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The Purchase of Company Stock in 401(k) Plans

urrently, about 45 million workers participate in a 401(k)-type plan, and aggregate assets of these plans totaled \$1.97 trillion in 2001. The trend toward 401(k)-type plans has forced employees to make decisions about how and how much to save. In addition to traditional investment choices, employees are often given the option to invest their 401(k) contributions in company stock. Company stock is offered as an investment option in 72 percent of retirement plans with more than 5,000 participants. At Enron, for example, 62 percent of 401(k) assets at year-end 2000 were held in company stock. Part of the high concentration reflected the company's match in Enron shares, but Enron employees also were allocating a large fraction of their own, discretionary contributions to company stock. Such a high concentration of retirement assets in company stock is not unique to Enron. Many workers do not have welldiversified retirement plan portfolios. For example, at General

Electric, Home Depot, and Pfizer, more than 75 cents of every dollar in defined contribution plan assets is held in company stock.

In Investor Behavior and the Purchase of Company Stock in 401 (k) Plans: The Importance of Plan Design (NBER Working Paper No. 9131), co-authors Nellie

features as implicit investment advice by the firm.

The number of investment alternatives offered by the plan is a significant indicator of the share of contributions in company stock. Allocations to company stock are substantially lower in plans that offer more alternatives. The authors

"Allocations to company stock are substantially lower in plans that offer more alternatives. The authors cannot reject the hypothesis that investors follow a simple "1/n" investment allocation for company stock, where n is the total number of investment alternatives available."

Liang and Scott Weisbenner examine the factors that influence investment decisions made by participants in retirement plans. They find that the characteristics of the 401(k) plan strongly influence investment decisions by participants because the employees follow naïve diversification rules and view plan

cannot reject the hypothesis that investors follow a simple "1/n" investment allocation for company stock, where n is the total number of investment alternatives available. However, the full reduction in allocations to company stock in response to an increase in investment options takes about 4 to 5 years, probably

because of investor inertia.

The authors also find that employees appear to interpret restrictions on asset allocation put forth by the firm as providing implicit investment advice regarding the purchase of company stock. The employees of firms that have a match in company stock put more, not less, of their own contributions in company stock. In addition, a switch from allowing the employee to invest the match without restriction to requiring that the match be all in company stock is not offset by the employee investing less of his own contributions in company stock. An examination of other plan restrictions, such as minimum or maximum limits on company stock purchases, further suggests that workers take investment cues from plan restrictions.

Because the plan features are so important in determining the purchase and holdings of company stock, the authors ask what determines the number of investment options offered and the employer match policy. They find that firms have offered more options in recent years, possibly because the proliferation of mutual funds has made it easier to offer more alternatives. The only significant determinant of the employer match in company

stock is whether the firm pays dividends. This link to dividends likely reflects the fact that when the match is in company stock, then the match contributions can be paid into a leveraged ESOP. This is desirable, because then the subsequent dividends paid on the stock will be considered compensation expense and thus will reduce a firm's future taxes.

The authors studied 994 publicly traded companies from 1991 to 2000, where the average share of participants' discretionary 401(k) contributions in company stock was 19 percent.

— Les Picker

What Reduced Crime in New York City?

During the 1990s, crime rates in New York City dropped dramatically, even more than in the United States as a whole. Violent crime declined by more than 56 percent in the City, compared to about 28 percent in the nation as whole. Property crimes tumbled by about 65 percent, but fell only 26 percent nationally.

Many attribute New York's crime reduction to specific "gettough" policies carried out by former Mayor Rudolph Giuliani's administration. The most prominent of his policy changes was the aggressive policing of lower-level crimes, a policy which has been dubbed the "broken windows" approach to law enforcement. In this view, small disorders lead to larger ones and perhaps even to crime. As Mr. Guiliani told the press in 1998, "Obviously murder and graffiti are two vastly different crimes. But they are part of the same continuum, and a climate that tolerates one is more likely to tolerate the other."

