

Trade Policy Uncertainty and its Effects on Foreign Direct Investment and Export Participation: Evidence from Mexico

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*Tenth BIS Consultative Council of the Americas Research Conference
Macro models and micro data, 23-24 May 2019, Buenos Aires*

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❖ Importance of Policy Uncertainty

Bloom (2009), Bloom (2014), Baker, Bloom, and Davis (2016)

❖ Trade Policy Uncertainty

Handley (2014), Pierce and Schott (2016), Handley and Limao (2017), Feng, Li and Swenson (2017)

Ideal setting for the evaluation of trade policy uncertainty

- ❖ *Known economic setting* (eg. model of entry, trade, investment, prices) with adequate data.
- ❖ *Single shock* which facilitates observation of responses.
- ❖ Identification typically through some *heterogenous effect of the policy treatment*, such as *cross-sectional variation in the shock*, or differential capability of agents to respond to the as mediated by their characteristics.

Trump trade policy uncertainty provides a less than ideal setting



Donald J. Trump ✓

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Follow

We are in the NAFTA (worst trade deal ever made) renegotiation process with Mexico & Canada. Both being very difficult, may have to terminate?

6:51 AM - 27 Aug 2017



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We have large trade deficits with Mexico and Canada. NAFTA, which is under renegotiation right now, has been a bad deal for U.S.A. Massive relocation of companies & jobs. Tariffs on Steel and Aluminum will only come off if new & fair NAFTA agreement is signed. Also, Canada must..

♥ 76.1K 4:47 AM - Mar 5, 2018



Trump trade policy uncertainty provides a less than ideal setting

How to specify the economic policy environment:

Standard Economics Approach

- 1) Treat U.S. as rational economic actor – maximizing known economic objective.
- 2) Game setting. Rules-based trade versus Power-based (Staiger)

Trump trade policy uncertainty provides a less than ideal setting

How to specify the economic policy environment:

Standard Economics Approach

Social science approach to describing U.S. behavior

- 1) Advisor identity
- 2) Trump
 - Psychology
 - Long-term skepticism of free trade
 - Maximizing re-election prospects
- 3) Chaos as an ultra-smart negotiation strategy

Trump-induced trade policy uncertainty provides a less than ideal setting

High Project Difficulty:

- * How to specify the question
- * Short length of data to analyze (especially in case of FDI)

Answer anyway:

- * Extreme importance of understanding the uncertainty impacts on FDI and Trade

- ❖ **Question:** How did increased trade policy uncertainty (TPU) affect FDI and Exports?
- ❖ **Approach:** Develop a new measure of TPU for identification, measured at the state level.

Measure of Trade Policy Uncertainty (TPU)

- ❖ Google trends

 - ❖ 2012- 2017

 - ❖ Search on “NAFTA”, “TLCAN”, Trump, Renegotiation....

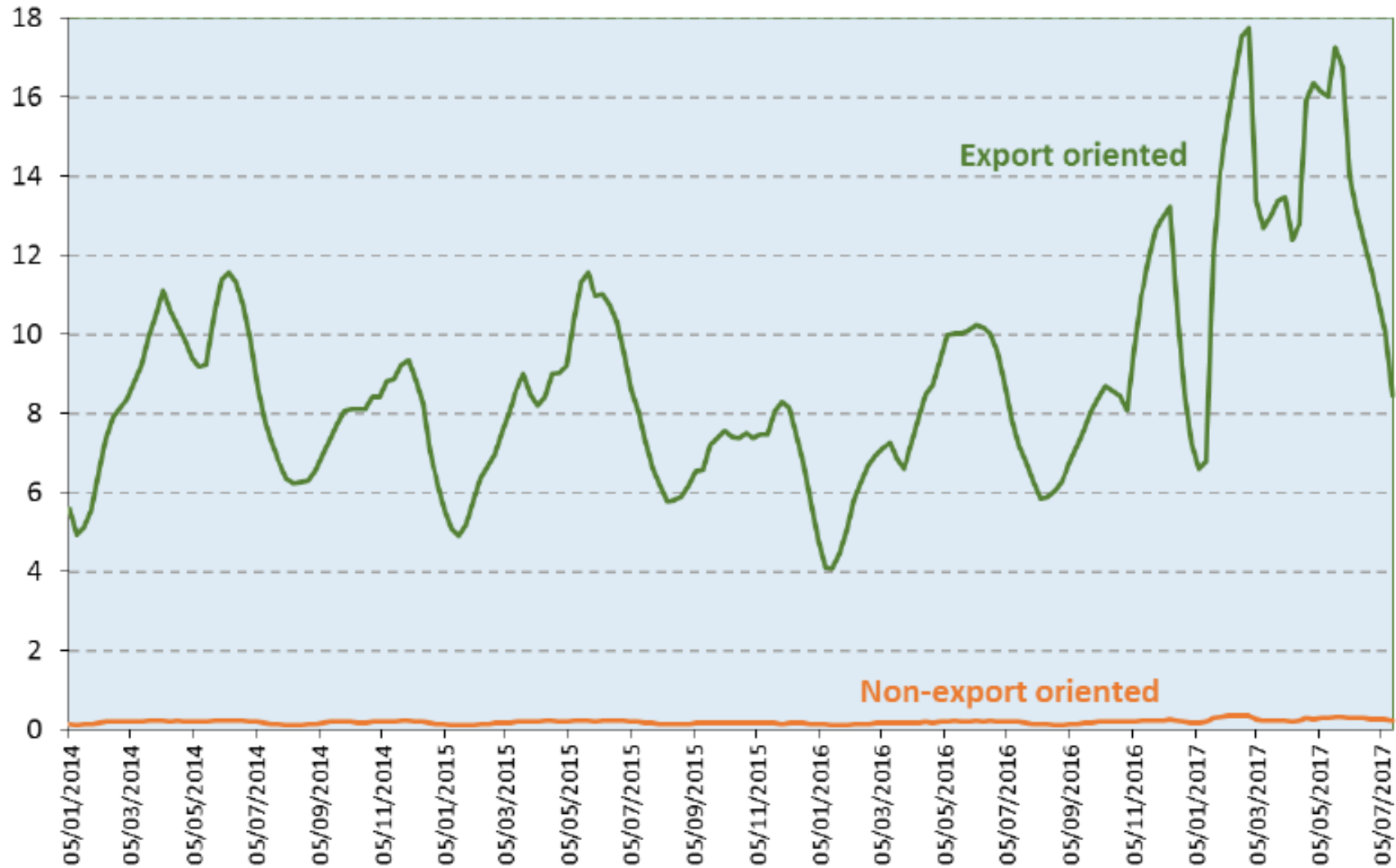
- ❖ New Focus

 - ❖ Mexican States

 - ❖ Search terms (eg. NAFTA) imply trade and NTB impediments; not just tariffs

Spikes in TPU coincide with Trump dates.....but only for export oriented industries

