Thirty years ago, our paper entitled “The High Cost of Regulating U.S. Railroads” (Regulation, January/February 1981) appeared in this journal. At the time, the Staggers Act had just been signed into law. Our paper provided an analysis of the U.S. railroad industry’s performance for the generation immediately preceding the legislation. We focused on the cost of pre-Staggers regulation and drew comparisons to the more liberalized Canadian railways. We also took the opportunity to speculate about the “deregulated” railroad industry appearing on the U.S. horizon.

Since that time, the railroad industry has had a generation to respond to regulatory incentives under the Staggers Act. We now have the opportunity to review the observations we made in our earlier paper and offer some additional comments based on what has transpired.

In 2007–08, we were part of the project team that conducted a study of competition in the U.S. freight railroad industry over the period 1987–2008. This experience has given us a current view of the industry and an understanding of how it has gotten here. Our Christensen Associates colleagues on that team have a companion article (see p. 32) that documents key aspects of the dramatic turnaround and stabilization that has occurred since the enactment of the Staggers Act.

Observations From 30 Years Ago

Some of our comments from three decades ago were prescient; others were overly cautious and pessimistic. Here is a quick look back at our analysis:

Reform and politics

The recently passed Staggers Rail Act should improve the regulatory climate for U.S. railroads. ... [T]o the extent that policy makers can resist calls for re-regulation, there is good reason to expect better performance from the U.S. railroad industry. But not, of course, dramatic improvements right away. Just as the costs of impaired productivity growth accumulated gradually, so the initial benefits from revived productivity are likely to be modest.

—“The High Cost of Regulating U.S. Railroads,” p. 46

Our guardedly optimistic forecast for the railroads under the provisions of the Staggers Act turned out to be quite an understatement. As documented in our colleagues’ article in this issue, the performance of the railroad industry did improve dramatically, right away, and pretty much on all fronts. Policymakers have largely resisted calls for re-regulation, not necessarily because of resolve, but because the calls for re-regulation simply have been far fewer than we anticipated. Most shippers and railroads have shared in the benefits from improved performance. Consequently, until rail rates began rising in the last few years, there has not been much political pressure for policy change.

This is not to say that there have not been contentious rate cases, controversial merger approvals, and attempts at legislating
rail “reform.” In fact, political pressure for new regulation currently seems at the greatest level since the Staggers Act was passed. The 111th Congress is considering major proposals such as requiring railroads to provide “bottleneck rates,” extending some of the antitrust laws to railroads, and giving the Federal Trade Commission greater oversight of future railroad mergers. At the time of this writing, drafts of rail reform legislation are in the Senate Commerce Committee and the House Transportation and Infrastructure Committee. The House and Senate Judiciary Committees also have interests in rail reform because of the antitrust issues.

This congressional activity bears a resemblance to that of some previous years, most recently 2007–08, when ultimately no rail legislation came out of committee. It seems likely that there will be a similar outcome this year, despite the more intense pressure from shippers. If the proposed reform legislation would pass, we believe that some of the enacted provisions would work against the railroad industry’s economies of density such that shipper benefits would be less than what shippers expect, and one shipper’s gain would be accomplished largely at a cost to other shippers.

**Capital expansion**

Freedom to negotiate rates provides railroads with a means of attracting the kinds and amounts of traffic that fit well with existing networks, traffic patterns, and stocks of equipment. Also important, in our view, is the fact that ratemaking freedom provides incentives for the development of new or more efficient services. Often the introduction of such services entails heavy costs that can be justified only if rates can be set so that sufficient profitable traffic is generated.” — p. 46

Our paper’s emphasis on the importance of ratemaking freedom has been affirmed. By the 1970s, it was painfully obvious that rate regulation and associated inflexibilities had brought U.S. railroads to the brink of economic disaster. With the passage of the Staggers Act of 1980, there was widespread hope that removing the shackles of regulation would pull the industry back from the precipice.
As it turned out, the post-Staggers freight railroad industry has proven adept in providing new and more efficient services, and nimble in adjusting to changing commodity mixes through time. However, in 1980 the eventual tremendous growth in both intermodal and coal traffic could hardly have been anticipated. We were aware of the Burlington Northern’s expansion into the coal fields of the Powder River Basin, but we had no idea of the Santa Fe’s subsequent expansion of its “TransCon” line from Los Angeles/Long Beach to Chicago. Both cases required massive capital expenditures to be cost-effective, and neither would prove popular with Wall Street equity analysts. In each case, the respective railroad’s ability to contract privately with its shippers proved critical to funding the capital programs that expanded capacity. To be certain, it is those contracts that provided assurance that the capital expenditures would, through time, be made.

