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IN THIS ISSUE

The Impact of the Real Estate Market on Fertility

Housing prices have a significant impact on a family's decision to have children, according to a new study by **Lisa Dettling** and **Melissa Schettini Kearney.** In **House Prices and Birth Rates: The Impact of the Real Estate Market on the Decision to Have a Baby** (NBER Working Paper No. 17485), they find that a 10 percent increase in home prices leads to a 1 percent decrease in births among non-homeowners in an average metropolitan area. However, the negative effect among non-owners is offset by a 4.5 percent increase in births among current homeowners, who are now wealthier. The total fertility effect of an increase in house prices varies across demographic groups, largely because their rates of homeownership differ. The authors conclude that "house prices are a relevant factor in a couple's decision to have a baby...".

Rising home values have a negative impact on birth rates because they represent, on average, the largest component of the cost of raising a child: larger than food, child care, or education. This implies that when the price of housing rises, the price of having children also rises. This price increase leads couples to delay childbearing or to have fewer children altogether. On the other hand, for the average American household, housing constitutes a substantial portion of household wealth. When the price of housing goes up, the wealth of homeowners rises. This can lead them to choose to have children sooner or to have more children altogether. For otherwise credit constrained households, access to increased home equity can be used to fund child-related expenses. The authors find evidence for this phenomenon.

"House prices are a relevant factor in a couple's decision to have a baby."

Previous papers have considered how fluctuations in employment affect birth rates. This paper suggests that house price changes are even more important than unemployment rates in driving birth rates. When the authors look at fertility rates of women ages 20 to 44 in 66 metropolitan statistical areas (MSAs) over the period 1990 through 2006, they find a higher correlation between fertility and housing prices (0.9) than between fertility and the unemployment rate (0.3).

During the period studied, house prices rose 42 percent on average. The authors find that white women who didn't own a home were more likely to put off child-bearing at this time than any other demographic group. However, because the homeownership rate for whites (56 percent) is higher than for other demographic groups, in the aggregate the rise in house prices had a positive fertility impact on whites. A 10 percent increase in housing prices is associated with a net increase in births among whites that is four times that of blacks (whose mean homeownership rate is 26 percent) and slightly ahead of white Hispanics (whose mean homeownership rate is 32 percent.)

The negative price effect among non-homeowners is more pronounced on subsequent births than on first births. Moreover, this negative price effect appears to be larger for women over the age of 30, while the positive home-equity effect appears to be larger for those below this age.

—Laurent Belsie

Corporate Acquisitions, Diversification, and the Firm's Lifecycle

In **Corporate Acquisitions, Diversification, and the Firm's Lifecycle** (NBER Working Paper No. 17463), **Asli Arikan** and **René Stulz** analyze a dataset of over 6,000 firms that initiated an initial public offering (IPO) between 1975 and 2002 to study when public corporations make acquisitions over their lifecycle. The evidence here is inconsistent with lifecycle theories, which predict that firms acquire and diversify through acquisitions when they have exhausted their growth opportunities.

The authors study the "acquisition rate," defined as the number of acquisitions in an IPO cohort-year divided by the number of firms in that cohort-year. They find that firms are most active in the corporate acquisition market in the year following their IPO. Those results are mainly driven by the merger/IPO wave of the 1990s, during which young firms were dramatically more acquisitive than mature firms. The acquisition rate follows a u-shape. It is higher when firms are young (their first three complete calendar years as public firms) and when they are mature (years ten to twenty) than when they are middle-aged (years four to ten). These results hold even after controlling for the fact that firms that go public vary in their age since incorporation. The u-shape pattern in the acquisition rate is driven by the cohorts that had their IPO after 1991. The cohorts that had IPOs in the 1970s and the 1980s have a peak acquisition rate when the firms are more mature (in year ten or later for all but two cohorts).

"The acquisition rate follows a u-shape: ... higher when firms are young ... and when they are mature ... than when they are middle-aged."

Young firms also differ from mature firms in the type of acquisitions they make. Young firms make fewer acquisitions of public firms than mature firms, but they are more likely to acquire private firms and subsidiaries. Surprisingly, firms make diversifying acquisitions early in life: 40 percent of the acquisitions in the first year following the IPO are diversifying acquisitions, that is, acquisitions of targets in a different industry from that of the acquirer. The authors find that firms make diversifying acquisitions at roughly the same rate early in their life as they do when they mature.