Figure A3. Evolution of TPU: Export Oriented vs Non-Export Oriented States



Estimation Approach

- ❖ Estimate how various forms of state-level FDI are related to TPU, making a distinction between export and non-export oriented states.
- ❖ Use state TPU measures to develop product-level measures of TPU based on employment shares. Then, associate export participation of *sometimes traded* products to product level TPU.

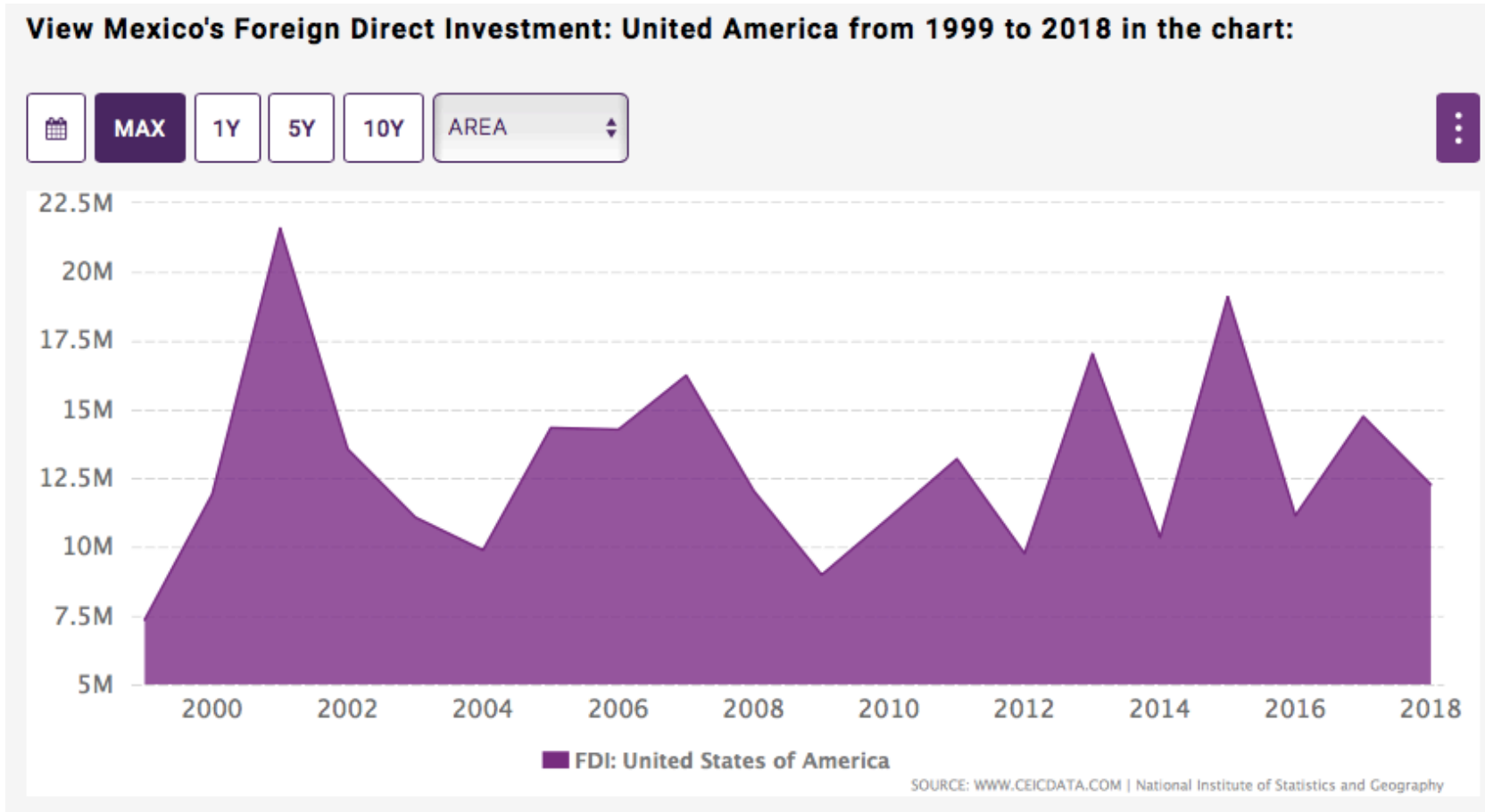
Trade Policy Uncertainty -- FDI results

- ❖ State-level FDI (Overall FDI, New Investments, Inter-company Investments) decline as a consequence of TPU even though no actual change in trade policy during the period of estimation!!!
- ❖ State-level FDI results are noted in both export-oriented and non-export oriented states, though the estimated effects are larger for export-oriented states.
- ❖ In full sample, positive/significant association between state-level TPU and reinvestment of profits. However, no significant association if export oriented and non-export oriented are combined.