**Demands for re-regulation**

On the one hand, the [Staggers] act falls far short of total deregulation. On the other, it is expected to cause sizeable rate increases for some shippers and loss of service for others. It will be surprising if these events do not evoke calls for the reimposition of controls from the affected parties. – p. 41

We appear to have been too pessimistic regarding the level of political pressure directed at reversing some aspects of the 1980 legislation. The Staggers Act did allow regulatory relief to protect captive shippers, and thus was not total deregulation. But the Interstate Commerce Commission and its successor agency, the Surface Transportation Board, have been conservative in the exercise of oversight authority and have shown deference to the market, as called for by the Staggers Act. Adjusting for inflation, rail rates overall steadily declined until about 2004. Even with recent increases, rail rates today, in real terms, are only about 60 percent of what they were when the Staggers Act was signed. And those lower rates have been enjoyed by a broad group of commodities. Certainly there has been loss of service to some shippers, notably the grain shippers in the plains and mountain states. There were immediate calls to “re-regulate” and some of those calls continue today. However, a broad spectrum of commodity shippers have benefited from lower rates since the Staggers Act was signed and, accordingly, the voices of the disgruntled have been far fewer and less demanding than we expected.

**Observations Made 30 Years Later**

Nostalgically, we remember the decade of the 1970s as a period when economic analysis was a powerful tool in policy debates. This was especially true in the efforts to deregulate the U.S. transportation sector. Transportation deregulation was a policy objective common to the Nixon, Ford, and Carter administrations. It was a bipartisan issue with congressional support spanning the political spectrum. The Airline Deregulation Act of 1978, the Motor Carrier Act of 1980, and the Staggers Act of 1980 all passed both houses of Congress with large majority votes. It is hard to imagine similar achievements in today’s political environment.

**Dedication to deregulation**

The leadership of the two key regulatory bodies at the time assured that the deregulation policies were effectively implemented. Alfred Kahn, chairman of the Civil Aeronautics Board, and Darius Gaskins, chairman of the ICC, both economists, appreciated the benefits of letting market forces find value. Their leadership in deregulating the transportation sector provided a jumpstart largely free of bureaucratic resistance and delay.

The Airline Deregulation Act of 1978 officially abolished the CAB, but not until 1985. Nonetheless, under Chairman Kahn’s leadership, airlines became effectively deregulated as soon as the law was signed. Likewise, Chairman Gaskins interpreted the Motor Carrier Act of 1980 as immediately removing trucking from ICC oversight. In contrast, the Staggers Act explicitly kept regulatory oversight to protect captive shippers. That left the door open for less market liberalization in rail, but the ICC and the STB have largely abided by the spirit of the Staggers Act, deferring to market outcomes subject to regulatory protection of captive shippers. This was not a guaranteed outcome, but early leadership set rail deregulation on track and it has remained there.

The post-Staggers period has seen considerable interactions and contests among the stakeholders. We authors of this article have been involved in several of these actions, with Swanson representing the railroads and Caves and Christensen representing coal shippers. While some procedural reforms may be warranted, we believe that the adversarial interactions reflect an appropriate pursuit of value by stakeholders. Indeed, that there is value to fight over is testimony to the turnaround in the railroad industry.

Productivity growth in railroads since the Staggers Act has greatly outpaced the performance of the U.S. economy overall. Much of this growth can only be explained as a result of market liberalization and technological change. But a substantial portion of the productivity gains can be attributed to economies
of density. The Staggers Act made it easier for the railroads to abandon track, thereby increasing density on the remaining networks. Likewise, industry consolidation put more traffic on fewer networks. And the explosive growth of both intermodal and western coal traffic resulted in more trains with greater car lengths going longer distances.

