

Trade Tariffs: Unprecedented But Not Uncharted

An Analysis of One and a Half Centuries of Investment Returns

- Tariffs are back, and markets are reacting.
- Past century and a half provides valuable insights into the impact of tariffs on economic growth and investment returns.
- Factor strategies provide resilience – equity factors, especially low volatility, have delivered strong returns in protectionist environments.

Trade tariffs have re-emerged as a central force shaping the investment landscape. After decades of liberalization, the tide turned in early 2025 when the United States imposed sweeping new tariffs on nearly all trading partners. This sharp policy reversal has heightened market volatility, rekindled fears of global fragmentation, and raised a pressing question for investors: how do tariffs affect economic growth, asset returns, and portfolio resilience?

While today's environment may feel unprecedented, it is far from uncharted. As shown in Exhibit 1, the U.S. has experienced several high-tariff regimes over the past 150 years—most notably during the industrial protectionism of the late 19th century and the Smoot-Hawley Act of the 1930s. Though the structure of the global economy has evolved—with deeper supply chain integration, a greater role for services, and faster information flow—investor behavior, policy feedback loops, and the fundamental mechanics of pricing risk have not. By studying long-run history, we can better understand how markets respond to protectionist shocks, how factor premia behave in these environments, and which strategies have historically delivered resilience.

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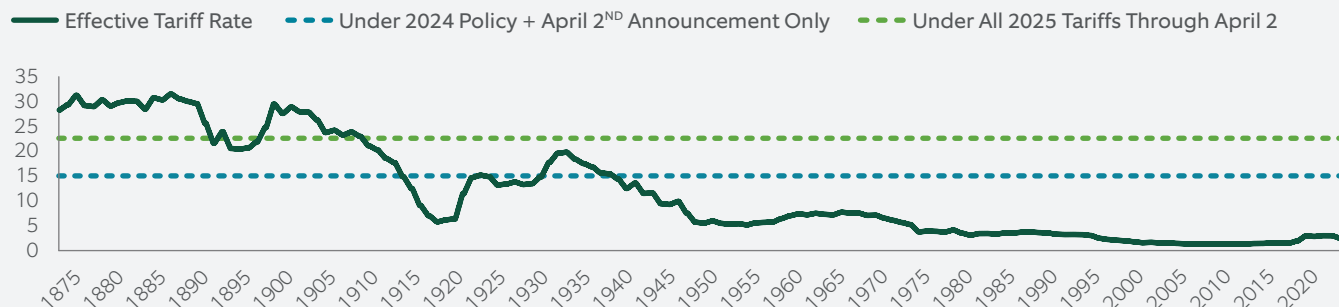
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EXHIBIT 1:

U.S. Effective tariff rate since 1875



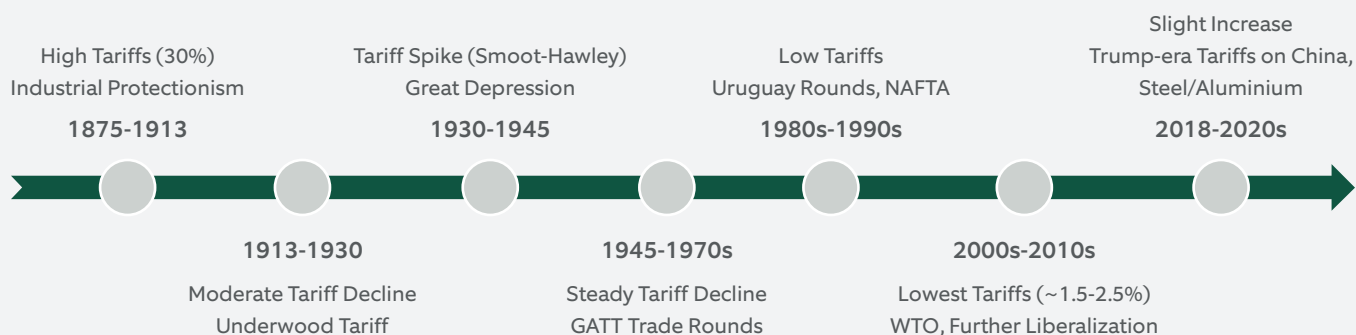
Source: Yale BudgetLab and Northern Trust Asset Management – Quantitative Strategies. The effective U.S. tariff rate is measured as customs duty revenue as a percent of goods imports. The sample period is 1875-2024.