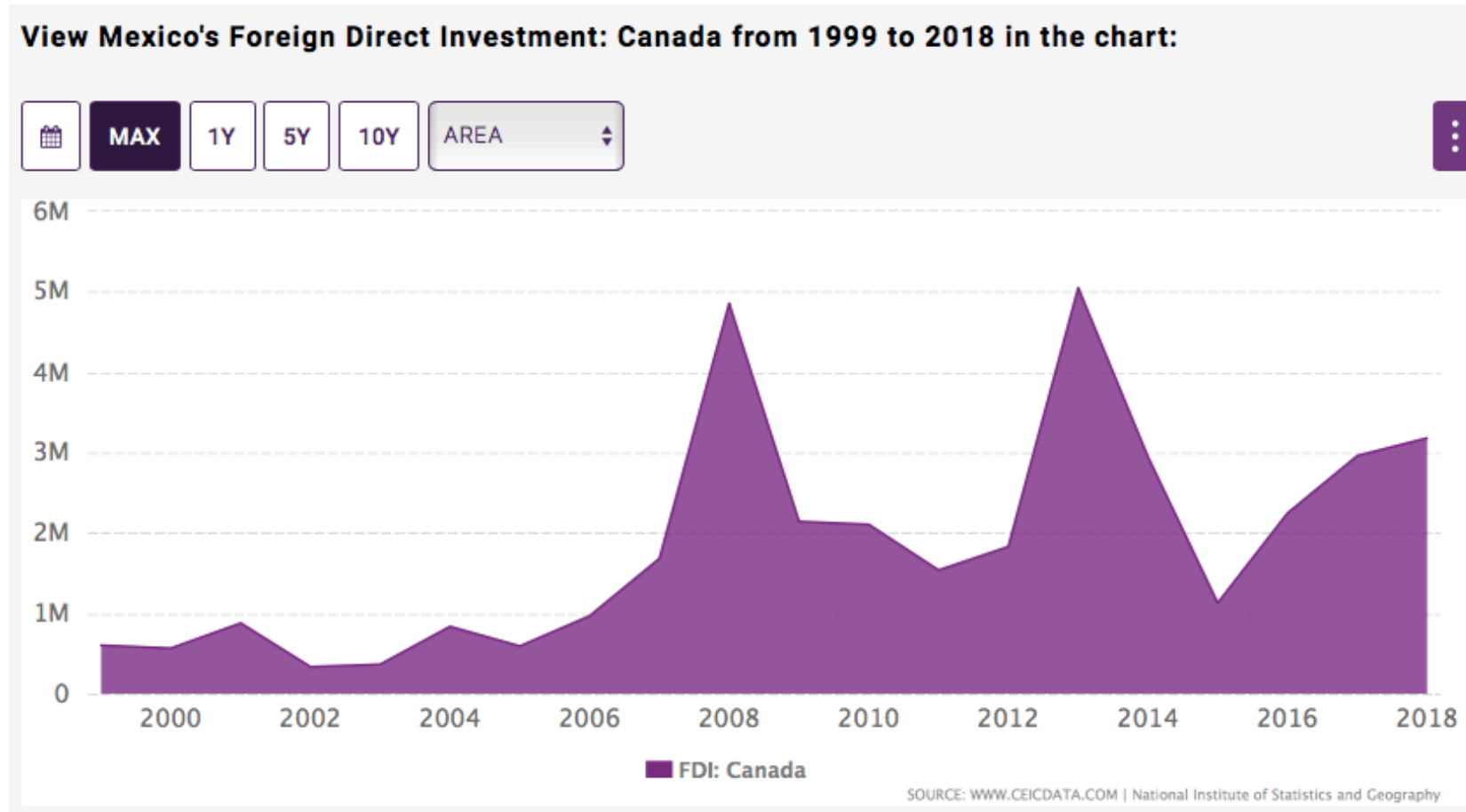
Concern 1: Heterogeneity

Do foreign investors respond uniformly by country and/or industry? Does it matter if they don't?

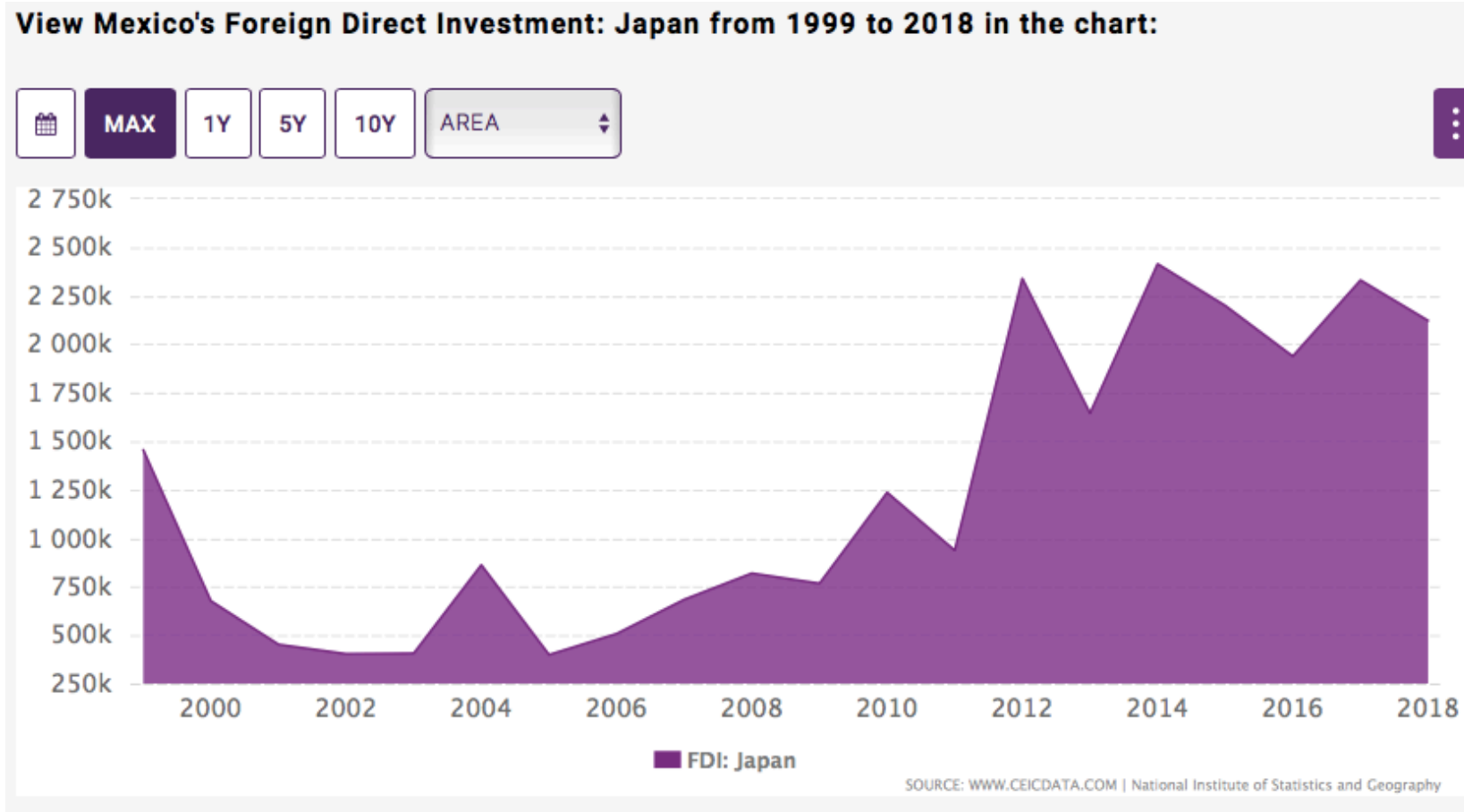
Heterogeneous FDI Responses by Country: United States



