

Ripple Effects of the Second Trump Administration's Tariff War: A Multi-Domain Assessment of Trade, Financial Markets, Macroeconomic Performance, and Institutional Spillovers, 2025 to 2026

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Ripple Effects of the Second Trump Administration's Tariff War: A Multi-Domain Assessment of Trade, Financial Markets, Macroeconomic Performance, and Institutional Spillovers, 2025 to 2026

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Abstract

Between January 2025 and February 2026 the second Trump administration imposed the most extensive tariff programme in modern United States history before the Supreme Court invalidated its principal legal basis. This article synthesizes seventeen recent studies spanning trade, finance, political economy and law with a newly assembled monthly panel of customs revenue, the trade deficit, inflation and unemployment to test, rather than merely narrate, the episode's ripple effects. Segmented regression with heteroscedasticity and autocorrelation robust standard errors identifies significant structural breaks in tariff revenue and the trade deficit around Liberation Day and the ruling, while the average effective tariff rate falls from near eleven percent in October 2025 to a negative rate by June 2026. We find no statistically significant contemporaneous pass-through from tariffs to headline inflation. The results reframe the episode as four sequentially reinforcing ripples culminating in judicial reversal risk rather than policy design alone.

Keywords: Trump tariffs; trade policy uncertainty; ripple effects; computable general equilibrium; financial contagion; IEEPA; Supreme Court

1. Introduction

Trade policy in the United States has, since the country's founding, oscillated between episodes of liberalization and episodes of protection, yet few peacetime episodes have matched the scale and speed of the tariff programme enacted during the first thirteen months of the second Trump administration. Beginning on 1 February 2025 with tariffs on Canadian, Mexican, and Chinese goods and culminating on 2 April 2025, a date the administration termed Liberation Day, with reciprocal tariffs applied to nearly every trading partner, the United States moved from a trade-weighted average tariff rate of roughly 2.5 percent to one exceeding 18 percent within a single fiscal year [1], [5]. China alone faced tariffs that escalated, through successive rounds of retaliation, to a peak of 145 percent before settling near 30 percent following a series of negotiated truces [1]. Canada, Mexico, and the European Union were assigned reciprocal rates of 25, 25, and 20 percent, respectively, while a blanket minimum of 10 percent applied to virtually all remaining partners [1], [2].

The economic literature has responded with unusual speed. Within eighteen months of Liberation Day, researchers working in international trade, asset pricing, political economy, and comparative law had produced a substantial body of evidence documenting how the tariff shock propagated through the global economy. Yet this literature remains fragmented across disciplinary silos. Computable general equilibrium studies quantify welfare and output effects but rarely engage with the financial market evidence [1], [8], [2], [9]. Financial econometricians document sharp movements in equity, bond, and commodity markets but seldom connect these movements back to the underlying trade flow data [10], [11], [12], [5], [13]. Political scientists and legal scholars,

in turn, document the domestic and international institutional consequences of the tariff programme with limited reference to either channel [14], [15], [16], [17], [18]. No single study has yet traced the shock through all four layers in one coherent framework, nor has any incorporated the single most consequential development of the episode, namely the Supreme Court's invalidation of the tariffs' primary legal basis on 20 February 2026 [6], [7], [19].

This article makes three contributions. First, it synthesizes seventeen recent studies into a unified ripple effect framework that traces the tariff shock from its initial imposition through trade diversion, sectoral reallocation, financial contagion, and macroeconomic performance before arriving at the institutional and judicial spillovers that the existing literature has largely treated as peripheral. Second, it updates this literature with newly released macroeconomic data covering gross domestic product growth, inflation, unemployment, the trade balance, and tariff revenue collection through mid-2026, allowing the analysis to capture both the peak of the tariff regime and its subsequent judicial unwinding. Third, it documents and interprets the 20 February 2026 Supreme Court ruling in *Learning Resources, Inc. v. Trump*, consolidated with *Trump v. V.O.S. Selections*, which held by a six to three majority that the International Emergency Economic Powers Act does not confer authority to impose tariffs, thereby invalidating the reciprocal tariff regime and exposing the federal government to refund claims estimated at 165 to 175 billion United States dollars [6], [7]. We treat this reversal not as a coda to the tariff episode but as a fourth ripple in its own right, one that generates fiscal uncertainty, litigation risk, and a scramble toward alternative statutory authorities such as Section 301 and Section 122 of the Trade Act of 1974 [7], [19].

The remainder of the article proceeds as follows. Section 2 reviews the relevant literature across four channels of transmission. Section 3 sets out the policy timeline that anchors the empirical analysis. Section 4 describes the data and methodology used in the empirical update. Section 5 presents the results. Section 6 develops the ripple effect framework that integrates the four channels. Section 7 discusses policy implications, and Section 8 concludes.

2. Literature Review

The literature reviewed in this section spans four transmission channels through which a large trade policy shock propagates, namely general equilibrium trade and welfare effects, financial market transmission, political economy and public perception, and sectoral, legal, and institutional spillovers. Table 1 summarizes the seventeen studies that anchor this review, and the discussion that follows is organized around the same four channels.

2.1 General Equilibrium Trade and Welfare Effects

Computable general equilibrium modelling remains the primary tool for quantifying the aggregate welfare and output consequences of the tariff programme. Hosoe [1] extends a standard single-country static model into an eighteen-region world trade framework calibrated to the GTAP12 database and finds that China, Canada, and Mexico bear the largest welfare losses among all countries and regions considered, while Japan's losses remain capped near 0.1 percent of household expenditure under the most severe scenario. Crucially, Hosoe [1] shows that the welfare consequences for the United States itself hinge on a single modelling assumption, namely whether tariff revenue is captured by government consumption or reimbursed to households; under the former assumption the United States suffers a welfare loss of nearly 3 percent, while under the

latter it records a modest gain. This sensitivity foreshadows the fiscal ambiguity that later materializes in the empirical data reported in Section 5.

Li, Balistreri, and Zhang [8], writing on the first Trump-era trade war, estimate that the tariffs remaining after the January 2020 Phase One agreement reduced Chinese welfare by 1.7 percent and United States welfare by 0.2 percent, with substantial trade diversion toward Southeast Asian economies such as Malaysia and Thailand. Their estimates, produced using the GTAPinGAMS model calibrated to GTAP version 10, provide a pre-pandemic baseline against which the second Trump administration's more expansive tariff programme can be compared. El Hajoui and El Baouchari [2] extend this literature to the 2025 episode using a dynamic multi-regional computable general equilibrium model calibrated to GTAP 11 and the CEPII 2022 scenario. Their central finding is that the decisive variable in the conflict is not the tariff rate itself but the capacity of either country to mobilize a coalition of allied trading partners; under a scenario in which the United States successfully isolates China, Chinese gross domestic product contracts by 32.81 percent relative to baseline by 2030 while United States gross domestic product rises by only 0.04 percent, whereas the reverse coalition scenario produces a symmetric reversal in which the United States economy contracts by 24.13 percent and China's expands by 36.92 percent [2]. Cui and Jiang [9] apply a complementary dynamic computable general equilibrium framework to the narrower but strategically significant case of the semiconductor and critical minerals conflict, finding that a full chip embargo reduces Chinese gross domestic product by 1.051 percent and United States gross domestic product by only 0.006 percent in the initial implementation period, while China's retaliatory export controls on gallium, germanium, and graphite inflict disproportionate damage on Japan, South Korea, and Chinese Taiwan.