In this paper, we examine those lessons through a data-driven lens, leveraging our proprietary database of 150 years of asset and economic data—the most comprehensive long-term dataset on tariffs, economic growth, and investment returns available to date (see Baltussen et al. 2023; Baltussen, van Vliet & Vidojevic 2024). Our objective is not to suggest that history will repeat itself, but to uncover patterns that rhyme—providing context for investors seeking to navigate today’s uncertainty. The evidence shows that while tariffs can introduce stress into markets, systematic equity factors—particularly low-volatility—have historically provided stability and added value during periods of trade disruption. For investors facing a resurgence in protectionist policy, these lessons are both timely and actionable.

The History of Tariffs

History is an interesting guide for the impact of tariffs. As evident from Exhibit 1 the world and the U.S. have experienced varying tariffs regimes over the past 150 years. Exhibit 2 summarizes the observed historic tariff trends since 1875 and links these to the key events and policies.

EXHIBIT 2: Historic tariff trends



Source: Yale BudgetLab and Northern Trust Asset Management – Quantitative Strategies.

We continue describing the evolution of U.S. tariff policy and it’s intended impact on the American economy.

1875-1913: Protectionist Peak

In the Civil War the U.S. implemented the Morrill Tariff in 1861, raising average tariff rates on dutiable commodities to approximately 47% to generate revenue for the Civil War. From the post-Civil War era (which was 1861–1865) to World War I, tariffs remained high to protect flourishing industries. Tariffs on dutiable imports averaged between 30% and 50%, reflecting the Republican Party’s commitment to industrial development through trade barriers, amounting to effective tariffs of around 30%. Notable legislation includes the Morrill Tariff (1861), the McKinley Tariff (1890), and the Dingley Tariff (1897), the latter of which marked the height of protectionism in this era.

1913–1920s: First Liberalization

The Underwood Tariff Act of 1913, enacted under President Woodrow Wilson, marked a turning point by reducing the basic tariff rates. In addition, many raw materials and groceries were added to the free of tariff list. This shift was driven by Democratic efforts to promote freer trade and encourage American manufacturers to produce more efficient and become more competitive with their prices, lowering the average cost for consumers.

1930s: Smoot-Hawley Era

The stock market crash of 1929 led to a worldwide economic downturn. As economies contracted, countries sought to protect their domestic industries and jobs. The Smoot-Hawley Tariff Act (1930) was a U.S. law that raised tariffs on over 20,000 imported goods to historically high levels. Sponsored by Senator Reed Smoot and Representative Willis C. Hawley, it aimed to protect American farmers and manufacturers during the early stages of the Great Depression. Average tariffs on dutiable imports were pushed to roughly 45%. Instead of helping, it triggered a trade war as other countries retaliated with their own tariffs and trade barriers. For example, major economies like Canada, the UK, France, and Germany imposed counter-tariffs, which led to a collapse in global trade. World trade dropped by over 60% between 1929 and 1933.¹

Post-WWII to 1970s: Trade Liberalization Era

After World War II, U.S. policy pivoted toward multilateral liberalization through the General Agreement on Tariffs and Trade (GATT). Through negotiation rounds, resulting in over 100 agreements, including Geneva, Dillon, Kennedy, and Tokyo, average tariffs on industrial goods fell dramatically. By the 1970s, U.S. tariffs were around 10% or lower, reflecting a global trend toward freer trade.

1990S–2000s: NAFTA and WTO Integration

With the signing of NAFTA (1992) coming into force (1994) and the U.S. joining the WTO (1995), tariff barriers declined even further. By the 2010s, average tariffs on all U.S. imports had dropped to approximately 1.5–2.5%, reflecting the peak of U.S. trade openness.