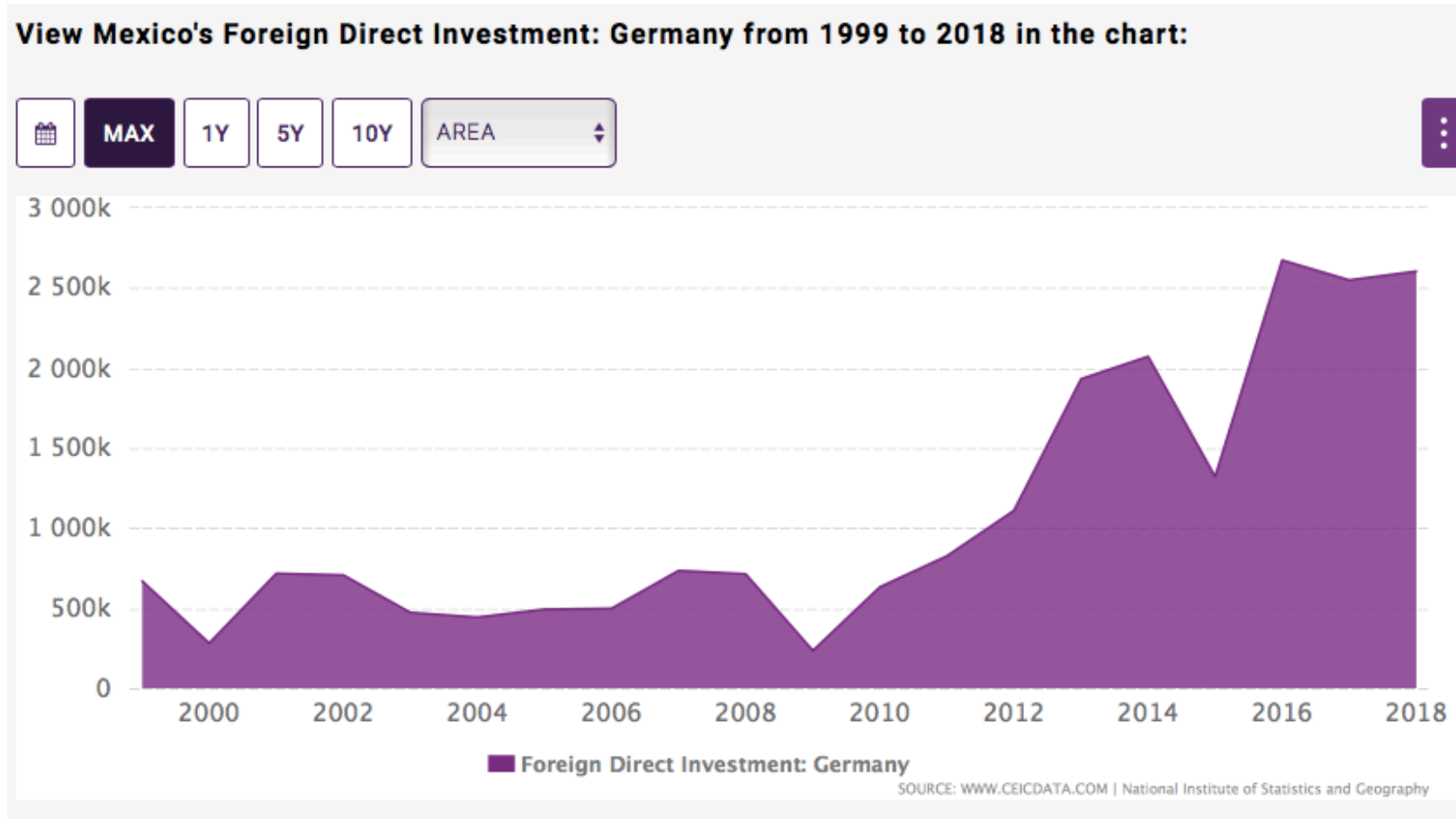
Heterogeneous FDI Responses by Country: Canada



