Introduction

Recent media coverage of a U.S. International Trade Commission proceeding concerning certain steel tariffs painted the issue as a clash between two U.S. industrial titans: the steel industry and the automobile industry. Although the auto industry and scores of steel-consuming industries have been harmed by the aggressive level of trade protection afforded the U.S. steel industry over the decades, the real story is not about steel versus autos. The real story is about the U.S. steel industry’s historic metamorphosis and the costly failure of trade policy to adjust to that new reality.

In a period of less than five years, the U.S. steel industry has undergone an extraordinary and unprecedented transformation. What was, as recently as 2002, a fragmented, perennially money-losing, capital-starved industry that relied on government for subsidized loans, protection from creditors, and insulation from foreign competition has become one of America’s strongest, most profitable, and most promising manufacturing industries. Massive industry restructuring, the adoption of new and more flexible labor agreements, and a permanent outward shift in global demand for steel explain the industry’s reversals of fortune and prospects.

Despite the industry’s renaissance, there remain in place some 136 antidumping and countervailing duty measures that restrict imports of 21 different kinds of steel products from 32 individual countries.1 These measures have long outlived their purposes, as the steel industry is no longer injured and foreign producers have ample alternatives to selling steel on the cheap in the United States. Instead, the trade remedy laws are serving only to bolster the market power of an emerging U.S. steel oligopoly, which could have seriously adverse consequences for U.S. steel-using industries and the economy as a whole.

Then and Now

In 2002, the top three U.S. producers of flat-rolled steel controlled 25 percent of U.S. production capacity; today, after long-overdue industry consolidation, the top three control 70 percent.2 That high degree of concentration has delivered to the industry the capacity to manage output—in a way never before possible—to control price fluctuations and maintain profitability.

In 2002, most unionized steel workers were classified according to hundreds of job descriptions and dozens of rigid labor grade classifications and their compensation was unrelated to company performance. Today, most of the unionized workforce is classified under six job definitions and five labor grades, and a portion of compensation is tied to company profitability and prices. These changes have contributed to a significant decline in the industry’s fixed costs and have lead to large increases in labor productivity.

In 2002, the world consumed 825 million metric tons of steel; in 2005, world consumption exceeded 1 billion metric tons.3 Much of that growth, which is projected to remain on a steep trajectory, is attributable to massive infrastructure projects and exploding consumer demand for appliances and automobiles in the developing world. This shift in developing country demand has caused global steel prices to rise to new heights and has rendered the U.S. market less attractive to foreign steel producers, accentuating the market power of U.S. producers and compounding the effects on supply of diminished competition brought about by industry consolidation.

These changes have generated fantastic industry financial performance. Since 2004—the first year after the most significant restructuring was completed—the U.S. steel industry has achieved average operating profits of 10.3 percent. To put that in perspective, operating profits for U.S. durable manufacturing as a whole during the same period were 5.5 percent. And between 2000 and 2003, the steel industry’s operating profits averaged just 0.1 percent, while profits for durable manufacturing as a whole were 3.9 percent.4 (See Figure 1.)

The same positive developments are evident with respect to market capitalization, asset investment, and stock valuations. In November 2006, the Dow Jones Steel Stock Index is valued nearly 400 percent higher than it was in December 2002. (See Figure 2.)
By every relevant financial yardstick, the industry is performing phenomenally and investors are bullish about its future. Indeed, in the span of just a few years, everything has changed for the U.S. steel industry—everything, that is, with the exception of the government’s indulgence of the industry’s sense of entitlement to trade restrictions.

**Figure 1**
Comparison of Operating Profit Margins (2000–1H 2006), Steel vs. All Durable Manufacturing

![Graph showing comparison of operating profit margins](image)

Source: U.S. Bureau of the Census.