2018–2020s: Strategic Protectionism

Beginning in 2018, the Trump administration imposed a 10% blanket tariff on imports, along with additional levies targeting countries with large trade surpluses with the U.S., notably China. These measures marked a shift toward selective protectionism and initiated retaliatory tariffs by major trading partners.

2025: Escalation of Broad Tariff Policy

In 2025, the U.S. government announced a sweeping overhaul of its trade policy, marking the most

comprehensive escalation in tariffs since the early 20th century. The new regime introduced a blanket 10% tariff on all imports, with an additional levy tied to bilateral trade imbalances—set at half the size of each country's goods deficit with the U.S. While implementation included a 90-day grace period for most partners, the policy environment has since been marked by ongoing adjustments, exemptions, and reversals, creating substantial uncertainty for global markets. Nowhere has the impact been more pronounced than in China, the primary target of these measures. U.S. tariffs on Chinese goods have risen sharply, triggering immediate retaliatory actions from Beijing. The fluid and politically charged nature of the tariff agenda has further complicated forecasting and investment planning, amplifying market volatility and investor caution. The threat now hanging over the global economy is that President Trump is orchestrating a return to the 1930s, when the infamous Smoot-Hawley tariffs set off a chain reaction of international retaliation, often blamed for deepening the Depression. This move contrasts sharply with the multilateral liberalization trend of the previous decades. These regimes of U.S. trade tariffs also impact average global tariffs across the world, as other countries either had high tariffs (like European countries in the 19th century) or retaliated (for example during the Smoot-Hawley era).

¹ Mitchener, O'Rourke, & Wandschneider (2022) found that U.S. exports to protesting countries fell by 15 to 22%, while exports to retaliating countries dropped by an average of 28 to 33%.

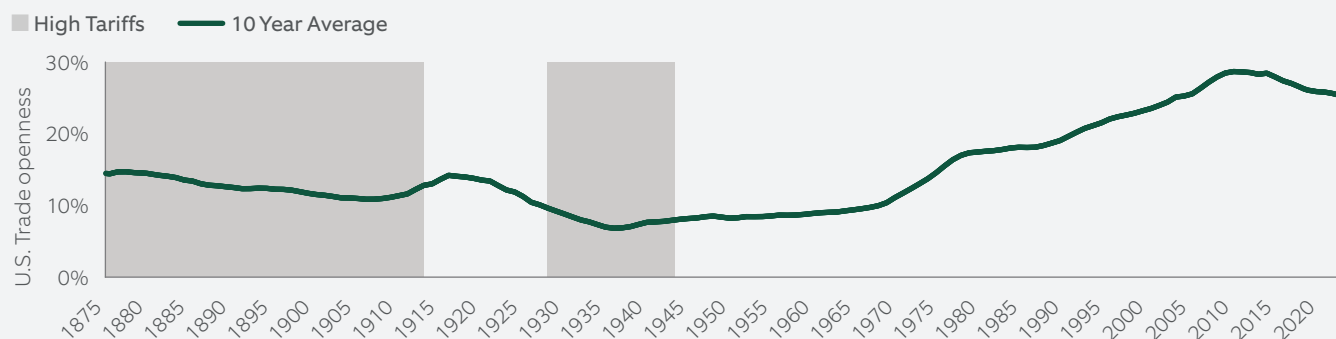
Tariffs are widely regarded as impediments to trade openness. By increasing the cost of cross-border transactions, high tariffs tend to restrict the flow of goods and services, thereby lowering a country's trade-to-GDP ratio—a standard measure of openness (Bas, 2012). Exhibit 3 illustrates the historical evolution of U.S. trade openness, defined as the sum of imports and

exports as a percentage of GDP, with key tariff regimes highlighted.

