diversification

One of the most enduring puzzles in international macroeconomics and finance is the tendency for investors to disproportionately weight their asset portfolios towards domestic securities and thus to forego the gains possible through international diversification. This tendency causes consumers to be underinsured against aggregate shocks that otherwise could have been hedged by holding foreign assets. In the framework of both macroeconomics and financial economics, the underlying source of diversification arises from the relatively low correlation in asset returns across countries.

In **Is the International Diversification Potential Diminishing? Foreign Equity Inside and Outside the U.S.** (NBER Working Paper No. 12697), author **Karen Lewis** examines the data on foreign returns from a U.S. investor's point of view to consider the impact of changing co-variances among international returns on the opportunities for diversification. She first analyzes foreign markets to consider the typical argument that domestic residents hold a less-than-optimal low portfolio allocation in foreign stock indexes.

Lewis finds that the co-variances among country stock markets have indeed shifted over time for a majority of countries. However, in contrast to the common perception that markets have become more integrated over time, the co-variance between foreign markets and the U.S. market has

increased only slightly over the last twenty years. Moreover, the standard deviation of the foreign portfolio has declined over this time.

To consider the economic significance of these changes, Lewis looks

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at a simple portfolio decision model in which a U.S. investor could choose between U.S. and foreign market portfolios. With two different assumptions about the estimates of foreign means, she finds that the optimal allocation in foreign markets actually has increased over time. This appears counter-intuitive, given that the higher degree of integration among countries increases the correlation across markets. On the other hand, the falling variance of foreign portfolios increases the allocation of assets into foreign markets.

Lewis then looks at whether foreign stocks that list in the United States can explain the lack of foreign investment. She finds, somewhat surprisingly, that the estimates of co-variation with the U.S. market have increased over time. Also, while the allocations in foreign markets do not decline much over time, the allocation into U.S. listed foreign stocks does decline, particularly in the 1990s. These results suggest that the diversification properties of domestic-listed foreign stocks are inferior to

investing directly in foreign markets.

Using a two-asset model with cross-listed foreign stocks instead of foreign market indexes, Lewis finds that the greatest gains in diversification improvement since 1994 have been in

foreign market indexes, rather than foreign cross-listed stocks or a combination of both groups.

Finally, she points out that her analysis is simply a way to demonstrate the effects of the parameters. An unconstrained, efficient portfolio decision based upon the universe of foreign stocks undoubtedly would allow a larger reduction in risk. Nevertheless, her analysis points to some general trends in the foreign portfolio diversification potentials. These trends could be summarized as follows: first, international equity markets have become more highly correlated. Second, foreign stocks inside the United States have become more correlated with the U.S. market over time. As a consequence of these trends, the attainable diversification from participating in foreign markets is declining, whether the investor holds foreign stocks inside or outside the United States.

—Les Picker

## The Return to Capital in China

China has one of the highest investment rates in the world—over 40 percent of its GDP in recent years—prompting researchers to question whether China actually invests too much. On the one hand, China is still a low-income economy, with a capital-labor ratio that is low compared

to those of advanced economies, and thus the potential returns to investment could be high. On the other hand, constraints, such as low levels of human capital, backward technology, and low quality of institutions, may limit the realization of the potential high returns to capital in China

as in other developing countries. The fact that capital often flows from poor to rich countries reminds us that the return to capital is not always higher in poor countries.

In **The Return to Capital in China** (NBER Working Paper No. 12755), authors **Chong-En Bai, Chang-Tai**

Hsieh, and Yingyi Qian attempt to answer the question of whether China invests too much. A natural metric to use in answering this question is the return to capital. Simply comparing China's investment rate with those in other countries does not necessarily give the right answer. For example, China's economic growth rate might have been so high that the return to capital has fallen little, if at all, despite high investment rates. Put differently, the investment rate in China might be high precisely *because* the return to capital in China is high. The authors try to determine whether the return to capital in China has fallen significantly over time and whether it is now low relative to returns in other countries.

The authors' estimates from China's national accounts data suggest that the return to capital in China has remained high despite China's remarkably high investment rates. When they use fixed capital formation as the basis for capital (thus excluding inventory from capital) and GDP net of labor income as the basis for capital income (thus including all taxes on businesses in capital income), they estimate that the real rate of return to capital in China was around 25 percent during 1978–93, fell during 1993–98, and fluctuated

around 20 percent since 1998. When they adjust capital by including inventory, adjust capital income by excluding all taxes on businesses, and adjust both capital and income by excluding

turing of China's industrial sector has moved it toward more capital-intensive industries, requiring higher aggregate investment rates in the steady state. The data the authors use did not allow

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the residential housing sector, they estimate that the real return to capital in China since 1978 fluctuated between 8 percent and 12 percent and rose to new highs in recent years. In both estimates, the aggregate real return to capital in China does not appear to be low by comparison with other economies.

Why have China's high investment rates not brought low returns to capital? The authors propose two possible explanations. First, output growth driven by growth in total factor productivity appears to have been quite rapid. Therefore, the capital-output ratio does not appear to have risen by much, despite the high investment rate. Second, the capital share of aggregate income has increased steadily in China since 1998, precisely the period that witnessed a significant increase in the investment rate. One explanation for this might be that a gradual restruc-

ture of China's industrial sector has moved it toward more capital-intensive industries, requiring higher aggregate investment rates in the steady state. The data the authors use did not allow them to examine the sources of the increase in the aggregate capital share since 1998, but this is clearly a fruitful avenue for future research.

An open question is the efficiency of the allocation of investment in China. While the authors find clear evidence of misallocation of investment across provinces and across the three major sectors of the economy, they also find some evidence that it may have lessened over time. However, it could be that the bulk of the capital misallocation takes place within provinces and *within* the three broad sectors. Data at the firm and farm level would be needed to address this question. The authors note that other researchers' estimates, based on firm level manufacturing data, indicate improvement in the allocation of capital across firms within sectors since 1995.

—Les Picker

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