**Regulatory backstop** | The unique feature of the Staggers Act is its liberalization of the market while retaining a “regulatory backstop” to protect captive customers. The essence of the backstop is that a shipper served by only one railroad may bring forward a case for rate relief if it can be shown that the rate being charged exceeds 180 percent of the railroad’s variable cost for that shipment.

The backstop concept appears sound, but shippers have complained about the cost and length of time to prosecute a rate case. In response, the STB has implemented simplified procedures and otherwise tried to facilitate access to rate relief. But perhaps the biggest problem with the backstop is its reliance on the Uniform Rail Cost System (URCS) for establishing the 180 percent threshold. Bluntly, the URCS is based on out-of-date statistical analyses, has other ad hoc assignments of costs, and is an inappropriate method for estimating the costs of specific movements. Not surprisingly, the 180 percent threshold based on the URCS appears to do a poor job of screening situations where excess market power is being exercised.

This inadequacy is a message that we delivered to the STB in our 2008 report, and that the STB has subsequently delivered to Congress. Until the URCS is reformed or a more effective screen for market power is implemented, the regulatory backstop suffers a credibility problem.

**No moral hazard** | Finally, in looking back over the last three decades, we note that the experience of the railroad industry appears largely free of the moral hazards that have led to calamities in other “partially deregulated” industries (e.g., savings and loans, banking, and the California electricity market). This is a tribute to the policy architects for the railroad industry.

**The Future for U.S. Freight Railroads**

Perhaps not having learned our lesson, we again venture some thoughts about the future of U.S. freight railroads.

- **Future productivity gains by U.S. railroads will be more commensurate with those in the economy in general.** We believe that the “immediate gains” from rail deregulation have been largely realized. Furthermore, additional increases in density would likely result in considerably smaller productivity impacts. Thus, the performance of the industry will be more in line with that of the economy overall.

- **There is considerably less incentive for further industry consolidation.** The railroad industry is now highly concentrated, so there is little room for further consolidation. An east-west merger would not have a large impact on network density. Since economies of density have been largely exhausted, there is less efficiency gain from further increased density.

- **Economies of density work both ways.** Economies of density have been central to the railroads’ productivity gains. This fact suggests a vulnerability if density were to decrease. The greatest exposure here might be a decreased volume of long-haul coal shipments.

- **There are unforeseen opportunities and challenges for the industry.** Unforeseen events will influence the future performance of the railroads. Perhaps these events are in front of us right now but are yet to be recognized, just as the emergent growth of coal and intermodal traffic were unrecognized in 1980. We are optimistic that the market flexibility established by the Staggers Act will allow the railroad industry to adapt to surprises, whether they are pleasant or unpleasant.

**Conclusions**

The history of the U.S. railroad industry during the 30 years since the Staggers Act was signed is a story of enormous success. Productivity growth in the U.S. railroad sector has far outpaced the gains in the U.S. private domestic sector. The factors underlying this performance include pricing flexibility, economies of density achieved through line abandonments, industry consolidation, and the growth of long-haul coal and intermodal traffic. Prior to the partial deregulation of the railroad industry, we and others identified pricing flexibility as being at the core of the promise of the Staggers Act. And by 1980, we had quantified the strength of the density economies in U.S. railroads. But we failed to identify those economies of density as the drivers of industry reconfiguration and productivity gains that were to come. In retrospect, it seems obvious.

We concluded our earlier paper in this journal by noting, “In any event, much mischief will be avoided if the public’s attention can be captured by the lure of huge long-term benefits that Canadian-type deregulation would bring.” That was more of a hopeful statement than a prediction. And that hope has come true. The Staggers deregulation has paid off with big benefits over a long period of time and, thus far, serious mischief has been avoided. But the above-average productivity gains appear to have been largely harvested and the performance of the industry is now more in line with the overall economy. So again we are hopeful, but are not certain, that future mischief will be avoided if stakeholders are satisfied with a sustainable industry achieving average productivity performance.

We are in agreement with the positive assessment of the railroad industry since the passage of the Staggers Act as presented in our Christensen Associates colleagues’ companion article in this issue. The regulatory framework appears to work without introducing strong distortions, inefficiencies, or moral hazards. The architects of transportation deregulation policies did a good job. The framework has been maintained and has delivered the intended consequences. The policies and the industry have survived for one generation. We believe they will likely last another.