The data show clear declines in openness during periods of elevated protectionism, notably the late 19th century and the Smoot-Hawley era of the 1930s. Conversely, trade openness expanded significantly during the post-World War II liberalization phase and through the multilateral agreements of the 1990s

and 2000s. This trend began to reverse in the late 2010s, as targeted tariffs—particularly those imposed on China during President Trump's first term—curtailed global trade flows. The recent escalation in 2025 threatens to accelerate this reversal, underscoring the persistent tension between protectionist policies and global economic integration.

EXHIBIT 3: Historical trade openness



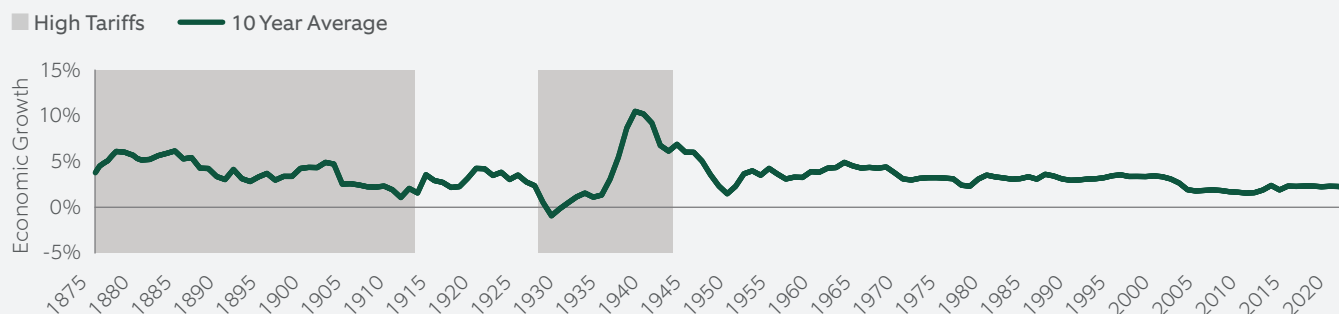
Source: GlobalMacroDatabase, Yale BudgetLab, Northern Trust Asset Management – Quantitative Strategies. The figure shows the historical timeseries behavior of the 10-year centered moving average of U.S. Trade Openness (based on the sum of U.S. Imports and Exports as a percentage of GDP). The bars highlighted periods of high tariffs. Tariff rates are calculated as the total revenue from import duties divided by the value of total imports in the same year. The sample period is 1875-2024.

What Does the Data Tell Us About Tariffs and Economic Growth?

A first order question for investors is what is the impact of tariffs on economic growth? While intuitive arguments often link protectionism with weaker economic outcomes, the historical data present a more nuanced picture. Academic research over the past decades has yielded mixed results, with some periods showing positive correlations between high tariffs and strong growth—especially before World War II—while post-war data point to slower growth in high-tariff regimes. This phenomenon has been termed the “tariff-growth paradox,” first identified by Baiocchi (1972), who noted that economies in the late 19th and early 20th centuries often grew rapidly despite, or even alongside, elevated tariff levels.² At the same time, economical channels suggest tariffs historically raised input costs and have done little to boost productivity, thereby potentially hindering economic growth originating from other historical sources like migration, recovery of the great depression, or productivity increases coming from major innovations.

To provide further color on the relationship between effective tariffs and economic growth we plot below the annual U.S. real GDP growth rates since 1875, with the previous high tariff periods highlighted in grey.

² For example, O'Rourke (2000) found that tariffs were positively correlated with growth in a panel of European and European-offshoot countries between 1870 and 1914, which Clemens & Williamson (2001) show persists in countries across the globe.

EXHIBIT 4:**U.S. tariffs versus economic growth**

Source: GlobalMacroDatabase, Yale BudgetLab and Northern Trust Asset Management – Quantitative Strategies. The effective U.S. tariff rate is measured as customs duty revenue as a percent of goods imports. U.S. economic growth is measured by the 10 years (centered) average growth rate in real GDP.