Heterogeneous FDI Responses by Country: Japan

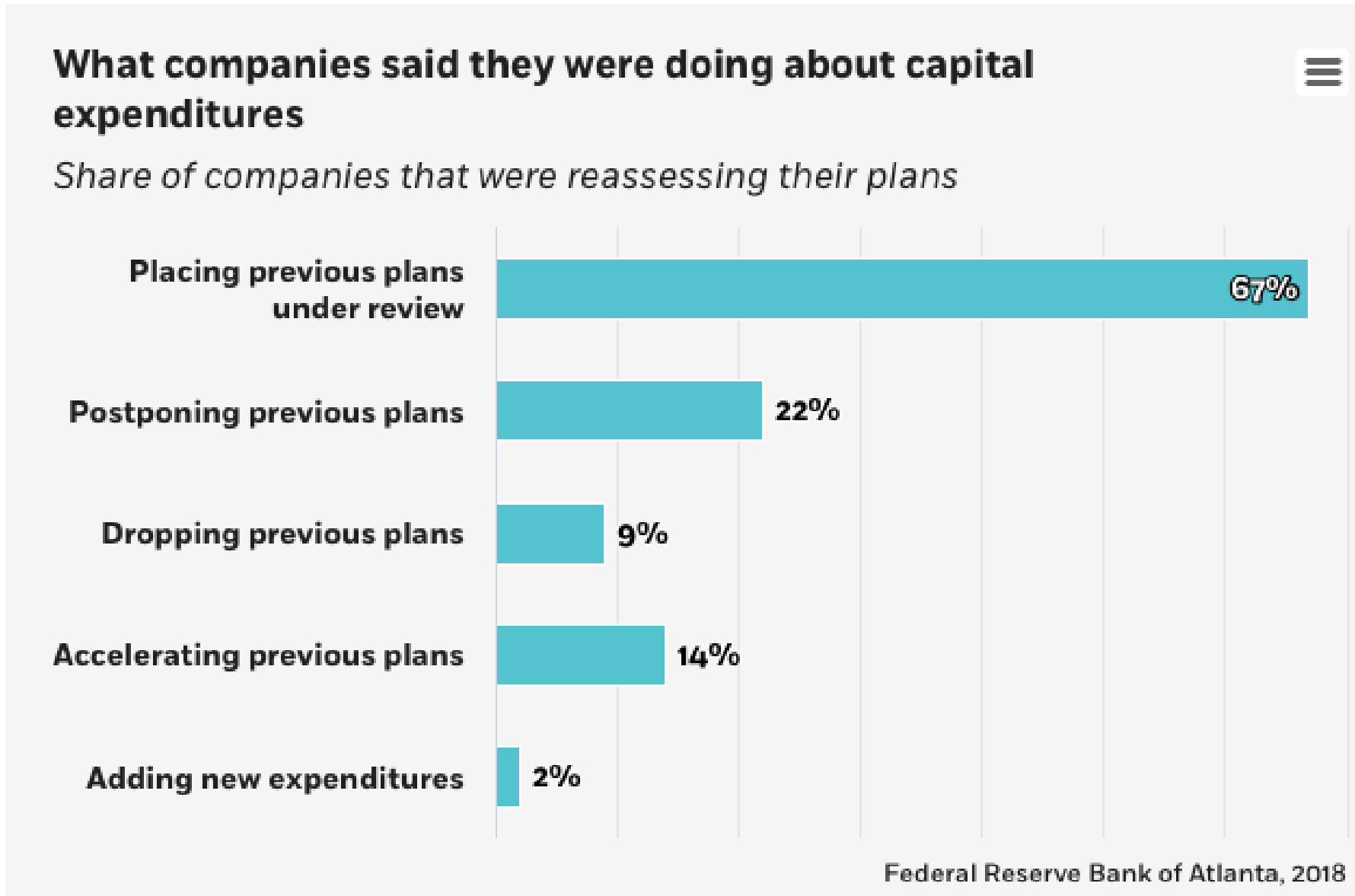


Heterogeneous FDI Responses by Country: Germany





Diversity of Firm Responses to Trade Policy Uncertainty (US firms – 2018)



Concern 1: Heterogeneity

Do foreign investors respond uniformly by country and/or industry? Does it matter if they don't?

- ❖ Current Effects as lower bound response due to slow response of FDI projects. Proceed with current plans unless they are clearly doomed to fail. Possibly slow to wait and see when possible.
- ❖ Ability to change investment projects will depend on industry features such as fixed costs.
- Use industry version of the data to test whether response to trade policy changes were different, as related to fixed costs, and industry features of past investment. Acquisition versus greenfield?

Estimated Magnitudes

- ❖ Lower Bound

 - ❖ Short-run

 - ❖ Mixture of responses (some increases and decreases)

- ❖ Long-run impacts will potentially depend on the degree of de-location of global value chains.

Question 2: TPU and Export participation by Sometimes Traded Goods

- ❖ Construct product level ETPU, based on state employment shares applied to sometimes exported products.
- ❖ Positive association between product level EPTU and export participation.
- ❖ Speculate that positive effect is due to increase in fixed market entry costs for FDI, that make export entry more attractive, due to potential reversibility.

Concern 2: Construction of industry EPTU

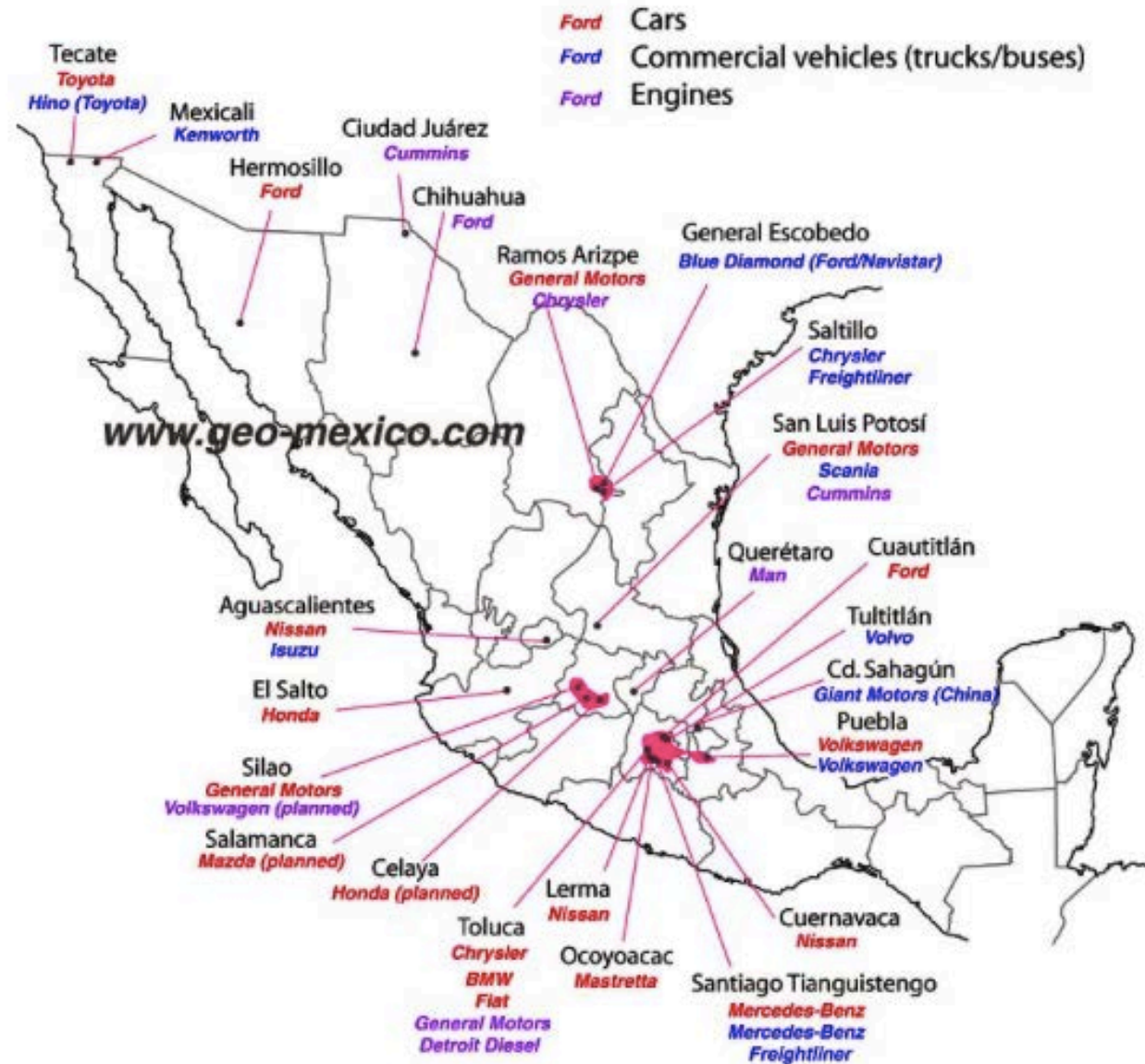
- ❖ For each industry, state TPU measures are weighted by employment share of industry in each state.
- ❖ Valid if TPU is the same for all industries in a state
- ❖ If not, pooling leads to incorrect inferences