In Carrots, Sticks and Broken Windows (NBER Working Paper No. 9061), co-authors Hope Corman and Naci Mocan find that the "broken windows" approach does not deter as much crime as

meanors had risen by 10 percent, indicating increased use of the "broken windows" method, robberies dropped 2.5 to 3.2 percent, and motor vehicle theft declined by 1.6 to 2.1 percent. But this decline was not the result of more of those

"The police measure that most consistently reduces crime is the arrest rate... Felony arrest rates (except for motor vehicle thefts) rose 50 to 70 percent in the 1990s. When arrests of burglars increased 10 percent, the number of burglaries fell 2.7 to 3.2 percent. When the arrest rate of robbers rose 10 percent, the number of robberies fell 5.7 to 5.9 percent."

some advocates argue, but it does have an effect, particularly on robbery and motor vehicle theft. They use misdemeanor arrests as a measure of broken windows policing.

Over the 1990s, misdemeanor arrests increased 70 percent in New York City. When arrests for misde-

involved in misdemeanors being incapacitated from further crimes by being in prison: prison stays for misdemeanors are short and only 9.4 percent of misdemeanor arrests result in a jail sentence, the authors note. Furthermore, an increase in misdemeanor arrests has no impact

on the number of murder, assault, and burglary cases, the authors finds.

Corman and Mocan identify several factors that could affect crime rates. For example, the police force in New York City grew by 35 percent in the 1990s, the numbers of prison inmates rose 24 percent, and there were demographic changes, including a decline in the number of youths.

Skeptics believe that it was the economic boom of the 1990s — a "carrot" that encourages people to remain on the straight-and-narrow — that brought about the drop in crime rates in New York City and the nation. The national unemployment rate declined 25 percent between 1990 and 1999, and by 39

percent in the city between 1992 and 1999. This study shows that a single percentage point decline in the jobless rate decreases burglary by 2.2 percent and motor vehicle theft by 1.8 percent. Increases in the real minimum wage also significantly reduce robberies and murders: 3.4 to 3.7 percent fewer robberies with a 10 percent increase in the minimum wage and 6.3 to 6.9 percent fewer murders.

The police measure that most consistently reduces crime is the arrest rate of those involved in crime, the study finds. Felony arrest rates (except for motor vehicle thefts) rose 50 to 70 percent in the 1990s. When arrests of burglars increased 10 percent, the number of burglaries fell 2.7 to 3.2 percent.

When the arrest rate of robbers rose 10 percent, the number of robberies fell 5.7 to 5.9 percent. In the case of murder, the decline was 3.9 to 4 percent; in the case of assault, 2 to 2.4 percent; and for motor vehicle theft, 5 to 5.1 percent.

The contribution of such deterrence measures (the "stick") offers more explanation for the decline in New York City crime than the improvement in the economy, the authors conclude. Between 1990 and 1999, homicide dropped 73 percent, burglary 66 percent, assault 40 percent, robbery 67 percent, and vehicle hoists 73 percent. The authors' model manages to explain between 33 and 86 percent of those declines.

— David R. Francis

Public Disability Insurance and Private Health Insurance

isability Insurance (DI), one of America's largest social insurance programs, pays out cash benefits and provides health insurance for 4.7 million beneficiaries. However, health coverage under DI, provided through the Medicare program, is only available after a two-year waiting period. Are many individuals left with no health insurance coverage during that waiting period? And, does the waiting period deter applications for DI by people who would lose their health insurance if they left their job and who do not have an alternative source of insurance?

In Health Insurance Coverage and the Disability Insurance Application Decision (NBER Working Paper No. 9148), authors Jonathan Gruber and Jeffrey Kubik examine these questions using data from the Health and Retirement Survey, which follows a sample of people born in 1931-41 for up to 10 years. The survey asks about their sources of health insurance coverage, DI applications and their receipt of DI benefits, and includes demographic and job characteristics. The survey asks for detail about health insurance provided by the individual's current

In fact, coverage rises, because individuals experience only a modest reduction in employer coverage, about 9 percent. This is more than offset by increased coverage from: spousal insurance (9 percent), Medicaid coverage and other public coverage (4 percent), and retiree coverage and other private coverage

"In spite of the waiting period before those on DI receive Medicare coverage, there is no reduction in insurance coverage among DI applicants."

employers, the availability of retiree health insurance coverage, and spousal health insurance coverage.