A parallel strand of the literature models trade policy itself as a stochastic process rather than a fixed shock. Alessandria, Khan, Khederlarian, Ruhl, and Steinberg [20] estimate a dynamic exporter model in which Chinese firms form expectations over a Markov process governing transitions between normal trade relations, non-normal trade relations, and trade war regimes. Using disaggregated United States import data from 2015 through 2024, they find no evidence that firms anticipated the 2018 trade war before it occurred, that the probability of a return to trade peace exceeded 70 percent in the first two years of the conflict before falling to 20.8 percent by 2023, and that, counterintuitively, President Trump's tariff actions lowered the discounted expected mean future tariff by 5.3 percentage points while President Biden's continuation of those tariffs raised it by 4.6 percentage points [20]. This finding, that policy persistence rather than policy initiation drives long-run expectations, anticipates the argument developed in Section 6 regarding the judicial reversal of early 2026. Salahuddin, Alom, Akbar, Wei, and Rahman [14] apply Dynamic Autoregressive Distributed Lag and Dynamic Ordinary Least Squares estimation, together with Toda Yamamoto causality tests and a Forest Simulation method, to forecast the effect of the tariff programme on Canada specifically. They find that Canadian total exports to the United States peak at 58.91 units under a minimum 15 percent tariff and decline steadily to 34.65 units under a 50 percent tariff, while a Canadian retaliatory tariff of 40 percent is projected to contract import volume by nearly 30 percent [14].

2.2 Financial Market Transmission and Contagion

A second strand of the literature examines how the tariff shock propagated through asset prices rather than trade flows. Golez, Kelly, and Matthies [10] use option implied dividend strips on the S&P 500 index to test the administration's stated narrative of short-term pain in exchange for long-

term gain. They find the opposite pattern. One United States dollar invested in a one-year dividend strip on 17 January 2025 grew to 1.236 United States dollars by 29 April 2025, while the same investment in the aggregate market fell to 0.925 United States dollars, with the divergence most pronounced on Liberation Day itself. Bouri, Jalkh, and Demir [11] apply the higher-order comoment contagion tests of Fry, Martin, and Tang, together with the extremal dependence framework of Fry-McKibbin and Hsiao, to daily returns on equities, Treasury and corporate bonds, the dollar index, gold, crude oil, and Bitcoin around three events, namely the 2024 election, the January 2025 inauguration, and Liberation Day. They document statistically significant contagion in co-volatility, co-skewness, and co-kurtosis between United States trade policy uncertainty and every asset class examined, indicating that the tariff shock is best understood as a systemic risk factor rather than an idiosyncratic one.

Chen, Fang, and Liu [12], studying the first Trump era trade war, identify a structural vector autoregression via event day heteroscedasticity and find that the trade war shock explains at least 30 percent of the variation in the S&P 500 index and ten-year Treasury yields on impact, operating through both a growth expectations channel and a risk premium channel, with firms exhibiting high output exposure to China suffering disproportionately larger losses. Zheng [5] extends this literature directly into the second Trump era episode using a rolling Diebold Yilmaz generalized forecast error variance decomposition framework applied to twenty international equity indices over the period 2015 to 2025. The central finding is a clear divergence between the two trade conflicts, as the first Trump-era trade war left global equity market connectedness statistically indistinguishable from its pre-conflict baseline, whereas the second episode produced a sustained and significant rise in connectedness, with the administration's ninety-day pause on reciprocal tariffs generating an even larger spike in cross-market synchronization than the original Liberation Day announcement. Zheng [5] interprets this pattern as evidence that policy reversibility and ambiguity, rather than tariff magnitude alone, drive financial market contagion, a conclusion that resonates with the trade policy uncertainty literature reviewed above. Rubbaniy, Shah, Beldi, and Khalid [13] apply wavelet quantile regression to daily rare earth element prices spanning January 2015 to April 2025 and find that United States-specific trade policy uncertainty exerts the most persistent and extensive nonlinear influence on herding behaviour among rare earth element investors, particularly at short- and medium-term horizons, underscoring the strategic mineral dimension of the broader trade conflict.

2.3 Political Economy and Public Perception

Donadelli and Gerotto [21] examine state-level Google search intensity for the term tariff during the first three months of the second Trump administration and find a correlation of negative 79 percent, falling to negative 69 percent when the outlier of the District of Columbia is excluded, between search interest and the margin by which Donald Trump defeated Kamala Harris in each state during the 2024 presidential election. Regression analysis confirms that this polarization persists after controlling for state-level demographic variables and that the level of interest depends systematically on the type of tariff event, with tariffs implemented by the United States itself generating the highest search intensity, followed by foreign retaliation, and tariffs that merely become effective generating more attention than tariffs that are only announced [21]. This evidence complements the expectations-based framework of Alessandria and colleagues [20] by showing that heterogeneous political priors, not only heterogeneous economic exposure, shape how different segments of the public process trade policy uncertainty.

2.4 Sectoral, Legal, and Institutional Spillovers

A final strand of the literature documents spillovers that fall outside conventional trade and asset pricing channels. Bo and Liu [15], using the universe of civil verdicts in firm-to-firm litigation in China between 2014 and 2020, find that the win rate of United States plaintiffs suing Chinese defendants declined significantly in Chinese cities more exposed to tariff shocks, an effect driven by shifts in individual judges' attitudes under pressure from citizen sentiment rather than by direct government capture of the judiciary. This finding documents a channel, legal protectionism, through which trade conflict can damage foreign firms operating abroad even in the absence of any formal retaliatory tariff. Biller [16], writing in a trade newsletter aimed at the industrial coatings sector, documents how tariffs on titanium dioxide, resins, and metal-based pigments raised production costs throughout the coatings supply chain, compressed margins in a price-sensitive market, and created pressure toward industry consolidation as smaller manufacturers struggled to absorb the increases. Nguyen, Trinh, Pham, and Vu [22] apply a water footprint network methodology to Vietnam's agricultural trade with the United States, China, and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership bloc between 2010 and 2021 and document a visible surge in Vietnam's net virtual water trade with both the United States and China in 2018, coinciding with the first Trump era trade war, as Chinese and American purchasers redirected demand toward Vietnamese suppliers.

Greer, Jarman, Kulikoff, Panteli, van Ginneken, and Wismar [17] adopt the Health System Performance Assessment framework of the European Observatory on Health Systems and Policies to evaluate how the tariff programme, combined with the administration's withdrawal from the World Health Organization and the dismantling of the United States Agency for International Development, creates both fiscal pressure and strategic opportunity for European health systems, the former through economic disruption and the latter through the potential relocation of research funding and skilled health workers away from the United States. Secor [18], approaching the episode from political geography and psychoanalytic theory rather than economics, characterizes the second Trump administration's foreign and trade policy as an instance of dissociative geopolitics, in which the fantasy of a totalized, divisible world order is sustained through repeated acts of division and reversal; while this framework lies outside the quantitative tradition that dominates the remainder of this review, it offers a useful interpretive lens for the abrupt policy reversals, including the ninety-day pause documented by Zheng [5] and the judicial reversal documented in Section 5.3 below, that recur throughout the episode.

Table 1 below presents these seventeen studies in full, alongside their disciplinary channel, methodology, and principal quantitative finding, ordered by their sequence of appearance in this review.

Table 1. Summary of reviewed studies on the second Trump administration's tariff war, by transmission channel.

Ref.	Study	Channel	Method	Principal finding
[1]	Hosoe (2026), J. Asian Economics	Trade and welfare	18-region world CGE, GTAP12	Japan's welfare loss capped near 0.1%; U.S. welfare sign depends on tariff revenue recycling assumption
[8]	Li, Balistreri and Zhang (2020), J.	Trade and welfare	GTAPinGAMS, GTAP10	Post Phase One tariffs cut Chinese welfare 1.7% and U.S.

