Does Firm-level Slack affect Firms' Responses to Fiscal Policy Shocks? Evidence from Tariff Announcements

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Abstract:

Macroeconomic research finds that economy-wide slack intensifies the effects of fiscal policy. I investigate whether this result extends to individual firms. To do this, I generate a stylized setting in which firm-level slack (conceptualized as unused productive capacity) results from a limited investment opportunity set. I show that firm value will be more sensitive to fiscal policy shocks under high-slack conditions, especially for contractionary shocks. To test this empirically, I examine stock market response to the "Liberation Day" tariff announcements, testing whether firm-level slack amplified the stock price reactions for the expected winners and losers of tariff policy. I find that firm-level slack intensifies firms' responses to fiscal policy news, and the effect is concentrated in firms facing contractionary shocks. I also find that the results are concentrated in firms with high financial slack, suggesting that both operational and financial slack are incrementally informative about a firm's investment opportunity set. Additionally, I find that a high-quality external information environment softened the impact of the tariffs for high-slack, contractionary firms, while the quality of the internal information environment had no measurable moderating effect, supporting a valuation role rather than real-effects role for information in my setting. As governments continue their use of targeted fiscal policies, my findings should inform policymakers on the distributional effects of fiscal policy across firms. More broadly, these results contribute to a more granular, accounting-based paradigm for understanding the conditions under which fiscal policy is likely to be effective.
Keywords: Fiscal policy, tariffs, tax, slack, information quality

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1. *Introduction*

Conventional macroeconomic wisdom suggests that the impact of fiscal policy depends on the degree of economic slack, or unused resources available in the economy.[1] Moreover, prior research finds that the effect of slack critically depends on whether the fiscal policy is expansionary or contractionary. If the policy is expansionary, slack is beneficial, since idle resources can be put to work to expand total output. If it is contractionary, slack is harmful, since an economy already struggling to deploy its resources now has even fewer opportunities to utilize them. Thus, in both cases, economic theory predicts slack will amplify the effects of fiscal policy. In this paper, I examine whether this same logic governs the individual firm. I examine whether a firm's own slack, meaning its unused productive capacity, moderates the effect of a fiscal policy shock on firm value, and whether that role differs when the shock is expansionary or contractionary for the firm.

Ex ante, it is unclear whether the traditional macroeconomic predictions extend to the context of firm-level analysis. If firms are free to enter and exit the market, changes in economic output may be driven primarily by the extensive margin (i.e. the number of firms) rather than by changes in output for each firm individually. If so, slack's amplifying role could still appear in aggregate-level analysis while remaining unobservable for existing, going-concern firms. Additionally, it's not clear to what extent the benefits and harms of fiscal policy, including those induced by slack, accrue to firms. If other market participants, such as consumers and labor market participants, are most affected by fiscal policy choices, then analyzing firm value will fail to capture the effects of fiscal policy. Thus, the precise role slack plays in moderating fiscal policy effects for individual firms is ultimately an empirical question.

[1] At a macro-level, seminal studies typically operationalize macroeconomic slack in terms of employment. The firm-level operational slack that I use relates to a firm's capacity utilization.

Understanding the role of firm-level slack in moderating the impact of fiscal policy is important for multiple reasons. The first is that it improves predictions regarding the aggregate effects of fiscal policy. Ramey (2019) remarks in a review of the literature that the amplification effect of slack on the spending multiplier is empirically sensitive and inconsistent across various studies and specifications. To the extent firm-level slack determines fiscal policy outcomes, aggregate measures of slack that ignore the richness of firm-level data may fail to accurately predict when fiscal policy is most effective. Second, understanding the role of firm-level slack allows for predictions regarding the distributional effects of fiscal policy. Fiscal policy effects may not be constant across the economy, and analysis that accounts for firm-level factors may better anticipate which firms, industries, and sectors of the economy are most likely to be impacted by a given policy. Overall, understanding the role of firm-level slack should improve both the accuracy and specificity of predictions regarding the effectiveness of fiscal policy.

Applying macroeconomic intuition to firm-level analysis requires reconceptualizing slack within the context of an individual firm's investment decisions. My argument begins from the premise that a firm's slack is informative about its investment opportunity set. A firm that leaves productive capacity idle has generally run short of positive-NPV projects to fund. I formalize this in Section 3 with a stylized example in which the firm allocates capacity to available projects in descending order of the projects' returns. Mapping out expected firm value as a function of the size of the firm's investment opportunity set reveals a concave kink (i.e. the slope decreases) at the point of full capacity utilization. Below full utilization, an additional project earns the firm its full return, because idle capacity carries no opportunity cost. Once available projects exceed capacity, an additional project can only displace an existing one, so the firm captures only the difference between the two returns. This kink generates my predictions: fiscal policy that expands a firm's investment opportunities raises value most when the firm has the slack to act on them, and policy that contracts those opportunities is most damaging when the firm already struggles to deploy the capacity it holds. Thus, my theory predicts that slack will amplify the effects of both expansionary and contractionary shocks for affected firms.

The existence of a concave kink further implies that the amplification effect of slack is not symmetric. For a firm at or near full utilization facing a large shock, a contraction of the opportunity set travels entirely along the steep portion of the value function, whereas an equal expansion exhausts the firm's remaining capacity and then continues along the shallow portion. Firm value is therefore more sensitive to large contraction than an equally large expansion. My theory thus predicts that the amplifying role of slack will be more pronounced among firms who see their investment opportunities contract than among firms who see their opportunities expand.

These predictions are not without tension. Slack may reflect a strategic choice to hold dry powder rather than a shortage of projects (Myers & Majluf, 1984), it may serve as a buffer that speeds recovery from adverse shocks (Latham & Braun, 2008), and it may invite indiscipline or overinvestment that leaves high-slack firms worse-placed to exploit new opportunities (Chu & Liu, 2016; Jensen, 1986; Nohria & Gulati, 1996; Stulz, 1990). Each of these would weaken or reverse the predicted pattern, which further underscores the need to test the effects of slack empirically.

To test my predictions, I use a unique setting. On April 2, 2025, President Trump announced sweeping tariffs on imports from all of America's trading partners, a fiscal policy expected to restructure global trade and carry enormous consequences for firm value. I use stock market responses to measure how expectations of firm value were revised. The setting offers two advantages.

First, and most important for my design, the expected effect of the announced policy on firm investment opportunities was highly heterogeneous. A firm importing large volumes of foreign inputs faced new tax costs capable of eliminating the viability of existing positive-NPV projects, while a firm relying on domestic inputs might find itself sheltered from competition in a way that expanded its set of viable projects. This heterogeneity allows me to use a single fiscal policy shock to test slack's amplifying role both where the policy expanded the firms' investment opportunities and where it contracted them, without relying on comparisons across different policies, dates, or prevailing macroeconomic environments.

Second, the announcement was a large shock. The proposed rates constituted one of the most aggressive tariff regimes in modern U.S. history, and although significant portions were postponed a week later on April 9 and the schedule was ultimately revised many times, the immediate market reaction was extreme: the S&P 500 fell 10.51% over the two trading days following the announcement. This magnitude establishes the setting's economic relevance and improves the tests' signal-to-noise ratio.

To construct my sample, I merge firm stock returns with firm-level fundamentals. I proxy for operational slack following Kovach et al. (2015), using the ratio of net property, plant, and equipment to sales, benchmarked to the firm's own three-year average. To separate firms whose investment opportunities the tariffs were expected to expand from those whose opportunities they were expected to contract, I use the measure of Andreou et al. (2026), which scores the text of a firm's 10-K for the degree of tariff risk it recognized in its annual disclosure ahead of Liberation Day. As an alternative, I use revisions in consensus analyst EPS estimates made after the announcement, imputing values from other tariff-exposure measures for firms without a timely revision. Because both measures rank firms against one another, the classification separates relatively favored firms from relatively exposed ones. I label these groups expansionary firms and contractionary firms, terms describing the policy's expected effect on an individual firm's investment opportunity set, not its aggregate effect on demand or output.

I find support for my predictions. Regressing April 3, 2025 abnormal returns on operational slack, tariff exposure, and their interaction yields a statistically significant positive interaction, indicating that slack widened the gap between firms whose opportunities expanded and those whose opportunities contracted. Subsample tests indicate the effect is concentrated among contractionary firms: high-slack contractionary firms earned abnormal returns 0.6 percentage points below their low-slack counterparts, a differential roughly three-quarters the size of the 0.8% mean abnormal loss sustained by contractionary firms as a group. Triangulating with a measure of financial slack built on the excess-cash model of Simutin (2010), I find that the amplifying role of operational slack is concentrated among firms with high financial slack. The pattern suggests that operational and financial slack carry complementary information about a firm's unused resources and its investment opportunity set.

Because slack shaped how consequential the tariff announcements were for firm value, I also ask whether accounting information quality shaped firms' responses as well. I consider two channels, a real-effects channel and a valuation channel, through which information quality might affect the market's valuation of slack following a fiscal policy shock. The real-effects channel focuses on the quality of the internal information environment affecting firm decisions. If accounting information helps managers identify how a policy will alter the costs and revenues attached to projects, better information should help firms deploy slack under an expanded opportunity set and adapt under a contracted one, thus affecting firm value. I capture this empirically by using manager forecast accuracy, a measure of internal information quality used by Gallemore & Labro (2015). The valuation channel concerns the quality of the external information environment affecting investor processing. Through this channel, a high-quality information environment could compress the return spread between the best and worst-positioned firms by allowing investors to reliably bound the policy's potential effects. I capture this using analyst forecast dispersion, following Lang & Lundholm (1996), who find lower dispersion among firms with more informative disclosure, and Barron & Stuerke (1998), who show dispersion proxies for uncertainty about the price-relevant component of future earnings.

Empirically, I find evidence suggesting that the quality of the external information environment moderates stock market reactions to fiscal policy shocks, supporting the valuation channel. Tests using internal information quality yield no statistically significant results. Directionally, greater external information quality is associated with a smaller outcome gap between otherwise well-positioned and poorly positioned firms. This effect is concentrated in reduced losses among high-slack contractionary firms, which were otherwise the hardest hit by the announcements. This pattern is consistent with high-quality external information allowing investors to bound the downside for the worst-positioned firms.

This study makes several contributions. First, I synthesize macroeconomic theory on fiscal policy with firm-level investment theory and analysis, providing a new lens through which to evaluate policy and understand macroeconomic effects. By connecting the policy-amplification role of firm-level slack to a framework built around investment opportunity sets, opportunity costs, productive capacity, and internal resources, I link questions of public finance, corporate finance, and managerial accounting in one cohesive system. This allows future researchers to further build upon the connections shared by economy-wide and firm-level analysis.

Next, I also contribute to the literature linking accounting data to macroeconomic analysis and public finance more generally. This includes, for instance, Wagner et al. (2018), who show how firm-level tax characteristics affected responses to the Tax Cuts and Jobs Act of 2017, as well as work using accounting data to forecast macroeconomic trends (Konchitchki & Patatoukas, 2014; Nallareddy & Ogneva, 2017) or state tax revenue (Welsch et al., 2025). This paper adds to this discussion by showcasing evidence for one particular firm characteristic (slack) that has the power to provide predictions across a broad range of potential policies.

Overall, I show the potential for firm-level data to yield useful predictions regarding the impact of policy on individual firms, industries, and the economy as a whole, giving policymakers new tools to examine not just the average but the distributional effects of proposed fiscal policies.