Gruber and Kubik show that, in spite of the waiting period before those on DI receive Medicare coverage, there is no reduction in insurance coverage among DI applicants. (5 percent). Hence, the researchers show that the waiting period does not lead to lower insurance levels among DI beneficiaries.

However, it turns out that individuals who would lose health insurance while waiting for Medicare coverage under DI are deterred from

applying to the program. The authors find that individuals with an alternative source of coverage if they lose their jobs are 26-74 percent more likely to apply to the DI program than those who do not have an alternative source of health insurance.

These findings suggest that reducing the waiting period or otherwise enhancing the insurance coverage of DI applicants would not do much to increase insurance coverage. Rather, it would serve chiefly to replace private sources of coverage with public coverage. However, enhancing insurance during the waiting period would promote applications for DI, and the implications of increased applications are unclear. If the applications come from the least disabled individuals, this might not be a good

use of public funds. However, if the individuals who are deterred from applying by the waiting period are the most disabled applicants, those who cannot bear the risk of going without coverage for any period of time, then there could be major societal gains from loosening what the researchers call the "application lock"

— Andrew Balls

Explaining the Flood of Asbestos Cases

Lithough asbestos has not been used since the 1970s, the number of asbestos personal injury claims filed each year has been increasing, rather than decreasing, over time. At least 600,000 people have now filed asbestos exposure claims. Eighty firms have filed for bankruptcy because of asbestos liability, including 30 since the beginning of 2000. Insurers have paid out approximately \$32 billion in compensation to date and the total cost of asbestos compensation is projected to be between \$200 and \$275 billion, making asbestos the largest mass tort in U.S. legal history.

In Explaining the Flood of Asbestos Litigation: Consolidation, Bifurcation and Bouquet **Trials** (NBER Working Paper No. 9362), Research Associate Michelle J. White finds that because most asbestos claims are filed in a small number of states and jurisdictions, judges in these jurisdictions have thousands of cases on their dockets. In response, they have developed new legal procedures intended to resolve large numbers of cases at once by encouraging mass settlements. These new legal procedures have changed trial outcomes in plaintiffs' favor. As a result, they give plaintiffs' lawyers incentives to

file large numbers of additional cases in the same jurisdictions, thereby making the asbestos crisis worse

One of the procedural innovations is consolidation, which involves trials of multiple claims before a single jury. Another is bifurcation, which divides the trial into liability and damage phases. After the first phase, trial judges direct the parties to settle and may become directly involved in the negotiations. Some-

innovations have worsened the asbestos crisis by making trial outcomes more favorable to plaintiffs and therefore giving plaintiffs' lawyers an incentive to file additional claims in the same courts. Using a dataset of asbestos trials from 1987 to 2002, she finds that bifurcation and bouquet trials increase plaintiffs' expected returns from trial from \$636,000 to about \$1.8 million, nearly a three-fold increase. In consolidation of up to seven plain-

"Legal innovations have worsened the asbestos crisis by making trial outcomes more favorable to plaintiffs and therefore giving plaintiffs' lawyers an incentive to file additional claims in the same courts."

times judges threaten that, if the parties do not settle, they will direct the jury to consider punitive damages. The third procedural innovation involves bouquet trials, in which a small group of cases is selected for trial from a much larger group. At the end of the bouquet trial, the judge directs the parties to settle the larger group of cases based on the template of the small group outcomes.

White finds that these legal

tiffs' cases, plaintiffs receive between \$200,000 and \$305,000 more, an increase of 31 to 48 percent. These figures include both compensatory and punitive damages.

In the three most pro-plaintiff states — Mississippi, West Virginia, and Texas — which have become centers for asbestos litigation, the expected return from trial is \$1 million to \$2 million higher than in the other states.