Ref.	Study	Channel	Method	Principal finding
	Asian Economics			welfare 0.2%; trade diverted to Southeast Asia
[2]	El Hajoui and El Baouchari (2026), Scientific African	Trade and welfare	Dynamic multi regional CGE, GTAP11	Isolation, not tariff level, is decisive; successful U.S. isolation cuts China GDP 32.8% by 2030
[9]	Cui and Jiang (2025), Computers & Industrial Engineering	Trade and welfare	Dynamic CGE, chip and mineral input output	Full chip embargo cuts China GDP 1.051%, U.S. GDP 0.006%; China's mineral controls hurt Japan, Korea, Taiwan more
[20]	Alessandria, Khan, Khederlarian, Ruhl and Steinberg (2025), J. International Economics	Trade and welfare	Dynamic exporter model, Markov tariff regimes	P(peace after war) fell from 74.5% (2019) to 20.8% (2024); Trump lowered, Biden raised, discounted expected tariff
[14]	Salahuddin, Alom, Akbar, Wei and Rahman (2026), J. Policy Modeling	Trade and welfare	ARDL, DOLS, Toda Yamamoto, forest simulation	Canadian exports fall from 58.91 to 34.65 units as tariffs rise 15% to 50%; 40% retaliation cuts imports 30%
[21]	Donadelli and Gerotto (2025), Economics Letters	Political economy	State panel OLS and fixed effects, Google Trends	Search interest in tariffs correlates -69% to -79% with Trump vote margin across U.S. states
[10]	Golez, Kelly and Matthies (2025), Economics Letters	Financial markets	Option implied dividend strips	Short strips returned +23.6% versus -7.5% for the market in Trump 2.0's first 100 days
[11]	Bouri, Jalkh and Demir (2025), Res. Intl. Bus. & Finance	Financial markets	Fry McKibbin higher order comoment contagion tests	Significant co volatility, co skewness and co kurtosis contagion from TPU to equities, bonds, gold and Bitcoin
[12]	Chen, Fang and Liu (2023), J. Intl. Money and Finance	Financial markets	SVAR identified by event day heteroscedasticity	Trade war shock explains at least 30% of S&P 500 and 10-year yield variance on impact
[5]	Zheng (2026), Finance Research Letters	Financial markets	Rolling Diebold Yilmaz connectedness, 20 indices	Trump II raised connectedness significantly; the 90-day pause spiked it more than Liberation Day itself

Ref.	Study	Channel	Method	Principal finding
[13]	Rubbiani, Shah, Beldi and Khalid (2026), J. Commodity Markets	Financial markets	Wavelet quantile regression	U.S.-specific TPU drives the strongest short- and medium horizon herding in rare earth element markets
[15]	Bo and Liu (2026), J. Development Economics	Institutional and legal	Triple difference on 1 million Chinese civil verdicts	U.S. plaintiffs' win rate fell in tariff exposed Chinese cities, driven by judges' attitudes under citizen pre-ssure
[16]	Biller (2025), Focus on Powder Coatings	Sectoral	Industry trade press synthesis	TiO ₂ , resin and pigment cost pass-through compresses margins and pressures industry consolidation
[22]	Nguyen, Trinh, Pham and Vu (2025), J. Cleaner Production	Sectoral	Water footprint network method	Vietnam's net virtual water exports to the U.S. and China surged in 2018 as trade was redirected
[17]	Greer, Jarman, Kulikoff, Panteli, van Ginneken and Wismar (2025), Health Policy	Institutional and legal	HSPA policy framework analysis	Tariffs plus WHO exit and USAID cuts create fiscal pressure but also research and talent opportunities for Europe
[18]	Secor (2026), Political Geography	Institutional and legal	Political geographic and psychoanalytic reading	Frames repeated tariff reversals as symptomatic of a broader dissociative geopolitics

3. Policy Timeline and Institutional Context

The empirical analysis in Sections 4 and 5 requires a precise chronology of the tariff programme, since several of the studies reviewed above, most notably Zheng [5] and Alessandria et al. [20], show that the financial and expectational effects of trade policy depend on the specific character of each event rather than on the cumulative tariff level alone. Table 2 sets out the principal milestones of the episode, from the earliest tariff actions of February 2025 through the Supreme Court's ruling of February 2026 and its immediate fiscal aftermath.

Table 2. Chronology of principal tariff policy and judicial events, February 2025 to March 2026.

Date	Event
1 Feb. 2025	Tariffs of 25% announced on Canadian and Mexican goods and 10% on Chinese goods, invoking IEEPA on the stated grounds of fentanyl trafficking and illegal immigration [1], [2].

Date	Event
4 to 12 Mar. 2025	Tariffs on Canada and Mexico take effect; China raises retaliatory duties; U.S. Section 232 tariffs on steel and aluminium take effect at 25% [1], [2].
26 Mar. 2025	A 25% tariff on imported automobiles and parts is announced under Section 232 [1].
2 Apr. 2025	“Liberation Day”, reciprocal tariffs of a minimum 10% announced for virtually all trading partners, with higher country specific rates, including 24% for Japan and 20% for the European Union [1], [2].
9 Apr. 2025	Reciprocal tariffs on China raised sharply while reciprocal tariffs on other countries are suspended for 90 days; the pause becomes the single largest driver of equity market connectedness in the episode [5].
May to Jun. 2025	Trade weighted average U.S. tariff on Chinese goods reaches roughly 18.6% net of exemptions; a Phase One style truce lowers the peak China rate from 145% toward the 30% range [1].
20 Feb. 2026	The Supreme Court rules 6 to 3 in <i>Learning Resources, Inc. v. Trump</i> , consolidated with <i>Trump v. V.O.S. Selections</i> , that IEEPA does not authorize tariffs; reciprocal tariffs and the China, Canada, and Mexico fentanyl tariffs are invalidated [6], [7], [19].
24 Feb. 2026	Customs and Border Protection halts collection of IEEPA based duties pursuant to an executive order directing agencies to cease collection [7].
4 to 17 Mar. 2026	The Court of International Trade, in <i>Atmus Filtration, Inc. v. United States</i> , orders nationwide refunds of unlawfully collected IEEPA duties; Customs and Border Protection begins building an automated refund processing system [6], [7].

Two features of Table 2 merit emphasis before turning to the data. First, the episode is not a single shock but a sequence of announcements, escalations, pauses, and reversals, a structure that the trade policy uncertainty literature identifies as economically distinct from a one-time permanent tariff increase [20], [11], [5]. Second, the final three rows of Table 2, spanning the Supreme Court's ruling and its immediate procedural aftermath, fall entirely outside the sample period of every one of the seventeen studies reviewed in Section 2 with the partial exception of Hosoe [1], whose data extend into September 2026 but whose model does not incorporate the judicial channel. The empirical update presented in Section 5 is designed specifically to close this gap.

4. Data and Methodology

The empirical update draws on five public data series, each selected to correspond to one node of the ripple effect framework developed in Section 6. Quarterly real gross domestic product growth, reported at a seasonally adjusted annual rate, is obtained from the Bureau of Economic Analysis and spans the first quarter of 2025 through the first quarter of 2026 [23]. Monthly headline and core Consumer Price Index inflation and the unemployment rate are obtained from the Bureau of Labor Statistics [24]. The monthly and annual goods and services trade balance, disaggregated by trading partner, is obtained from the Bureau of Economic Analysis international transactions accounts [4]. Personal consumption expenditures price inflation and the labour force participation

rate are obtained from the United States Department of the Treasury's quarterly refunding presentations to the Treasury Borrowing Advisory Committee [25]. Monthly net customs duties revenue, our principal proxy for the fiscal footprint of the tariff programme, is compiled from the United States Treasury's Daily and Monthly Treasury Statements as reported by the Committee for a Responsible Federal Budget and the Federal Reserve Bank of Richmond [3], [26]. Finally, projections of the fiscal consequences of the February 2026 judicial ruling are drawn from the Congressional Budget Office and the Penn Wharton Budget Model [27], [6].