**Figure 2**
Dow Jones Steel Index, Weekly Index Value (December 2002–November 2006)

![Graph showing Dow Jones Steel Index](image)


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**Unsustainable Structure…**
Blaming “unfair” import competition for its woes has been a staple of the U.S. steel industry’s public relations machine for several decades. But ironically, the industry’s success at winning import restraints only served to mask and exacerbate the real problems confronting the industry. Import
competition has played a relatively minor role in the U.S. steel industry’s historical underperformance. Import restrictions and other short-sighted policies that discouraged structural adjustment are the real culprits.

Until recent years, there has been a chronic disparity between the steel industry’s actual and optimal composition. The industry has comprised far too many firms given the high fixed cost nature of steel production. Steel producers must make and sell a lot of steel just to cover those fixed costs, and then they must produce and sell even more to have a shot at achieving profitability. Moreover, firms facing high fixed costs have additional incentive to continue producing because their per unit costs of production decline more rapidly when there is more output over which to spread those fixed costs. Thus, long production runs and operation at high levels of capacity utilization traditionally have been critical to profitability in the steel industry. But because there have been too many firms pursuing those incentives, overproduction and price suppression have undermined profitability.

Furthermore, when there are too many firms in a high-fixed-cost industry, it is difficult for any one of them to affect the aggregate price for steel. If one producer seeks to obtain higher prices or to respond to downturns in the business cycle by cutting back its own production, other producers have incentive to produce and sell more as prices stabilize or rise. Such actions, of course, push the price back down. Steel producers have been caught in a classic prisoners’ dilemma. All firms would be better off if they could cooperate and reduce production, but the assumption that other firms will continue to produce inspires all firms to continue producing, to their collective detriment.

Under normal market conditions, the stronger firms would be better situated to survive periods of price suppression and declining demand, while the weaker firms would respond to low prices and negative profitability by shutting down and liquidating. And over time, an industry optimally structured for its conditions of production would emerge.

... Plus Bad Policy

But over the past 35 years, those market signals have been distorted by government interventions of one sort or another, which left the industry in a perpetual state of “crisis” (to use one of the industry’s favorite terms). Pernicious bankruptcy laws that enabled failing mills to expunge their liabilities and return to operations without any real consequences, tax holidays, buy-American provisions, loan guarantees, legacy-cost relief, uncompetitive bidding processes, environmental exemptions, and the trade remedy laws all conspired to discourage the least efficient, least competitive mills from exiting the market permanently.

Instead, that confluence of policies encouraged failing mills to stay in business and failed ones to return to operations, thus preventing the industry from adjusting to the market’s signals and perpetuating the industry’s problems. Instead of the stronger, more competitive firms being rewarded with greater market share and stronger profitability, those firms were dragged down by the uneconomic, price-suppressing oversupply of inefficient mills that should have liquidated but were prevented from doing so by politicians who fought to keep those mills operating at all costs. And those costs were significant. The American Institute for International Steel estimates that Americans paid $100 billion for the steel industry’s trade restraints and subsidies during the 30 years ending 1999.5

Equals Steel Crisis

By 2001, the U.S. steel industry as a whole was bleeding red ink. Operating profits had declined from 3.4 percent in 1999 to 2.8 percent in 2000 to -2.2 percent in 2001. As a result, 8 steel producers accounting for nearly 20 million net tons of production capacity (about 20 percent of total U.S. capacity at the time) filed for bankruptcy that year. During 2002 and 2003, the trend of failures continued: 10 more producers, accounting for another 21 million net tons of capacity, filed for bankruptcy.6

True to form, the domestic industry and its powerful lobby succeeded in blaming its woes on surging import competition and convinced President Bush to launch a Section 201 investigation at the ITC.7 During the investigation, which led to sweeping trade restraints against all types of foreign steel, the structural problems that had been afflicting the industry for many years were brought to the fore. There was vast agreement between industry executives, analysts, and policymakers that the steel industry needed to restructure and that the restructuring should involve retirement of inefficient capacity and consolidation of more efficient production capacity within the control of fewer producers. But standing in the way of the most significant potential mergers and acquisitions were billions of dollars of unfunded pension and health care liabilities (i.e., legacy costs) on the books of companies that were otherwise strong candidates for acquisition.

