ECONOMIC SCENE

Fewer workplace injuries and illnesses are adding to economic strength.

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WITH little fanfare, the workplace has become a safer place to be. Since 1992, the number of work-related injuries and illnesses has fallen 25 percent, to 6.7 per 100 full-time workers from 8.9. This unexpected improvement translates to at least a $125 billion annual lift for the economy.

The decline in injuries is remarkable because it reverses a historical pattern discovered by Robert S. Smith of Cornell in 1972: injuries usually rise when unemployment falls because work intensity increases and many inexperienced workers are hired. Yet the tightest labor market in a generation has coincided with the lowest work-related injury and illness rate since the Bureau of Labor Statistics started tracking it.

In 1998, the latest year with available data, there were 5.9 million cases of work-related injuries and illnesses -- mostly injuries -- in the private sector. If the pre-1992 cyclical pattern had held, one would have expected three million more.

For more serious injuries and illnesses -- those requiring time away from work -- there were 2.8 million cases in 1998, about a million fewer than expected from the past relationship with the unemployment rate.

Interestingly, when researchers looked across states in the 1990's, an inverse relationship between unemployment and work injuries was discernible. In all likelihood, strong economic times still impair workplace safety, only this effect was masked by an even stronger nationwide downward trend in injuries in the 1990's.

All major types of injuries have declined. Since 1992, missed-workday cases are down 36 percent for sprains and strains, 31 percent for broken bones and 30 percent for carpal tunnel syndrome.

The decline does not appear to be a mere reporting phenomenon. Although audit studies have found that employers tend to underreport injuries about 10 percent, the underreporting appears constant over time. Also, the Bureau of Labor Statistics' Census of Fatal Occupational Injuries -- which are unlikely to be underreported -- indicates a 13 percent drop in the fatality rate since 1992.

The cause of the trend toward fewer work injuries remains something of a mystery. So far, it has been easier to rule out potential explanations than to find a smoking gun (or should that be safety lock?) that is responsible.

The decline does not result from shifts in employment toward jobs in safer industries. Instead, injuries and illnesses fell in most industries -- 22 percent in manufacturing, 33 percent in construction and 27 percent in services.

Some analysts have attributed the decline to the Occupational Safety and Health Administration's shift in emphasis from safety inspections to compliance assistance in the mid-1990's. But the decline began before the new OSHA policy was in place. Also, the drop-off was slightly greater in the states that administered their own OSHA programs, suggesting that federal OSHA policy was not the key.

Studies by Daniel Hamermesh, a labor economist at the University of Texas at Austin, show that when workers
become wealthier, they are quite willing to forgo some extra pay in exchange for safer working conditions.

Indeed, rising income probably explains the long-term decline in accidents both at work and away from work. Concerning the recent decline in work injuries, however, Professor Hamermesh said: "Why all of sudden? Why the effect should suddenly be so large, since there was some rise in real earnings before 1992, is the hard part to explain."

Another explanation involves the costs of workers' compensation insurance, which swelled in the 1970's and 1980's as states raised benefits and medical costs soared.

In response to escalating costs, some states tightened eligibility standards for benefits and restricted employees' choice of medical providers in the 1990's. But a new study by Leslie Boden of Boston University and John Ruser of the Bureau of Labor Statistics suggests that only a small share of the decline in injuries and illnesses can be traced to these factors.

Probably a more important effect of ballooning workers' compensation insurance costs is that many managers recognized that occupational injuries had a significant effect on the bottom line. Instead of viewing injury costs as unavoidable, they developed safety programs to cut risks. The 1990's investment boom in new, and safer, plants and equipment probably abetted this effort.

Injury rates have also fallen sharply in Canada and Britain. So changes in work practices and technology that cut across borders and industries, perhaps in response to higher injury costs, apparently reduced workplace hazards.

Whatever the reason for lower injuries, the economic implications are sizable.

Econometric studies suggest that workers are willing to forgo at least $33,000 in earnings to take a job that entails no risk of injury as compared with one that carries a certain risk. Thus, the three million fewer injuries and illnesses than expected in 1998 are implicitly valued by workers at around $100 billion -- a sum not counted in G.D.P. This amounts to $1,000 per private-sector worker.

Another economic benefit is that employers save on workers' compensation costs. Adjusted for inflation, these costs, per covered employee, fell by a third from 1992 to 1998. The aggregate savings in 1998 was $25 billion.

The fall in injuries also raises the supply of labor available for work. Although most injuries are of short duration, a study of cases arising in Michigan in 1986 suggests that when an injury or illness results in lost work time, the average duration of missed work is four to eight months. So the one million shortfall in lost-workday cases in 1998 could eventually expand the labor force by the equivalent of 333,000 to 667,000 workers employed full time for a year. Consequently, there may be some relief for labor shortages in sight.

When he worked as a claims adjuster for the Bohemian Workers' Accident Insurance Institute, Kafka decried jobs in which "danger defied all caution." Although many jobs still entail grave dangers, occupational injuries are now viewed as controllable thanks to technological progress and economic incentives.