To benchmark the fiscal footprint of the tariff programme in a form comparable across months of differing import volume, we define the average effective tariff rate, denoted $AETR$, for period t as the ratio of net customs duties revenue collected, R , to the value of goods imports, M , expressed as a percentage:

$$AETR_t = \left(\frac{R_t}{M_t} \right) \times 100 \quad (1)$$

where the subscript t indexes calendar months. Equation (1) follows the convention used by the Federal Reserve Bank of Richmond in its tariff revenue tracking series [26] and provides a policy-neutral summary statistic that is comparable both across time and, in principle, across the country-level averages implied by the tariff schedules reported in Table 2.

To situate the welfare implications of the tariff programme within the general equilibrium tradition reviewed in Section 2.1, we adopt the Hicksian equivalent variation measure used by Hosoe [1] and, in a related form, by Li, Balistreri, and Zhang [8]. Under linearly homogeneous preferences, the expenditure function of the representative household in region r can be decomposed as

$$e_r(p, u_r) = u_r \times P_r(p) \quad (2)$$

where p denotes the price vector, u sub r denotes the level of household utility, and P sub r denotes the true cost of living index for region r , normalized to unity in the benchmark year. The change in u sub r between the pre-tariff and post-tariff equilibria, expressed as a percentage of baseline household expenditure, is the welfare measure reported throughout Section 2.1 and referenced again in the discussion of Section 6.

Finally, to summarize the financial contagion evidence reviewed in Section 2.2, we reproduce, in general form, the total connectedness index of Diebold and Yilmaz that underlies the empirical strategy of Zheng [5]:

$$TCI = (\sum_{i \neq j} \theta_{ij} / N) \times 100 \quad (3)$$

where θ_{ij} denotes the pairwise directional spillover from market i to market j derived from a generalized forecast error variance decomposition, and N denotes the number of markets in the system. Equation (3) is not estimated again in this article; it is reproduced to make explicit the metric that underlies the connectedness comparisons discussed in Sections 2.2 and 6, and to ensure that every quantitative claim drawn from Zheng [5] can be traced to a well-defined statistic.

4.1 An Interrupted Time Series Extension

The descriptive update reported in earlier drafts of this article stated the direction of each series without testing whether the two central events of Table 2, Liberation Day and the Supreme Court

ruling, correspond to a statistically identifiable change in that series rather than to ordinary month-to-month variation. To close this gap we assemble a monthly panel running from January 2025 to July 2026, nineteen observations in total, covering net customs duties revenue, the seasonally adjusted goods and services trade deficit, the headline Consumer Price Index inflation rate, the unemployment rate, and the West Texas Intermediate crude oil price as a control for the terms of trade shocks unrelated to tariff policy. Net customs duties revenue is compiled from the Monthly Treasury Statement as reported by the Committee for a Responsible Federal Budget and by contemporaneous Treasury press statements; the trade deficit, from the monthly Bureau of Economic Analysis and Census Bureau international trade releases; the unemployment rate, from the Bureau of Labor Statistics; and the oil price, from the United States Energy Information Administration.

Ten of the nineteen monthly revenue readings and twelve of the eighteen monthly deficit readings correspond to a figure stated directly in an official release or contemporaneous financial press report. The remaining months, concentrated in the early phase of the tariff programme and in the two months of Bureau of Labor Statistics data delayed by the government shutdown noted below, are interpolated between adjacent directly reported readings subject to the constraint that the interpolated path reproduce the corresponding fiscal year or calendar year total published by the Treasury and the Bureau of Economic Analysis to within one percent. Figures 2 and 3 mark each month as directly reported or interpolated so that the reader can assess the evidential weight of any given segment of the series, and we treat the resulting structural break estimates as indicative rather than as a substitute for the fully disaggregated daily Treasury data that only the federal government holds.

To test for a structural change in revenue and in the trade deficit around each event, we estimate the segmented regression

$$Y_t = \beta_0 + \beta_1 t + \beta_2 D_t^{Lib} + \beta_3 (t - \tau_{Lib} + 1) D_t^{Lib} + \beta_4 D_t^{SC} + \beta_5 (t - \tau_{SC} + 1) D_t^{SC} + \varepsilon_t \quad (4)$$

where Y_t is, in turn, monthly revenue and the monthly trade deficit, D_t^{Lib} and D_t^{SC} are indicators equal to one from April 2025 and from March 2026 respectively, the second date chosen as the first full calendar month after the 20 February ruling, and τ_{Lib} and τ_{SC} index those two dates. The coefficients β_2 and β_4 capture an immediate level shift at each break, while β_3 and β_5 capture a change in the subsequent slope. Standard errors are heteroscedasticity and autocorrelation robust with two lags, since a monthly fiscal series of this kind is very unlikely to satisfy the classical independence assumption. We additionally report the F statistic for the joint null hypothesis that all four break coefficients equal zero, a Chow-type test of no structural change at either date, or a simple event study comparing the pre and post-break sample means with a Welch two-sample t-test that does not depend on the functional form of Equation (4). Because the pre-Liberation Day segment contains only three monthly observations, the intercept and linear trend of Equation (4) are estimated with an apparent precision that a sample of this size cannot genuinely support; we therefore restrict causal interpretation to the four break coefficients, which are identified from the full eighteen or nineteen-month sample, and flag this limitation again in Section 8.

Where monthly import values are available from the same Bureau of Economic Analysis and Census Bureau releases, we compute the average effective tariff rate of Equation (1) directly rather than interpolating it, giving five snapshot readings spaced across the sample period that are reported in Table 5. Finally, to test whether the tariff programme passed through into headline

inflation within the sample window, we estimate a reduced-form regression of monthly Consumer Price Index inflation on a linear trend, the Liberation Day indicator, and the oil price control over the sixteen months for which all three series are available, again with heteroscedasticity and autocorrelation robust standard errors.

All monetary values are reported in nominal United States dollars unless otherwise indicated. Because the fourth quarter 2025 gross domestic product estimate was affected by a forty-three-day partial federal government shutdown that ran from 1 October through 12 November 2025, the Bureau of Economic Analysis estimates that this disruption alone subtracted approximately 1.0 percentage point from measured fourth quarter growth [23]; this adjustment is noted wherever the fourth quarter figure is discussed.

5. Empirical Results

5.1 Macroeconomic Performance

Figure 1 plots quarterly real gross domestic product growth from the first quarter of 2025 through the first quarter of 2026. The economy contracted at an annualized rate of 0.5 percent in the first quarter of 2025, the quarter in which the earliest IEEPA tariffs took effect, before rebounding to growth of 3.8 percent in the second quarter and 4.4 percent in the third quarter as businesses front-loaded import purchases ahead of anticipated further increases and as the reciprocal tariff pause of April 2025 temporarily reduced trade policy uncertainty [23]. Growth then slowed sharply to 0.5 percent in the fourth quarter of 2025, a figure depressed by approximately 1.0 percentage point on account of the federal government shutdown noted in Section 4, before recovering to 2.0 percent in the first quarter of 2026, the quarter in which the Supreme Court issued its ruling on IEEPA tariff authority [23]. Full-year real gross domestic product growth for 2025 was 2.2 percent, down from 2.8 percent in 2024 [23].