2. *Background on Tariffs*

Tariffs are taxes on imported goods. They are generally payable by the importer of record, whether that's a U.S. firm or a U.S. subsidiary of firm based outside the U.S.[2] Yet, although the legal incidence of the tax is clear-cut, the economic incidence of who suffers the true economic burden is more complex. Usually, tariffs advantage domestic producers over foreign producers by making imported goods more costly. The Liberation Day tariffs announced in 2025 (described in greater detail in Appendix A.2), fundamentally deviate from this traditional policy debate by imposing tariffs not on products, but on countries. Because most firms producing in the U.S. use some level of imports from other countries in their production process, this new tariff framework removed the clean separation between domestic firms and foreign firms, creating winners and losers among U.S. firms based on the degree to which their production relies on taxed foreign

[2] For more details on tariff law and tariff policy, see Appendix A.1.

inputs. This creates a unique setting in which the same fiscal policy can be examined to consider separately the set of domestic firms which are positively and negatively impacted. Section 3 generates a theoretical framework useful for evaluating this kind of fiscal policy setting in which the policy likely expanded investment opportunities for some firms, while contracting them for others.

3. *Theoretical Framework*

A deep theoretical literature dating back to Keynes (1936) argues that the impact of fiscal policy should depend on the degree of slack in the economy. It argues that if resources are idle, then government spending can put those resources to work and increase total output across the economy, but if resources are already fully utilized, then it only leads to "pure inflation". Some empirical work has also shown support for this idea. When it comes to expansionary policy (fiscal stimulus), some research finds that slack increases the spending multiplier, leading to more dramatic economic effects (Auerbach & Gorodnichenko, 2012; Fazzari et al., 2015). With regards to contractionary policy (fiscal austerity), Blanchard & Leigh (2013) and House et al. (2017) both find that austerity measures taken by European nations in the aftermath of the Great Recession had larger effects than expected, showing that slack can amplify contractionary effects as well. However, the question remains unresolved, and Ramey (2019) points out in a review of the literature that the evidence for slack's role is inconsistent across methodological designs and approaches. By re-examining the role of slack within the context of firm-level analysis, I hope to shed new light on how slack moderates fiscal policy.

To reconceptualize these economic dynamics at a firm level, I begin by considering what information firm-level slack conveys about a firm's investment opportunity set. Consider a firm that optimally utilizes its productive capacity to pursue positive-NPV projects in order to maximize shareholder wealth, with productive capacity equal to C. Suppose that the firm faces an investment opportunity set of positive-NPV projects, each with its own return and its own amount of productive capacity that it utilizes. Let the size of the investment opportunity set, measured by the total amount of productive capacity necessary to fully serve all positive-NPV projects, be equal to IOS. The firm always invests in the highest-return projects first, continuing until either the entire productive capacity of the firm is already in use, or all of the projects are fully served (whichever comes first).[3] A depiction of this setup (described in greater detail below), can be found in Figure 1.

Assume, for the sake of a simple numerical example, that the rate of return of each project is pulled from a binary distribution, where 50% of the time the project has a return of x_L and 50% of the time it has a return of x_H, with $x_H > x_L$. Further suppose, for simplicity, that firm value is solely a function of current-period returns. In that case the relation between the size of the investment opportunity set and firm value takes a distinct shape.

When $IOS = 0$, none of the firm's productive capacity is in use, and the opportunity cost for a unit of productivity capacity is zero. Thus, as IOS increases, each new project earns the firm the full additional return of x_H or x_L, or, in expectation, $\frac{x_H+x_L}{2}$. However, eventually the firm runs out of productive capacity. Once $\frac{IOS}{C} = 1$ (or, equivalently, $IOS = C$), each additional project can only displace existing projects. This means that additional realizations of projects earning x_L no longer increase firm value. Instead, firm value only increases as IOS increases when new projects earn the higher rate, x_H, which then can replace existing projects earnings x_L, allowing

[3] Of course, in the real world, firms may often be able to increase their total productive capacity by building new factories or investing in other buildings or capital equipment. Such investments may be expensive or have long time horizons before coming to fruition. As such, this theory is especially apt for describing behavior over shorter horizons.

the firm to pick up the difference, $x_H - x_L$. Because x_H is realized 50% of the time, the expected increase in firm value from another dollar of IOS is $\frac{x_H - x_L}{2}$. The firm now faces a positive opportunity cost, limiting the growth in firm value.

The end result is a kink in the firm value curve that occurs once the size of the investment opportunity set reaches the size of the firm's productive capacity. Once new projects can only displace existing ones such that the firm only enjoys the incremental return from new high-return projects, the value to marginal increases in the firm's investment opportunity set diminishes.[4]

Although this is a very stylized example, the basic principle – that because opportunity costs rise as utilization (defined as $\frac{IOS}{C}$) increases, the sensitivity of firm value to size of the investment opportunity set is increasing in slack – is quite robust, and leads to powerful predictions. Namely, to the extent that fiscal policy operates through changing the size of the investment opportunity set[5], fiscal policy has a larger impact on firms experiencing a greater degree of firm-level slack. For firms to the right of the dotted line in Figure 1 (i.e. firms already past 100% utilization), local

[4] By using terms such as "productive capacity", my theory is framed in the context of operational slack. However, this same logic can also be applied to financial slack as well. In that context, "capacity" can simply be reinterpreted as the firm's internal financial reserves, including cash and cash equivalents as well as current payments of dividends or money spent on stock repurchases, and the size of the investment opportunity can then be redefined in terms of the financial capital needed to fully fund all projects. Arguably, using financial slack could make the kink in the value relation less pronounced, as the baseline opportunity cost when $IOS < C$ would be the cost of internal equity capital, rather than zero. Additionally, once all internal funds are exhausted (i.e., when the firm "reaches" capacity), the constraint causing the kink to occur would no longer be the time and other costs involved in building new factories or capital equipment, but rather an increase in the cost of capital. There are several reasons to believe that an increase in the cost of capital would occur once internal funds had been exhausted such that any new projects pursued by the firm would have to be funded by debt or by the issuance of new equity. One argument comes from the Pecking Order theory that posits firms prefer internal funds to external funds due to friction from information asymmetry (see, e.g., Myers, 1984). Another argument is laid out by Kemsley & Kemsley (2026), who suggest that since dividend taxes apply to internally generated funds returned to shareholders but not to the return of original capital, the hurdle rate on external equity should be higher than for internal equity. In either case, lower costs of capital for internal funds means that some projects may be positive-NPV if they could be funded internally, but due to a lack of internal funds are not viable investments.

[5] My theory does not address the case where all effects of the fiscal policy operate through the channel of increasing or decreasing returns to existing positive-NPV projects, rather than by expanding and contracting the set. Because this alternative mechanism lies outside my framework, I cannot comment on how my results would change under that set of assumptions. This is a fascinating additional research question that I encourage future researchers to explore.

movements towards the right (expansionary policy effects) and towards the left (contractionary policy effects) will take place in the region with the shallower slope, leading to less dramatic changes in firm value, and hence empirically less dramatic changes to the firm's share price. Meanwhile, for firms operating on to the left of the dotted vertical line (firms whose utilization is at less than 100%), local changes move along the steeper portion of the firm value relation, suggesting more dramatic stock price changes as a result of the fiscal policy.

This framework also suggests that slack's amplification effect is asymmetric, applying more heavily to contractionary shocks than to expansionary ones. To see this, consider a firm right at the dotted line (i.e. utilization is exactly 100%), and note that the sensitivity of the firm to fiscal policy depends on whether the policy is expansionary (increases the firm's IOS) or contractionary (decreases it). In that special case, expansionary policy operates entirely along the shallow part of the curve and hence its effect will be small, whereas contractionary policy operates entirely along the steep part of the curve and hence its effect will be amplified. Generalizing, now consider all firms on the left side of the dotted line (i.e. firms with slack). Whenever the policy-induced movement is large relative to the amount of slack those firm's carry, large portions of upwards expansions will travel along the shallow part of the function while contractions will travel entirely along the steep side.[6] The result is that slack should amplify contractionary effects more than expansionary effects.

[6] In theory, the reverse argument also exists. For firms just above full utilization (just to the right of the dotted line), the presence of extra investment opportunities shields the firm only partially from contractions whereas expansions remain entirely on the shallow end of the firm value function. This narrow set of firms would not have slack but still be more affected by contractions than expansions. In this case, the overall pattern (firms with fewer investment opportunities are more susceptible to contractions), stays in place. In practice, it is likely that there is far more clustering on the left side of full utilization than the right. This is because firms with extremely large amounts of slack are likely to be unobservable in the data, as they are likely to go bankrupt, whereas firms with way more investment opportunities than they need *are* observable. Thus in practice, firms with slack as a group are likely to be more empirically susceptible to this asymmetric effect those without.

These insights have an intuitive appeal. Within my framework, firms with slack are experiencing a shortage of positive-NPV investment opportunities, while firms without slack are experiencing a surplus. Unsurprisingly, my framework suggests that firms with a shortage of opportunities are the most harmed by losing them and are most helped by gaining access to more, while those with a surplus of investment opportunities are least affected if some of them dry up and see their fortunes least improved if new opportunities emerge. Figure 2 summarizes these insights from my stylized example in tabular form.

My predictions regarding firm-level slack are not entirely without precedent. Both Myers & Majluf (1984) and Bolton et al. (2019) suggest that slack is beneficial when investment opportunities expand, arguing that without slack available to seize new opportunities, firms may need to pass up some otherwise valuable projects. I extend this logic into a broader framework that includes contractionary policy by focusing on slack's theoretical role as a proxy for investment opportunities. Additionally, I test my theory empirically, allowing me to examine whether these ideas correspond to real-world effects.

My hypothesis that firm-level slack amplifies expansionary and contractionary effects is not without tension. In the expansionary case, excessive slack could lead to managerial indiscipline (Nohria & Gulati, 1996) or overinvestment (Chu & Liu, 2016; Jensen, 1986), such that firms with more unused resources may do a *worse* job of capitalizing on expanding investment opportunities created by fiscal policy, not better. In the contractionary case, slack may serve as a buffer that protects the firm from downturns (Latham & Braun, 2008), which would lend slack a muting, rather than an amplifying role. Additionally, in some cases, slack may not be indicative of the firm's investment opportunity set at all. Myers & Majluf (1984) argues firms may hold slack strategically in order to be ready for new opportunities. While this would align with my predictions under expansion, this would create no reason for amplified effects under contraction. Each of these alternative explanations could weaken or eliminate my results, challenging my theory.[7]

Ultimately, the role that firm-level slack plays in moderating the effects of fiscal policy is an empirical question. The remainder of the paper is dedicated to testing my predictions in the unique context of the Liberation Day tariff announcements.

4. Setting and Sample

A. Setting – The Liberation Day Tariff Announcements

At market close on April 2, 2025, President Trump gave a much-anticipated speech on tariff policy, declaring that it was America's "Liberation Day". Although the tariff-oriented nature of the Liberation Day speech was known to market participants in advance, the size and scope of the tariffs announced were widely perceived by market watchers to far exceed baseline expectations, leading to a sell-off in the market.[8] Ultimately, postponements, bilateral trade deals, and legal challenges meant that the long-run effects of the tariffs never occurred.[9] Yet, although the full impact of the originally announced tariffs is unobservable, the stock market reactions to those expected tariffs are observable and provide a window into the anticipated effect of the Liberation Day tariffs on firm value. Hence, I use stock returns around the Liberation Day tariff announcements as my setting in which to investigate the role of slack in moderating fiscal policy.

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[7] One additional practical concern with my theory is that firms may be able to quickly sell off unused capacity, such that in practice very few firms actually experience operational slack for any length of time. The literature on cost stickiness suggests this is unlikely, as many firms retain unused capacity to avoid retrenchment costs (Anderson et al., 2003).

[8] *See, e.g.,* Kalyeena Makortoff and Graeme Wearden, "Global Stock Markets Fall and Dollar Dives after Trump Announces Sweeping Tariffs," *The Guardian*, April 3, 2025, https://www.theguardian.com/us-news/2025/apr/03/trump-tariffs-see-stocks-dive-and-investors-scramble-to-bonds-gold-and-yen; The Associated Press, "Trump's Tariffs Tank Stocks and Leave Markets Reeling," *BNN Bloomberg*, April 3, 2025, https://www.bnnbloomberg.ca/tariffs/2025/04/03/dow-drops-nearly-1680-in-biggest-wipeout-since-2020-as-fears-of-fallout-from-tariffs-shake-markets/.