Shoe Industry Locations in Mexico

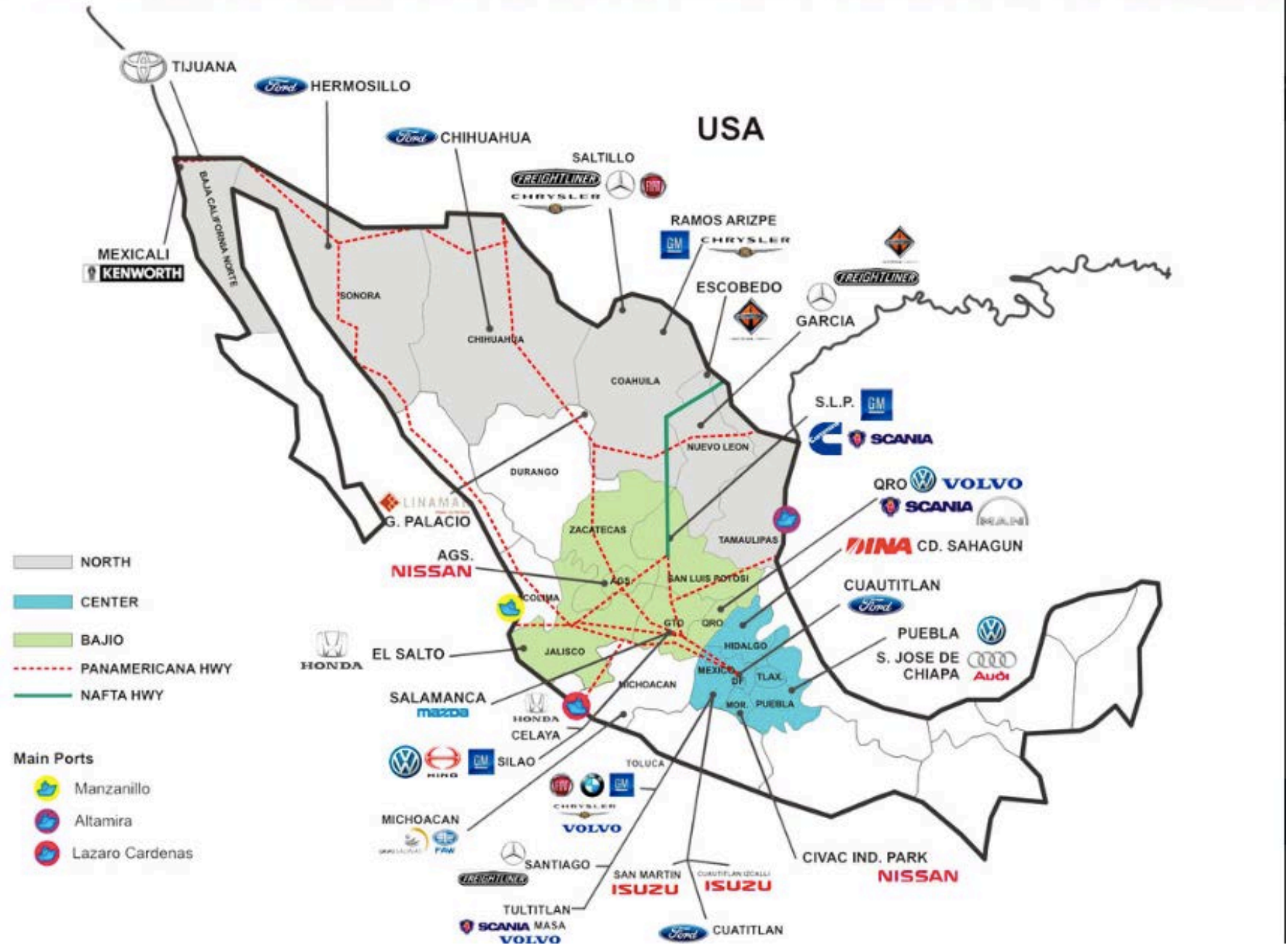


Concentration of shoe industry in Mexico.

