## COMMERCE & TRADE

# What Should Become of US Steel?

# Policymakers have little reason to fear the Nippon Steel deal.

he proposed sale of United States Steel Corporation to Japan-based Nippon Steel Corporation has caught the attention of American lawmakers. As I write this, US Steel shareholders are awaiting federal approval of the acquisition. If it is rejected, the shareholders may reconsider a sale to domestic rival Cleveland Cliffs Corporation or continue the firm as an independent operation. The outcome has implications for the competitiveness of the domestic steel industry, the future of organized labor, upstream supply chains affecting the mining demand for iron, coal, and other inputs for steel production, downstream supply chain effects on steel users, the wages and employment of affected workers, the economic fabric of communities in which the company's facilities are located, and national defense.

While US Steel no longer commands the dominant position it once did on the global stage, it remains a significant player in the domestic steel industry, ranking third in crude steel production behind Nucor and Cleveland Cliffs. The company's ongoing efforts to innovate and restructure may yet determine its future trajectory in the ever-evolving steel landscape.

An acquisition by Nippon Steel provides the best opportunity for US Steel to gain the investment, innovation, and management experience needed to reinvigorate the firm's productivity. Nippon also presents the best opportunities for US Steel employees and their unions and could help to revive the nation's steel industry. This conclusion is conditional on the expectation that Nippon would maintain, renovate, and

RONALD BIRD is a former chief economist for the US Department of Labor, senior regulatory economist for the US Chamber of Commerce, and adjunct professor of economics at George Washington University.



expand US Steel's production capacity in the United States and work within the context of existing collective bargaining agreements. Nippon's investment could strengthen competition within the US domestic steel product market, especially in terms of the potential to expand domestic steel supply to automobile assembly operations in the United States, Mexico, and Canada, serving both domestic and foreign-owned automobile brands. Strategic defense production concerns would be allayed by the fact that Nippon ownership would increase domestic steel production capacity compared to the status quo or a takeover by Cleveland Cliffs.

### **US STEEL'S RISE AND DECLINE**

US Steel was founded in 1901 when J.P. Morgan merged Andrew Carnegie's Carnegie Steel Company with Elbert H. Gary's Federal Steel Company and William Henry Moore's National Steel Company. The result stood as a giant in the manufacturing world, symbolizing the might and innovation of American industry. But in the last half-century, US Steel's global significance has waned. The firm now needs cash flow to maintain its position and its workers' jobs.

Early dominance / At its inception, US Steel controlled about



60 percent of the American steel market, boasting a capitalization of \$1.4 billion—equivalent to \$53.5 billion in 2024 dollars. That capitalized value exceeded all other US publicly traded corporations at the time. The company epitomized vertical integration: It controlled not just steel mills but also iron ore mines, coal fields, railroads, and shipping lines. This integration allowed it to dominate production and significantly influence prices and wages within the industry.

For decades, US Steel benefited from the burgeoning industrial growth in the United States. The early 20th century was marked by massive infrastructure projects, urbanization, and the rise of the automobile industry, all of which drove steel demand. During both World Wars, US Steel played a critical role in supplying the necessary materials for military manufacturing, further entrenching its position as an industrial leader.

**Post-war challenges**/ The post-World War II era brought unprecedented economic growth, but also sowed the seeds of future challenges for US Steel. By the 1950s and 1960s, the firm began facing increasing competition from both domestic and international steel producers. European and Japanese steel industries, rebuilt with modern technologies and often subsidized by their governments, started to outpace US Steel in efficiency and cost-effective-

#### COMMERCE & TRADE

ness. In the domestic market, the rise of mini-mills—smaller, more flexible steel plants using electric arc furnaces to recycle scrap steel—posed a significant threat. These mini mills, exemplified by companies like Nucor, could operate at lower costs and adapt more quickly to market demands than the large, integrated mills of US Steel.

The 1970s and 1980s were particularly tumultuous for US Steel. The oil crises of the 1970s led to economic stagflation, curbing industrial demand. The company began to face competition from cheaper imported steel, primarily from Japan and later from emerging markets like South Korea and China. These countries not only had lower labor costs but also benefited from government policies aimed at boosting their steel industries.