[9] See Appendix A.2 for more details regarding the timeline of tariff policy surrounding Liberation Day.

The Liberation Day tariffs are a unique context because of their ability to serve both as form of expansionary fiscal policy and as contractionary fiscal policy, depending on the firm.[10] This is because although a tariff is a tax, and thus serves as an additional cost of business and is likely to be contractionary, it can also create special advantages for U.S. firms that are less dependent on imports and thus less affected by the tax. Indeed, this was one of the stated goals of the Liberation Day tariffs, with the White House arguing that the taxes would abate the "hollowing out" of the U.S. manufacturing base[11] and President Trump stating that "more production at home will mean stronger competition and lower prices for consumers."[12] To the extent some firms were expected to be able to take advantage of the changes to new business landscape the announced tariffs would create, this allows me to use the same policy announcement to test the role of slack in moderating the effect of both expansionary and contractionary fiscal policy. To focus in on the immediate expected impact of the Liberation Day tariffs prior to any subsequent reversals, I use the first day following the announcement (April 3, 2025) for my analysis.[13]

B. Sample Selection

The primary dataset for my analysis is the Security Daily file from the CRSP/Compustat Merged database (CCM). From there, I obtain daily stock price data for all firms starting in March of 2024, just over a year prior to Liberation Day tariff announcement on April 2, 2025. I require all firms to have a complete time-series throughout my sample, including in the 252

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[10] While expansionary and contractionary fiscal policy are usually defined in terms of their aggregate effect on demand or GDP, in this context I am referring to the effect for a given firm. In particular, my focus is on whether tariffs were likely to expand or to contract a given firm's investment opportunity set within the context of my theory set out in Section 3.
[11] Exec. Order no. 14257.
[12] Trump, Donald J. "Remarks Announcing Additional United States Tariff Actions on Foreign Imports." *The American Presidency Project*. Edited by Gerhard Peters and John T. Woolley, April 2, 2025. https://www.presidency.ucsb.edu/documents/remarks-announcing-additional-united-states-tariff-actions-foreign-imports.
[13] Using only April 3 allows me to better capture the effects of the Liberation Day tariffs themselves while avoiding confounding effects related to China's retaliatory tariffs announced the following day on April 4.

trading days leading up to the stock market reaction to Liberation Day on April 3, 2025 that are used to calculate abnormal returns.[14] After removing observations from non-primary issuances[15], observations where price data is missing, and firms with an incomplete data to calculate abnormal returns, my starting sample of stock data consists of 4,717 firms.

In order to calculate firm-level slack for each firm, I merge the data from the CCM Security Daily file with CCM's Fundamentals Quarterly file. For each firm, I use the fiscal quarter ending in the first calendar quarter of 2025 (January-March) in order to capture the most recent quarterly data as of Liberation Day. In order to effectively capture operational slack, which focuses on a firm's excess productive capacity, I remove observations for whom this concept is likely to be less relevant or less reliable. Specifically, prior to calculating *Operational Slack* in the quarterly data, I remove firm-quarter observations with less than a $1 million in quarterly sales, or whose PP&E-to-sales ratio are outliers at the 1st and 99th percentiles[16], as well as firms classified as a utility or financial firm under the Fama-French 17-industry classification.[17] Additionally, to avoid denominator effects whenever variables are scaled by assets, I remove firm-quarters with less than $1 million in total assets before calculating those variables.[18] Finally, in order to focus my policy analysis on its direct domestic effects, I remove firms that are either headquartered or incorporated outside the United States. After removing these observations, there are 2,156 firms which successfully merge with my underlying stock data.

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[14] The 252 trading days run from April 2, 2024 through April 2, 2025. This is just over one year due to the closure of the stock market on January 9, 2025 in honor of a National Day of Mourning held following the passing of former president Jimmy Carter.
[15] I identify non-primary issuances as observations where the variable "iid" in the CCM database is not equal to "01".
[16] Removing these firm-quarter observations does impact the eventual total firm count downstream. See Section 4.C and Appendix B for details on the construction of *Operational Slack*, and Table 1 for the sample impact of sample selection choices.
[17] French, Kenneth R. 2026. "17 Industry Portfolios." Kenneth R. French Data Library. Accessed March 20, 2026. https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/Data_Library/det_17_ind_port.html.
[18] As it so happens, this choice does not ultimately impact the total number of firms in the final analysis.

To distinguish between firms for whom the announced tariffs were likely expansionary and those for whom they were likely contractionary, I use a measure of tariff-risk recognition developed by Andreou et al. (2026).[19] For robustness, I also use a measure that examines whether consensus earnings estimates increased or decreased following Liberation Day, imputing values for firms without timely consensus updates. After removing observations that are missing tariff-risk recognition data, or data required to impute changes to consensus earnings, 2,077 firms remain in the sample.

My final steps are to remove observations to ensure a perfectly balanced panel, and to remove outliers on Liberation Day abnormal returns at the 1st and 99th percentiles that are more likely driven by extreme firm-specific, idiosyncratic events rather than reactions to tariff news. This reduces my sample to 2,034, which is the number of observations in my main, primary tests. See Table 1 for more details regarding the sample selection process.

C. Variable Definitions

a. *Abnormal Returns*

The dependent variable of my analysis is abnormal returns. To calculate abnormal returns, I use a Fama-French 5-factor model, as developed by Fama & French (2015). I begin by calculating daily total raw returns for each firm. To do this, I adjust prices to handle the effects of dividends, stock splits, and other factors.[20] After calculating raw returns, I subtract out the risk-free rate (from the Kenneth French Data Library), and then regress the excess returns on each of the 5 Fama-French factors (excess return of the market, *SMB*, *HML*, *RMW*, *CMA*). For each firm,

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[19] This data was provided directly to me by the authors of Andreou et al. (2026), who developed the measure in their paper. A detailed description of the construction of this variable (which is called TRR_{Other} in their paper) can be found there.

[20] In terms of CCM variables, adjusted price is calculated as $Adjusted\ Price = \frac{prccd}{ajexdi} * trfd$. See Appendix B for additional details regarding all variable definitions used in this paper and discussed throughout this section.

I use the 252-day trading window ending April 2, 2025 (the day before the Liberation Day stock market reaction) to estimate the market coefficient for that firm. I then use that coefficient to calculate the "expected" return on any other days and define abnormal returns (*Abnormal Return*) as the actual observed return less the expected return.

b. *Operational Slack*

The key moderating variable from my theory is operational slack, referring to a firm's unused productive capacity. To operationalize this concept, I follow Kovach et al. (2015) in using the ratio of a firm's net property, plant, and equipment (PP&E) to sales. Fundamentally, this measures capacity-based slack because it serves as ratio of capacity to utilization. Net PP&E is related to the firm's production capacity, since capital expenditures on capital equipment or property used for production are included in PP&E. Hence, an increase in the numerator represents an increase in the firm's capacity, making the ratio positively connected to slack. The same can be seen with the denominator. Because a firm's sales are closely tied to utilization (more sales generally means more production, which uses more capacity), an increase in sales, which makes the ratio smaller, also represents lower slack. Thus, this ratio correctly captures the effects on slack of changes in total capacity and total utilization under simple conditions.[21]

To account for the fact that even for two firms with equal slack the PP&E-to-sales ratio will differ based on the nature of each firm's production process, I benchmark the ratio to the firm's own history. Specifically, I compare the firm's PP&E-to-sales ratio in the fiscal period ending in the first calendar quarter of calendar year 2025 to the firm's average ratio value using

[21] Another way to think about slack is in the context of managerial accounting and the bifurcation of fixed vs. variable costs. When the firm exhibits a greater degree of unused capacity, managerial accounting would predict that average fixed costs would increase as a share of total costs, due to being spread over fewer units. Since net PP&E is likely to scale with fixed costs, and sales generally scales with units and variable costs, this logic is captured neatly in the PP&E-to-sales ratio.

quarterly data for fiscal quarters ending in the calendar years 2022-2024. If the ratio is greater in Q1 of 2025 than the three-year average, I set *HighOpSlack* equal to 1. Otherwise, I set it equal to 0. The result is a measure of operational slack that varies predictably with underlying constructs and accounts for firm-level idiosyncrasy.

c. *Identifying Expansionary and Contractionary Policy Effects*

In order identify expansionary firms, for whom the tariffs announced on Liberation Day would have been expected to expand the firm's investment opportunity set, and distinguish them from contractionary firms for whom the tariffs would have been expected to contract the investment opportunity set, I use a measure of tariff-risk recognition that is based on the text of the firm's 10-K. This variable uses a lexicon of tariff-risk-related words and phrases and then rates each instance of these lexicon terms on the degree of tariff-risk recognition they represent. In particular, I use the TRR_{Other}, variable developed by Andreou et al. (2026), which the authors shared with me. This allows me to use an ex-ante measure based on individual firm disclosure that captures the degree of tariff-risk recognized by the firm in information released to investors, thus plausibly capturing differences in which firms were expected to see the tariffs as expansionary and which as contractionary. I designate firms above the median as expansionary (*ExpansionaryTRR* = 1), and those below as contractionary (*ExpansionaryTRR* = 0).

For robustness, I consider an alternative measure of positive vs. expansionary firms that's based off changes to consensus earnings estimates after the Liberation Day tariff announcement. This measure assumes that if a proposed tariff increases (decreases) analyst expected earnings, then this is at least partially caused by an expanded (contracted) set of positive-NPV projects being made available to the firm. To calculate how analyst expectations changed, I use data on one-year EPS analyst forecasts from I/B/E/S. Specifically, I use estimates announced by all analysts for a firm on or after January 1, 2025, and before April 9, 2025. By ensuring that forecasts are announced on or after January 1, 2025, I ensure that estimates aren't overly stale and unrepresentative. By excluding forecasts from April 9, 2025, or later, I ensure that the estimates are not influenced by the reversal in reciprocal tariff policy pursued by the White House, but were issued at a time when the Liberation Day tariff rates were expected to persist. I also exclude forecasts relating to fiscal periods ending prior to Liberation Day or ending after fiscal year 2025. For each analyst, I only include the most recent forecast made before and after Liberation Day. After creating each firm's set of relative earnings estimates, I calculate whether consensus earnings increased or decreased after Liberation Day. Specifically, I take the mean of all forecasts announced before 4:00 PM EDT on April 2, 2025, and compare it to the mean of all forecasts announced after that point, setting the indicator variable *ExpansionaryCU* equal to 1 if mean earnings estimate increased. Since many firms do not have an estimate released during the April 2-9 window, I impute values for the remaining observations using a regression fitted on firms with complete data. Specifically I regress the changes in consensus on the firm's R&D, an indicator for zero R&D, the firm's US dollar sensitivity (*FX Beta*), previous abnormal returns on March 4, 2025 (*Mar4AR*), and the portion of the firm's industry's intermediate inputs that are imported (*ImportPortion*), constructed from BEA data.[22] For all firms without direct consensus update data, I then use the predicted value of this regression to determine the value of *ExpansionaryCU*, setting it equal to one when the predicted value is positive, and zero otherwise. *ExpansionaryCU* therefore uses a combination of direct consensus update data where available, and imputed values otherwise to separate firms into expansionary and contractionary categories.

[22] On March 4, 2025, markets reacted to news of new tariffs on goods imported from Mexico and Canada. For more details on these regression variables, see Appendix B.