Metamorphosis

What turned the industry around was its restructuring, starting with the creation of International Steel Group in 2001, and ISG’s subsequent purchase of the assets of the defunct and bankrupt LTV Steel Corporation in February 2002. LTV had been one of the industry’s largest producers prior to its second trip into bankruptcy in 2000. ISG’s purchase of LTV was conditioned upon, among other things, the U.S. government’s assumption of LTV’s legacy cost liabilities, and a presumption that a new, more flexible labor agreement could be struck with the United Steelworkers union.

In March 2002, the Pension Benefit Guarantee Corporation, a taxpayer-funded entity created by Congress to protect defined-benefits pension plans from corporate underfunding, assumed $2.2 billion of LTV’s legacy cost liabilities.8 Later that year, a new labor agreement was reached which radically restructured job classifications, work rules, compensation and benefits plans, and ultimately helped to reduce fixed labor and pension costs and improve labor productivity.

ISG hailed the new agreement as providing “greater flexibility and increased productivity as compared to historical agreements at integrated steel mills. The absence of significant defined benefit pension and retiree health care plans makes ISG’s cost structure significantly more variable than most of its U.S. integrated competitors.”9 In other words, ISG’s new competitiveness was achieved, in substantial part,
by a government intervention that essentially excused management and labor of their respective contractual obligations and risks, thrusting them, instead, upon U.S. taxpayers.

The PBGC’s assumption of LTV’s legacy costs and the new labor agreement negotiated between ISG and the United Steel Workers served as a model for subsequent acquisitions. During the course of 2002 alone, the pension plans of nine steel companies were taken over by the PBGC at a cost to taxpayers of over $8.2 billion. In 2002 and 2003, ISG purchased the assets of other bankrupt steel companies, including Bethlehem, Weirton, and Acme, while U.S. Steel purchased the assets of National Steel. Meanwhile, acquisitions by Nucor Steel of Trico, Birmingham, Northstar, and Corus Tuscaloosa, as well as acquisitions by foreign producers of U.S. mills over the same period, helped to transform the landscape of the U.S. steel industry. What had been a largely disaggregated, high fixed-cost industry transformed very rapidly into a highly concentrated, lower-cost industry with a few dominant players possessing significant market power.

In 2000, there were 27 U.S. producers of flat-rolled steel operating 35 mills with a total production capacity of 81 million metric tons. In 2006, there are only 14 producers operating 29 mills with a total capacity of 73 million tons. While production capacity and the number of firms and mills have declined, capacity per firm and mills per firm have increased by 69 percent and 63 percent, respectively. And this concentration of production is evident in the changes in market share.

In 2000, the top three U.S. producers of hot-rolled steel accounted for 36 percent of consumption; in 2005, the top three accounted for 61 percent. Likewise, the top three’s share of cold-rolled steel consumption increased from 47 percent in 2000 to 70 percent in 2005. For rebar, the share increased from 45 percent to 80 percent, and for tin plate, the share went from 60 percent in 2000 to 100 percent in 2005. Similar patterns exist for every major steel product.

With production capacity in the hands of fewer companies, the steel industry is now better able to control output in response to changing demand. And since the industry’s fixed costs have declined considerably, profitability now can be achieved at substantially lower levels of output, which gives producers greater flexibility to cut production in support of price levels.

Steel industry executives have not been shy about sharing this strategy with the public. John Surma, Chairman and CEO of U.S. Steel, was quoted in the Wall Street Journal as saying, “we see inventories building in our shops, we would slow production down...” Mittal Steel reported that its “operating rates were reduced as part of Mittal’s plan to lower global steel production to help reduce excess inventory and restore equilibrium to supply and demand in the marketplace.” These types of proactive steps were impossible before the wave of consolidation during 2002–2003, which was made possible by new and improved labor agreements and the foisting of nearly $9 billion of industry legacy costs onto the books of the PBGC.