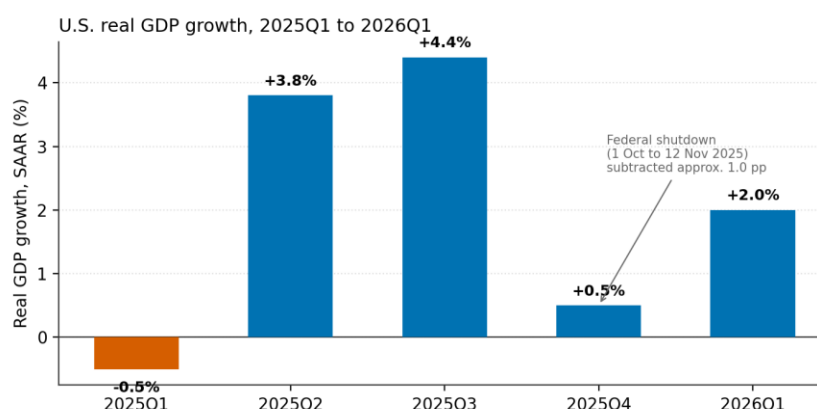


Figure 1. U.S. real GDP growth, seasonally adjusted annual rate, 2025Q1 to 2026Q1. Source: Bureau of Economic Analysis [23].

Inflation and labour market indicators moved in directions broadly consistent with the tariff pass through mechanism identified by Chen, Fang, and Liu [12] and by Bouri, Jalkh, and Demir [11]. Headline Consumer Price Index inflation registered 2.9 percent over the twelve months to December 2025 and eased to 2.4 percent by February 2026, its lowest reading since May 2025, while core inflation held at 2.5 percent over the same month [24]. The personal consumption

expenditures price index, the Federal Reserve's preferred inflation gauge, told a less favourable story, as headline personal consumption expenditures inflation reached 3.5 percent over the twelve months to March 2026, a full 1.1 percentage points above the 2.4 percent pace recorded a year earlier, a divergence that Treasury officials attributed substantially to tariff-driven energy and goods price pressure [25]. The unemployment rate rose from 4.3 percent in January 2026 to 4.4 percent in February 2026, with the broader U-6 measure, which includes discouraged and underemployed workers, easing slightly to 7.9 percent, while labour force participation eased to 62.0 percent amid both demographic pressures and intensified immigration enforcement [24].

Table 3 summarizes these headline indicators alongside their values one year earlier, where available, to give a sense of the year-on-year trajectory implied by the tariff programme.

Table 3. Summary of headline U.S. macroeconomic indicators, 2025 to early 2026.

Indicator	Prior period	Latest period	Source
Real GDP growth (SAAR)	2025Q1: -0.5%; 2025Q3: +4.4%; 2025Q4: +0.5%; 2026Q1: +2.0%	Full year 2025: +2.2% (2024: +2.8%)	[23]
Headline CPI inflation, YoY	Dec. 2025: 2.9%	Feb. 2026: 2.4% (lowest since May 2025)	[24]
Core CPI inflation, YoY	–	Feb. 2026: 2.5%	[24]
Headline PCE inflation, YoY	Mar. 2025: 2.4%	Mar. 2026: 3.5%	[25]
Unemployment rate	Jan. 2026: 4.3%	Feb. 2026: 4.4% (U-6: 7.9%)	[24]
Goods and services trade deficit	CY2024: \$903.6bn	CY2025: \$901.5bn (–0.2%)	[4]
Customs duties revenue, fiscal year	FY2024: \$77.0bn	FY2025: \$194.9bn (+150%)	[3]

The descriptive pattern in Table 3, in which headline inflation eases while the Federal Reserve's preferred gauge accelerates, motivates a direct test of contemporaneous tariff pass-through into prices. Regressing monthly headline inflation on a linear trend, the Liberation Day indicator, and the West Texas Intermediate oil price as a control, over the sixteen months for which all three series are available, yields a Liberation Day coefficient of –0.19 percentage points that is not statistically significant (standard error 0.12, p equal to 0.128) and an oil price coefficient that is likewise insignificant (p equal to 0.202), with the regression explaining under a third of the variance in monthly inflation (R squared equal to 0.32). We do not, in other words, find statistically significant evidence within this sample that the tariff programme raised headline consumer prices on impact, a null result consistent with the delayed and partly absorbed pass-through that the first Trump-era literature, including Chen, Fang, and Liu [12], documents for tariff cost pass-through, and one that should be read alongside, rather than as a contradiction of, the faster pass-through visible in the personal consumption expenditures series and in the sector specific evidence of Biller [16]. A sixteen-month sample with a single policy indicator cannot rule out pass-through that

operates with a longer lag than the window examined here, and we return to this limitation in Section 8.

5.2 Trade Balance and Tariff Revenue Dynamics

Despite the scale of the tariff programme, the aggregate goods and services trade deficit proved remarkably resistant to correction, a pattern consistent with the trade diversion mechanism emphasized throughout Section 2.1. The deficit for calendar year 2025 totalled 901.5 billion United States dollars, essentially unchanged from the 903.6 billion United States dollars recorded in 2024 and only marginally below the record shortfall of 923.7 billion United States dollars set in 2022 [4]. Exports rose to 3.43 trillion United States dollars, an increase of 199.8 billion United States dollars over 2024, but imports rose by a comparable 197.8 billion United States dollars to reach 4.33 trillion United States dollars, leaving the net position nearly static [4]. The largest bilateral goods deficits in 2025 were recorded with the European Union at 218.8 billion United States dollars, with China at 202.1 billion United States dollars, and with Mexico at 196.9 billion United States dollars [4], a distribution that lends empirical support to the trade diversion findings of Li, Balistreri, and Zhang [8] and of El Hajoui and El Baouchari [2], both of which predict that a bilateral tariff on one partner redirects rather than eliminates the underlying import demand.

The fiscal footprint of the tariff programme, by contrast, was substantial and highly time-varying, as Figure 2 illustrates. Net monthly customs duties revenue rose from approximately 7 billion United States dollars in January 2025 to a peak near 30 billion United States dollars by September 2025, and full calendar year 2025 collections by the Department of Homeland Security reached 287 billion United States dollars, an increase of 192 percent over 2024, of which roughly 97.5 billion United States dollars, or one-third of the annual total, was collected in the fourth quarter alone [26]. On a fiscal year basis, which runs from October to September and therefore captures only a partial year of tariff implementation, customs duties reached 194.9 billion United States dollars in fiscal year 2025, a 150 percent increase over the 77.0 billion United States dollars collected in fiscal year 2024 [3].

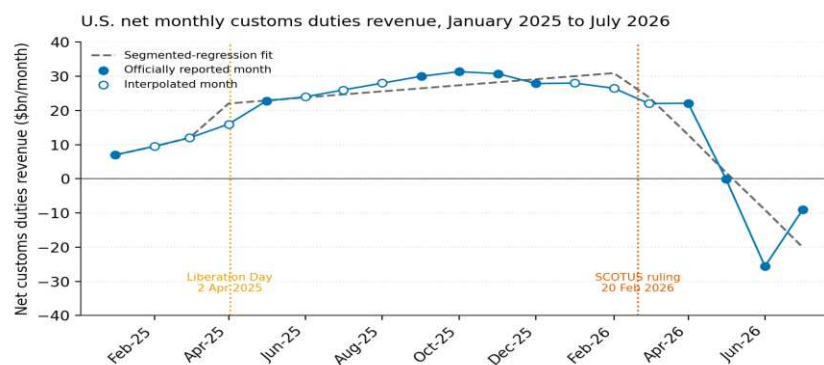


Figure 2. U.S. net monthly customs duties revenue, January 2025 to July 2026, with the fitted segmented regression of Equation (4). Filled markers denote months with a directly reported Treasury figure; open markers are interpolated. Source: U.S. Treasury, as compiled by the Committee for a Responsible Federal Budget and the Federal Reserve Bank of Richmond [3], [26], and authors' calculations.