We can see that U.S. economic growth was marginally higher during high-tariff regimes. During the ‘Protectionist Peak’ period, the economy experienced a high but gradually declining growth rate of 3.9% on average, followed by a significant drop during the Great Depression.

Subsequently, growth recovered and averaged above 5% during the ‘Smoot-Hawley’ era. After that, tariffs declined, but economic growth fell to levels below those seen during the protectionist peak—dropping from 3.2% in the post-World War II period to 2.2% since the start of the 21st century.

Moreover, evidence suggests a prisoner’s dilemma for individual countries. If a single country imposes tariffs in a targeted and well-designed manner, it may reap some benefits. However, if others retaliate, the outcome typically worsens for all. Leaders considering a shift toward trade openness face a strategic game, not an isolated decision. Defection by major economies—raising tariffs unilaterally—often leads others to follow suit. In the end, only cooperation serves the best interests of the “prisoners.” Hence, the global context and international responses matter significantly, with a classic ‘prisoner’s outcome’ likely if everyone

begins retaliating. Good luck, politics!

Does this mean we can expect tariffs to avoid harming—or even benefit—economic growth going forward? In this note, we take a purely data-driven historical perspective, but we emphasize that today’s economies differ in important ways from those of the 19th and early 20th centuries. Most notably, the global economy is now far more interconnected, with intricate international supply chains, increasingly complex and tech-driven products, and a U.S. economy that relies more heavily on the export of services than goods. If the goal of protectionism is to improve trade balances, history offers some precedent—but at the same time, global trade has become a much larger share of world GDP. This suggests that the opportunity cost of retreating behind protectionist walls may be considerably greater today than it was in the past.

Tariffs and Investment Returns

Next, we turn to the impact of tariffs on investment returns. Our unique and extensive historical dataset enables us to examine this question through a purely data-driven lens,

focusing on real returns across both asset classes and equity factors. We analyze key traditional asset classes available over a long sample—equities, bonds, and gold—as well as classic equity style factors including size, value, momentum, low risk, and quality. These factors represent core building blocks in investors’ opportunity sets. We conduct three main analyses: (i) a sample split based on previous tariff episodes identified in Exhibit 2; (ii) a sample split based on the level of U.S. effective tariffs; and (iii) a sample split based on trade openness.

Exhibit 5 shows the results when zooming into the major tariff regimes identified above.

EXHIBIT 5:**Real investment returns during tariff regimes**

	1875–1913, Industrial protectionism High	1913–1930, Moderate Decline	1930–1945, Smoot- Hawley, Spike	1945–1970s, Steady Decline	1980s–1990s, Low, Uruguay Round	2000s– 2010s, Lowest	2018–2020s, Increase	1875–2024
Global Inflation	0.9	6.2	2.7	5.3	3.7	1.6	3.2	3.3
Equities	5.3	-3.1	5.1	4.8	11.9	4.2	8.7	5.1
Bonds	2.7	-3.2	1.1	-1.9	6.0	3.0	-1.7	1.1
Gold	-1.2	-6.2	1.9	2.9	-1.6	8.4	7.0	1.0
Size	6.4	-2.8	9.1	5.9	11.4	6.2	7.8	6.2
Value	6.7	-2.2	8.8	7.4	13.7	5.7	7.4	6.9
Momentum	7.4	2.4	6.3	9.8	17.4	5.9	10.0	8.5
Low Vol	8.8	1.7	5.2	7.7	16.9	8.0	9.2	8.4
Quality				5.7	13.7	6.3	10.2	8.4*
Multi-Factor	7.3	-0.2	7.1	7.3	14.6	6.4	8.9	7.4

Source: Baltussen et al. (2023), Yale BudgetLab and Northern Trust Asset Management – Quantitative Strategies. Data from January 1875 until December 2024, *except for Quality which starts in 1940, Quality is left out for periods with limited observations. Returns are inflation-adjusted, in annual terms, in USD and averaged across tariff regimes.