D. Descriptive Statistics

Having formed my dataset, I explore its properties further in Table 2. In particular, Table 2.A contains summary statistics for all the major variables used in my analysis. Of particular note are the statistics regarding the abnormal returns on April 3, 2025. Because abnormal returns are measured relative to benchmarks (in this case the 5 Fama-French factors, which also were affected by the tariff announcements), statistics regarding the abnormal return implicitly capture aspects of how my sample compares to the broader market as a whole. For instance, the mean abnormal return for April 3, 2025 in my sample is -0.4%. This suggests that firms in my sample responded even more negatively to tariff news than the broader market, suggesting that my sample was, as a whole, particularly sensitive to tariff policy. Given my choice to exclude industries less directly impacted, including financial and utility firms, this dynamic is unsurprising, and is indicative of a sample for whom tariffs are especially value-relevant.

For further insight, I compare expansionary firms (*ExpansionaryTRR = 1*) to contractionary firms (*ExpansionaryTRR = 0*) in Table 2.B. Consistent with expectations, I find that contractionary firms experienced especially large stock price drops on average, with a mean abnormal return of -0.8% on April 3, suggesting the expected tariff impact on those firms was much worse than for the broader market, or even my broader sample. By comparison, I find for expansionary firms, the mean abnormal return on April 3 was 0.1%, suggesting a much lighter impact, but also suggesting that even my subsample of firms marked as expansionary fared no better than the average firm in the market that day, consistent with the broader characteristic of my sample capturing relatively tariff-sensitive firms. Overall, simple mean comparisons provide some confirmation that the distinction drawn between expansionary and contractionary firms captures real differences, but creates some reason for caution regarding the interpretation of expansionary firms.

Additional insight into my sample can be found in Table 2.C, which tallies the number of firms falling into particular categories within my dataset. I find that given my definition, 1,017 of the firms in my sample are labeled as contractionary and 1,017 are expansionary firms, due to my median split. With regards to my primary measure of operational slack, I find that 1,060 firms in my sample are labeled as high-slack, with 974 low-slack firms. This breakdown showcases an overall balance in my sample that aids in statistical power.

5. Research Design and Results

A. The Amplification Role of Slack

In order to test my theory that firm-level slack amplifies the effects of fiscal policy, I regress abnormal returns following the Liberation Day tariff announcements on my measure of firm-level slack. Because the tariffs were announced after market close on April 2, 2025, I use abnormal returns from April 3 to estimate my effects.[23] In particular, I run the following specification:

$$(1)\ AbnormalReturn_i = \beta_0 + \beta_1 Expansionary_i + \beta_2 HighOpSlack_i + \beta_3 Expansionary * HighOpSlack_i + \varepsilon_i$$

Here, i indexes firms, but since only one day of data is used in each regression, the specification constitutes a simple cross-sectional regression and no other indexes are needed. This regression is a simple interaction model, with $Expansionary$ being an indicator for expansionary firms that is set equal to $ExpansionaryTRR$ in some specifications and to $ExpansionaryCU$ in others. The key coefficient of interest in this case is β_3, which captures the

[23] Although the stock market drop on April 4 was also unusually large, returns on that day are potentially contaminated with stock market responses to retaliatory tariffs announced by China that same day. By focusing my analysis on April 3, I ensure that my results on are not driven by China's announced retaliation.

interactive effect between $Expansionary$ and $HighOpSlack$. According to my theory, β_3 is expected to be positive, consistent with slack affecting returns more positively for expansionary firms than for contractionary firms, thus amplifying the differences between the two groups.

In order to calculate standard errors in my regressions, I use the standard error measure developed by Cohn et al. (2026) for cross-sectional regressions of short-term stock returns on firm characteristics. In order to account for the fact that firm characteristics may correlate with abnormal returns on other days where no event took place, this method uses the pre-period to estimate the usual relationship between included firm characteristics and returns to determine whether the observed relation on the event day is truly out of the ordinary and statistically significant. This method allows me to avoid false positives where observed correlations are merely part of the normal relationship between firm characteristics and firm returns, rather than a specific reaction to the event (in this case Liberation Day).

My main results in Table 3.A are consistent with my predictions. When estimating coefficients using OLS, I find that a firm having high operational slack (meaning an increase in its PP&E-to-sales ratio relative to its pre-period average) is associated with abnormal returns 0.8 percentage points higher among expansionary firms than contractionary firms, which is significant at the 5% level. This shows that slack had a more positive effect for expansionary firms than contractionary firms, indicating statistically significant state-dependent amplification effects of slack.

In columns labeled "GLS" I use a generalized least squares model to estimate my coefficients that was developed by Cohn et al. (2026). Specifically, I run a GLS model that uses principal components analysis (PCA) to estimate pre-period relationships between regression variables and then uses the calculated correlation matrices to weight the observations in the regression.

Using this method yields a similarly significant positive coefficient for β_3. Overall, these results are generally consistent with the results found using OLS and provide some confirmation of the robustness of this empirical result.

In Table 3.B, I show additional robustness by using an alternative measure of expansionary firms, *ExpansionaryCU*. I continue to observe a positive and statistically significant β_3 using GLS, with a statistical significance at the 10% level using OLS (and a similar point estimate). This shows that the observed result regarding the role of operational slack is not solely due to problems idiosyncratically attributable to my primary measure of expansionary firms. In all, the results regarding slack are consistent across different empirical approaches.

B. Asymmetric Slack Effects

My theory predicts that the effect of slack is asymmetric, amplifying contractions more than expansions. To test this directly, I re-run a new form of (1) that uses separate regressions for expansionary and contractionary firms.

(2) $AbnormalReturn_i = \beta_0 + \beta_1 HighOpSlack_i + \varepsilon_i \; if \; ExpansionaryTRR = 1$

(3) $AbnormalReturn_i = \beta_0 + \beta_1 HighOpSlack_i + \varepsilon_i \; if \; ExpansionaryTRR = 0$

Because the regressions are separate, they simplify, and the variable $ExpansionaryTRR$, as well as the interaction term, drop from the regression. Instead, β_1 becomes the coefficient of interest, representing the distinct effect of operational slack for expansionary and contractionary firms.

Table 4 reports the results. I find that the interactive result observed using combined regressions was concentrated among contractionary firms, supporting my predictions. For contractionary firms, I find that high-slack firms experienced returns 0.6 percentage points lower than their low-slack counterparts, which is an effect size equal to 75% of the -0.8% mean abnormal return experienced for contractionary firms overall. In the context of my theory, this represents that the upside potential of slack in the expansionary state is bounded from above by the actual amount of slack that the firm carries, whereas no such bound exists for the contractionary state. Given the magnitude of the Liberation Day shock, and the fact that firms with very high levels of slack would be more prone to bankruptcy and less likely to appear in the sample, it is plausible that this upper bound would be binding for many high-slack firms. This explanation is consistent with my result for expansionary firms, where I find a positive but insignificant effect of slack.

These results confirm the presence of state-dependent effects of slack in moderating abnormal returns. Overall, my results highlight the consequences of contractionary policy for firms with slack, and suggest that policy makers should be aware of not just economy-wide measures, but firm-level analysis for understanding optimal policy.

6. *Additional Analysis*

A. **Financial Slack**

A substantial portion of the existing literature regarding firm-level slack deals with financial slack, with excess financial resources being tied to the investment opportunity set by Jensen (1986), and Bolton et al. (2019) arguing growth options are less valuable if the firm doesn't have the financial slack to capitalize on them. This begs the question whether financial slack provides any incremental insight into the firm's position with regards to investment opportunity set and policy sensitivity in a context where operational slack is accounted for.

To operationalize financial slack, I use the excess cash measure created by Simutin (2010), adjusted for dividends and share repurchases. Specifically, I run a cross-sectional regression in the first calendar quarter of 2025 of the natural log each firm's adjusted cash scaled by adjusted assets on a variety of predictors to capture expected cash needed for the firm's operations.[24] These predictors include the firm's market-to-book, size, capital expenditures, R&D, working capital, long-term debt, a dummy variable for whether the firm issued a dividend that quarter, and dummy variables for industry. While I set R&D expenditures equal to zero when missing, I also follow Koh & Reeb (2015) in including a dummy variable for zero R&D. I then take the residuals from this regression and use them as my measure of financial slack (*Financial Slack*). Due to some firms missing data required to calculate excess cash, including *Financial Slack* in my analysis reduces my sample to 1,978 firms.

Using financial slack, I perform subsample regressions of my main test from equation (1) as presented in Table 3.A, creating a median split on *Financial Slack* to form each subsample. This yields the following construction:

$$(4)\ AbnormalReturn_i = \beta_0 + \beta_1 ExpansionaryTRR_i + \beta_2 HighOpSlack_i + \beta_3 ExpansionaryTRR * HighOpSlack_i + \varepsilon_i \ if \ HighFinSlack = 1$$

$$(5)\ AbnormalReturn_i = \beta_0 + \beta_1 ExpansionaryTRR_i + \beta_2 HighOpSlack_i + \beta_3 ExpansionaryTRR * HighOpSlack_i + \varepsilon_i \ if \ HighFinSlack = 0$$

Logically, after pinning down operational slack, financial slack should offer additional insight into the firm's position relative to its investment opportunity set. An expansionary firm with a great deal of operational slack, but with no financial slack, may find it difficult to deploy the financial capital required to seize on new opportunities, even though it has the operational capacity to do so. Additionally, and even more relevant given that my results are concentrated

[24] See Appendix B for more details regarding the specific construction of each of the variables used in my excess cash regression.

among contractionary firms, a high-slack contractionary firm that has no financial slack may not be as poorly affected by a contraction in its investment opportunity set as a high-slack contractionary firm that does have financial slack. This is because if the firm has low financial slack and high operational slack, this could signify that the firm is actually fully invested, and does not face a paucity of investment opportunities, because for them the binding constraint is not operational capacity but financial capital needed to fund the use of that capacity. Thus it may have room to lose some investment opportunities without it heavily affecting operations or value. This would suggest that only if the firm has both high operational slack and high financial slack is it clear that the firm lacks sufficient existing investment opportunities.

Putting it together, this suggests the main result may not hold for firms with low financial slack, but that it will hold among a subsample of high financial slack firms. Then, β_3 should be positive for firms with high financial slack firms and muted or insignificant for firms with low financial slack.

As shown in Table 5A and Table 5B, I find precisely this result. I find that for high financial slack firms, β_3 is positive and significant for both the GLS and OLS specifications, and greater in magnitude than in Table 3.A where I rely on operational slack alone. Meanwhile, for low financial slack firms, I find no statistically significant results. This confirms the theory that both financial slack and operational slack provide incremental information about the firm's investment opportunity set, and thus its value-sensitivity to fiscal policy. Additionally, the combined empirical harmony of both operational slack and financial slack in the context of the theory helps assuage the concern that either result is purely a statistical artifact of either proxy's limitations. This result helps to underline that slack predicts sensitivity to fiscal policy *because* it's tied to the firm's investment opportunity set.

B. Information Quality

So far, my analysis has implicitly assumed that firms have all the necessary information to know precisely how a fiscal policy shock will affect their investment opportunity set (i.e. perfect internal information) and that investors have all information necessary to correctly predict and value those effects (i.e. perfect external information). Decades of accounting research suggest that these may be strong assumptions. For instance, researchers have found that firm investment decisions depend on the quality of the internal information environment (Goodman et al., 2014; Heitzman & Huang, 2019), and that firm valuation depends on the quality of the external information environment (Botosan, 1997; Diamond & Verrecchia, 1991). I now relax these assumptions and directly examine how the quality of a firm's information environment affects the role of slack in the context of firm-level fiscal policy shocks.

I consider two channels through which information could alter the value of slack following a fiscal policy shock. The first is a real-effects channel. Similar to how Keynes (1936) argued that the economy can only respond to fiscal stimulus if it has resources available to be deployed, it can be argued that firms can only respond to the positive signal from a fiscal policy if their information is good enough to decipher it. Accounting information plays a key role in firm decision-making, allowing managers to better identify the costs and revenues resulting from a project. Thus, when internal information quality is low, managers may not be able to identify profitable projects, and thus may not be able to optimally employ existing slack within the context of their investment opportunity set, leading to a positive interaction between internal information quality and slack in explaining abnormal returns among both expansionary and contractionary firms.