— Les Picker

School Spending Raises Property Values

An enduring question in education policy is whether spending additional public resources improves schools. Those who argue against strategies to increase public spending argue that current spending levels are too high and that public schools spend their current revenues inefficiently.

In Using Market Valuation to Assess Public School Spending (NBER Working Paper No. 9054), co-authors Lisa Barrow and Cecilia Rouse first examine whether an additional dollar of public money spent on schools increases residential property values. If it does, then consumers presumably value the additional spending because it increases school quality. Further, the authors evaluate whether the current level of spending is too high.

School expenditures are financed with both state and local contributions. Each state has a financing formula for determining the state aid to each district, and these formulas are revised periodically. The state portion of the contribution often is negatively related to property values because states try to equalize expenditures across rich and poor districts. Thus, it is difficult to assess directly the effects of an increase in state aid on school quality as it may reflect a worsening of other conditions in the local district that also affect school quality. To overcome

this difficulty, the authors examine 1980-to-1990 changes in property values resulting from changes in state aid for schools that arise *solely* from changes in state financing formulas — they control for an extensive list of district and county characteristics that may also affect property values.

Their results suggest that, overall, a \$1.00 increase in per pupil state aid increases aggregate per pupil housing values by about \$20.00, indicating that potential residents value education expenditure.

because households with greater income can afford to consider a wider range of schooling and housing options, school spending in districts with wealthier residents may be more efficient. Similarly, the degree of external competition that a school district faces (from having many neighboring districts) or the district's size may also affect the efficiency of school spending.

To test whether wealthier and more educated school districts spend their revenues more efficiently, the authors categorize school dis-

"... A \$1.00 increase in per pupil state aid increases aggregate per pupil housing values by about \$20.00, indicating that potential residents value education expenditure."

Further, their results suggest that some of the increase in value reflects lower local tax burdens, but most reflects increases in total per pupil district expenditures. Finally, they conclude that there is no evidence that school districts are overspending, on net.

However, this overall result may mask important differences, because some school districts may operate more efficiently than others. Specifically, the authors note that tricts by average household income and education level of the adult population, as well as by the degree of competition faced by the district, and the district's size. Although potential district residents on average value additional state revenues, the authors find that "large school districts, and those areas with fewer homeowners and in areas in which residents are poor or less educated" are more likely to overspend.

— Linda Gorman

Does Confidential Proxy Voting Matter?

onfidential voting in corporate proxies is a principal recommendation of activist institutional investors, such as TIAA-CREF, and is the first principle listed among the "core corporate governance policies" of the Council of Institutional Investors. The rationale behind these recommendations is that shareholders with conflicts of interest will not feel constrained to vote with management if it cannot be determined how they voted. Confidential voting also should limit re-solicitation efforts that occur when it becomes apparent that votes are not going in favor of management. Proponents of this view believe that those most vulnerable to re-solicitation efforts are shareholder entities, such as financial services firms, that have a conflict of interest.

In **Does Confidential Proxy Voting Matter?** (NBER Working Paper No. 9126), author **Roberta Romano** examines the impact of the adoption of confidential voting on 130 corporations from 1986-98. She finds that the adoption of confidential voting procedures had no significant impact on subsequent

Romano also finds that stock value is not changed by adoption of these procedures. This may explain why so many firms voluntarily adopt confidential voting procedures; it apparently does not matter in terms of voting outcomes or

"The adoption of confidential voting procedures had no significant impact on subsequent voting outcomes."

voting outcomes. Support for share-holder proposals did not increase and support for management proposals did not decrease after adoption of the confidential voting procedure. Specifically, financial institutions, whose votes could be construed as being constrained because of conflicts of interest, do not change their level of support for management proposals once confidential voting is enacted.

stock performance, results that are similar to research conducted on three other categories of activist investor proposals, namely defensive tactics, board independence, and executive compensation. Romano concludes that investor initiatives aimed at confidential voting are not a fruitful allocation of investors' resources.

— Les Picker

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