

# Appendix to ‘Who Will Pay for Tariffs? Businesses’ Expectations about Costs and Prices’

September 24, 2025

## 1 Cost–price Pass-through in the U.S. Census Business Trends and Outlook Survey

The U.S. Census Business Trends and Outlook Survey (BTOS) is a rotating panel survey of 1.2 million firms that comprise a representative sample of all single-location-employer businesses in the U.S. economy. Every two weeks, the survey collects responses to questions about business conditions and expectations from a sample of about 200,000 of those businesses.

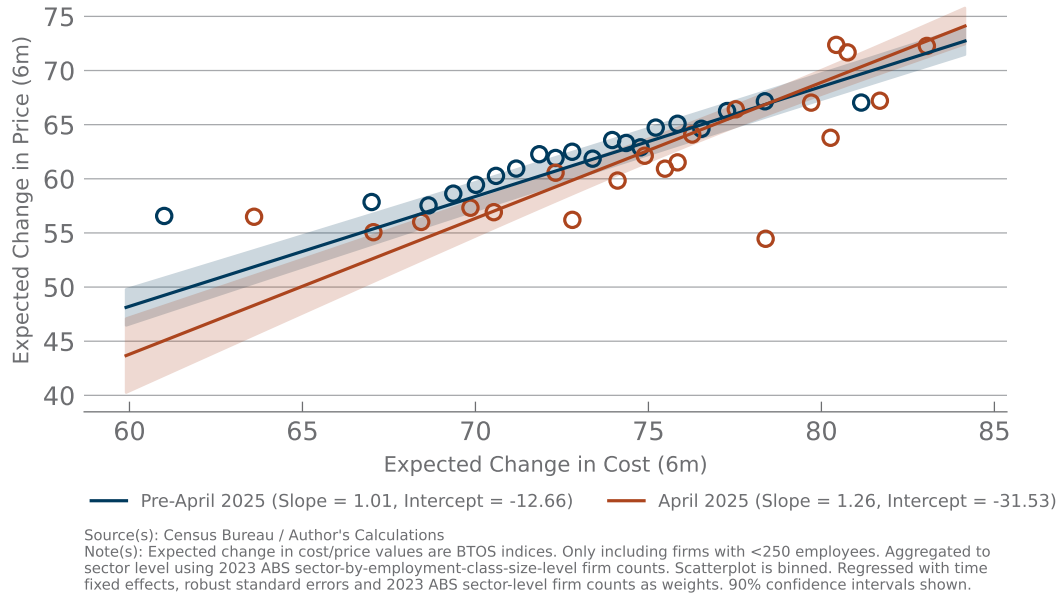
In our analysis, we use publicly available statistics compiled at the sector and employment-size-class level. We examine the relationship between diffusion indices computed based on the fractions of firms that expected to increase, hold constant, or decrease prices and costs over the next six months. Higher values of the indices indicate more firms expecting price increases or fewer firms expecting price decreases.

To make our analyses comparable with those for our small and medium-sized businesses (SMB) survey, we aggregate these indices among only firms with fewer than 250 employees, using sector-by-employment-class-size-level firm counts from the 2023 U.S. Census Annual Business Survey. To match the timing of our SMB survey, the figure below shows binned data points and the estimated relationships for a January 2023–February 2025 sample and an April 2025 sample. Though such diffusion indices do not capture the magnitude of expected price or cost changes, the steeper relationship seen in April 2025 compared with earlier times supports the main finding from our SMB survey of a larger cost–price pass-through over this time frame.<sup>1</sup>

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<sup>1</sup>The difference in the slopes is statistically significant at the 10 percent level.

Figure 1: Relationship between Expected Cost and Price Changes (BTOS)



## 2 Survey Description

For the analysis of firms' expectations, this brief uses data from a survey of U.S. SMBs administered by [Morning Consult](#), which has introduced other large-scale surveys (see, for example, Hajdini et al. (2022, 2024)). We use all waves of the survey, beginning in 2023, but focus on four that included some questions on tariffs and were fielded from December 24, 2024 through January 2, 2025; from February 18 through 24, 2025; from April 22 through 27, 2025; and from August 20 through 29, 2025. Each survey wave contains a cross-sectional sample of 500 to 600 firms. See the [Technical Appendix of "Small and Medium-sized Businesses' Expectations Concerning Tariffs, Costs, and Prices"](#) for full details.

In our analysis of expected tariffs, cost changes, and price changes, we winsorize the top and bottom 1 percent of responses.

For our analysis, we exclude approximately 10 percent of firms from each wave because they pervasively chose the "stay the same" response for questions about cost changes over the next year for both total unit costs and costs within 11 different subcategories as well as price changes at four different horizons up to a year into the future (a total of 16 responses). We consider these respondents to potentially not be answering the questions to the best of their abilities.

In addition, when estimating pass-through coefficients (regressions of expected price

changes on expected cost changes), we minimize the influence of outlier observations by using a jackknife approach based on Coibion et al. (2023) and Belsley, Kuh, and Welsch (1980).