If acquisitions are made because internal growth opportunities have vanished, then the market should react adversely to acquisitions by young firms, and especially diversifying ones, since those firms just went public based partly on their investment opportunities. On the other hand, if young firms make acquisitions to exploit their growth opportunities because acquisitions are complementary to capital expenditures, then there is no reason for the market to react adversely to acquisitions. The results of this study show that the market generally reacts more positively to acquisitions by young firms than to those by more mature firms. There is no evidence that the market punishes diversifying acquisitions by young firms relative to other acquisitions. Both facts support the complementary nature of acquisitions and internal investment for young public firms.

— Claire Brunel

What Do Boards Really Do?

In **What Do Boards Really Do? Evidence from Minutes of Board Meetings** (NBER Working Paper No. 17509), **Miriam Schwartz-Ziv** and **Michael Weisbach** find that boards spend most of their time monitoring management rather than making business decisions. However, on occasion they do make managerial decisions.

The researchers analyzed a year's worth of minutes of board meetings from the period 2007–9 for each of nine companies for which the Israeli government had a controlling equity stake. The companies ranged in size from a few dozen employees to more than 10,000 workers. In all, there were 155 board meetings and 247 board-committee meetings, and 2,459 decisions were made or updates given.

The board minutes contain a complete record of everything said at the meetings and were not filtered for sensitive information. The authors constructed a database containing: the topics discussed at the meeting; whether a decision was made, and if it followed the CEO's recommendation; whether the board took an initiative to modify or more broadly define the actions to be taken, or requested further information or an update; whether the board was presented with at least two proposals to consider; and whether there was any dissent around a vote.

"Boards were more likely to receive updates than to make decisions [and] ... they were rarely presented with alternatives."

These data suggest that, most of the time, boards play supervisory rather than managerial roles. In particular, Schwartz-Ziv and Weisbach find that the boards were more likely to receive updates than to make decisions; that they were rarely presented with alternatives; and that they almost always voted in line with the CEO. Nevertheless, the boards examined were active: in 63 percent of the meetings, the boards took some type of action. On about 8 percent of the issues discussed, the boards requested further information. On roughly as many issues, they took initiatives on their own. Taken together, these findings suggest that boards could be characterized as "active monitors" — their activity chiefly involves supervising management rather than dictating the specifics of how the company is run.

Schwartz-Ziv and Weisbach emphasize that they are studying data from a single year from a small sample of companies in a single country. These companies are government-controlled rather than privately held, which raises a potential concern about the extent to which the findings can be generalized. Government company directors, the authors note, are appointed rather than elected, and their monetary incentives are typically smaller than in privately held companies. Notwithstanding these limitations, this unique data allows them to observe real dynamics within boards and between boards and their CEOs.

— Matt Nesvisky

Culture and Norms Affect Immigrant Women's Work

The share of the U.S. population that is foreign-born has risen from 4.8 percent in 1970 to 12.2 percent in 2009. Furthermore, the combined Asian and Latin American share of U. S. immigrants was 81.1 percent in 2009, a fact that may be important because the culture and norms surrounding the issue of women's work outside the home in a woman's home country influence whether she will be employed in the United States.

In **Substitution between Individual and Cultural Capital** (NBER Working Paper No. 17275), authors **Francine Blau** and **Lawrence Kahn** analyze data from the New Immigrant Survey. They find that women who migrate from countries with relatively high levels of female labor supply work more once they arrive in the United States. Furthermore, the effect of source-country female labor supply on an immigrant woman's work hours in the United States remains strong and positive even after the researchers control for her own labor supply before coming to the United States.

The researchers also find that source-country female labor supply has a much stronger effect for those who did not work for pay in their home country than for those with prior work experience. Moreover, there is a stronger impact of pre-migration work experience on work in the United States for women from source countries with low female labor supply than for women from high-female-labor-supply countries.

> "The effect of source-country female labor supply on an immigrant woman's work hours in the United States remains strong and positive even after the researchers control for her own labor supply before coming to the United States."

The discovery of this negative interaction effect between a female immigrant's previous work experience and the prevalence of female labor supply in her home country in predicting immigrant women's U.S. work hours and wages suggests that cultural capital can substitute for individual job-related human capital in affecting preparedness for work in the United States. The large positive effect of source-country female labor supply on the work hours of women who did not work before migrating suggests that there can be substantial cultural or social capital effects on immigrant women's labor supply.

In most economic analyses of labor supply, an individual's preparedness for work depends on traditional measures of human capital, such as education or prior work experience. But by comparing immigrant women who come to the United States from different countries with different gender roles, and with or without prior experience, this research suggests that cultural capital — that is, women's work roles in the source country — is also an important source of labor market skills, as well as an influence on preferences for market work.

