Labor Dispute Caused Poor Quality Products

In August 2000, Bridgestone/Firestone and Ford jointly announced the recall of 14.4 million tires, some 6.5 million of them still on the road, mostly on Ford Explorers. It was big business news, especially after the National Highway Traffic and Safety Administration (NHTSA) the following month issued an advisory concerning several other sizes and models of Firestone tires and asserted that Firestone tires under investigation were related to 271 fatalities and more than 800 injuries. The most common source of failure of the recalled tires was tread separation: that is, a sudden detachment of the tire’s rubber tread from the steel belts, causing the tire to blow out.

At the time, a number of observers — members of Congress, plaintiffs’ attorneys, and reporters — hypothesized that the tire problem was related to a long, contentious strike at a plant in Decatur, Illinois, that made many of the tires involved. They speculated that under-trained replacement workers or lax supervision during the strike contributed to an excess number of tire defects. Or that workers may have been fatigued and more prone to errors because Firestone had introduced a 12-hour, rotating shift to operate the plant 24 hours a day during the strike.

In *Strikes, Scabs and Tread Separation: Labor Strife and the Production of Defective Bridgestone/Firestone Tires* (NBER Working Paper No. 9524), coauthors Alan Krueger and Alexandre Mas do find that labor strife in the Decatur plant coincided closely with lower product quality, but the story is not simply that replacement workers made bad tires. Instead, defects peaked when strikers returned to the plant, and just before they went out on strike. Thus the paper provides new evidence on the impact of labor strife on the quality of production at the plant level, and suggests that workers provide more effort and due diligence if they feel that they are being treated better.

“…tires made in Decatur during the labor dispute were some 15 times more likely to have resulted in a financial claim against the company than were tires manufactured in other plants.”

The available data also enable the authors to rule out several other explanations that might account for the excessive number of defects found in tires produced in the Decatur plant during the period of the labor dispute, from 1994 to 1996.

For instance, Bridgestone/Firestone executives blamed the tire defects in part on the design of the Ford Explorer, which they argued was prone to roll over. They also argued that Ford recommended that the air pressure of the tires be set at 26 pounds per square inch, while the tire manufacturer recommended 30 PSI. At lower pressures, tires
Colleges work hard to lure exceptionally high achieving students. Typically, high achieving students can expect to receive individualized packages of loans, grants, and work opportunities from each school where they apply. The package structure will depend on parents’ ability to pay, the student’s demonstrated ability, and how well the college thinks the student fits its needs. If students are rational investors, then they will look beyond the superficial aspects of college aid, and refuse to attend schools offering good aid packages but reduced human capital investments that will affect their lifetime earnings.

In Do and Should Financial Aid Packages Affect Students’ College Choices? (NBER Working Paper No. 9482), co-authors Christopher Avery and Caroline Hoxby followed a specially constructed sample of high achieving students through the college admissions process in 1999-2000. Mean SAT scores for the sample were in the 90th percentile nationally. The data included parental preferences, the schools to which the students applied, and the schools where they enrolled. Information on aid was collected by questionnaire, and information on college costs and administration was gathered from the college students themselves.

The results suggest that students make rational choices, overall. They are more likely to attend more selec-
Mergers and acquisitions destroy shareholder wealth in the acquiring companies. New research from the NBER shows that, over the past 20 years, U.S. takeovers have led to losses of more than $200 billion for shareholders. However, this result is dominated by the big losses experienced by shareholders in big companies.

Small companies that make acquisitions create value for their shareholders.

In *Do Shareholders of Acquiring Firms Gain from Acquisitions?* (NBER Working Paper No. 9523), co-authors Sara Moeller, Frederik Schlingemann, and Rene Stulz calculate that takeovers by large firms have destroyed $226 billion of shareholder wealth over 20 years. In contrast, small firms, defined as companies whose market capitalization is equivalent to the smallest 25 percent of companies listed on the NYSE in each year, created $8 billion of shareholder wealth through their transactions.

The researchers use a sample of 12,023 transactions, taking the data from the Securities Data Company's U.S Mergers and Acquisitions database. They limit the sample to completed transactions worth at least $1 million. Of the 12,023 transactions, 5,583 involved the acquisition of private firms, 3,798 involved the acquisition of subsidiaries, and 2,642 involved the acquisition of public firms. The abnormal return on the acquisition of a public firm is negative 1.02 percent. Shareholders lose 5.9 cents per dollar spent on acquiring a public firm. The aggregate losses on acquiring public firms were $257 billion in the past 20 years. Purchases of private firms provide better returns than purchases of public companies. On average, acquiring firm shareholders gained from the purchase of private firms, although in the aggregate shareholders lose because of big losses experienced during the merger wave of the late 1990s. It is only in acquiring subsidiaries, as opposed to whole companies, that returns are positive for acquiring shareholders in the aggregate.

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Previous studies often have concentrated on whether acquisitions
are paid for in cash or in stock, typically showing better returns in cash deals. Moeller, Schlingemann, and Stulz show that cash deals are associated with superior returns for acquirers as compared with equity deals only for acquisitions of public firms. They also show that controlling for financing, and for the question of whether it is a public company, a private company, or a subsidiary that is being bought, returns are still better for shareholders in smaller firms. An acquisition made by a small firm — regardless of funding and the nature of the target — has an announcement return that is 1.55 percent higher than a comparable acquisition made by a large firm.

The overall results are dominated by acquisitions made by large firms, and in particular the big value-destroying deals announced during the merger boom of the late 1990s. If the period 1994-2001 is excluded from the sample, the total dollar amount of gains/losses on acquisitions is still negative, but the sum of losses is only $10.4 billion. More than 87 percent of the money spent on acquisitions in the sample comes after 1993, accounting for 95 percent of the losses that also occurred after 1993.

