



# Extra-Regional Trade Effects & The Value of Preferential Market Access

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(Based on joint work with Tom Vollrath)

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# Outline

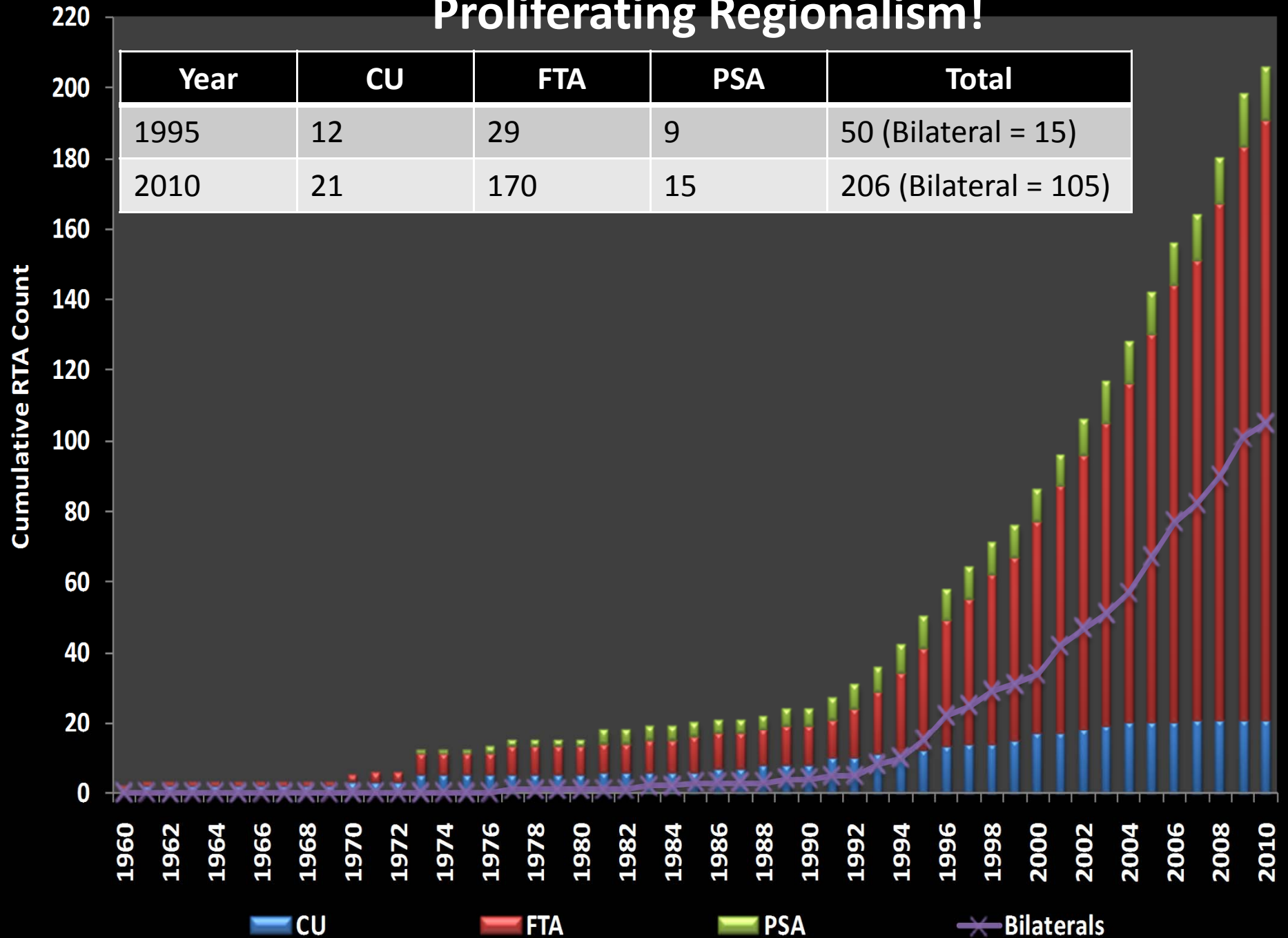
- RTAs in Global Trade
- Significant dynamics occurring in extra-regional meat markets
- Is the surge in RTAs shrinking our preference margin?



# RTAs in Global Trade

- Proliferating Regionalism
  - 500 notifications of RTAs (in force, in negotiation, in consideration)
  - 239 in force (Jan. 2012)
- Since its inception, WTO has received an average of ~ 12 notifications/year
  - Almost 1/month
- All WTO members party to at least one RTA and most participate in multiple agreements (avg. = 6!)
- This is natural policy response to increasing membership (WTO), stagnating multilateral talks
- All of which leads to ...