The results show that equities performed well during previous high-tariff periods, with annual real returns averaging 5.3% during the Protectionist Peak and 5.1% during the Smoot-Hawley era—both broadly in line with the long-term average over the past 150 years. Bond returns were more modest, at 2.7% and 1.1% respectively, while gold posted negative returns during the 1875–1913 period. Equity factor portfolios consistently outperformed the broad market, adding approximately 2.0% in both high-tariff regimes. Notably, low-volatility stood out during the 1875–1913 period, while the size factor delivered particularly strong results during the 1930–1945 Smoot-Hawley era.

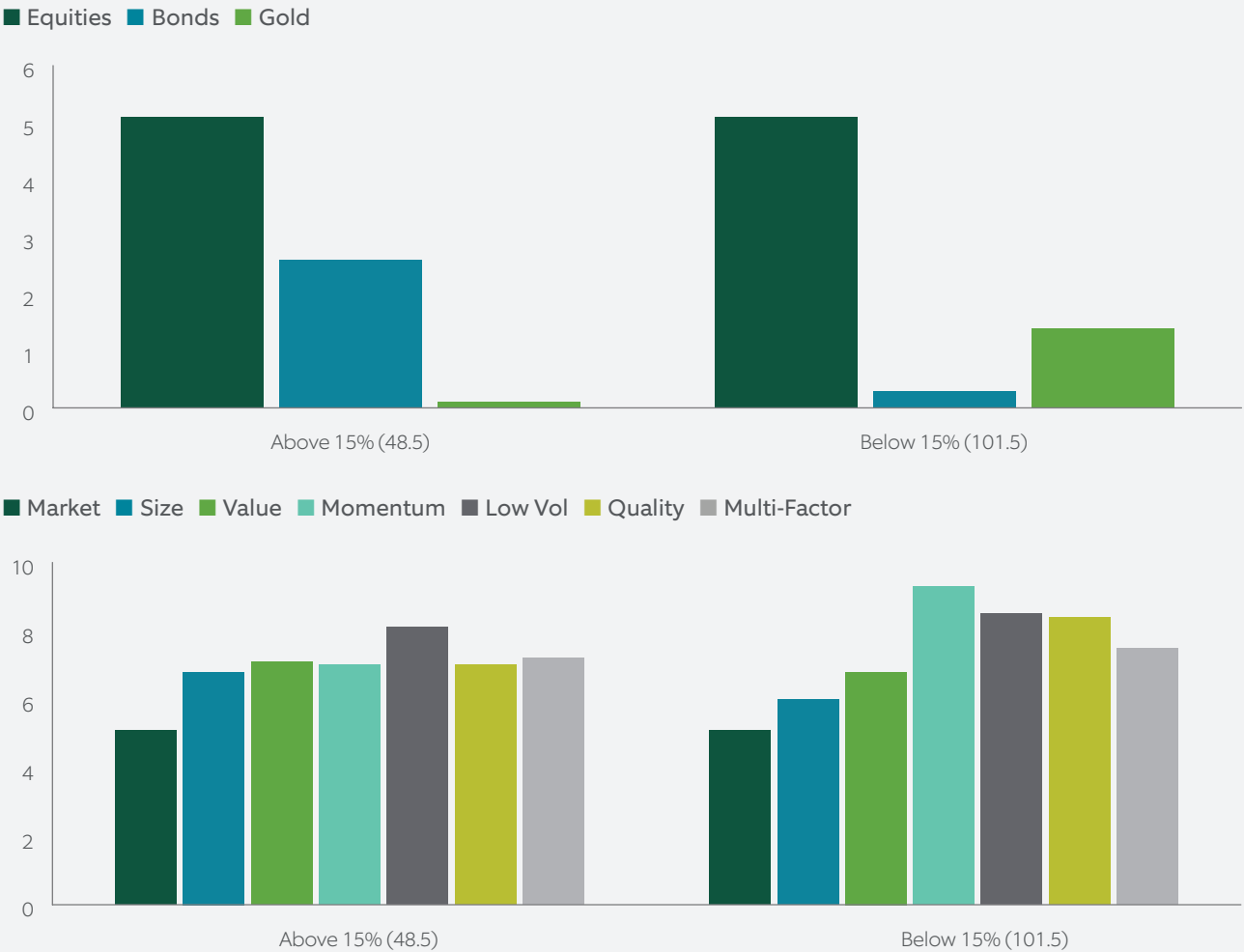
Next, we consider a sample split based explicitly on the level of U.S. effective tariffs, using a cutoff of 15%, as shown in Exhibit 6. The results align closely with the period classifications presented in Exhibit 5.