At the very least, the U.S. steel industry that has emerged owes more than a debt of gratitude to the victimized consumers and unwitting taxpayers whose resources were tapped to effect this transition. The breadth and longevity of steel tariffs have put the squeeze on U.S. steel-consuming industries, which have been forced to endure higher costs and supply constraints, while at the same time trying to compete at home and abroad with foreign companies that have access to market-priced steel. Meanwhile, subsidies and bailouts have siphoned tens of billions of dollars from federal and local treasuries. Yet, the steel industry continues to insist that restrictions on imported steel are an essential component of its long-term viability, taxpayers and consumers be damned.

**Broken Trade Remedy Laws**

Despite the industry’s profound structural changes and the strong performance those changes have delivered, the U.S. government still maintains 136 antidumping and countervailing duty measures that limit the access of steel-consuming industries to foreign steel. Although there are legal mechanisms in place, such as “Sunset Reviews,” to see that measures no longer necessary are revoked, the sad fact is that this process rarely works.

The initiation of a sunset review is required five years after an antidumping or countervailing duty order is imposed to determine whether revocation would be likely to lead to a continuation or recurrence of dumping and material injury. The Commerce Department is tasked with evaluating the likelihood of continuation or recurrence of dumping, while the ITC evaluates the likelihood of continuation or recurrence of material injury.

Since U.S. sunset reviews began in July 1998, the Commerce Department has determined that revocation would lead to continuation or recurrence of dumping in every single case where the domestic industry participated and supported continuation. The ITC has voted against revocation in 75 percent of cases.

Since 2004 (the first full year after major restructuring had occurred), 12 sunset reviews have been completed concerning 62 separate antidumping and countervailing duty measures on steel products. Only 13 measures have been revoked, while 49 have been continued. That the ITC can still find this industry vulnerable to a recurrence of injury is boggling. Not only has the U.S. industry restructured, but the global industry has consolidated and eliminated uneconomic capacity; as well. No longer do foreign mills have incentive to overproduce and then sell at prices just high enough to cover their variable costs. In fact, the same high prices and shortages that have afflicted the U.S. market in recent years have been prevalent in Asia and Europe. And with demand growth strongest, and projected to remain strong for years to come, in developing Asia, Eastern Europe, and the former Soviet republics, foreign producers have little incentive to ship large volumes of steel to the mature U.S. market.

What continues to drive industry consolidation in Europe and Asia is the desire to produce for regional consumption. Arcelor-Mittal, the world’s largest steel producer with production operations in 27 countries on five continents, is highly unlikely to endure high transportation costs, exchange rate uncertainties, and long delivery times to ship to the United States when it already owns Mittal Steel USA, the largest producer in the United States. The same can be
said of several other foreign producers who own production facilities in the United States.

One of the explanations for the failure of the sunset provisions to have any real meaning is that in performing its analysis, the ITC is required to give weight to the Commerce Department’s conclusions. Recall that Commerce always concludes that revocation would likely lead to continuation or recurrence of dumping. And that should not be surprising, given the absence of rigor in the Commerce Department’s analysis. That analysis involves nothing more than looking back to the period before an order was in place, presuming nothing about the industry has changed since then, and concluding that life without the orders prospectively would inspire pricing practices identical to those that existed during the original period of investigation. Thus, if Commerce found originally that foreign producers were dumping in the range of 20 to 30 percent, the department would conclude that revocation of the measures (regardless of how many years later and how much change has transpired) would likely lead to a recurrence of dumping at those same levels. It’s as simple as that. Commerce gives no latitude for, and gives no consideration to, the fact that the conditions of competition within the industry may have changed between the original period of investigation and the present.