The second possibility is a purely valuational channel. The quality of the firm's external information environment could change the way the market interprets the value-relevance of news without changing the fundamental value or behavior of the firm itself. In which case, when faced with an ambitious fiscal policy of uncertain impact, the presence of high-quality information in the market could help to bound the potential effects, preventing runaway positive speculation for well-positioned firms (i.e., theoretically, expansionary firms with a high degree of slack) or extreme worst-case pessimism for poorly-positioned ones (i.e., theoretically, contractionary firms with a high degree of slack). This would predict that external information quality should positively interact with slack for contractionary firms and negatively interact with slack for expansionary firms.

An alternative valuation theory supports opposite results. Imhoff & Lobo (1992) find that ex-ante forecast uncertainty was associated with smaller earnings response coefficients, suggesting poor information quality could act as static in the signal between value-relevant events and firm price, dampening stock market responses and leading to attenuated abnormal returns for well-positioned and poorly-positioned firms. Under this reading, high information quality would amplify market responses, suggesting that slack and external information quality should positively interact for expansionary firms and negatively interact for contractionary firms, the exact opposite of the bounded impact theory.

Overall, whether internal information quality or external information quality is more important, and whether it acts through the real-effects channel or through the valuational channel, or both, is an empirical question. It is also a question of significant consequence, as it determines whether information quality directly moderates long-term policy effectiveness or merely the short-term reaction as investors digest complex value-relevant events.

To operationalize the quality of a firm's information environment, I use two measures. The first captures internal information quality using one of the measures of Gallemore and Labro

(2015): the accuracy of a firm's management guidance regarding sales. I calculate this using the most recent annual sales forecast for each fiscal year from 2020 to 2024, excluding guidance given after the end of the fiscal period or in the same month that the fiscal period ends. For guidance ranges, I use the range’s midpoint. I then take the mean percentage error relative to realized actuals across available years for each firm, and then multiply by -1 so as to ensure the variable is increasing in forecast accuracy. I rely on the same analyst data from I/B/E/S used to capture changes in earnings consensus. I then define high and low values of *Internal Information* by using a median split on forecast accuracy. This measure is based on the notion that firms that can accurately predict their own future sales have high-quality internal information regarding their own operations. Due to some firms having no management guidance data from which to calculate forecast accuracy, including *Internal Information* in my analysis reduces my sample to 1,031 firms.

To capture the quality of the firm’s external information environment, I use a measure based on analyst forecast dispersion. This follows Lang and Lundholm (1996), who find lower dispersion among firms with more informative disclosure, and Barron and Stuerke (1998), who show dispersion proxies for uncertainty about the price-relevant component of future earnings. Specifically, for each firm, I calculate the standard deviation of all earnings estimates from before the Liberation Day tariff announcement and, to ensure the measure is increasing in the quality of information, I multiply this standard deviation by negative one. I then do a median split on this variable to create the variable, with high *Analyst Information* being equal to one for firms above the median. Due some firms missing analyst forecast data, including *Analyst Information* in my analysis reduces my sample to 1,531 firms.

Using these information measures, I estimate the effects that the quality of accounting information has on firm responses to policy. To do so, I begin by estimating the following regression:

(6) $AbnormalReturn_i = \beta_0 + \beta_1 Expansionary_i + \beta_2 HighOpSlack_i + \beta_3 HighInformation + \beta_4 Expansionary * HighOpSlack_i + \beta_5 Expansionary * HighInformation_i + \beta_6 HighInformation * HighOpSlack_i + \beta_7 Expansionary * HighInformation * HighOpSlack_i + \varepsilon_i$

In this construction, $HighInformation$ represents firms above the median for management forecast accuracy or below the median for pre-period analyst forecast dispersion, depending on the specification. Because the weightings on the GLS model are related to the pre-period idiosyncratic variance of returns for a given firm, which is likely to be related to measures of information for that firm, I use only OLS to estimate these regressions. This avoids the possibility of a correlation between the regressors and the regression weights that makes interpretation more difficult.

Here, the primary coefficients of interest are β_7 and β_6, which represent interactive effects between information and slack. If information plays a real-effects role, then β_7 should be positive, reflecting that information is most useful for expansionary firms with slack seeking to deploy their unused resources in a favorable investment landscape. Additionally, β_6 should be positive, suggesting that even for contractionary firms, information should be most useful when the firm has unused resources it seeks to gainfully deploy. In that case, these results should load strongly on *Internal Information*, which is more closely related to information available to firm management and thus more closely related to a real-effects interpretation.

If, on the other hand, information plays a valuational role, then results should load strongly on *Analyst Information*, which represents the quality of the external information environment. In that case, a positive coefficient on β_7 and a negative one for β_6 would be consistent with static-in-the-signal story proposed by Imhoff & Lobo (1992), good information increasing the positive response for expansionary firms with high slack and exacerbating the negative response for contractionary firms with high slack due to reduced noise in the signal. Reverse signs would be consistent with good information allowing investors to bound the outcome of otherwise uncertain policy by eliminating runaway positive speculation and worst-case pessimism by providing high-quality firm-specific information.

As shown in Table 6.A, I find no statistically significant results with regard to *Internal Information*, but do with regards to *Analyst Information*, consistent with a purely valuational interpretation of information being the only informational role for which my analysis provides evidence. Consistent with bounding the outcomes, I indeed find a statistically significant negative coefficient on β_7 and a significant positive coefficient for β_6, suggesting that a better external information environment allowed investors bound the impact, and to rule out extreme outcomes that might have been anticipated given the apparent magnitude of the policy itself.

To gain more insight into this same analysis, I also perform subsample regressions for expansionary and contractionary firms, which aids in the interpretation of a complex triple interaction. To do this, I use the following construction:

(7) $AbnormalReturn_i = \beta_0 + \beta_1 HighOpSlack_i + \beta_2 HighInformation + \beta_3 HighInformation * HighOpSlack_i + \varepsilon_i \; if \; ExpansionaryTRR = 1$

(8) $AbnormalReturn_i = \beta_0 + \beta_1 HighOpSlack_i + \beta_2 HighInformation + \beta_3 HighInformation * HighOpSlack_i + \varepsilon_i \; if \; ExpansionaryTRR = 0$

Here, the primary coefficient of interest is β_3, capturing the interactive effect between slack and information separately for each subsample. I find that my results for *Analyst Information* are primarily concentrated among contractionary firms. I find that β_3 is positive and statistically significant for contractionary firms, and negative (but only significant at the 10% level) for expansionary firms, reaffirming the effect-bounding interpretation. More precisely, in Table 6.C, I find that for contractionary firms, high-information, high-slack firms were associated with returns 1 percentage point higher than for low-information, high-slack firms, suggesting that information played a major role in diminishing the negative returns for otherwise poorly-positioned high-slack contractionary firms. Examining expansionary firms in Table 6.B, the incremental effect of information was -0.7 percentage points among high slack firms, providing weak evidence of information weakening returns for the otherwise best-positioned firms. I continue to find no statistically significant results in specifications using *Internal Information*.

Taking all the results regarding information holistically, the evidence is consistent with external information quality allowing investors to bound the positive and negative effects of tariffs for a given firm, leading to less extreme negative returns for high-slack contractionary firms and less extreme positive returns for high-slack expansionary firms. The results are strongest among the contractionary firms, consistent with the same results found in Table 4. Meanwhile, my results provide no positive evidence for a real-effects role of information in my setting whereby firms were expected to use higher quality information to respond to a changing investment landscape.

7. Conclusion

Macroeconomic research suggests that, on an economy-wide basis, slack plays an important role in moderating the effects of fiscal policy. In a stylized setting, I demonstrate how this logic could extend to individual firms, showing that when firm-level slack is the result of a limited investment opportunity set, slack increases the sensitivity of firm value to fiscal policy, especially for contractionary policy shocks. Using the Liberation Day tariff announcements as my fiscal policy setting, I find evidence in support of this theory. I find that high-slack firms were more sensitive to tariff policy, and my results are concentrated amongst firms for whom the tariffs were perceived as contractionary. I also show that these results are concentrated among firms with a high degree of financial slack, suggesting that both operational and financial slack provide incremental information about a firm's investment opportunity set and its value-sensitivity to fiscal policy.

I also show that the quality of the information environment played a role in changing how investors evaluated the likely impact of the announced tariff policies on the firm. While I find no evidence of internal information quality changing investor expectations of firm behavior and value, I find that a high-quality external information environment reduced the return differences between the otherwise worst-off and best-off firms, consistent with higher-quality information allowing investors to bound the impact of a highly disruptive and uncertain policy by allowing them to evaluate its firm-specific consequences with greater precision.

Taken together, I present a framework for understanding how firm-level slack relates to fiscal policy that yields powerful predictions. By reconceptualizing slack within the context of a firm's investment opportunity set, I create a space in which questions relating to managerial accounting, financial accounting, corporate finance, and public finance all naturally interact, creating the possibility of new connections across disciplines as the frontier of knowledge expands. By bridging the gap between macroeconomic and firm-level analysis, I extend the literature from both directions.

I provide tools to policymakers who seek to understand the distributional effects of fiscal policy across firms and showcase the importance and value of accounting information in evaluating fiscal policy. By leveraging information on the degree of slack at each individual firm, this paper's framework provides predictions not just for the overall effect of fiscal policy, but for how it will percolate across the economy.

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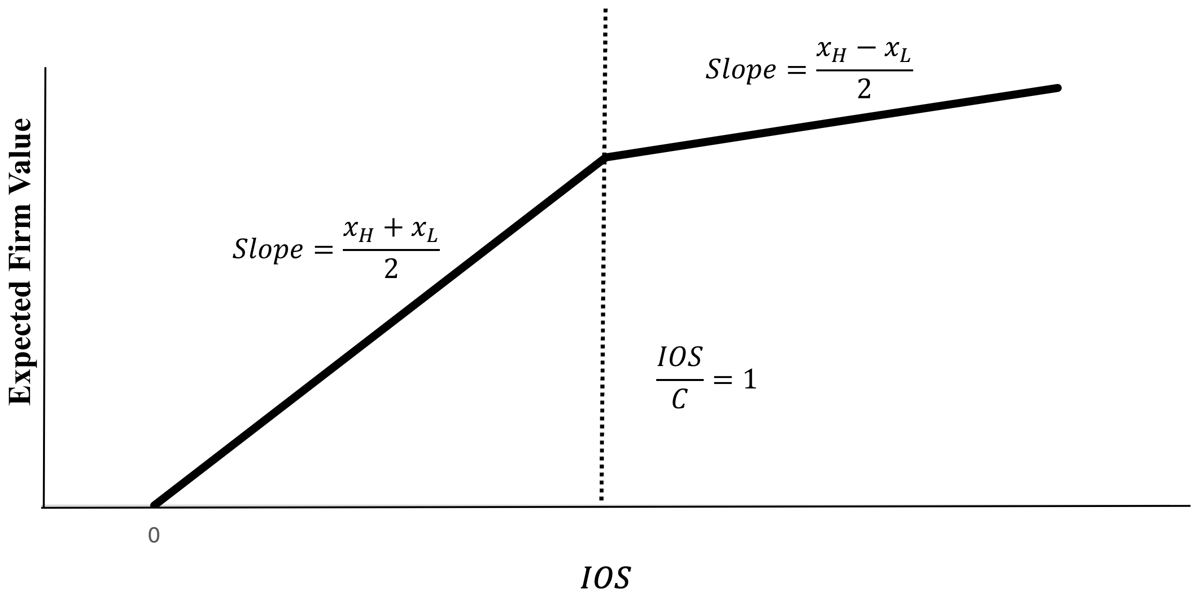
Figures

Figure 1.