US Steel's response was often reactive rather than proactive. In 1982, the company diversified its operations by acquiring Marathon Oil in a \$6.4 billion deal, rebranding as USX Cor-

poration. This move aimed to mitigate the cyclical nature of the steel industry by tapping into the more stable energy sector. However, this diversification strategy did little to address the core issues plaguing its steel operations.

**Rankings** / US Steel has declined from its pinnacle as the world's largest industrial company when it was formed in 1901. That year the company produced 9.1 million metric tons of steel products. Its

annual output peaked at 29.0 million tons in 1979, when it was still the largest steel-producing company in the world, but then declined to 14.5 million tons in 2022.

Among the world's 50 largest steel producers in 2022, the firm ranked 27th, far behind global leader China Baowu Steel Group (131.8 million metric tons). Others in the global top five of annual tons were AccelorMittal (68.9 million), Ansteel Group (55.7 million), Nippon Steel (44.4 million), and Shagang Group (41.5 million).

US Steel's production tonnage was also behind American producers Nucor (globally 18th at 20.6 million) and Cleveland Cliffs (globally 22nd at 16.8 million). US Steel most recently operated at 76 percent of its 22-million-ton annual capacity, the lowest capacity utilization among U.S. domestic producers. In terms of domestic sales revenue, US Steel (\$18.0 billion) ranked fourth behind Nucor (\$41.5 billion), Cleveland Cliffs (\$23.2 billion), and Steel Dynamics (\$22.2 billion).

*Labor relations and legacy costs* / Another significant factor contributing to US Steel's decline is its labor relations and legacy costs. The company had a long history of contentious labor relations, exemplified by numerous strikes and labor disputes. High wages and generous pension and healthcare benefits secured by its unions increased the company's operating costs. As US Steel's market share and profitability declined, those legacy costs became increasingly unsustainable.

In the late 20th century, many American industries, including steel, saw a shift toward reducing labor costs and improving productivity. However, US Steel struggled to adapt because of its contractual commitments to its workforce. While competitors could modernize and streamline operations, US Steel's legacy obligations to retired workers and current employees kept costs high and made it difficult to compete. At the end 2022, US Steel employed 22,622 workers globally, of which 17,254 (76 percent) were union employees. Its total US employment of union workers was 14,374 (77.8 percent).

*Global market challenges* / Entering the 21st century, US Steel continued to face formidable challenges. The rise of China as the world's largest steel producer (currently accounting for

# In response to global competition, US Steel has undertaken restructuring efforts, invested in new technologies, and pursued strategic partnerships.

58 percent of world steel production) fundamentally altered the market. Chinese steel companies, often state-owned and heavily subsidized, flooded the global market with cheap steel, driving down prices and squeezing profit margins for US Steel and other Western producers. In response, US Steel undertook several restructuring efforts, including layoffs, plant closures, and divestitures. The firm also tried to innovate by investing in new technologies and more efficient production processes. Despite those efforts, US Steel struggled to regain its former dominance. The Great Recession of 2008–2009 further exacerbated the company's woes, leading to significant financial losses and further restructuring.

In recent years, US Steel has sought to reposition itself in the global market through strategic investments and partnerships. The company has focused on enhancing its technological capabilities, such as investing in the production of advanced high-strength steels for the automotive industry and exploring sustainable steel production methods. Additionally, US Steel has pursued joint ventures and strategic alliances to bolster its competitive position. One notable initiative is the company's acquisition of Big River Steel, a technologically advanced mini mill, aimed at combining US Steel's traditional expertise with innovative production techniques. This move represents a strategic shift toward more flexible and cost-effective steelmaking methods, reflecting the broader industry's trends.

At the end of 2023, the company reported \$1.0 billion in after-tax earnings on \$16 billion in revenue. Corporate assets totaled \$20.5 billion compared to \$9.3 billion total liabilities, resulting in total stockholder equity of over \$11 billion, or \$38.63 per share. With its stock currently trading at about \$36.50 per share (about 10 times earnings per share), market capitalization is about \$8.2 billion. The \$850 million increase in retained earnings in 2023 is a result of the company's recent investment in its future growth. These are all indicators of a financially healthy company with moderately sustainable future earnings prospects. The question raised by merger and acquisition discussions is whether US Steel's assets are being used most efficiently: Could its assets be more profitable and its growth prospects enhanced by combining with another company?

