But the restrictions and demands of World War II slowed the diesel's spread. Diesel locomotives for freight trains "weren't produced in significant numbers until well into the war," Abbey notes, and diesels for passenger trains weren't produced at all. By the end of 1944, there were only about 3,000 diesel locomotives in service—compared with nearly 40,000 steam locomotives. When the diesel did triumph after the war, a raft of new problems confronted America's railroads.

The Paradox of Child Labor

"Eliminating Child Labor" by Miriam Wasserman, in *Regional Review* (Apr.–June 2000), Federal Reserve Bank of Boston, P.O. Box 2076, Boston, Mass. 02106–2076.

Many Americans have been horrified to learn that shoes, clothing, soccer balls, and other goods imported from developing nations were made with child labor. Yet those nations themselves strongly oppose any talk of a ban. They use child labor extensively, for much more than just exports, observes Wasserman, an associate editor of *Regional Review*. A glance at U.S. history makes the widespread practice—and the difficulty in uprooting it—easier to understand.

About 120 million children between the ages of five and 14 work full-time today in the developing world, and another 130 million work part-time. Children also do much unpaid work at home. Probably less than five percent of all child workers are employed in manufacturing or mining, producing the kinds of exported goods that attract worldwide attention. More than 70 percent work on farms. Populous Asia has the largest number of child workers (more than 150 million), while poverty-stricken Africa has the highest proportion of them (41 percent of all children aged five to 14).

"The plight of working children in the developing world today is not very different, and in some cases even less harsh, than that prevalent in countries such as the United States and England during the 19th and early 20th centuries," says Wasserman. In 1900, an estimated 1.75 million American children between 10 and 15 years old—or about 18 percent of children that age—were employed. They worked, for the most part, on farms, she notes, "but young children also worked long hours in factories and textile mills, in the anthracite coal mines of Pennsylvania, and in many other industries."

By then, however, "child labor was clearly on the decline," Wasserman points out. Americans' views had changed since the early 18th century, when work was considered helpful to "a child's character and moral upbringing," and child labor was vital to the agricultural and handicraft economy. As more children appeared in the mills, public acceptance started to diminish. Americans also came to regard play and leisure as important for children's healthy development, not as vices to be avoided. Between 1880 and 1910, 36 states established a minimum age (of 14, on average) for manufacturing workers. Pressure for federal legislation mounted, despite opposition in the South from those who claimed that the richer North was trying to limit their region's development. In 1938, a federal law setting 16 as the minimum age was finally enacted. But some economists think that such laws had less impact than other factors. The long, slow process of reducing child labor, Wasserman writes, "required a host of changes in family income, education policy, production technologies, and cultural norms."

As the American experience shows, the problem is not a simple one, she notes. Well-intended efforts can leave the children involved *worse* off. In 1993, garment manufacturers in Bangladesh, fearing a possible U.S. ban on imports made with child labor, fired an estimated 50,000 children. Some of the children turned to street hustling and prostitution. Fortunately, the International Labor Organization and the United Nations Children's Fund reached an agreement with the Bangladesh Garment Manufacturers and Exporters Association to give the fired children monthly stipends and to jointly sponsor schools. By 1997, more than 300 schools were serving 9,710 children. But in many other countries, Wasserman points out, not only are

schools unavailable, but education may not even be valued.

International pressure to reduce child labor does some good, she concludes, but ultimately, "a cultural change . . . has to come from within developing countries."

Shock Economics

"A Shocking View of Economic History" by Larry Neal, in *The Journal of Economic History* (June 2000), Karl Eller Center, 202 McClelland Hall, Univ. of Arizona, P.O. Box 210108, Tucson, Ariz. 85721–0108.

Neal, a professor of economics at the University of Illinois at Urbana-Champaign, has some earthshaking advice for his fellow economists: Act like geologists!

He urges them to stop thinking of their discipline as an exercise in applied mathematics, and look on it instead as a historical science, like geology. Just as geologists range the globe, "search[ing] in each location for the remains of catastrophic events in the history of the earth itself," so economic historians, he says, should focus more on the "shocks" to economies of the past, rather than on the longer periods of "normal" economic activity, undisturbed by depression, war, or natural disaster.

"Like modern geologists," writes Neal, "we economic historians need to become comfortable in thinking about the economic activity of the human race, not merely in terms of gradual movements of technical and economic progress occurring by insensible degrees, but also as shoved on occasion by shocks, many barely noticed, some easily absorbed, and a few with cataclysmic consequences."

Consider, for instance, Neal says, the role that immigration has played in German economic performance, as a result of major population shocks during the last century. After the loss of military-age men during World War I, Germany had no postwar baby boom, then experienced the "birth dearth" of the Great Depression, the further loss of military-age men in World War II, and again, curiously, no postwar baby boom. West Germany owed much of its economic success in the 1950s to educated, ambitious immigrants from East Germany, and met the increased demand for labor in the booming 1960s with immigrants from Yugoslavia and Turkey. But in 1990, as Germany was being reunified and the Soviet Union was collapsing, West Germany adopted a different "shock absorption" policy: It effectively stopped the flow of immigrants from the former East Germany, by artificially boosting the value of the east's currency and reducing workers' incentive to move. Instead of labor moving westward, capital moved eastward. "Ten years later," Neal says, "this policy does not appear nearly as fruitful as the policy adopted by West Germany in the 1950s." If economic historians had done more work "explor[ing] the ramifications of [the population] shocks," that might have been foreseen.

Concentrating on "normal" periods of economic activity has produced "empirical findings . . . only too reassuring" to theoretical economists committed to "a 'stylized fact' of a stable, equilibrium-seeking, self-contained economic mechanism that rules our lives," Neal says. But studying shocks, instead of shrugging them off as anomalies, "should yield insights into the shock-absorption capacities of different economic structures." That, he hopes, would lead to "a paradigm that encompasses more of the actual human experience"—perhaps even to "the equivalent of a tectonic plate revolution."

Megamerger Mania

"The Dubious Logic of Global Megamergers" by Pankaj Ghemawat and Fariborz Ghadar, in *Harvard Business Review* (July–Aug. 2000), 60 Harvard Way, Boston, Mass. 02163.

Everywhere one looks in the globalizing economy, companies seem to be rushing pell-mell to join forces with other companies: Exxon with Mobil . . . BP with Amoco and Atlantic Richfield . . . Chrysler with Daimler-Benz . . . Ford with Volvo . . . and