Firm Auto Production -- 2011



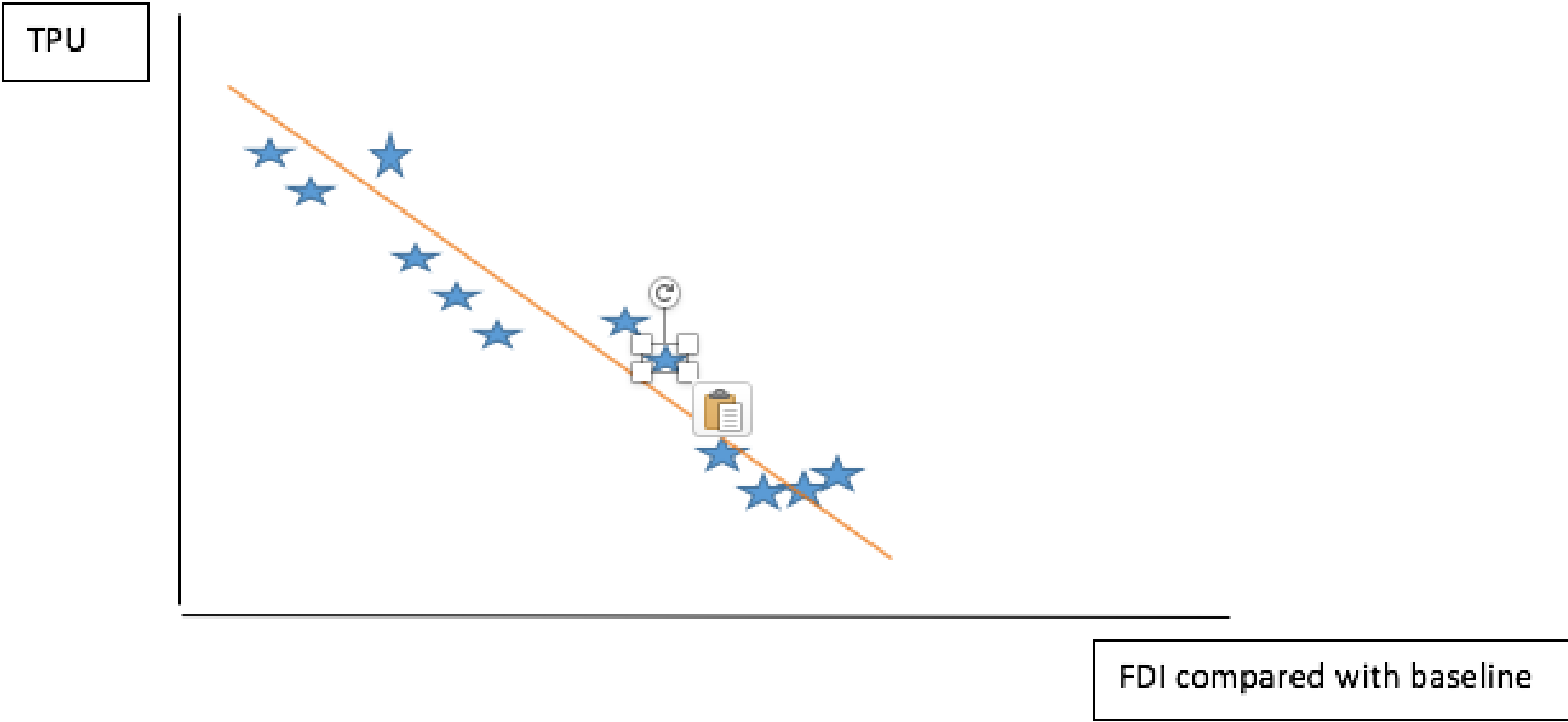
THE AUTOMOTIVE & HEAVY DUTY INDUSTRY IN MEXICO



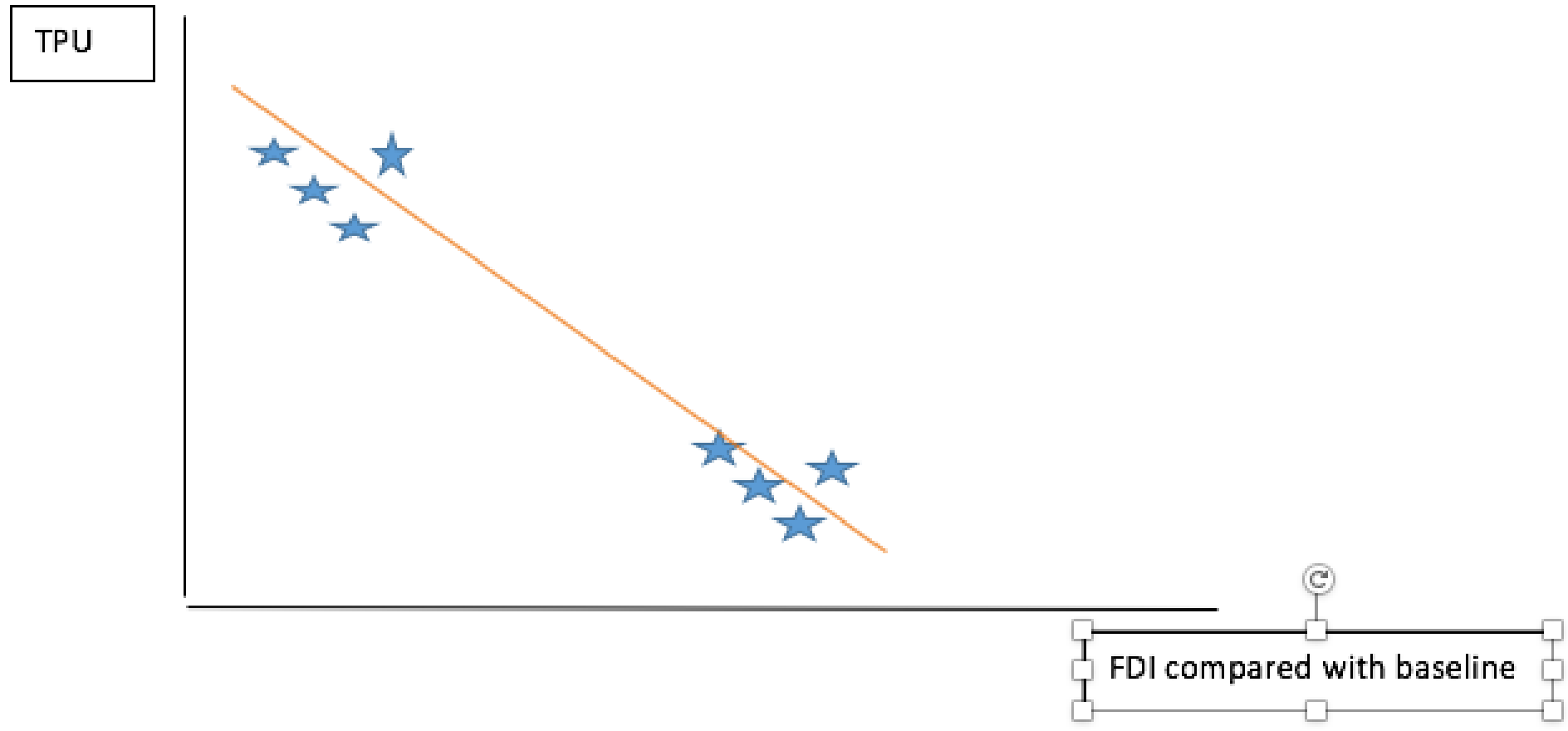
Concern 2: Construction of industry EPTU