A legacy strength of US Steel is its significant self-owned supplies of raw materials. The company owns and operates iron ore and coal mining and processing facilities, providing the raw materials required for its steel production processes. These resources are critical for maintaining its integrated steel production operations, enabling the company to produce finished steel products from raw materials internally and thus ensuring a stable and cost-effective supply chain for its steel manufacturing needs. Because the company's current production levels are below its historical capacity, these raw material sources may be underutilized, and they may be an attractive asset for other steelmakers to acquire through merger.

# **COMPARING THE OFFERS**

Two acquisition offers were made to the US Steel board in 2023. The first, by Cleveland Cliffs in July, was rejected. The second, by Nippon Steel in December, was recommended by the board for stockholders' vote and approved by 99 percent of voting shares. The deal is now awaiting approval by government regulators. It has been met with political and, ironically, labor union opposition, and the outcome has not yet been determined. Cleveland Cliffs has indicated that it may revise and resubmit its offer if regulators bar the Nippon deal, but the terms of a possible future offer have not been revealed.

*Cleveland Cliffs offer* / Cleveland Cliffs offered a combination of cash and stock that valued US Steel at about \$10 billion: \$17.50 per share cash plus 1.023 shares of Cleveland Cliffs stock, equivalent to \$35.40 cash per share of US Steel common stock. The offer was a 42 percent premium over the market price of \$24.65 per share for US Steel common stock on that date. US Steel's board of directors rejected the offer.

An acquisition involving partial payment in the form of the offeror's own stock can be problematic because stockholders of the acquired company might worry that the offeror's stock value will fall after acceptance of the offer. As of June 10, 2024, the stock price of Cleveland Cliffs (CLF) was \$15.69 per share, which was 12 percent below its price when it made its offer. Further, Cleveland Cliffs stock was downgraded by JP Morgan and GLJ Research in June 2024 because of a lack of near-term growth compared to other steelmakers, lower steel prices, and anticipated increases in operation spending for the next four years. Sentiment on Wall Street and with investors has had a significant negative effect, and as of this writing the stock is down about 23 percent since the start of the year.

Cleveland Cliffs CEO Lourenco Goncalves has mentioned the firm would consider making another bid for US Steel, but very likely at a significantly lower price than the existing Nippon offer and potentially lower than the original Cleveland Cliffs offer. Regardless of business realities and investor perspectives, the company remains interested in the acquisition.

Cleveland Cliffs employs 28,000 workers, half of whom are unionized. It is North America's largest producer of flat-rolled steel, meaning steel sheets and plates. It is the largest supplier of steel to the automobile industry in North America, and 36 percent of its revenue comes from flat-rolled steel sales to the automobile industry. The company is also a leading producer of electrical steel cable to the utility grid market.

Cleveland Cliffs only recently expanded into the full steel production business with its acquisition of AK Steel Holding Corporation in 2020. That allowed Cleveland Cliffs to integrate its operations as North America's largest producer of iron ore pellets with the production of high-value-added steel and specialty manufactured parts for the automotive and other industries. The AK Steel acquisition marked a significant transformation for Cleveland Cliffs, positioning it for the first time as a major player in the steel industry, with a broad range of production capabilities, including integrated blast furnace steel mills, electric arc furnace plants, and facilities for producing hot briquetted iron. The combination of self-owned ferrous raw materials supplies provides cost and reliability advantages relative to domestic competitors, but the recency of Cleveland Cliffs' expansion into the end-stage steel production business may have been a concern when the US Steel board rejected the offer.

Cleveland Cliffs' acquisition of AK Steel presented costly challenges to modernize outmoded facilities to comply with environmental regulations and goals, including investment in innovations to reduce its steel production carbon emissions footprint. Increased expenditures to maintain and upgrade newly acquired steel production facilities in 2021 and 2022 adversely affected free cash flow and profits. Cleveland Cliffs has undertaken significant investment to upgrade the operational efficiency and environmental sustainability of some of its steel-making blast furnace facilities, and these improvements led to it choosing to idle a major older-type furnace at its Indiana Harbor facility in 2022. There may be need for further closures of older facilities in the near future.

#### COMMERCE & TRADE

The 2023 Cleveland Cliffs annual report showed total revenue of \$22 billion and net income of \$450 million, significantly less than 2022's net earnings of \$1.376 billion and 2021's net earnings of \$2.033 billion.