Real equity returns are, on average, positive and broadly in line with long-term averages. Real bond returns are also positive during high-tariff episodes but tend to be closer to zero when tariffs are relatively low. In contrast, gold returns are typically flat during high-tariff periods but more positive when tariffs are lower. Equity factors, however, show a consistent value-add over the market portfolio, delivering strong returns in both high and low tariff environments. In particular, low-volatility strategies performed well during high-tariff episodes, while size, value, and other factors also held up robustly.

These results reflect the various channels through which tariffs can influence factor performance. Elevated tariffs often increase input costs, compress profit margins, and heighten macroeconomic uncertainty—conditions under which investors tend to favor more resilient,

lower-risk companies. This supports low-volatility and quality factor outperformance. At the same time, tariffs can weigh more heavily on cyclical and globally integrated firms, which are often concentrated in value and small-cap segments. However, when these factors are priced at deep discounts, they can still deliver strong returns, particularly if policy shocks reverse or are already priced in—explaining their resilience even in high-tariff regimes.

EXHIBIT 6:
Investment returns during tariff regimes

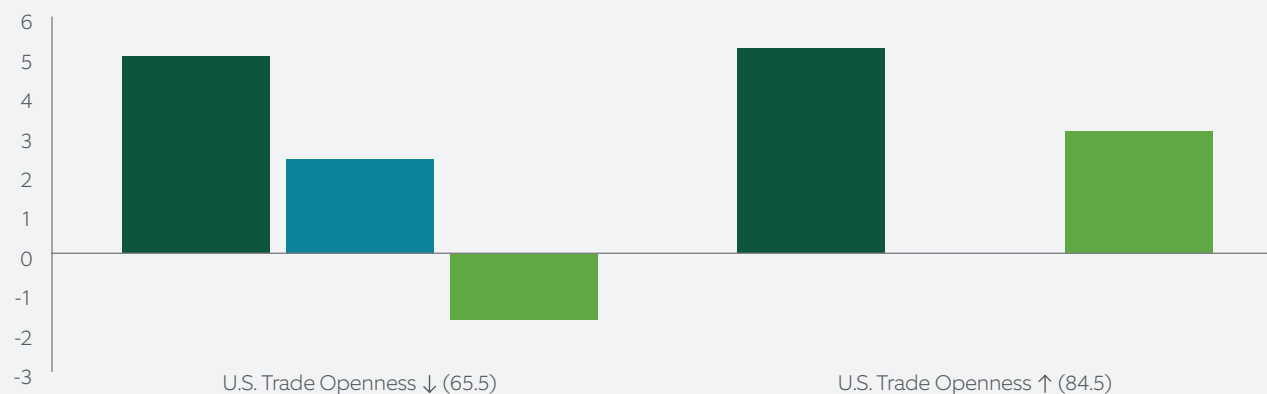


Source: Baltussen et al. (2023), Yale BudgetLab and Northern Trust Asset Management – Quantitative Strategies. The effective U.S. tariff rate is measured as customs duty revenue as a percent of goods imports. Effective U.S. tariff rates are year-end values, replicated across July-to-June, centered around December. Factors are simulated. Data from January 1875 until December 2024, except for Quality which starts in 1940, given earlier data is not available for this factor. The Multi-Factor series includes all factors available at each point in time. The shaded part for quality represents the market return over the same period. Factors are constructed by overlaying long-short portfolios on the market portfolio. Returns are in annual terms, in USD. Numbers in parentheses indicate the average number of years per scenario.