Expected Firm Value as a Function of the Investment Opportunity Set



Notes: The above is visual representation of my stylized example. IOS represents the size of the firm's investment opportunity set, measured as the total amount of productive capacity required to serve all positive-NPV projects available to the firm. C represents the total productive capacity of the firm, such that full utilization is achieved for $IOS \geq C$. Each project earns a return of x_H or x_L, with $x_H > x_L$. While idle capacity remains, new projects face no opportunity costs and new investment opportunities sharply increase expected firm value. Once capacity is reached, new projects can only displace existing ones, reducing the value of new opportunities. This results in a concave kink (i.e. a slope-decreasing kink) in firm value that occurs at the point $IOS = C$ which generates the predictions of my theory.

Figure 2.

	No Slack	High Slack
Contractionary Policy	*Small Negative Effect* Because the firm experiences an ex-ante surplus of investment opportunities, contractions to the investment opportunity set are less painful than they otherwise would be.	*Large Negative Effect* Because the firm is already experiencing an ex-ante shortage of investment opportunities, a further contraction to the investment opportunity set is more painful than it otherwise would be.
Expansionary Policy	*Small Positive Effect* Because the firm experiences an ex-ante surplus of investment opportunities, expansions to the investment opportunity set are less helpful than they otherwise would be.	*Large Positive Effect* Because the firm experiences an ex-ante shortage of investment opportunities, expansions to the investment opportunity set are more helpful than they otherwise would be.

Tables

Table 1 – Sample Selection

Starting Number of Firms	**6,042**
Removed non-primary issuances	(1,056)
Removed observations missing pricing data	(3)
Removed firms with incomplete data to calculate abnormal returns	(266)
Removed firms that could not merge with Compustat	(177)
Removed utility and financial firms	(1,269)
Removed firms with insufficient or unreliable data to calculate Operating Slack	(692)
Removed non-U.S. firms	(423)
Removed firms with insufficient data to impute Consensus Update	(62)
Removed firms missing Tariff-Risk Recognition data	(17)
Removed firms with incomplete time-series	(2)
Removed outliers on Liberation Day abnormal returns	(41)
Ending Number Firms	**2,034**

Table 2 – Summary Statistics

Table 2.A - Full Sample

Variables	Mean	Median	Standard Deviation	Minimum	Maximum	Observations
Abnormal Return - Apr 3	-0.4%	0.1%	4.0%	-12.9%	11.0%	2034
Operational Slack	0.03	0.01	1.37	-20.97	12.90	2034
Financial Slack	0.00	-0.02	0.10	-0.28	0.58	1978
Consensus Update	0.00	0.00	0.07	-1.73	1.41	2034
Tariff-Risk Recognition	0.39	0.10	0.42	0.00	0.91	2034
Forecast Accuracy	-0.06	-0.02	0.12	-1.52	0.00	1031
Dispersion	0.03	0.00	0.13	0.00	3.85	1531
Sales	1.89	0.25	8.38	0.001	180.55	2034
Market-to-Book	2.30	1.59	2.18	0.22	29.76	2034
Cash	0.13	0.08	0.12	0.00	0.69	2034
Size	5.97	6.05	2.11	0.77	12.21	2034
Capital Expenditures	0.01	0.00	0.01	-0.01	0.17	2028
Working Capital	0.06	0.06	0.26	-4.61	0.95	1999
Long-term Debt	0.28	0.23	0.27	0.00	2.73	2017
R&D	0.27	0.00	1.78	0.00	63.25	2034
Cash Flow	-0.01	0.00	0.07	-0.64	0.85	2030
Import Portion	0.12	0.11	0.07	0.01	0.37	2034
FX Beta	-1.25	-1.04	1.29	-13.60	3.28	2034
Abnormal Return - Mar 4	-0.2%	-0.2%	4.2%	-54.7%	87.7%	2034

Notes: Summary statistics for Sales are expressed in billions. Variable descriptions can be found in Section 4.C and Appendix B.

Table 2.B - Expansionary vs. Contractionary Firms

Variables	Mean		Observations	
	Expansionary	Contractionary	Expansionary	Contractionary
Abnormal Return - Apr 3	0.1%	-0.8%	1017	1017
Operational Slack	0.01	0.06	1017	1017
Financial Slack	0.00	0.00	993	985
Consensus Update	0.00	0.00	1017	1017
Tariff-Risk Recognition	0.02	0.76	1017	1017
Forecast Accuracy	-0.06	-0.05	486	545
Dispersion	0.04	0.02	743	788
Sales	1.39	2.39	1017	1017
Market-to-Book	2.31	2.29	1017	1017
Cash	0.14	0.12	1017	1017
Size	5.62	6.33	1017	1017
Capital Expenditures	0.01	0.01	1013	1015
Working Capital	0.06	0.06	1003	996
Long-term Debt	0.27	0.28	1009	1008
R&D	0.34	0.20	1017	1017
Cash Flow	-0.01	-0.01	1015	1015
Import Portion	0.11	0.13	1017	1017
FX Beta	-1.24	-1.25	1017	1017
Abnormal Return - Mar 4	-0.1%	-0.3%	1017	1017

Notes: Expansionary and contractionary firms are based on a measure of tariff-risk recognition developed by Andreou et al. (2026). Summary statistics for *Sales* are expressed in billions. Variable descriptions can be found in Section 4.C and Appendix B.

Table 2.C - Tallies of Binary Variables

Variables	Tally		
	Expansionary	Contractionary	Total
High Operational Slack	476	584	1060
Low Operational Slack	541	433	974
Total	1017	1017	2034
High Financial Slack	468	521	989
Low Financial Slack	525	464	989
Total	993	985	1978
High Analyst Information	325	441	766
Low Analyst Information	418	347	765
Total	743	788	1531
High Internal Information	241	274	515
Low Internal Information	245	271	516
Total	486	545	1031

Notes: This table counts the number of observations where *HighOpSlack*, *HighFinSlack*, *Analyst Information*, and *Internal Information* are equal to 1 (High) and equal to 0 (Low). Expansionary and contractionary firms are based on a measure of tariff-risk recognition developed by Andreou et al. (2026). Detailed variable definitions can be found in Section 4.C and Appendix B.

Table 3 – The Moderating Effect of Slack

Table 3.A - Tariff-Risk Recognition

Variables	GLS	OLS
HighOpSlack	-0.002	-0.006**
	(0.325)	(0.042)
ExpansionaryTRR	0.002	0.004
	(0.325)	(0.142)
HighOpSlack * ExpansionaryTRR	**0.004****	**0.008****
	(0.042)	(0.025)
Constant	-0.000	-0.005
	(0.950)	(0.117)
Observations	2034	2034

Table 3.B - Consensus Update

Variables	GLS	OLS
HighOpSlack	-0.002	-0.005**
	(0.167)	(0.042)
ExpansionaryCU	0.003	0.009**
	(0.242)	(0.017)
HighOpSlack * ExpansionaryCU	**0.007****	**0.008***
	(0.017)	(0.067)
Constant	-0.000	-0.006*
	(0.917)	(0.067)
Observations	2034	2034

Notes: This table shows how firm-level slack affected market reactions to Liberation Day tariff announcements using one-day abnormal returns as the dependent variable. In Panel A and Panel B, the columns labeled "GLS" use the generalized least squares model developed by Cohn et al. (2026) to estimate the coefficients, while the columns labeled "OLS" use ordinary least squares. Standard errors are estimated using the methodology developed by Cohn et al. (2026), which compares the magnitude of differences in returns on the event date to the magnitude of return differences in the pre-period to establish statistical significance. In Panel A, expansionary and contractionary firms are separated using a median split around a tariff-risk recognition variable from Andreou et al. (2026). In Panel B, the firms are instead split into expansionary and contractionary categories based on updates to consensus earnings forecasts before vs. after Liberation Day, with a regression being used to impute values for firms without such data. Variable descriptions can be found Section 4.C and Appendix B.

Table 4 – The Effect of Slack Using Separate Regressions

Variables	Expansionary Firms	Contractionary Firms
HighOpSlack	**0.003**	**-0.006****
	(0.367)	(0.042)
Constant	-0.001	-0.005
	(0.808)	(0.117)
Observations	1017	1017

Notes: This table shows how firm-level slack affected market reactions to Liberation Day tariff announcements using one-day abnormal returns as the dependent variable. Ordinary least squares is used to estimate the coefficients. Standard errors are estimated using the methodology developed by Cohn et al. (2026), which compares the magnitude of differences in returns on the event date to the magnitude of return differences in the pre-period to establish statistical significance. Expansionary and contractionary firms are separated using a median split around a tariff-risk recognition variable from Andreou et al. (2026). Separate subsample regression are run for expansionary and contractionary firms. Variable descriptions can be found Section 4.C and Appendix B.

Table 5 –Cross-Sectional Cuts Using Financial Slack

Table 5.A - High Financial Slack Firms

Variables	GLS	OLS
HighOpSlack	-0.004	-0.007
	(0.150)	(0.108)
ExpansionaryTRR	0.002	0.004
	(0.567)	(0.375)
HighOpSlack * ExpansionaryTRR	**0.008****	**0.012****
	(0.025)	(0.050)
Constant	-0.002	-0.007**
	(0.408)	(0.042)
Observations	989	989

Table 5.B - Low Financial Slack Firms

Variables	GLS	OLS
HighOpSlack	-0.001	-0.006
	(0.758)	(0.208)
ExpansionaryTRR	0.001	0.005
	(0.558)	(0.225)
HighOpSlack * ExpansionaryTRR	**0.002**	**0.005**
	(0.458)	(0.392)
Constant	0.002	-0.003
	(0.375)	(0.483)
Observations	989	989

Notes: This table shows how firm-level operational slack affected market reactions to Liberation Day tariff announcements using one-day abnormal returns as the dependent variable. The columns labeled "GLS" use the generalized least squares model developed by Cohn et al. (2026) to estimate the coefficients, while the columns labeled "OLS" use ordinary least squares. Standard errors are estimated using the methodology developed by Cohn et al. (2026), which compares the magnitude of differences in returns on the event date to the magnitude of return differences in the pre-period to establish statistical significance. Panel A uses a subset of firms classified as having high financial slack based on a variable relating to excess cash, while Panel B uses a subset with low financial slack. Variable descriptions can be found Section 6.A and Appendix B.

Table 6 – The Interaction Between Slack and Information Quality

Table 6.A - Combined Regressions

Variables	Analyst Information	Internal Information
HighInformation	-0.005	0.007
	(0.417)	(0.117)
ExpansionaryTRR	0.002	0.009*
	(0.675)	(0.092)
HighOpSlack	-0.014**	-0.003
	(0.025)	(0.425)
*HighOpSlack * ExpansionaryTRR*	0.019**	0.005
	(0.017)	(0.225)
*HighInformation * ExpansionaryTRR*	0.008	-0.001
	(0.167)	(0.975)
*HighInformation * HighOpSlack*	0.015**	-0.002
	(0.025)	(0.767)
HighInformation * HighOpSlack * ExpansionaryTRR	**-0.024*** **	**-0.006**
	(0.008)	(0.400)
Constant	-0.004	-0.011**
	(0.358)	(0.017)
Observations	1531	1031

Table 6.B - Expansionary Firms

Variables	Analyst Information	Internal Information
HighInformation	0.003	0.006
	(0.608)	(0.158)
HighOpSlack	0.004	0.002
	(0.358)	(0.600)
HighInformation * HighOpSlack	**-0.010***	**-0.008**
	(0.083)	(0.208)
Constant	-0.002	-0.002
	(0.675)	(0.567)
Observations	743	486

Table 6.C - Contractionary Firms

Variables	Analyst Information	Internal Information
HighInformation	-0.005	0.007
	(0.417)	(0.117)
HighOpSlack	-0.014**	-0.003
	(0.025)	(0.425)
HighInformation * HighOpSlack	**0.015****	**-0.002**
	(0.025)	(0.767)
Constant	-0.004	-0.011**
	(0.358)	(0.017)
Observations	788	545

Notes: This table shows how firm-level slack and firm information environments interacted to affect market reactions to Liberation Day tariff announcements using one-day abnormal returns as the dependent variable. Ordinary least squares is used to estimate the coefficients. Standard errors are estimated using the methodology developed by Cohn et al. (2026), which compares the magnitude of differences in returns on the event date to the magnitude of return differences in the pre-period to establish statistical significance. In the left column of each panel, the coefficients on "*HighInformation*" and its interactions correspond to an information variable based on analyst forecast dispersion. In the right column of each panel, a different information variable based on management forecast accuracy is used. Panel A uses a combined sample of all firms, while Panel B and Panel C use subsamples of expansionary and contractionary firms, respectively. Expansionary firms and contractionary firms are separated based on a tariff-risk recognition variable developed by Andreou et al. (2026). Variable descriptions can be found Section 6.B and Appendix B.