- ❖ For each industry, state TPU measures are weighted by employment share of industry in each state.
- ❖ Valid if TPU is the same for all industries in a state
- ❖ What if weights are very different, especially in case of auto industry which has been subject to particular Trump scrutiny. (eg. National Security report on auto industry)

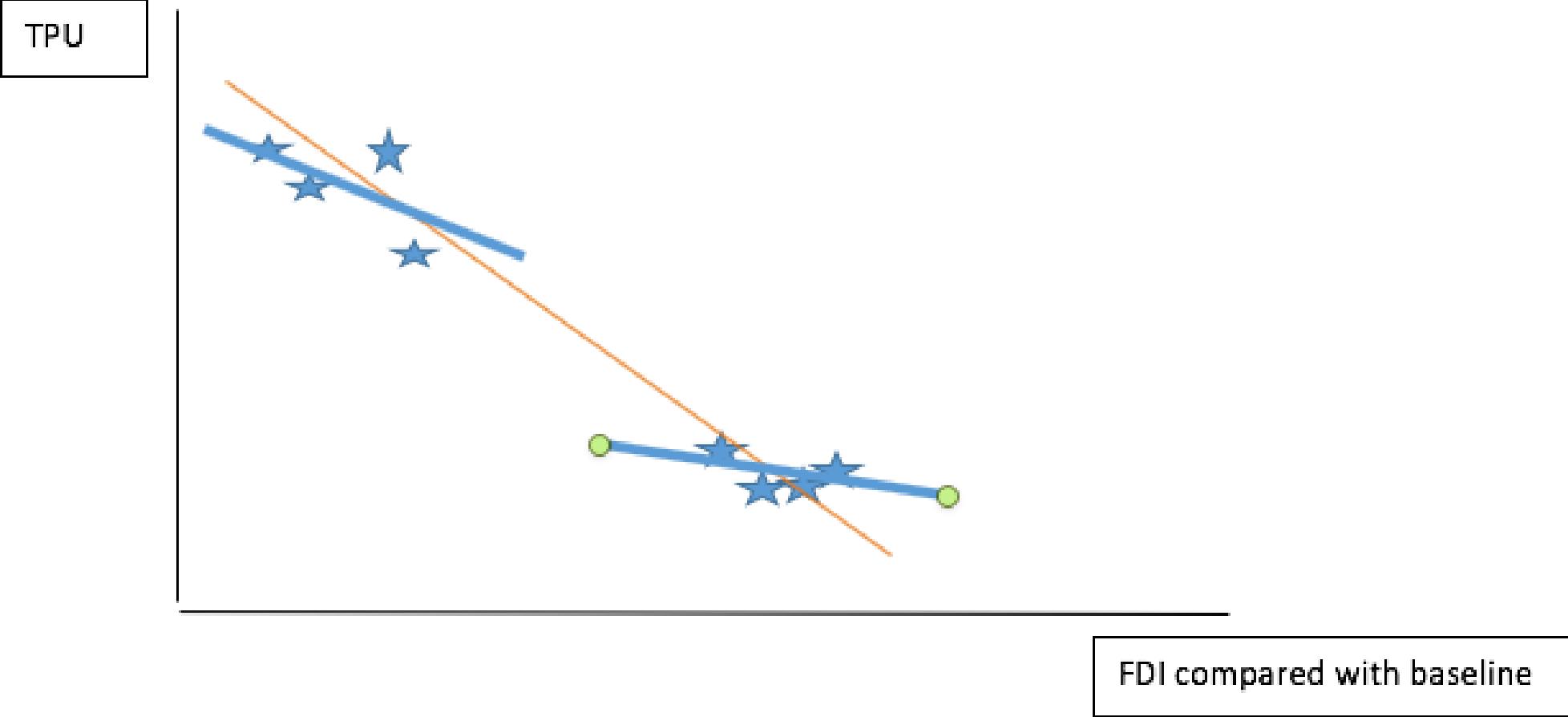
Identification by State



Identification by State – pooling of polarized Export & Non-Export



Identification by State



Concern 3: Mechanism

Explaining how TPU → decreased FDI & increased export

❖ CCHS suggest increased fixed cost of FDI, and flexibility of export.

Is there a link between industries with reduced FDI and industries with increased export?

→ Compare industry data on FDI with industry classification of products that are sometimes traded. Are they the same?

→ Extend analysis to intensive margin

→ Distinguish responses by product type (intermediates; final; raw)

Concern 3: Mechanism

Explaining how TPU → decreased FDI & increased export

Other possible explanations

- ❖ Account for possibilities due to other U.S. trade wars (China, especially) that may be leading to new export opportunities.
- ❖ Decreased FDI production in larger (always traded sectors) reduces local production costs, thereby expanding exports. However, this would suggest simultaneous increase in ROW exports.
- ❖ In anticipation of new tariffs or trade barriers, sometime trade is accelerated in time to beat barriers. (can this be associated with the potential tariff increase? US MFN)
- ❖ Agriculture and timing coincidence.

Summary

- ❖ CCHS provide valuable *real-time* insight into the effects of trade policy uncertainty on FDI and exports.
- ❖ Small but identifiable effects suggest real effects, of policies that have *yet* to be implemented. Thus, ongoing monitoring of this situation is crucial.