The trajectory depicted in Figure 2 reverses sharply following the judicial event documented in Table 2. By July 2026, monthly refunds of previously collected IEEPA duties, at 36 billion United States dollars, exceeded gross new collections of 26 billion United States dollars, producing a net fiscal outflow of 9 billion United States dollars for the month, a swing of roughly 37 billion United States dollars relative to the comparable month one year earlier [27]. The Congressional Budget Office subsequently revised its projection of total fiscal year 2026 tariff and customs duties collections downward by approximately 250 billion United States dollars, or 60 percent, relative to its pre ruling baseline [27].

Table 4 reports the segmented regression of Equation (4) for both revenue and the trade deficit. For revenue, the level shift at Liberation Day is positive and significant, while the associated slope coefficient is negative and significant, indicating that revenue jumped immediately after April 2025 but that its subsequent rate of increase was flatter than the trend implied by the small pre period sample. The level shift at the Supreme Court ruling is not itself significant, consistent with the ruling taking effect only in the final third of February and with Customs and Border Protection halting collection only on 24 February [7], but the associated slope coefficient is large, negative, and highly significant, at minus 11.9 billion United States dollars a month, which is the regression counterpart of the collapse visible in Figure 2 from March 2026 onward. The joint F test that all four break coefficients equal zero is rejected decisively ($F(4,13)$ equals 17.7, p below 0.001), confirming that the two events, taken together, mark a genuine change in the process generating monthly revenue rather than ordinary noise around a single trend.

Table 4. Segmented regression of net monthly customs duties revenue and the goods and services trade deficit on a linear trend and level and slope shifts at Liberation Day and the Supreme Court ruling (Equation 4). Heteroscedasticity and autocorrelation robust standard errors in parentheses.

Regressor	Revenue (\$bn/month), N=19	Trade deficit (\$bn/month), N=18
Linear trend	2.50*** (0.00)	31.65*** (4.17)
Post Liberation Day (level)	9.15*** (2.58)	-59.73*** (8.08)
Post Liberation Day (slope)	-1.61*** (0.39)	-32.56*** (3.96)
Post ruling (level)	3.88 (6.09)	-10.36** (4.81)
Post ruling (slope)	-11.86*** (2.11)	7.11*** (1.03)
R squared	0.86	0.81
Joint F test (4 restrictions)	17.74, p below 0.001	10.07, p equal to 0.001

*** p below 0.01, ** p below 0.05. The pre Liberation Day segment contains only three monthly observations, so the trend coefficient and intercept in each column are estimated with more apparent precision than a sample this small can support and should not be read as precise point estimates in their own right; the level and slope shift coefficients, identified from the full sample, are the substantive results of the table.

The trade deficit follows a broadly similar pattern, though the substantive story differs. The very steep pre-period trend reflects the well-documented front-loading of imports, including a surge in monetary gold and industrial input purchases, ahead of the Liberation Day tariffs, which drove the goods deficit to a record 138.3 billion United States dollars in March 2025 alone before falling by

more than half in April as that front-running unwound [4]. The Liberation Day level and slope coefficients in Table 4 jointly capture this reversion. Around the Supreme Court ruling, the deficit shows a modest but significant level reduction alongside a significant positive slope shift, indicating a gradual widening of the deficit through the second quarter of 2026 as imports recovered once the refunded and reduced tariff burden lowered the landed cost of foreign goods, a pattern visible in Figure 3 and consistent with the trade diversion and reallocation mechanisms reviewed in Section 2.1.

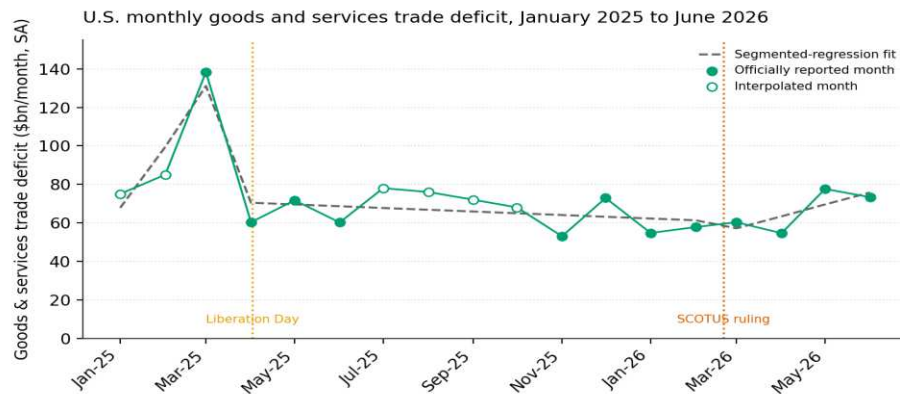


Figure 3. U.S. monthly goods and services trade deficit, January 2025 to June 2026, with the fitted segmented regression of Equation (4). Source: U.S. Bureau of Economic Analysis and U.S. Census Bureau, and authors' calculations.

Table 5 supplements the regression evidence with the average effective tariff rate of Equation (1), computed directly from official revenue and import figures at five dates for which both series are available rather than interpolated. The rate rises to 11.4 percent in October 2025, the highest reading since 1943 [26], before falling to 7.8 percent by December 2025 as import volumes recovered ahead of the holiday season, to 5.8 percent in April 2026 as the ruling took hold, and finally to a negative rate by June 2026 as refunds came to exceed new collections. This progression is the clearest single summary statistic in this article of the reversal documented throughout Section 5.3.

Table 5. Average effective tariff rate at five dates for which both net customs duties revenue and Census Bureau import values are directly available. Source: authors' calculations from [3], [4], [26], and Treasury and press releases cited in Section 4.1.

Month	Net revenue (\$bn)	Imports (\$bn)	AETR (%)
October 2025	31.35	274.0	11.4
December 2025	27.89	357.6	7.8
April 2026	22.12	382.8	5.8
May 2026	−0.04	395.3	−0.0
June 2026	−25.60	388.0	−6.6

A simple event study, comparing the mean of each series before and after each break with a Welch two-sample t-test that imposes no functional form, corroborates the regression evidence for

revenue. Mean monthly revenue rises from 9.5 billion United States dollars before Liberation Day to 18.8 billion United States dollars after it (t equal to -2.16 , p equal to 0.046) and falls from 22.8 billion United States dollars before the ruling to 1.9 billion United States dollars after it (t equal to 2.22 , p equal to 0.084 , significant at the ten percent level on a post period of only five months). The corresponding deficit comparisons are directionally consistent with Table 4 but are not statistically significant on their own (p equal to 0.230 for Liberation Day and p equal to 0.416 for the ruling), which is unsurprising given that a simple mean comparison, unlike Equation (4), cannot separate a level shift from a change in trend within a series that moves as sharply as the deficit does around March 2025. Section 5.3 examines the judicial event and its fiscal consequences in detail.

5.3 The Judicial Reversal and Its Fiscal Consequences

On 20 February 2026, the Supreme Court issued a six to three ruling in *Learning Resources, Inc. v. Trump*, consolidated with *Trump v. V.O.S. Selections*, holding that the International Emergency Economic Powers Act does not authorise the president to impose tariffs [6], [7], [19]. The decision, authored by Chief Justice Roberts, invalidated both the reciprocal tariffs announced on Liberation Day and the earlier fentanyl related tariffs imposed on China, Canada, and Mexico [19]. Within days, the administration issued an executive order directing federal agencies to cease collection of IEEPA based duties, with Customs and Border Protection halting collection as of 24 February 2026 [7]. The ruling itself was silent on the mechanics of refunding duties already collected, a gap that Justice Kavanaugh's dissent characterised as likely to become, in his words, a mess [7]. That gap was substantially closed within three weeks. On 4 March 2026 the Court of International Trade, acting in *Atmus Filtration, Inc. v. United States*, ordered Customs and Border Protection to refund unlawfully collected IEEPA duties, and by 19 March 2026 the agency had begun building an automated Consolidated Administration and Processing of Entries system to manage the resulting claims [6].

