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IMPACT OF US IMPORTS OF FRESH BLUEBERRIES ON THE DOMESTIC INDUSTRY

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INTRODUCTION

- Seven states California, Georgia, Michigan, New Jersey, North Carolina, Oregon, and Washington accounted for 94 %of fresh market blueberry production in the United States in 2021.
- April-June harvests mostly occurred in CA, GA and NC, while MI, NJ, OR and WA typically harvested in July-September.
- Four countries Chile, Peru, Mexico and Canada accounted for 98% of U.S. fresh blueberry imports in 2021.
- Since 2016, Mexico has more than tripled export volumes to US during April-June impacting CA, GA and NC growers. Peru's exports to US increased by more than seven times since 2016, overlapping with the other four states' seasons.

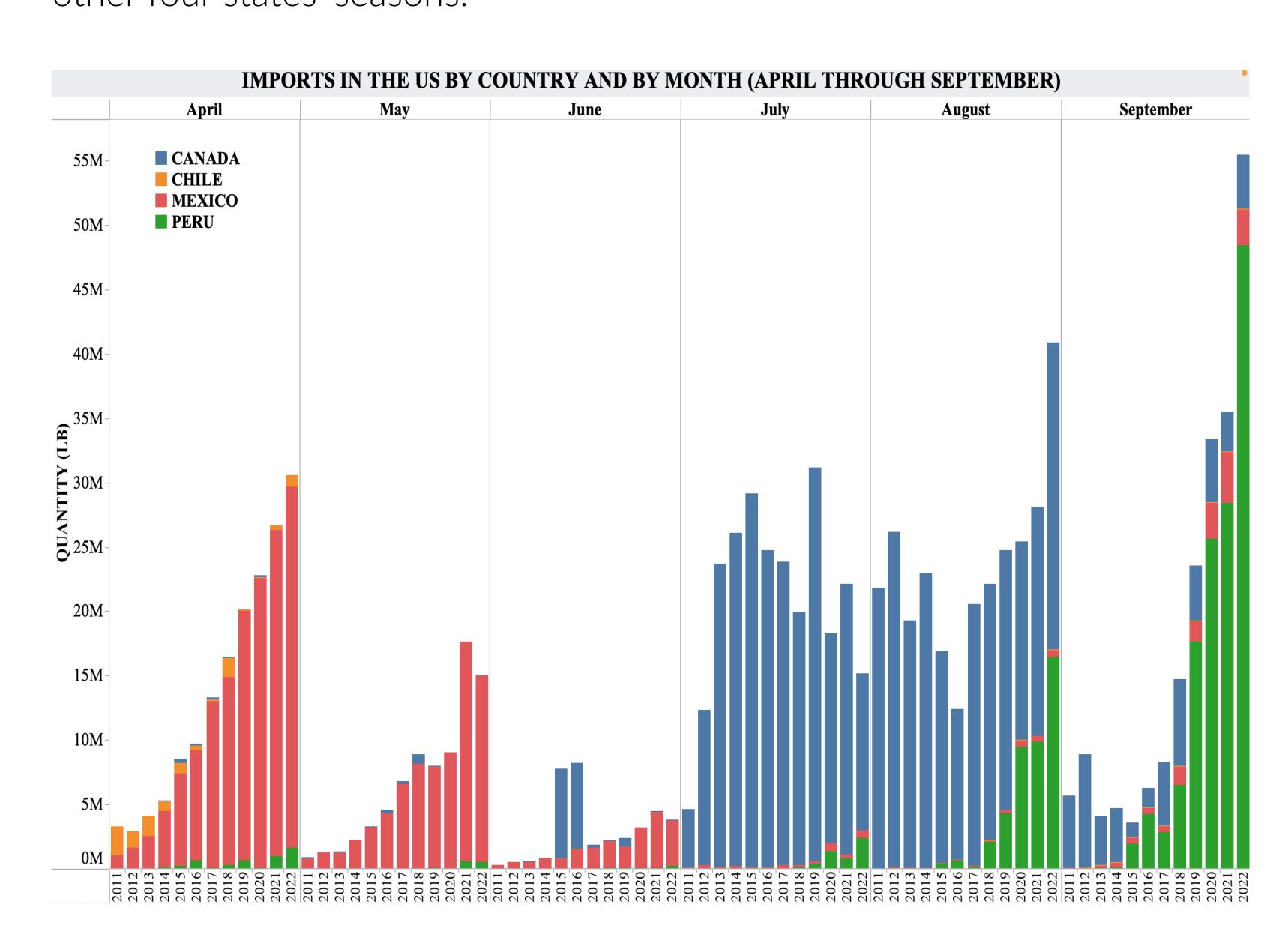


Figure 1. Fresh Blueberry Imports

• In 2021, USITC found no "national injury" to growers from all (fresh and frozen) blueberry imports.[2] However, USITC studies on cucumber[1] and squash found grower revenue losses of \$66.93 million and \$32.34 million, respectively, from "above-average" import growth into the U.S.

