# Regional Trade Agreements

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# I. Impacts of Regional Trade Agreements (RTAs)

- A. Standard *Ex Ante* (CGE) Forecasts of RTAs
  - 1. Small-to-Moderate Trade Effects
  - 2. Small-to-Moderate National Output and Per Capita Income (Welfare) Effects
- B. Measuring Welfare Change:
- $\%\Delta$  Welfare = ( $\%\Delta$  Internal Trade/Total Income)<sup>-1/a</sup>



# I. Impacts of RTAs (cont.)

C. NAFTA *Ex Ante* Forecasts (circa early 1990s)

The "Michigan Model":

Trade increase: 3% (US), 4% (CA), 42% (MX)

Welfare increase: 0.1% (US), 0.7% (CA), 1.6% (MX)

# I. Impacts of RTAs (cont.)



- D. Standard *Ex Post* Evidence of RTAs
  - 1. Large Trade Effects
  - 2. Small-to-Moderate National Output and Per Capita Income (Welfare) Effects (due to larger assumed "a" parameter)
- E. Representative *Ex Post* Direct (Treatment) Effects
  - 1. Free Trade Agreements (FTAs): 36%
  - 2. Common Market: 61%
  - 3. Economic Union: 143%
- F. NAFTA *Ex Post* Direct (Treatment) Effect: 70% (Baier, Bergstrand, and Bruno, 2019)



### I. Impacts of RTAs (cont.)

G. *Ex Post* Evidence of NAFTA on Trade (General Equilibrium Effects; allow all prices to change)

Intra-NAFTA Trade: 49% (US), 47% (CA), 48% (MX)

Internal Trade: -1.05% (US), -7.66% (CA), -3.95% (MX)

H. Welfare Effects of NAFTA

0.3% (US), 2.1% (CA), 1.1% (MX)

(Baier, Bergstrand, and Bruno, 2019)



### II. Benefits of RTAs

- A. Improvement in Members' Average Productivity
  - Allows a wider range of firms to export
     (as threshold productivity falls);
     most productive firms gain the most
  - 2. Least productive firms shut down
- B. Consumer Variety
  - 1. Wider range of types of products available via imports increasing
  - 2. However, loss of domestic varieties as least productive firms shut down
- 3. Under a common assumption, previous two effects cancel each other out, leaving only productivity gains.



### II. Benefits of RTAs (cont.)

C. Reduced Trade-Policy Uncertainty

Empirical evidence confirms that a further benefit of RTAs is the reduction in uncertainty about future policy, encouraging more trade, raising welfare.

(Handley and Limao, 2015)

On net, the proposed USMCA will have a positive impact on trade and welfare, mostly owing to reduced uncertainty regarding trade policies (especially regarding data transfers).

(U.S. ITC, 2019)



### II. Benefits of RTAs (cont.)

#### D. Consolidation of Weak Democracies

Empirical evidence confirms that a further benefit of RTAs is the consolidation of less mature democracies.

(Liu and Ornelas, 2014)

#### E. Reductions of Conflicts

Empirical evidence confirms that RTAs tend to reduce bilateral international conflicts.

(Martin, Mayer, and Thoenig, 2008)



### III. Costs of RTAs

A. RTAs Cause Least Productive Firms to Shut Down and Labor is Re-allocated (but only in the long run)

Autor, Dorn and Hanson (2015):

"We juxtapose the effects of trade and technology on employment in US local labor markets between 1980 to 2007. Labor markets whose initial industry composition exposes them to rising Chinese import competition experience significant falls in employment, particularly in manufacturing and among non-college workers.





### B. Skilled vs. Unskilled Wage Rates

Virtually every *ex ante* analysis of RTAs shows that skilled wage rates rise relative to unskilled wage rates.

This was noted in USITC (2019) explicitly. RTAs likely add to income inequality.

Beverelli, Rubinova, Stolzenburg, and Woessner (2019):

"Global-value-chain exposure is associated with a decrease in the employment share of the low-wage group and an increase in the employment share of the high-wage group."



### III. Costs of RTAs (cont.)

C. Costs of Adjustment

Davidson and Matusz (2001):

"... we find that when we take the time cost of retraining into account our estimate is that the short run adjustment costs amount to (at least) 10 to 15 percent of the long run benefits of liberalization. When the resource costs of retraining are taken into account as well, our estimates of the short run costs jump to 30 to 90 percent of the long run gains from freer trade."



### III. Costs of RTAs (cont.)

D. Increased Resistance to Globalization: Implications of "Trade in Tasks"

"... in the era of offshoring, winners and losers of globalization are no longer separated by their education level, so that skilled and unskilled workers can be negatively affected, with schooling losing its capacity to give protection against losses from trade. In particular, if schooling provides skills that are tailored to the needs of specific tasks, skilled workers are vulnerable to not finding an adequate new workplace, after losing their job due to offshoring."

(Egger and Fischer, 2019)



### IV. Closing Observation on the 2018 Trade-War Effects

Fajgelbaum, Goldberg, Kennedy, and Khandelwal (2019):

"We find complete pass-through of U.S. tariffs to variety-level import prices. Annual consumer and producer losses from higher import costs were 0.37% of GDP. After accounting for higher tariff revenue and gains to domestic producers from higher prices, aggregate welfare loss was 0.04% of GDP. U.S. tariffs favored sectors in politically competitive counties, but retaliatory tariffs offset the benefits to these counties. We find that tradeable-sector workers in heavily Republican counties were the most negatively affected by the trade war."