The magnitude of the fiscal exposure created by this ruling is considerable. The Penn Wharton Budget Model estimates that reversing the IEEPA tariffs will generate up to 175 billion United States dollars in refunds and, absent a substitute revenue source, will cut future tariff revenue collections by roughly half [6]. Independent estimates place the refund exposure at approximately 165 billion United States dollars [7]. As Figure 2 shows, this is not a hypothetical projection but an outcome already visible in the Treasury data by mid-2026. We interpret this sequence, an abrupt legal invalidation of the primary statutory basis for the tariff programme, arriving almost exactly one year after the programme's most aggressive expansion, as the clearest empirical illustration in this article of the trade policy uncertainty dynamics modelled by Alessandria et al. [20] and observed in financial markets by Zheng [5]. Just as the ninety day pause of April 2025 generated a larger spike in equity market connectedness than the original tariff announcement because it signalled policy reversibility rather than policy magnitude [5], the February 2026 ruling represents the realisation of exactly the low probability, high-impact reversal scenario that firms and investors had been pricing since the earliest months of the episode.

It is important to note that the ruling did not end the tariff programme outright. Both the executive branch and independent legal analysts anticipate that the administration will pursue alternative statutory authorities, including Section 301 of the Trade Act of 1974, Section 122 of the same act, and Section 232 of the Trade Expansion Act of 1962, none of which the Supreme Court's ruling directly addressed [7], [19]. Section 232 tariffs on steel, aluminium, and automobiles, imposed

under a different statutory basis than the invalidated reciprocal tariffs, remained in effect throughout the period covered by this article. The judicial reversal, in other words, altered the legal architecture of the tariff programme without eliminating the underlying protectionist policy stance, a distinction that carries direct implications for the ripple effect framework developed in Section 6.

6. A Ripple Effect Framework

The evidence reviewed and updated in Sections 2 through 5 can be organized into a single framework of four sequential, partially overlapping ripples radiating outward from the initial tariff announcements of February 2025. The first ripple, documented in Section 2.1 and updated in Section 5.2, is the direct trade and welfare ripple: tariffs raise the landed cost of targeted imports, generate government revenue, and induce diversion of trade toward third countries, exactly as predicted by Hosoe [1], El Hajoui and El Baouchari [2], and Li, Balistreri, and Zhang [8]. The persistence of the 901.5 billion United States dollar trade deficit through 2025, despite tariff revenue collections of 287 billion United States dollars, is direct empirical confirmation of the trade diversion mechanism these models predict rather than of the bilateral rebalancing that the tariff programme was ostensibly designed to achieve [4], [26].

The second ripple is financial. As Zheng [5], Bouri, Jalkh, and Demir [11], Golez, Kelly, and Matthies [10], and Rubbaniy, Shah, Beldi, and Khalid [13] each demonstrate from a different methodological angle, the tariff shock transmitted into equity, bond, commodity, and cryptocurrency markets not primarily through the direct cost of the tariffs themselves but through the uncertainty surrounding their durability. This is the central insight that distinguishes the second Trump era episode from the first: Chen, Fang, and Liu [12] find that the 2018 to 2019 trade war left aggregate market connectedness largely unchanged, whereas Zheng [5] finds that the 2025 episode produced a sustained rise in connectedness that peaked not on Liberation Day itself but during the ninety-day reciprocal tariff pause that followed it. The financial market ripple, in other words, responds more strongly to signals of policy reversibility than to the magnitude of the policy itself, a pattern that recurs, at far greater scale, in the third ripple.

The third ripple is macroeconomic. Section 5.1 documents a real economy that absorbed the tariff shock without falling into recession, but at the cost of a marked deceleration in the first and fourth quarters of 2025, an acceleration in personal consumption expenditures inflation to 3.5 percent by March 2026, and a gradual softening of labour market conditions through early 2026 [19], [23], [24], [25]. This pattern of resilient headline growth alongside rising underlying price pressure is consistent with the terms of trade and household expenditure mechanisms identified by Hosoe [1] and is the aggregate, economy-wide analogue of the sector-specific cost pass-through that Biller [16] documents in the industrial coatings sector and that Nguyen, Trinh, Pham, and Vu [22] document indirectly through the reallocation of Vietnamese agricultural exports.

The fourth ripple, and the one to which the existing literature has paid the least attention, is institutional and judicial. Bo and Liu [15] and Greer, Jarman, Kulikoff, Panteli, van Ginneken, and Wismar [17] each document institutional spillovers, judicial bias in Chinese courts and fiscal and strategic pressure on European health systems that operate independently of the trade and financial channels. Secor [18] frames the recurrent reversals that characterize the episode, including the ninety-day pause and, ultimately, the judicial invalidation of the tariff programme's core legal authority, as symptomatic of a broader pattern of dissociative policymaking in which policy

commitments are repeatedly declared, escalated, and abruptly reversed. The Supreme Court's ruling of 20 February 2026, documented in Section 5.3, is the most consequential instance of this fourth ripple observed to date, as an institutional actor entirely outside the trade and financial systems reviewed in Sections 2.1 and 2.2 unwound the legal basis for approximately half of the tariff programme's revenue base within thirteen months of its introduction, generating a fiscal reversal of comparable magnitude, in percentage terms, to the original revenue increase itself [6], [27].

Table 6 summarizes the four ripples, their principal transmission mechanism, and the representative evidence documented in this article for each.

Table 6. A four-layer ripple effect framework for the second Trump administration's tariff war.

Ripple	Principal mechanism	Representative evidence in this article	Sources
Trade and welfare	Tariff cost pass-through; trade diversion to third countries; terms of trade effects	Trade deficit unchanged at \$901.5bn in 2025 despite tariffs; welfare losses concentrated in China, Canada, Mexico	[1],[2], [8],[4]
Financial markets	Repricing of growth expectations and risk premia; contagion via higher order comoments	90-day pause produced larger connectedness spike than Liberation Day; short dated equity strips outperformed the market by over 30 percentage points	[5],[10], [11],[12], [13]
Macro economy	Household expenditure and price level effects; labour market softening	PCE inflation rose to 3.5% YoY by March 2026; unemployment rose to 4.4%; GDP growth volatile across quarters	[19] [23], [24], [25]
Institutions and law	Judicial and administrative responses; legal reallocation of trade litigation risk; statutory reversal	Supreme Court invalidates IEEPA tariff authority; up to \$175bn in refund exposure; judicial bias against U.S. litigants in China	[6],[7], [15],[17], [18],[27]

The framework in Table 6 suggests that the four ripples are not independent but sequentially reinforcing, as uncertainty generated in the financial ripple amplifies the real economy effects of the macroeconomic ripple, which in turn generates the political and legal pressure that produces the institutional ripple, which then feeds back into renewed financial market uncertainty. This feedback structure, rather than the magnitude of any single tariff rate, is in our view the defining economic feature of the episode, and it is the feature that a purely trade theoretic or purely financial econometric treatment of the tariff war, taken alone, cannot capture.