The AK Holdings acquisition required Cleveland Cliffs to take on a large debt, and its long-term debt liability totals \$3.1 billion. Cleveland Cliffs' financial position suggests that the company would need to secure significant additional funding through debt or equity to facilitate a substantial cash offer for US Steel given Cleveland Cliffs' current cash reserves and debt levels.

The United Steelworkers Union has endorsed Cleveland Cliffs' bid, based largely on the company's assurances that there would be no job cuts for union workers. It is noteworthy, however, that these assurances refer only to the unionized production workforce. Supervisory, administrative, and management workforces would be subject to significant

reductions because Cleveland Cliffs would have no need for another US headquarters. Despite assurances or intentions, union-represented production jobs would also eventually become at risk unless significant new investment can be obtained to modernize legacy facilities. This could potentially jeopardize pension plan obligations for current and retired steelworkers.

While Cleveland Cliffs has painted itself as more union friendly than Nip-

pon, the company and Goncalves' track record should be a cause for concern for the union. Earlier this year, Goncalves made assurances of growing American jobs but, just a few days later, announced the closure of a West Virginia plant with 900 jobs on the line.

Consideration of the effect of a Cleveland Cliffs–US Steel merger on domestic steel production competition and pricing is relevant for evaluating the likelihood that Cleveland Cliffs would carry through on its stated intention to maintain the union workforce. The company reported record steel shipments of 16.4 million net tons in 2023. US Steel's current total output is similar, and its output capacity is greater. US Steel also has significant market share and production capacity to supply flat-rolled steel to the automobile market. The combination of Cleveland Cliffs and US Steel would control over half of the domestic market for flat-rolled steel products. The combination would likely improve efficiency, but it would also enhance the new firm's pricing power.

The fact that both firms currently control substantial upstream supplies of steel-making inputs of iron and coal also raises competition concerns. Both companies sell raw materials to other domestic and foreign steel producers in addition to their own internal uses of these supplies, and their merger would eliminate the competition between them that reduces prices in the market for steel-making inputs.

Both companies currently are striving to upgrade older facilities to improve operational efficiency and meet evolving environmental and energy efficiency standards. Because any merger of the two would entail a substantial new debt burden, it is questionable whether the combined entity would have the financial ability to make the necessary investments to upgrade its facilities or even maintain commitments to union workers.

The market concerns of a combined Cleveland Cliffs–US Steel would likely extend to other industries with large union workforces, most notably the auto industry. If Cleveland Cliffs were to acquire US Steel, it would place 65–90 percent of steel used in vehicles under the control of a single firm, lead to anticompetitive pricing, and have a downstream effect on American autoworkers. In fact, if Cleveland Cliffs acquires US Steel, it would own 100 percent of the iron ore mines in the

# The combination of Cleveland Cliffs and US Steel would likely improve efficiency, but it would also enhance the new firm's market power.

United States and that would certainly require divestiture, undoubtedly leading to job losses within the company.

It is also questionable whether the combined entity would have an incentive to expand output and employment. The combination would create a near monopoly in domestic flat steel and other market segments. Typically, monopolists constrain output to raise prices and their profits, which would also result in reduced employment of manufacturing workers.

*Nippon offer* / Nippon Steel has offered to purchase outstanding shares of US Steel for \$55 per share, an amount totaling roughly \$14.1 billion. This represents a 40 percent premium over US Steel's closing stock price of \$39.50 per share as of December 15, 2023. (On June 10, 2024, US Steel common stock was selling at \$38.12, about 3.5 percent less.) While shareholders approved the deal, the acquisition faces significant regulatory and political hurdles. The Committee on Foreign Investment in the United States (CFIUS) is conducting a detailed review, and the US Justice Department has initiated an antitrust investigation. The acquisition has encountered opposition from key political figures, including President Joe Biden, who has expressed a preference for US Steel to remain under domestic ownership because of national security concerns. Former president Donald Trump has also said that he opposes the sale of US Steel to Nippon and has vowed to block the deal if he returns to the White House.