OBJECTIVES

- To estimate additional revenue that U.S. fresh blueberry growers would earn in absence of above-average increase in imports.
- Additional revenue is estimated using a range of price data (terminal market price, shipping point price, and farm gate price) and after reexports are accounted for.

METHODS

- Employed the USITC framework on cucumber/squash for the estimation.
- Average growth in imports from 2011-2021 is calculated along with yearly growth. Yearly growth exceeding the average growth are reduced either by the difference between average growth from 2011-2021 and average growth of high growth years (2017-2021) or the average growth from 2011-2021. The import volume of 2011 and the counterfactual growth rates are used to get counterfactual level of imports.

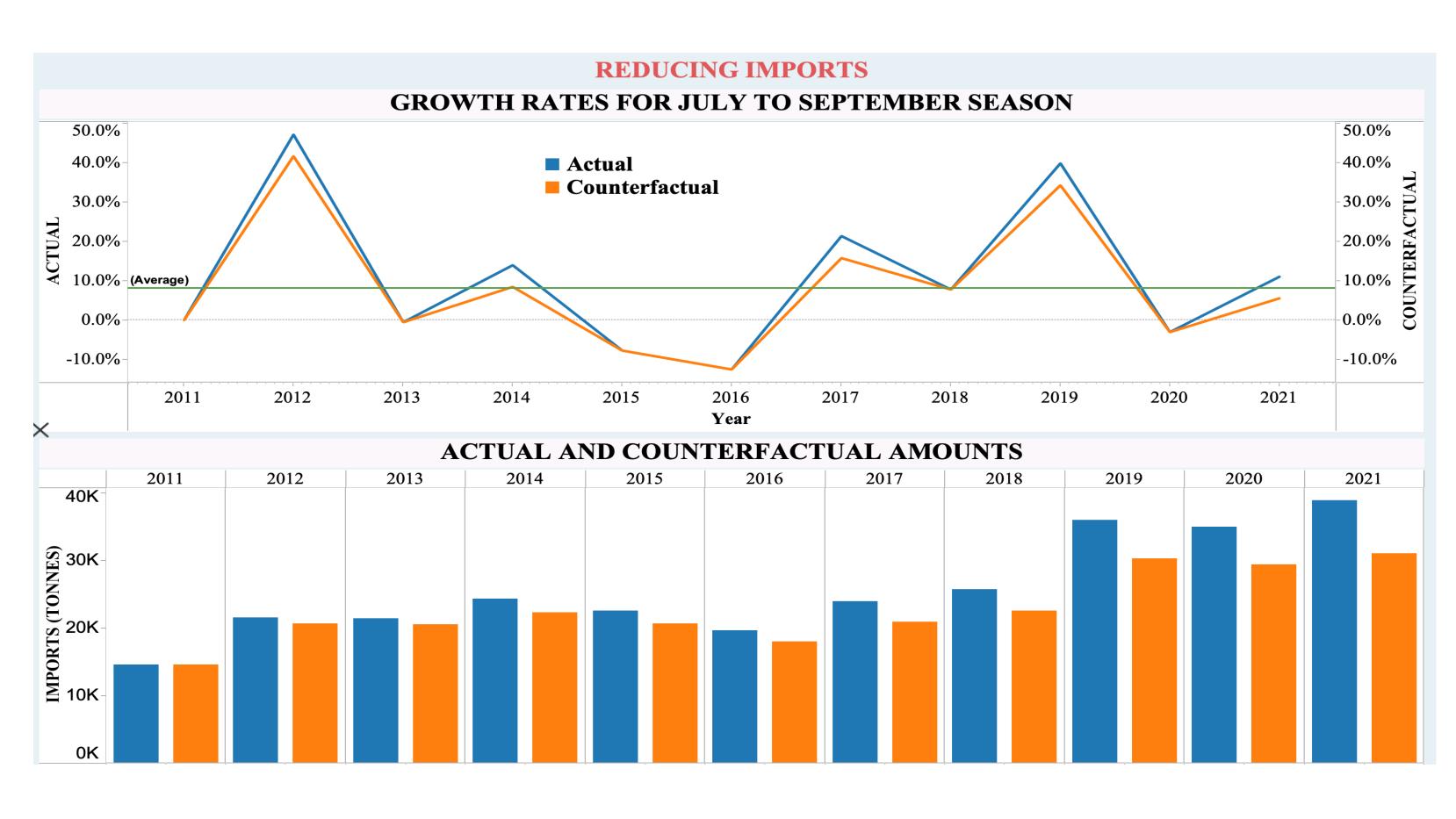


Figure 2. Counterfactual imports and growth rates: July to September season

• Import reduction increases the price and supply of domestically produced blueberries and thus, increases the revenue in comparison to the actual scenario.