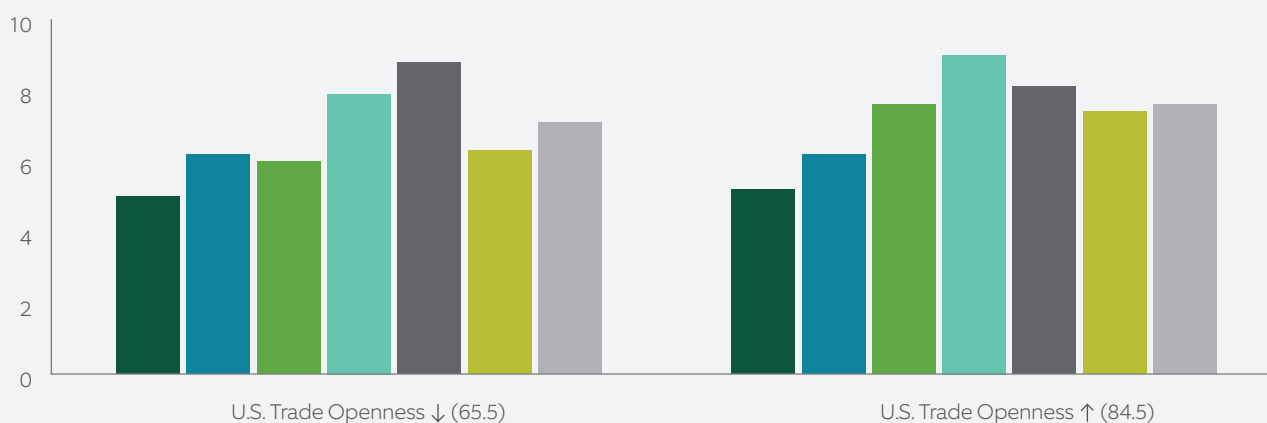
Trade tariffs typically lead to declines in trade openness, as shown in the previous section. As a third test, we examine a sample split based on changes in the level of U.S. trade openness, measured by the combined share of exports and imports relative to GDP. Exhibit 7 presents the results of this analysis.

EXHIBIT 7:**Investment returns during changing U.S. trade openness**

■ Equities ■ Bonds ■ Gold



■ Market ■ Size ■ Value ■ Momentum ■ Low Vol ■ Quality ■ Multi-Factor



Source: Baltussen et al. (2023), Yale BudgetLab and Northern Trust Asset Management – Quantitative Strategies. U.S. Trade Openness levels are year-end values, replicated across July-to-June, centered around December. Factors are simulated. Data from January 1875 until December 2024, except for Quality which starts in 1940, given earlier data is not available for this factor. The Multi-Factor series includes all factors available at each point in time. The shaded part for quality represents the market return over the same period. Factors are constructed by overlaying long-short portfolios on the market portfolio. Returns are in annual terms, in USD. Numbers in parentheses indicate the average number of years per scenario.

Consistent with the previous two analyses, we observe that equity returns remain relatively stable across different trade openness regimes. Bond returns tend to hold up well when trade openness declines, while gold returns are, on average, negative in those same periods. By contrast, equity factors consistently add value over the market portfolio in both high and low openness scenarios, with low-volatility strategies in particular delivering strong performance.

Conclusion

Using a proprietary dataset spanning 150 years, we examine the historical impact of trade tariffs on economic growth, asset returns, and equity factors. Our findings show that while high tariffs have historically coincided with episodes of volatility and reduced trade openness, economic growth and equity returns have remained relatively resilient.

Equity factors, in particular, have delivered consistent value over the market portfolio across both high and low tariff regimes. Low-volatility stands out as especially effective during periods of market stress, while size and value have also held up well.

As protectionist policies return to the forefront of global economic policy, these historical patterns may offer timely guidance. Factor-based strategies—especially those focused on resilience—can help investors navigate uncertainty in a more fragmented world.

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