Furthermore, in rendering its determination, the ITC is required to speculate about what might happen if an order is revoked, and then it is required to speculate about the impact of that speculation on the industry in question. To get a feel for the nonsensical results these proceedings produce, consider the recent sunset review vote to continue the antidumping order on Tin- and Chromium-Coated Steel Sheet from Japan.

The ITC voted to continue the order for at least five more years because it concluded that revocation would likely induce large volumes of imports from Japan at prices likely to be low, which likely would lead to material injury because the domestic industry was in a “vulnerable” state. That decision was issued in June 2006. The next month, the U.S. Department of Justice, concerned about the antitrust implications of mergers and acquisitions in the steel industry, ordered Mittal Steel to sell one of its tin plate production facilities because the number of U.S. firms producing tin plate had declined to three, and the degree of concentration was deemed to be a threat to competition.

So, on one hand the Justice Department is ordering a company to divest because it has too much market power and there is too little competition; on the other hand the ITC concludes that the industry is vulnerable and votes to keep out the competition. How can an industry that is so concentrated as to inspire intervention from antitrust regulators be considered vulnerable to a recurrence of dumping? If this outcome doesn’t raise legitimate questions about the efficacy of the Sunset Review process, nothing should.

There is nothing wrong with industries evolving in ways best suited for their long-term viability—even if that means producers in the industry attain high degrees of market power. But it makes no sense for trade policy to accentuate that market power by preventing foreign competition. In the case of the U.S. steel industry, there can be no plausible justification for continuation of any of the 136 antidumping and countervailing duty measures. Next month the ITC will vote on the cases for which the media has pit the steel industry against the auto industry. Continuing to maintain those 13-year-old restrictions, or any other steel import restrictions, will only enhance the industry’s market power to the detriment of the same consumers and taxpayers who subsidized the steel industry’s metamorphosis, and it will—as it has—deter optimal adjustment within the industry.

Conclusion

The dramatic changes in the steel industry over the past few years have been long overdue. Through consolidation, the retirement of inefficient capacity, reduced fixed costs and greater flexibilities brought about by new labor agreements, the industry is in a much stronger position than it has been in recent history. That does not mean, however, that steel production is no longer prone to cycles. Steel consumption is highly pro-cyclical, and undoubtedly there will be periods of slow growth or recession in the future. But under its new structure, firms operating in the industry will be much more capable of enduring demand downturns, and given the industry’s new capacity to regulate its output more effectively, those downturns are unlikely to cause steep price declines. In any event, the trade remedy laws are not intended to protect industries from cyclical downturns.

Of greater concern to policymakers than ensuring the viability of the U.S. steel industry should be the impact that continued antidumping and countervailing duty restrictions on behalf of a highly concentrated industry could have on steel consumers and the economy at large. Taxpayers and consumers bore a heavy brunt for the policies that preceded the steel industry’s renaissance. To continue to maintain trade restrictions on behalf of an industry that is in enviable health, whose firms have been achieving record or near-record profits, and which has a substantial degree of market power, is an injustice to those same taxpayers and consumers. And, as has been witnessed, it will distort market signals, frustrate optimal adjustment, and undermine the steel industry’s long-term health.

7. Section 201 of the Trade Act of 1974, also know as the
“Safeguard Law,” allows for import restrictions if imports are deemed a “substantial cause of serious injury” to the domestic industry.


11. International Steel Group was subsequently purchased by LNM Steel, a Dutch-based producer, and merged with Ispat-Inland to create Mittal Steel USA in 2005.


Members Conference, Washington, May 16, 2006; supplemental data provided by Christopher Plummer to the author via e-mail.

13. Ibid.

14. Ibid.


13. “U.S. Supreme Court Finally Removes Decade-long Roadblock to U.S.-Mexican Trucking” by Cassandra Chrones Moore (July 8, 2004)
10. “Why We Have Nothing to Fear from Foreign Outsourcing” by Dan Griswold (March 30, 2004)
1. “NAFTA at 10: An Economic and Foreign Policy Success” by Dan Griswold (December 17, 2002)
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