Appendix A – Additional Background on Tariffs

1. Background on Tariff Policy

Tariffs are taxes on imported goods. Legally speaking, they are generally paid by the "importer of record" responsible for the purchase of the good to Customs and Border Protection at the time the good arrives at a port of entry, or within 10 days.[25] In most cases, this is a U.S. company (or a U.S. subsidiary of a foreign company) that either uses the good in their production process or sells it to domestic consumers.

Although the legal incidence of the tax is clear-cut, the economic incidence of who suffers the true economic burden is more complex. Generally, economic theory suggests that tax burdens are shared based on the relative elasticities of the affected parties.[26] The simplest case considers the market for a finished good in which foreign and domestic producers compete for domestic consumers. In that case, the foreign firm shares the incidence of the tariff with its U.S. consumers, while the domestic firm faces no tax, giving the U.S. firm a distinct advantage. This creates the potential for a tug-of-war between the interests of domestic producers and domestic consumers as a key tradeoff of tariff policy.[27] Empirically, much of the literature examining this tradeoff suggests that U.S. tariff policy has been a net loss for the United States. Looking at the tariffs imposed by the U.S. in 2018, Fajgelbaum et al. (2020) and Amiti et al. (2019) both find that most or all of the economic incidence of the tax was borne by domestic consumers. Additionally, Fajgelbaum et al. (2020) compared those losses to the gains seen by protected

[25] 19 U.S.C. § 1484 (2024); 19 U.S.C. § 1505 (2024); 19 C.F.R. § 141.1 (2024).
[26] Fullerton et al. (2002).
[27] At the theoretical level, economic analysis suggests that when a country is so large that its own demand for an imported good significantly impacts the world price for that good, then it can actually be possible for tariffs to be a net benefit to the importing country without appealing to effects on the growth of domestic industry. Whether the tariff is welfare-increasing or welfare-decreasing for the importing country depends in part on whether the terms-of-trade benefit driven by the reduction in the after-tax price received by foreign producer outweighs the portion of the deadweight loss borne by the domestic nation. *See, e.g.,* Feenstra & Taylor (2008). Empirically, this does not seem to have been the effect of the tariffs imposed by the U.S. in 2018 (Amiti et al., 2019; Fajgelbaum et al., 2020).

domestic industry and found that the loss to consumers was greater in magnitude. Overall, the literature suggests that targeted tariffs can create a system of winners and losers where domestic producers benefit at the expense of domestic consumers.

The Liberation Day tariffs announced in 2025 (described in greater detail in Appendix A.2), fundamentally deviate from this traditional policy debate by imposing tariffs not on products, but on countries. As a general rule, these tariffs placed a blanket tariff on all products imported from a given nation, including any raw materials or intermediate goods.[28] This distinction can dramatically change the tax's economic incidence. In the case where a U.S. company imports foreign inputs to produce and sell a product in the United States, three parties are involved: the foreign firm that is selling the imported good, the U.S. firm that purchases it to use as an input in production, and the U.S. domestic consumer that purchases the final good made by the U.S. firm using the imported input. While the exact breakdown of the incidence is likely to be market-dependent, as long as the tax is not fully borne by the foreign firm, then the U.S. firm will face higher costs of production. If any of those costs are passed into the price of the final good, the consumer will face higher costs as well. Meanwhile, the only U.S. firms unaffected by the tax (and thus relatively advantaged) are those using no foreign inputs in production.

Because most firms producing in the U.S. use some level of imports from other countries in their production process, this new tariff framework removed the clean separation between domestic firms and foreign firms, creating winners and losers among U.S. firms based on the degree to which their production relies on taxed foreign inputs. This creates a unique setting in which the same fiscal policy can be examined to consider separately the set of domestic firms

[28] Tariffs on raw materials and intermediate goods were not a wholly unknown phenomenon prior to Liberation Day, as targeted tariffs on specific products used in production had been imposed in the past. What was new in the context of the Liberation Day tariffs was that by targeting countries as a whole, virtually unlimited numbers of input products were included in the tax, bringing their unique role to center stage.

which are positively and negatively impacted. Appendix A.2 explains the institutional background of the Liberation Day tariffs in greater detail.

2. Background on the Liberation Day Tariff Announcements

At 4:00 PM EDT on April 2, 2025, President Donald J. Trump gave a much-anticipated speech in the White House Rose Garden in which he declared that it was America's "Liberation Day". He then announced Executive Order 14257, "Regulating Imports With a Reciprocal Tariff To Rectify Trade Practices That Contribute to Large and Persistent Annual United States Goods Trade Deficits"[29], which included a sweeping set of "reciprocal tariffs" of rates ranging from 11% to 50% to be applied to imported goods from 83 different countries and territories.[30] For most other countries and territories, a baseline 10% tariff rate was set to apply by default.[31] By default, the tariffs were set to apply to all goods imported from a subject country, with a specific set of exempted goods that were included in the executive order.[32] The announced tariffs were set to go into effect three days later on April 5, 2025.[33]

Although the tariff-oriented nature of the Liberation Day speech was known to market participants in advance, the size and scope of the tariffs announced were widely perceived by market watchers to far exceed baseline expectations, leading to a sell-off in the market.[34] The

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[29] Executive Order 14256 was also signed at the same time, which removed the *de minimis* tariff exemption for certain Chinese products. *See* Exec. Order No. 14256.
[30] See Appendix A.3 for a list of Liberation Day tariff rates by country.
[31] The only countries for whom no new tariffs were announced as part of the Liberation Day announcement were Canada and Mexico, which were at the time already subject to new tariffs announced previously, and countries with Non-Normal Trade Relations (NNTR) with the U.S. falling under Column 2 of the Harmonized Tariff Schedule of the United States, which at the time included Russia, Belarus, Cuba, and North Korea.[31] *See* Exec. Order No. 14257, sec. 3(b)-3(e).
[32] *See* Exec. Order no. 14257, Annex II.
[33] *See* Exec. Order no. 14257, sec. 3(a).
[34] *See, e.g.,* Kalyeena Makortoff and Graeme Wearden, "Global Stock Markets Fall and Dollar Dives after Trump Announces Sweeping Tariffs," *The Guardian*, April 3, 2025, https://www.theguardian.com/us-news/2025/apr/03/trump-tariffs-see-stocks-dive-and-investors-scramble-to-bonds-gold-and-yen; The Associated Press, "Trump's Tariffs Tank Stocks and Leave Markets Reeling," *BNN Bloomberg*, April 3, 2025, https://www.bnnbloomberg.ca/tariffs/2025/04/03/dow-drops-nearly-1680-in-biggest-wipeout-since-2020-as-fears-of-fallout-from-tariffs-shake-markets/.

announcement was timed to take place as the market closed, meaning that the stock market reaction began the following day on April 3, 2025. On that day, the S&P 500 experienced its largest one-day drop in over five years, falling by 4.8%, with the Dow Jones Industrial Average (DJIA) dropping by 4%.[35] The selloff continued the following day, when the S&P 500 fell by 6% and the DJIA fell 5.5%[36], perhaps driven in part by the news that day that China would implement of a retaliatory tariff of 34% on the United States, effective April 10, 2025.[37] Trade tensions with China continued to escalate over the course of the next week[38], and stocks remained volatile as discussion continued over the long-run impact of the Liberation Day tariffs.[39]

The full long-run impact of the Liberation Day tariffs never took place. During trading hours on April 9, 2025, President Trump signed an additional executive order delaying the onset of the reciprocal tariffs outlined in the original set of new duties outlined in the Liberation Day announcement by 90 days. While the 10% baseline rate was left in place, and the tariff rate against China was raised to 125%, the overall effect was a large reduction to most of the most aggressive rates put forward on Liberation Day.[40] That same day, stocks shot upwards, with the S&P 500 jumping 9.5% while the DJIA climbed 7.9%.[41] Throughout the following months, the

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[35] Alain Sherter, "Dow Jones Plunges More than 1,600 Points as Stock Market Recoils from Trump Tariff Shock," CBS News, April 4, 2025, https://www.cbsnews.com/news/dow-jones-today-stock-tariff-trump-4-3-25/.

[36] Rob Wile, "U.S. Stocks Drop as Investors Weigh the Impact of Trump's New Trade War," NBC News, April 3, 2025, https://www.nbcnews.com/business/markets/stocks-fall-trump-trade-war-rcna199675.

[37] John Ruwitch, "Trade War Escalates as China Hits Back with 34% Tariffs on All U.S. Goods," NPR, April 4, 2025, https://www.npr.org/2025/04/04/g-s1-58250/trade-war-escalates-as-china-hits-back-with-34-tariffs-on-all-u-s-goods.

[38] In particular, China and the U.S. moved towards higher and higher tariffs against each other as the week progressed. This included an additional executive order on April 9, 2025, wherein Trump raised the tariff rate against China to 84%. *See* Exec. Order No. 14259.

[39] Ankur Banerjee and Kevin Buckland, "Global Markets Slide as Trump's Tariff Hike Jolts Investors," Reuters, April 8, 2025, https://www.reuters.com/markets/global-markets-wrapup-1-2025-04-08/.

[40] Exec. Order No. 14266.

[41] Towfighi, John, David Goldman, and Anna Cooban. "US Stocks Skyrocket Higher After Trump Signals Shift in Trade Policy." CNN, April 9, 2025. https://www.cnn.com/2025/04/09/investing/global-stock-market-reciprocal-tariffs-hnk-intl.

full breadth of the original Liberation Day tariffs continued to be held back by continued extensions and bilateral trade agreements.[42] Finally, in February of 2026, in *Learning Resources, Inc. v. Trump*, the Supreme Court invalidated the emergency authority undergirding the White House's tariff strategy[43], forcing the administration to rely on alternative legal bases to maintain the tariff regime in limited form.[44]

Although the ultimate impact of the dramatic tariffs originally announced is unobservable, the stock market reactions to those expected tariffs are observable and provide a window into the anticipated effect of the Liberation Day tariffs on firm value. Due to the magnitude of the proposed policy, and the intensity of the stock market response, this setting provides a unique, high-powered opportunity to test the impact of fiscal policy at the firm level and how it interacts with firm-level slack.

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[42] C.H. Robinson. "Tariff Timeline." Accessed March 13, 2026. https://www.chrobinson.com/en-us/resources/insights-and-advisories/trade-tariff-insights/tariff-timeline/.

[43] *Learning Resources, Inc. v. Trump*, No. 24-1287, slip op. at 4 (U.S. Feb. 20, 2026).

[44] Brosy, Thomas, Robert McClelland, and John Wong. "How the Supreme Court's IEEPA Ruling and New Section 122 Tariffs Reshape Costs Across Industries." *TaxVox* (blog). Tax Policy Center, March 10, 2026. https://taxpolicycenter.org/taxvox/how-supreme-courts-ieepa-ruling-and-new-section-122-tariffs-reshape-costs-across-industries.