— Lester Picker

Payout Taxes and the Allocation of Investment

Payouts of corporate earnings, whether in the form of dividends or share repurchases, are subject to taxation in most countries. Those taxes drive a wedge between the cost of internal equity finance, from retained earnings, and external equity finance, from new share issues. Higher taxes on corporate payouts are expected to "lock in" investment in currently-profitable firms that generate retained earnings, relative to firms with good investment opportunities that require external equity financing. Put differently, payout taxes favor investment financed by retained earnings over investment financed by equity issues.

In **Payout Taxes and the Allocation of Investment** (NBER Working Paper No. 17481), authors **Bo Becker, Marcus Jacob,** and **Martin Jacob** use an international dividend and capital gains tax dataset covering 25 countries during 1990–2008 to assess this "lock-in effect". Their data include 15 substantial tax reforms and 67 discrete changes in dividend or capital gains tax rates. They use this tax database to test if the allocation of investment across firms with and without access to internal equity depends on payout taxes.

> "High payout taxes lock in capital at firms that generate internal cash flows."

The authors find that payout taxes do affect the allocation of capital across firms. High payout taxes lock in capital at firms that generate internal cash flows. If firms have different investment opportunities, this means that tax rates change the type of investments being made. For example, high payout taxes may favor established industries. The authors suggest that taxes on payout may be as important for investment decisions and the cost of capital as is the corporate income tax.

The authors also find that the effect of payout taxes is related to both access to the equity market and governance. Firms that can access the equity market are most affected by tax changes, because such tax reforms have an effect on the costs of raising equity. Firms that rely on retained earnings for equity finance are less affected by taxes. Governance also has an influence on investment decisions. Firms in which decision makers have low financial stakes are less affected by tax changes, reflecting their propensity to make investment decisions for reasons unrelated to the cost of capital.

— Lester Picker

Copyright Protection and the Quality of Recorded Music Since Napster

Napster was the first widely used program that allowed music lovers to share music by exchanging MP3 files, thereby allowing millions of people to enjoy music without paying for it. Recorded music revenues plunged, raising a concern that piracy would stem the flow of good new music. In **Copyright Protection, Technological Change, and the Quality of New Products: Evidence from Recorded Music Since Napster** (NBER Working Paper No. 17503), **Joel Waldfogel** explores the possibility that technological changes in the music industry "may have altered the balance between technology and copyright law for digital products." Despite music industry claims that digital piracy harms consumers by undercutting its revenues and reducing the amount of new music that it can bring to market, he constructs indexes of music quality based on critics' best-of lists, airplay, and sales that show no evidence of a decline in music quality since Napster.

Waldfogel's first index of music quality is based on critics' retrospective lists of the best music (for example, "best of the decade"). It encompasses 88 different rankings from the United States, England, Canada, and Ireland, and covers more than 16,000 musical works from 1960 to 2007. Statistically combining information from these sources results in an overall quality index that rises between 1960 and 1970, declines through the 1980s, rises again in the mid-1990s, declines in the latter half of the 1990s, and is stable for the period after 2000. Waldfogel concludes that although the index was falling prior to the appearance of Napster, it is stable after 2000 and thus shows no evidence of a decline in quality.

"The quality of new music has not fallen since Napster."

His second and third indexes are derived from data on radio airplay and sales of music. Music is aired on radio less, and sells less, as it gets older; but if a vintage is better, it will receive more sales or airplay after accounting for such depreciation. Using data on the frequency with which songs originally released as early as 1960 were aired on the radio from 2004 to 2008, Waldfogel constructs an airplay-based vintage quality index suggesting that music quality rose from 1960 to 1970, fell until at least 1985, and rose substantially after 1999. The analogous sales-based index is derived from Recording Industry Association of America Gold (sales greater than 500,000 copies) and Platinum (sales greater than one million copies) certifications. The sales-based index echoes the result of other indexes: it rises from 1960 to 1970, falls to the 1980s, and then rises sharply after 1999.

Based on the movements of these three indexes over time, Waldfogel concludes that "the quality of new music has not fallen since Napster." The post-Napster flow of product appears to be as strong as or stronger than it was before Napster, with independent labels accounting for a growing share of successful albums. Although it is impossible to determine whether creative output is as high as it would have been without Napster, the evidence does not suggest that innovations in digital technology, and associated changes in effective copyright protection, reduced the quality or quantity of new music.

— Linda Gorman

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