Nippon can finance its proposed \$14.1 billion cash offer to acquire US Steel and still boost its output and productivity. The company had annual revenues of \$50.7 billion and after-tax profits of \$4.7 billion according to its 2023 financial reports, and this level of performance has been consistent over the past decade or more. Nippon Steel's assets total \$60.8 billion and net stockholder equity is \$29.5 billion. The company has substantial cash reserves of \$4.4 billion and access to financial resources to support the acquisition. Nippon has secured commitments from major financial institutions to provide the necessary funding for the transaction. This includes leveraging its strong balance sheet and liquidity position to cover the cash component of the offer. Nippon Steel's strategic intention behind this acquisition includes expanding its global footprint and increasing its market share in the steel industry, particularly in the US market, which it views as integral to its goal of sustaining its position as a leading global steelmaker.

Nippon has committed to making significant investments in US Steel's existing facilities and productive capacity as part of its acquisition strategy. Specifically, Nippon has pledged to invest at least \$1.4 billion from 2024 to 2026 in US Steel's integrated steel mills to enhance its production capabilities and make it more advanced and environmentally sustainable.

Nippon Steel has also promised that there will be no layoffs or plant closures under the current contract. The company plans to keep US Steel's operations and headquarters in Pittsburgh and maintain the iconic US Steel brand. These commitments are part of a broader strategy to integrate Nippon's technologies and research and development advancements, which are expected to benefit US Steel's production processes and overall competitiveness. This should resolve any concerns of countless steelworkers and other employees in Pittsburgh who could have seen their lifelong jobs shipped elsewhere if the firm were bought by a different company.

With its extensive global resources and expertise, Nippon–US Steel could challenge existing US producers like Nucor and Cleveland Cliffs more effectively. Nippon Steel has previously supplied flat-rolled steel and other products to domestic automotive assembly plants as imports from steel production facilities abroad. In 2022, Nippon's revenue from imports of steel products by US customers was \$10.5 billion, including \$4.2 billion in flat steel products, supplied mostly to automotive assembly plants. The integration of Nippon Steel's advanced technologies and operational practices into US Steel's operations should enhance the combined entity's competitiveness not just domestically but also in international markets where US Steel has a presence.

Nippon's acquisition of US Steel would seem to favor the interests of union workers in three ways:

- The promised investment would increase productivity and expand competitive production capacity.
- The acquisition of US flat steel production facilities would enable Nippon to shift flat steel supplies currently going to its Japanese automaker customers' US assembly plants via imports to improved and expanded domestic facilities.
- Increased competition in the domestic steel industry would protect workers' wages and enhance union bargaining power.

The first two of these factors would contribute to increased employment of union-represented steel workers in America. The competition between US Steel (strengthened by the investment from Nippon Steel) and Cleveland Cliffs would enable the United Auto Workers to leverage them against one another in wage negotiations. It would also protect automakers from unfair pricing practices if Cleveland Cliffs were to acquire US Steel and have a monopoly on the domestic steel market.

Nippon and Japanese companies in general have had a positive track record with employees and union workers. Nippon has operated union plants in Pennsylvania and West Virginia for decades without issue. US Steel has also maintained good relations with organized labor for years, and with the proposed merger's cash flow increase and corporate culture from Nippon, current and future US Steel workers would be on more solid footing.

Politicians' assertions of concern about national security risks and job losses from the acquisition are unwarranted. While it may be important to national security that steel production capacity exist within the United States, the ownership of that capacity is irrelevant. Nippon cannot dig up US Steel's plants and transport them to Japan. Instead, the acquisition would result in significant investment and technology transfer to improve and expand existing domestic production facilities. Contrary to the politicians' stated fears, the acquisition by Nippon would contribute to improved national security.

# CONCLUSION

Nippon Steel's pending acquisition of US Steel has the potential to increase the domestic supply of steel to Japanese brand automakers in the United States. All things considered, the Nippon offer is clearly better for US Steel stockholders, employees, and union workers, as well as the US businesses that use steel. And the acquisition would improve national security by boosting domestic steel production.

Even though Nippon Steel is a foreign investor, US Steel's existing and expanded facilities would clearly remain in the United States and could shift to military production in a national emergency. Nippon is sufficiently strong financially to ensure the long-term sustainability of US Steel's domestic operations. A Nippon–US Steel merger would ultimately leave the United States with a more competitive steel sector that has greater capacity, benefiting the domestic economy and the nation.