3. Liberation Day Tariff Rates

Country	Tariff Rate
Algeria	30%
Angola	32%
Bangladesh	37%
Bosnia and Herzegovina	35%
Botswana	37%
Brunei	24%
Cambodia	49%
Cameroon	11%
Chad	13%
China	34%
Côte d`Ivoire	21%
Democratic Republic of the Congo	11%
Equatorial Guinea	13%
European Union	20%
Falkland Islands	41%
Fiji	32%
Guyana	38%
India	26%
Indonesia	32%
Iraq	39%
Israel	17%
Japan	24%
Jordan	20%
Kazakhstan	27%
Laos	48%
Lesotho	50%
Libya	31%
Liechtenstein	37%
Madagascar	47%
Malawi	17%
Malaysia	24%
Mauritius	40%
Moldova	31%
Mozambique	16%
Myanmar (Burma)	44%
Namibia	21%
Nauru	30%
Nicaragua	18%
Nigeria	14%

Country	Tariff Rate
North Macedonia	33%
Norway	15%
Pakistan	29%
Philippines	17%
Serbia	37%
South Africa	30%
South Korea	25%
Sri Lanka	44%
Switzerland	31%
Syria	41%
Taiwan	32%
Thailand	36%
Tunisia	28%
Vanuatu	22%
Venezuela	15%
Vietnam	46%
Zambia	17%
Zimbabwe	18%
All Other Countries*	10%

*Excludes countries with which the U.S. has Non-Normal Trading Relations (NNTR), which include Russia, Belarus, Cuba, and North Korea

Appendix B – Variable Definitions

Variable Name	Description	Formula	Data source
Adjusted Price	Daily stock price for the firm's primary common stock issuance. It is adjusted for factors such as stock splits and dividends to capture total returns.	(prccd / ajexdi) * trfd	CCM (Daily Stock File)
RawReturn	The daily total return on the firm's adjusted stock price.	Adjusted Price / Lagged Adjusted Price - 1	CCM (Daily Stock File)
RF	The risk-free rate, proxied for using one-month Treasury bill rates.		Kenneth French Data Library
SMB	Small Minus Big, one of the Fama-French 5 factors (2x3).		Kenneth French Data Library
HML	High Minus Low, one of the Fama-French 5 factors (2x3).		Kenneth French Data Library
RMW	Robust Minus Weak, one of the Fama-French 5 factors (2x3).		Kenneth French Data Library
CMA	Conservative Minus Aggressive, one of the Fama-French 5 factors (2x3).		Kenneth French Data Library
Rm	The value-weighted return of the market, as calculated by Fama-French.		Kenneth French Data Library
ExcessMarket	A value-weighted return of the market, less the risk-free rate. One of the standard Fama-French factors.	Rm - RF	Kenneth French Data Library
ExcessReturn	The daily total return less the risk-free rate.	RawReturn - RF	CCM (Daily Stock File)
Abnormal Return	Residual from a firm-level regression of excess returns on a Fama-French 5-factor model. The regression uses a 252-day trading window from April 2, 2024 through April 2, 2025, which is then used to predict expected returns on other trading days.	Equal to ε in the regression: $ExcessReturn = \beta_0 + \beta_1 ExcessMarket$ $+\beta_2 SMB + \beta_3 HML + \beta_4 RMW$ $+\beta_5 CMA + \varepsilon$	CCM (Daily Stock File)

Variable Name	Description	Formula	Data source
Operational Slack	Difference between the firm's ratio of net PP&E to sales in the fiscal quarter ending in the first calendar quarter of calendar year 2025 relative to the firm's own mean using all fiscal quarters falling within the calendar years 2022-2024. Firm-quarter outliers at 1st and 99th percentile are removed before the mean is calculated.	(ppentq / saleq) - mean(ppentq / saleq)	CCM (Fundamentals Quarterly)
HighOpSlack	Set equal to one if a firm's ratio PP&E to sales exceeds its own three-year mean.	Operational Slack > 0	CCM (Fundamentals Quarterly)
Market-to-Book	A firm's market-to-book ratio. Calculated in accordance with Simutin (2010).	(atq - seqq + (cshoq * prccq)) / atq	CCM (Fundamentals Quarterly)
CPI	A quarterly measure of the consumer price index, obtained from FRED (CPIAUCSL). End-of-calendar-quarter values are matched to their associated firm-calendar-quarter.		FRED
Real Assets	A firm's total assets, adjusted for inflation using the CPI.	atq * (100 / CPI)	CCM (Fundamentals Quarterly), FRED
Size	The natural log of a firm's real assets.	ln(1 + Real Assets)	CCM (Fundamentals Quarterly), FRED
Capital Expenditures	Capital expenditures of the firm, scaled by total assets.	capx / atq	CCM (Fundamentals Quarterly)
Working Capital	Working capital less cash, scaled by total assets.	(wcapq - chq) / atq	CCM (Fundamentals Quarterly)
Long-Term Debt	Long-term debt of the firm, scaled by total assets.	dlttq / atq	CCM (Fundamentals Quarterly)

Variable Name	Description	Formula	Data source
R&D	R&D expenditures of the firm, scaled by quarterly sales. R&D expenditures are set to zero when missing.	xrdq / saleq	CCM (Fundamentals Quarterly)
Zero R&D	An indicator variable set equal to 1 for observations for which R&D expenditures are zero or missing.		CCM (Fundamentals Quarterly)
Cash Flow	Net cash flow, scaled by total assets. This is calculated by transforming cumulative annual cash flow values from Compustat into quarterly values, and includes operating cash flow, investing cash flow, and financing cash flow.	(oancf + invncf + fincf) / atq	CCM (Fundamentals Quarterly)
Industry Sigma	The industry-level standard deviation of net cash flow. Calculated as the standard deviation of Cash Flow for each industry using 2-digit SIC codes.		CCM (Fundamentals Quarterly)
Dividend Dummy	An indicator variable set equal to 1 if the firm paid out a dividend that quarter. Set equal to zero when dividend data is missing.		CCM (Fundamentals Quarterly)
Common Dividends	Total dividends paid to common stock by the firm. The Data is transformed to represent quarterly values.		CCM (Fundamentals Quarterly)
Repurchases	The sum of purchases of common and preferred stock. Values are set equal to zero when missing. Common and preferred stock repurchase variables are both transformed to represent quarterly values.	prstkcc + prstkpc	CCM (Fundamentals Quarterly)
Cash	The natural log of cash and cash equivalents, plus Repurchases and Common Dividends, scaled by adjusted total assets.	ln(1 + (chq + CommonDividends + Repurchases) / (atq - CommonDividends - Repurchases))	CCM (Fundamentals Quarterly)

Variable Name	Description	Formula	Data source
Financial Slack	Represents a firm's unused financial capacity. Calculated as the residual from a regression of Cash on Market-to-Book, Size, Capital Expenditures, Working Capital, Long-Term Debt, R&D, Missing R&D, Cash Flow, Dividend Dummy, Industry Sigma, and 17 industry dummies based on Fama-French's 17 -industry classification system.		CCM (Fundamentals Quarterly), FRED
Mar4AR	The abnormal return for the firm's stock on March 4, 2025 when stocks reacted to the implementation of new tariffs on imports from Canada and Mexico, calculated using the Fama-French 5-factor model.		CCM (Daily Stock File)
USDIndex	An index value for the value of the US dollar, obtained from FRED (DTWEXBGS).		FRED
USDRet	Daily changes in the value of the US dollar, calculated as returns to the index.	USDIndex / Lagged USDIndex - 1	FRED
FX Beta	The coefficient from a regression of firm returns on returns to the US dollar. The regression uses all available daily data from the window of April 2, 2024 through April 2, 2025 to calculate the coefficient for each firm.	Equal to β_1 in the regression: $RawReturn = \beta_0 + \beta_1 USDRet + \varepsilon$	CCM (Daily Stock File), FRED
TotalImports	The total imports of each industry in 2024, using industry classifications and import numbers from the 2024 edition of the "Import Matrix, Before Redefinitions - Summary" published by the Bureau of Economic Analysis		BEA

Variable Name	Description	Formula	Data source
TotalInputs	The total intermediate inputs used by each industry in 2024, using industry classifications and input use numbers from the 2024 edition of the "The Use of Commodities by Industries - Summary" table published by the Bureau of Economic Analysis.		BEA
ImportPortion	The portion of each industry's intermediate inputs that are imported, estimated from BEA data.	TotalImports / TotalInputs	BEA
RawConsensusUpdate	The difference between the mean of analyst earnings estimates after vs. before the Liberation Day tariff announcements. All one-year EPS estimates that are announced on or after January 1, 2025 but before April 9, 2025 are included, provided they relate to fiscal periods ending in April of 2025 but before December of 2025. To calculate the value, the mean of estimates announced before 4:00 PM EDT on April 2, 2025 is subtracted from the mean of estimates announced after 4:00 PM EDT on April 2, 2025. The final value is then scaled by the firm's Adjusted Price as of April 2, 2025.		I/B/E/S, CCM (Daily Stock File)

Variable Name	Description	Formula	Data source
Consensus Update	An adjusted form of RawConsensusUpdate where, for firms where there is insufficient data to calculate RawConsensusUpdate, the value is imputed using the predicted values from a regression that uses observations where RawConsensusUpdate is non-missing to estimate the coefficients. The regression is run as one of RawConsensusUpdate on R&D intensity, import intensity, abnormal returns on March 4, 2025, and sensitivity to the US dollar.	Equal to RawConsensusUpdate where non-missing, and equal to the predicted value from the following regression for all other firms: $RawConsensusUpdate = \beta_0 + \beta_1 R\&D + \beta_2 Zero\ R\&D + \beta_3 FX\ Beta + \beta_4 ImportPortion + \varepsilon$	I/B/E/S, CCM (Daily Stock File, Fundamentals Quarterly), FRED
Tariff-Risk Recognition	A variable that estimates a firm's exposure to tariff risk based on the text of its 10-K. It uses a lexicon on words and phrases associated with tariff-risk, then further rates individual instances of those lexicon items to determine the extent to which firms recognize tariff risk. For details on the construction see the variable TRR (Other) from Andreou et al. (2026).		Shared by Andreou et al. (2026)
ExpansionaryCU	An indicator variable that designates firms for whom the Liberation Day tariff announcements are expected to be expansionary, based on actual and imputed changes to consensus earnings forecasts. It is set equal to 1 if Consensus Update is greater than zero.	Consensus Update > 0	I/B/E/S, CCM (Daily Stock File, Fundamentals Quarterly), FRED

Variable Name	Description	Formula	Data source
ExpansionaryTRR	An indicator variable that designates firms for whom Liberation Day tariff announcements are expected to be expansionary, based tariff-risk recognition in the firm's 10-K. It is set equal 1 if firm's Tariff-Risk Recognition is below the median.		Calculated from data shared by Andreou et al. (2026)
Dispersion	The standard deviation of analyst earnings estimates used to calculate RawConsensusUpdate, scaled by the firm's Adjusted Price as of April 2, 2025. Only earnings estimates announced before 4:00 PM EDT on April 2, 2025 are used.		I/B/E/S, CCM (Daily Stock File)
Forecast Accuracy	A variable that calculates the accuracy of a firm's management guidance using evidence from management guidance for sales. It is calculated using the most recent annual sales forecast for each fiscal year from 2020 to 2024, excluding guidance given after the end of the fiscal period or in the same month that the fiscal period ends. For guidance ranges, the midpoint of the range is used. The mean percentage error relative to realized actuals is taken across available years for each firm, and then multiplied by -1 so as to ensure the variable is increasing in forecast accuracy.	(-1) * mean(abs(Forecast Sales - Actual Sales) / Actual Sales)	I/B/E/S
Analyst Information	An indicator variable meant to capture the quality of the firm's external information environment, set equal to 1 for a given firm if Dispersion is below the median.		I/B/E/S, CCM (Daily Stock File)

Variable Name	Description	Formula	Data source
Internal Information	An indicator variable meant to capture the quality of the firm's internal information environment, set equal to 1 for a given firm if Forecast Accuracy is above the median.		I/B/E/S