DEMAND AND SUPPLY EQUATIONS

Consumers at home country optimize their utility

$$U = \left(\sum (n_i b_i q_i)\right)^{\frac{\sigma}{1-\sigma}} s.t. E = \sum n_i p_i q_i \tag{1}$$

Marshallian Demands[1]

$$q_d = kP^{\gamma} \left(\frac{p_d}{P}\right)^{-\sigma} \tag{2}$$

$$q_i = kbP^{\gamma} \left(\frac{p_i}{P}\right)^{-\sigma} \tag{3}$$

Domestic Supply[1]

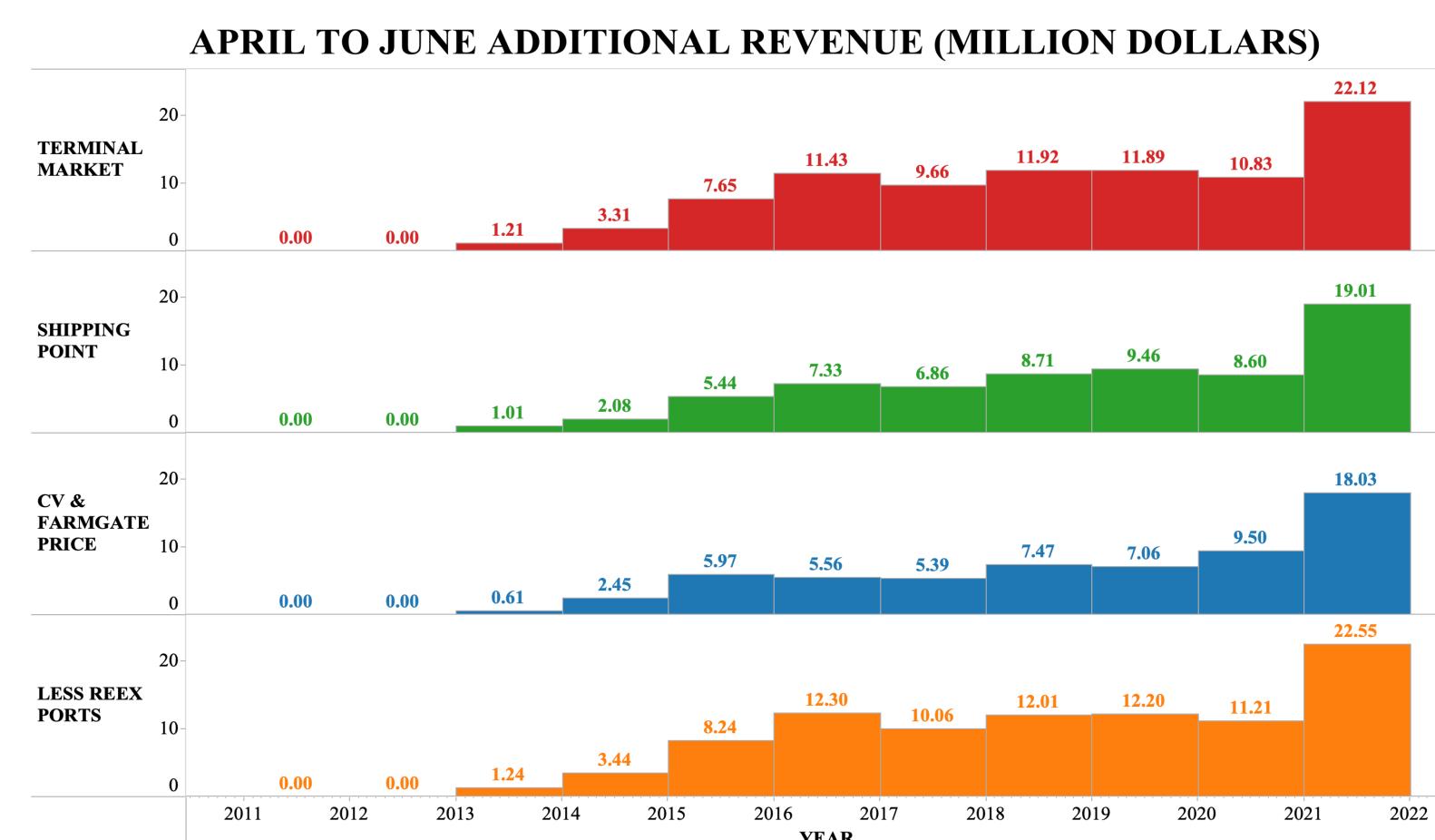
$$q_d = ap_d^{\varepsilon} \tag{4}$$

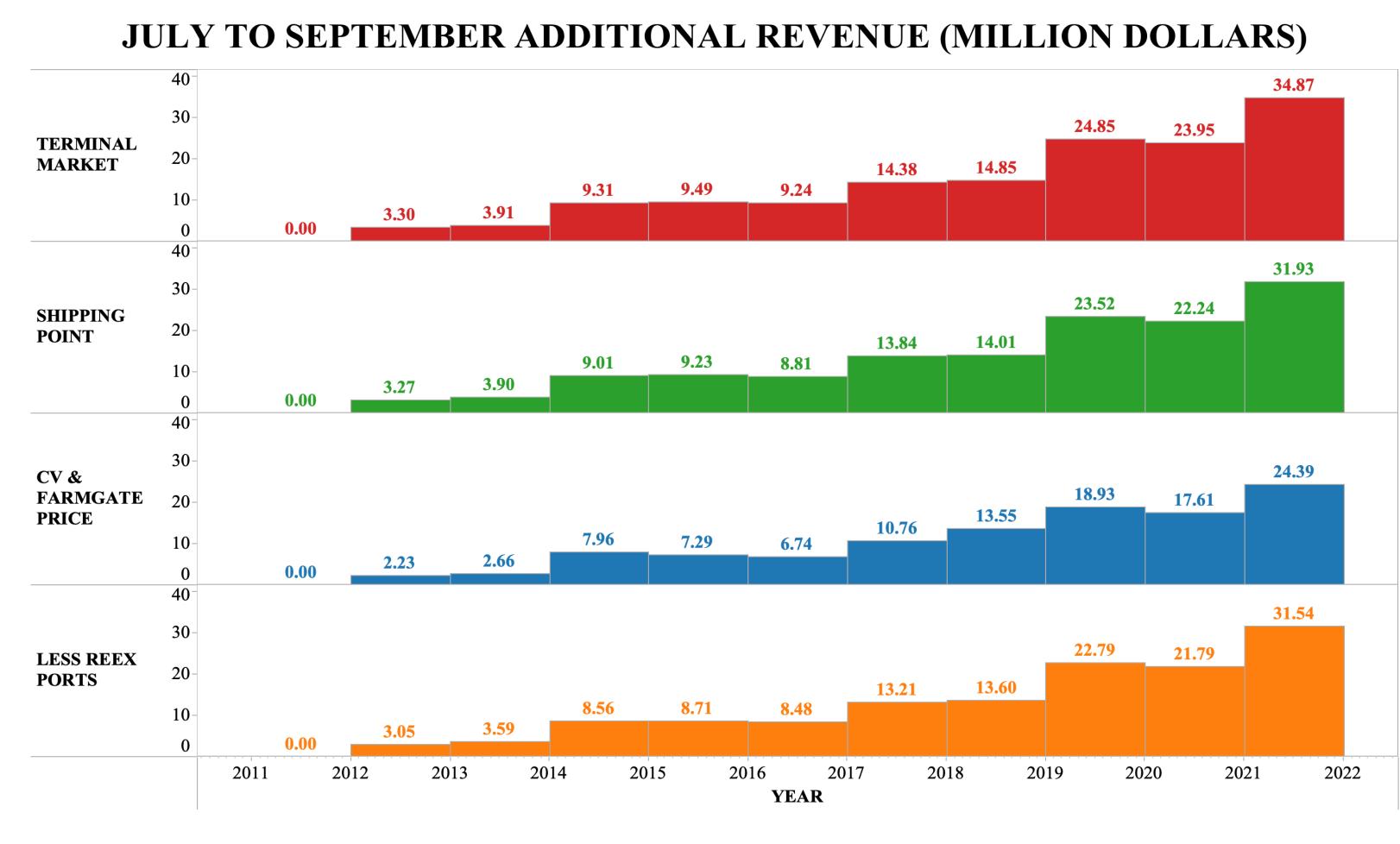
Import quantity is then set to the calculated counterfactual level[1]

$$q_i = q_c \tag{5}$$

The values for elasticities are gathered from USITC investigation on blueber-ries.[2]

PRELIMINARY RESULTS





- Revenue loss has been increasing every year in both seasons.
- Higher additional revenue is observed in July to September season due to higher import penetration.
- In both seasons, using terminal market price resulted in larger additional revenue.

REFERENCES

- [1] United States International Trade Commission. Cucumbers: Effect of Imports on U.S. Seasonal Markets, with a Focus on the U.S. Southeast. 2021.
- [2] United States International Trade Commission. Fresh, Chilled, or Frozen Blueberries. 2021.