Because small firms make so many acquisitions — accounting for half of the total acquisitions of private companies and a quarter of the acquisitions of private companies — abnormal returns can be positive for acquisitions even though acquisitions appear to destroy wealth as a whole. Results that put the same weight on acquisitions by small firms and large firms may be poorly suited for analyses of the social benefits of acquisitions, the researchers suggest.

Part of the explanation for why big companies make value-destroying acquisitions may be the “agency problem” that results from the separation of ownership and control in big companies with dispersed shareholders. It is also possible that when large firms make acquisitions, they signal that they have exhausted internal growth opportunities. In that case, even when the takeover is a project with positive net present value, a negative return may be observed when looking at the share price following the transaction.

Yet, even if the abnormal returns incorporate information other than an estimate of the net present value of the acquisition, this information differs across small and large companies. Small firms make acquisitions that, when announced, have an abnormal return that is systematically higher than acquisitions by large firms.

— Andrew Balls

Responses to Health Insurance Premium Increases

As insurance premiums rise, the use of flexible benefit plans, in which employees explicitly choose how to allocate compensation between cash and various benefits, has been increasing in the United States. Currently, approximately 13 percent of workers in medium and large firms are covered by such plans.

In *The Reallocation of Compensation In Response to Health Insurance Premium Increases* (NBER Working Paper No. 9540), authors Dana Goldman, Neeraj Sood, and Arleen Leibowitz investigate how increases in health insurance premiums affect workers’ decisions to reallocate their compensation. They find that a $1 increase in health insurance premiums leads to a 52-cent increase in employee expenditures on health insurance. Employees finance approximately two-thirds of that increase through reduced wages and one-third through reductions in other benefits, such as retirement, life insurance, and disability insurance. Rising health insurance prices not only reduce employee resources for current consumption, but also lower insurance purchases against a variety of risks, potentially leaving employees vulnerable to health, mortality, disability and other significant risks in the long term.

The authors use a dataset consisting of three years (1989-91) of earnings and benefit information for employees under age 65 at a single U.S. company. While the data is ten years old, the period was characterized by rapidly rising health insurance premiums, a situation that is still true today. The 7,896 employees in the sample were geographically dispersed over 47 states. All are single employees, since no information was available on health insurance options available to spouses.

Employees at the firm were given a menu of benefit options...
Capital account liberalization policies have fallen from favor in recent years. Initially they were touted as a way to permit financial resources to flow from capital-abundant countries, where expected returns on investment are low, to capital-scarce countries, where expected returns are high. The inflow of capital was expected to reduce an emerging economy’s cost of capital, to increase investment, and to raise output. However, opponents of capital account liberalization have argued that it does not generate greater efficiency and, in fact, invites speculative money flows, thus increasing the likelihood of financial crises with no positive effects on investment and output.

In Capital Account Liberalization, The Cost of Capital, and Economic Growth (NBER Working Paper No. 9488), author Peter Blair Henry finds that the initial predictions about capital account liberalization hold true in actual practice. Three things happen when emerging economies open their stock markets to foreign investors. First, the aggregate dividend yield falls by an average of 240 basis points per year. Third, the growth rate of output per worker rises by 2.3 percentage points per year.

According to the author, because the cost of capital falls, investment soars, and the growth rate of output per worker increases when countries liberalize the stock market, the recently popular view that capital account liberalization brings no real benefits seems untenable.

“Three things happen when emerging economies open their stock markets to foreign investors. First, the aggregate dividend yield falls by an average of 240 basis points. Second, the growth rate of the capital stock increases by an average of 1.1 percentage points per year. Third, the growth rate of output per worker rises by 2.3 percentage points per year.”

In the late 1980s and early 1990s a number of developing countries liberalized their stock markets, opening them to foreign investors for the first time. The author uses these 18 countries as the basis for his research. The approximate 240 basis point decline in dividend yield reflects an average of yield of 5 percent in the five years prior to liberalization versus an average yield of 2.6 percent in the five years following liberalization. The growth of the capital stock rose from an average of 5.4 percent in the pre-liberalization period to 6.5 percent in the post-liberalization period. Finally, the output per worker rose from an average of 1.4 percent pre-liberalization to 3.7 percent post-liberalization.

Henry points to several issues regarding capital account liberalization that we need to understand better, such as whether the policy causes financial crises when adopted. He suggests that moving from aggregate-level data to firm-level data should enhance our general understanding of the process by which the effects of liberalization are transmitted to the real economy.

— Les Picker
Teacher Certification Raises Salaries but not Quality

As of 1999, 43 states required prospective teachers to pass a certification test. Proponents of testing say it establishes minimum quality standards. Economists have long been skeptical of such claims, pointing out that there is little evidence that licensing requirements create benefits for consumers and quite a bit of evidence to suggest that they create barriers to entry that raise pay rates in the professions that they protect.

In Does Teacher Testing Raise Teacher Quality? Evidence From State Certification Requirements (NBER Working Paper No. 9545), co-authors Joshua Angrist and Jonathan Guryan estimate the effect of state teacher testing requirements on teacher wages and teacher quality. Preparation for teacher certification tests is costly. If private sector jobs with similar wages but less costly entry requirements are readily available, then the best applicants may choose those over public school teaching, lowering the average quality of the new teacher pool. Using data from the Schools and Staffing Survey, the authors find that state-mandated testing for teachers increases their wages by 3 to 5 percent but has no observable effect on their quality, as measured by the average SAT score of an individual teacher’s undergraduate institution.

Consistent with their finding of no quality benefit from testing teachers, the authors point out that “while occupational licensing requirements are widespread and apparently increasing, most skilled workers in the private sector are still not subject to formal licensing or testing.”

— Linda Gorman

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