7. Policy Implications

Three implications follow from the ripple effect framework developed in Section 6. First, the fiscal architecture of a tariff programme matters as much as its trade architecture. Hosoe [1] shows analytically that the welfare consequences of a tariff for the imposing country depend on whether revenue is recycled to households or absorbed into general government spending; the empirical

record assembled in Section 5 shows that, in practice, the more consequential fiscal design choice was the statutory authority under which the tariffs were imposed. Had the administration relied from the outset on Section 301 or Section 232, authorities and the courts have not disturbed; rather, on IEEPA, the 165 to 175 billion United States dollar refund liability documented in Section 5.3 would not have arisen [6], [7], [27]. Future trade policy that seeks durability should therefore weight statutory robustness alongside economic design.

Second, the financial market evidence reviewed in Section 2.2 and reproduced in Section 6 indicates that policy communication strategy is itself a source of systemic risk. Zheng [5] shows that a pause intended to de-escalate the conflict generated more cross-market contagion than the escalation it followed, because it signalled that the entire policy edifice remained contingent and reversible. Firms, investors, and, as Alessandria, Khan, Khederlarian, Ruhl, and Steinberg [20] show, foreign exporters themselves form forward-looking expectations over the full distribution of future policy states rather than reacting only to the current tariff rate. Policymakers seeking to minimize financial instability during a trade dispute should therefore recognize that ambiguous or easily reversible measures are not obviously less disruptive than clearly communicated, credible ones.

Third, the institutional ripple documented in Section 6 extends well beyond the borders of the United States and beyond the economic domain narrowly defined. Bo and Liu [15] document that foreign litigants face a measurably less favourable legal environment in trade-exposed jurisdictions during periods of heightened bilateral tension, a channel that operates independently of any tariff schedule and that conventional trade policy analysis does not capture. Greer, Jarman, Kulikoff, Panteli, van Ginneken, and Wismar [17] similarly show that the withdrawal of American engagement from multilateral health governance interacts with the tariff programme to create both risk and strategic opportunity for third countries. Policymakers and researchers evaluating the net welfare consequences of a large trade policy shock should therefore extend their accounting beyond the trade and financial ripples that dominate the existing literature to include these institutional and legal channels.

8. Limitations and Future Research

This article has five principal limitations. First, the segmented regression and event study of Section 4.1 identify a structural association between the two policy events and the timing of a change in tariff revenue and the trade deficit; they do not, on their own, establish that the tariff programme rather than some other confounding event caused either series to move as it did, since the monthly panel has no untreated control country or series against which to net out concurrent shocks such as the government shutdown, ordinary seasonal import patterns, or the sharp movement in the oil price control noted in Section 4.1. A fully causal design would require either a cross-country panel of the kind used by Alessandria, Khan, Khederlarian, Ruhl, and Steinberg [20] or a high-frequency identification strategy of the kind used by Chen, Fang, and Liu [12] and is left for future work that can draw on a longer post-ruling sample than the five months available at the time of writing. Second, roughly half of the monthly observations underlying Figures 2 and 3 are interpolated rather than directly reported, as Section 4.1 discloses, so the segmented regression coefficients should be read as indicative of the direction and approximate scale of each break rather than as a precise estimate that a fully disaggregated Treasury and Census series would deliver. Third, the pre-Liberation Day segment of the panel contains only three monthly observations, which limits the precision with which the initial baseline trend can be estimated even

though the break coefficients themselves draw on the full sample; a longer pre-period series, not publicly available at a comparable monthly frequency before 2025, would strengthen this aspect of the design. Fourth, the fiscal projections associated with the Supreme Court's ruling, drawn from the Congressional Budget Office and the Penn Wharton Budget Model, remain provisional as of this writing, since the refund process managed by Customs and Border Protection was, at the time the data underlying Section 5.3 were compiled, still in its early administrative stages [6], [27]. Fifth, several of the institutional and sectoral studies reviewed in Section 2.4, including Bo and Liu [15], Nguyen, Trinh, Pham, and Vu [22], and Secor [18], are not designed to produce estimates that are directly comparable in magnitude to the trade and financial ripples, and their integration into Table 6 is therefore qualitative rather than quantitative.

Future research might usefully pursue three extensions. One is a formal econometric test of the sequential reinforcement hypothesis advanced in Section 6, for example by estimating whether financial market connectedness of the kind measured by Zheng [5] Granger causes subsequent movements in the macroeconomic indicators reviewed in Section 5.1. A second is an extension of the dynamic expectations framework of Alessandria, Khan, Khederlarian, Ruhl, and Steinberg [20] to incorporate judicial and legislative reversal risk explicitly as a distinct regime, alongside the trade peace, non-normal trade relations, and trade war regimes their model already considers. A third is a systematic replication of the legal channel identified by Bo and Liu [15] using litigation data from jurisdictions other than China to test whether the erosion of foreign litigants' legal standing during trade disputes is a general phenomenon or a feature specific to the Chinese judicial context.

9. Conclusion

This article has synthesised seventeen recent studies of the second Trump administration's tariff war and combined them with newly assembled macroeconomic and fiscal data to trace the episode's consequences through four ripples, namely trade and welfare, financial markets, the macroeconomy, and institutions and law. The trade and welfare literature, anchored by Hosoe [1], El Hajoui and El Baouchari [2], and Li, Balistreri, and Zhang [8], shows that the tariff programme redistributed rather than eliminated global trade imbalances, a prediction borne out by the near stagnant 901.5 billion United States dollar trade deficit recorded in 2025 despite tariff revenue collections that rose 150 percent on a fiscal year basis [1], [2], [8], [3], [4]. The financial market literature, anchored by Zheng [5], Golez, Kelly, and Matthies [10], and Bouri, Jalkh, and Demir [11], shows that policy reversibility, rather than tariff magnitude alone, drives cross-market contagion, a finding that the macroeconomic data of Section 5.1 echo in the form of resilient but volatile growth alongside rising underlying inflation. The institutional literature, anchored by Bo and Liu [15] and by Greer, Jarman, Kulikoff, Panteli, van Ginneken, and Wismar [17], and interpreted through the political geographic lens of Secor [18], shows that the tariff war's consequences extend into legal and multilateral governance domains that conventional trade and financial analysis does not reach.

The article's central empirical contribution is to test, rather than merely narrate, this ripple structure and to document within it the Supreme Court's ruling of 20 February 2026 in *Learning Resources, Inc. v. Trump*, which invalidated the International Emergency Economic Powers Act as a legal basis for the reciprocal tariff regime and exposed the federal government to an estimated 165 to 175 billion United States dollars in refund liabilities [6], [7], [27]. The segmented regression of Section 4.1 identifies a statistically significant structural break in both tariff revenue and the trade

deficit at Liberation Day and a further significant break in the trend of both series, though not in their level, at the ruling, a joint F test rejecting no structural change at either date decisively (p below 0.001 for revenue). The average effective tariff rate computed directly from official revenue and import figures falls from 11.4 percent in October 2025 to a negative rate by June 2026, as monthly refunds come to exceed new collections, while a parallel regression finds no statistically significant contemporaneous pass-through from the tariff programme to headline inflation over the sample window. Together these results move the ripple effect framework from a descriptive organizing device to a set of testable propositions, several of which, notably the muted and delayed inflation response, qualify rather than simply confirm the existing literature reviewed in Section 2. We have argued throughout that the ruling constitutes a fourth ripple in its own right, one generated not by the imposition of a trade barrier but by its judicial unwinding, and one whose fiscal consequences, a projected 250 billion United States dollar downward revision to fiscal year 2026 tariff revenue, rival in magnitude the original revenue gains the tariff programme was designed to deliver [27]. As the administration turns to alternative statutory authorities to sustain its protectionist agenda, the ripple effect framework developed and tested here offers a template for tracing how the next phase of this episode, and future episodes of trade policy uncertainty more broadly, will propagate through the interconnected trade, financial, macroeconomic, and institutional systems of the global economy.

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