For the analysis of consumer expectations related to pass-through, we use responses to the May 2025 Morning Consult Tariff Tracker Survey (fielded May 8 through 13) which features a nationally representative sample of approximately 2,200 consumers.

The remaining two sections contain selections of survey questions from the firm and consumer surveys, respectively, that we use in our analysis.

### 3 Select SMB Survey Questions

**MCSMB26:** In the next 12 months, by about what percent do you expect your business' unit costs will change?

- ☐ Increase by %\_\_\_\_\_
- ☐ Remain about the same
- ☐ Decrease by %\_\_\_\_\_
- ☐ Don't know / No opinion

**MCSMB305:** Please consider your most important product or service. Now looking ahead, compared to today, by what percent do you expect its price for a typical customer will change in the following time periods?

	Increase by %	Stay the same	Decrease by %
In the next month	<input type="radio"/> _____	<input type="radio"/>	<input type="radio"/> _____
In the next two months	<input type="radio"/> _____	<input type="radio"/>	<input type="radio"/> _____
In the next six months	<input type="radio"/> _____	<input type="radio"/>	<input type="radio"/> _____
In the next year	<input type="radio"/> _____	<input type="radio"/>	<input type="radio"/> _____

**MCSMB701:** In 2025, tariffs may increase for many imported goods and services. How high do you think the new tariffs will be for Canada/Mexico/China/other Asian countries/European countries? Please indicate your answer in percent. [Note: Question asked individually for each country/region.]

- ☐ Average tariff %\_\_\_\_\_
- ☐ Lowest possible tariff %\_\_\_\_\_
- ☐ Highest possible tariff %\_\_\_\_\_

**MCSMB710 (February 2025 wave only):** How long do you expect new tariffs to last on imported goods and services from the following regions —Canada/Mexico/China/other Asian countries/European countries? [Note: Question asked individually for each country/region.]

- ☐ Less than 1 month
- ☐ 1 to 6 months
- ☐ 7 to 12 months
- ☐ 13 months to 4 years
- ☐ 4 years or longer

**MCSMB801 (August 2025 wave only):** For how long do you expect new tariffs or trade policies to affect your firms' costs?

- ☐ Less than 1 month
- ☐ 1 month
- ☐ 2 months
- ☐ ...
- ☐ 12 months
- ☐ More than 1 year but less than 4 years
- ☐ More than 4 years

## 4 Select Consumer Tariff Tracker Survey Questions

**GR19:** If you had to guess, how long do you expect the tariffs enacted since the start of 2025 will last?

- ☐ They will last less than one more month
- ☐ They will last 1 to 6 more months
- ☐ They will last 7 to 12 more months
- ☐ They will last 13 more months to 4 more years
- ☐ They will last for more than 4 more years

**GR45:** How much of the cost of tariffs do you think companies are likely to pass on to consumers by increasing prices?

- ☐ None of the tariff cost
- ☐ About a quarter or less
- ☐ Between a quarter and half
- ☐ Between half and three quarters
- ☐ Three quarters or more
- ☐ All of the tariff cost
- ☐ Don't know / No opinion

## References

- Belsley, A. David, Edwin Kuh, and Roy E. Welsch. 1980. *Regression Diagnostics: Identifying Influential Data and Sources of Collinearity*. New York: Wiley.
- Coibion, Olivier, Dimitris Georgarakos, Yuriy Gorodnichenko, and Maarten van Rooij. 2023. "How Does Consumption Respond to News about Inflation? Field Evidence from a Randomized Control Trial." *American Economic Journal: Macroeconomics* 15 (3):109–52. URL <https://www.aeaweb.org/articles?id=10.1257/mac.20200445>.

- Hajdini, Ina, Edward Knotek, John Leer, Mathieu Pedemonte, Robert Rich, and Raphael Schoenle. 2024. “Indirect Consumer Inflation Expectations: Theory and Evidence.” *Journal of Monetary Economics* 145:103568. Also available as Cleveland Fed Working Paper.
- Hajdini, Ina, Edward Knotek, Mathieu Pedemonte, Robert Rich, John Leer, and Raphael Schoenle. 2022. “Indirect Consumer Inflation Expectations.” Working Paper 2022-03, Federal Reserve Bank of Cleveland.
- National Center for Science and Engineering Statistics, U.S. National Science Foundation, and U.S. Census Bureau. 2024. “Annual Business Survey: Employment Size of Firm Statistics for Employer Firms by Sector, Sex, Ethnicity, Race, and Veteran Status for the U.S., States, Metro Areas, and Counties: 2022.” U.S. Census Bureau. URL <https://data.census.gov/table/ABSCS2022.AB2200CSA04>. Accessed on 1 August 2025.
- U.S. Census Bureau. 2025. “Business Trends and Outlook Survey: Sector by employment size class data.” U.S. Census Bureau. URL <https://www.census.gov/hfp/btos/downloads/Sector%20by%20Employment%20Size%20Class.xlsx>. Accessed on 1 August 2025.