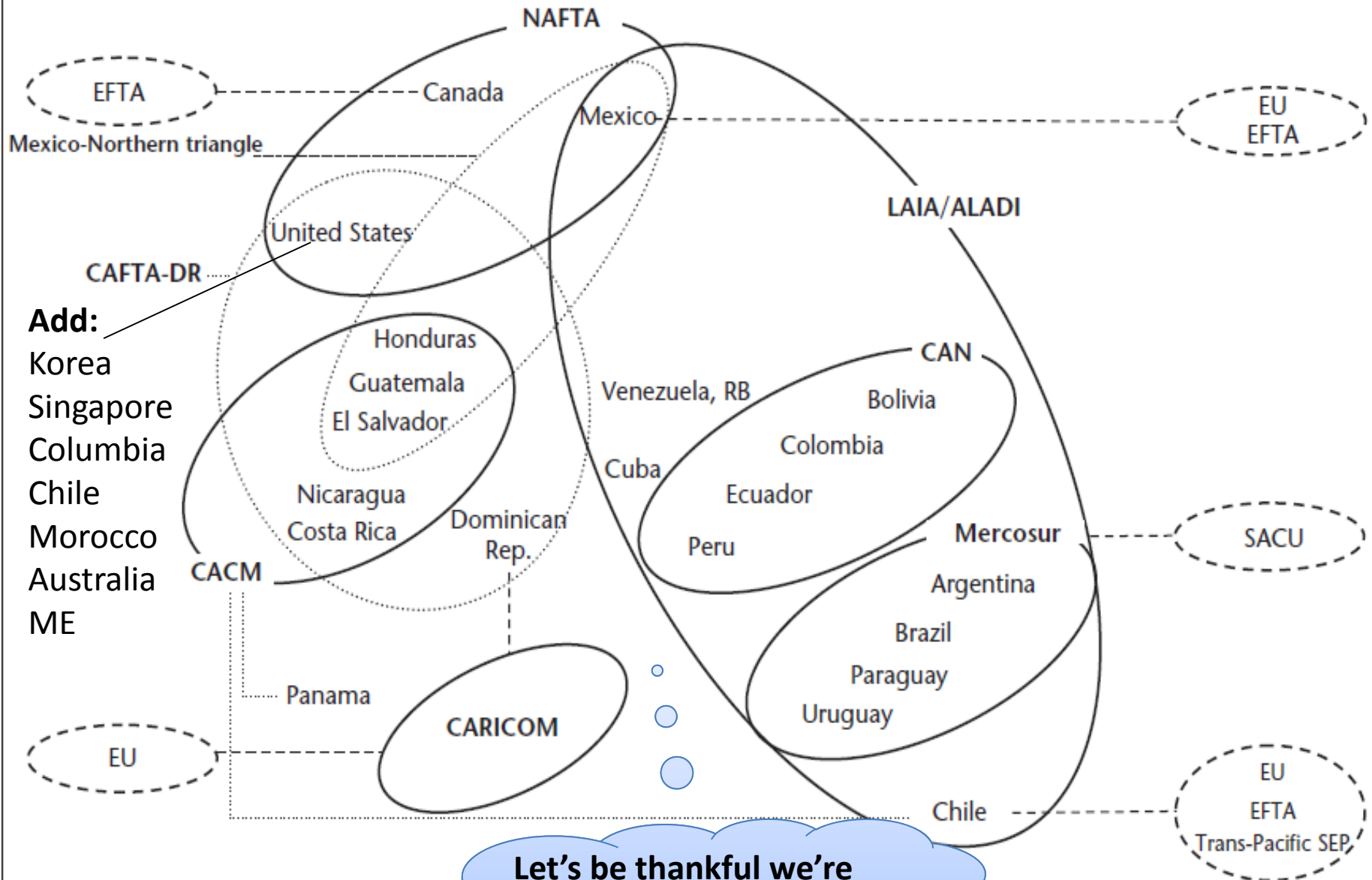
# Proliferating Regionalism!





# Western Hemisphere

Source: WTO Secretariat



Let's be thankful we're not in charge of the Rules of Origin!





## The Issues

- Regional integration once again “breeding concern” about intra vs. extra-regional trade effects
- US (& Canada) finds itself increasingly on the outside
  - Particularly w.r.t large & economically significant RTAs being formed & expanded in Asia (**ASEAN + 6**)
  - And the aggressive pursuit of regionalism by our competitors in South America (i.e., Brazil)
- “Is there a barrier being drawn down the center of the pacific?” (Bergsten, 2009)



# Objectives

1. Evaluate market share and trade intensity indices to evaluate U.S. and competitor animal product export trends to RTA markets to which the U.S. does not participate
2. Estimate the value and extent of preferential market access in RTA markets, vis-à-vis tariffs, granted to key competitor nations relative to the U.S.





## Data Information & Sources

- Reconciled UN Comtrade Data, 1980-2010
  - 75 Countries (> 90 percent of global meat trade)
  - SITC Rev. 2 (00, 02, 04)
    - Live animals, processed meat, and dairy sectors
  - 5 year averages to smooth year specific shocks (i.e., BSE)
- Mirrored Flows (Feenstra et al. 2005)
  - Use import statistics whenever available
  - Export statistics used if imports missing (adj. for FOB/CIF differentials)
- World Integrated Trade Solutions (WITS 2004)
  - Bilateral tariffs including preferential margins
  - *Ad valorem* equivalent of specific tariffs



# Acronyms

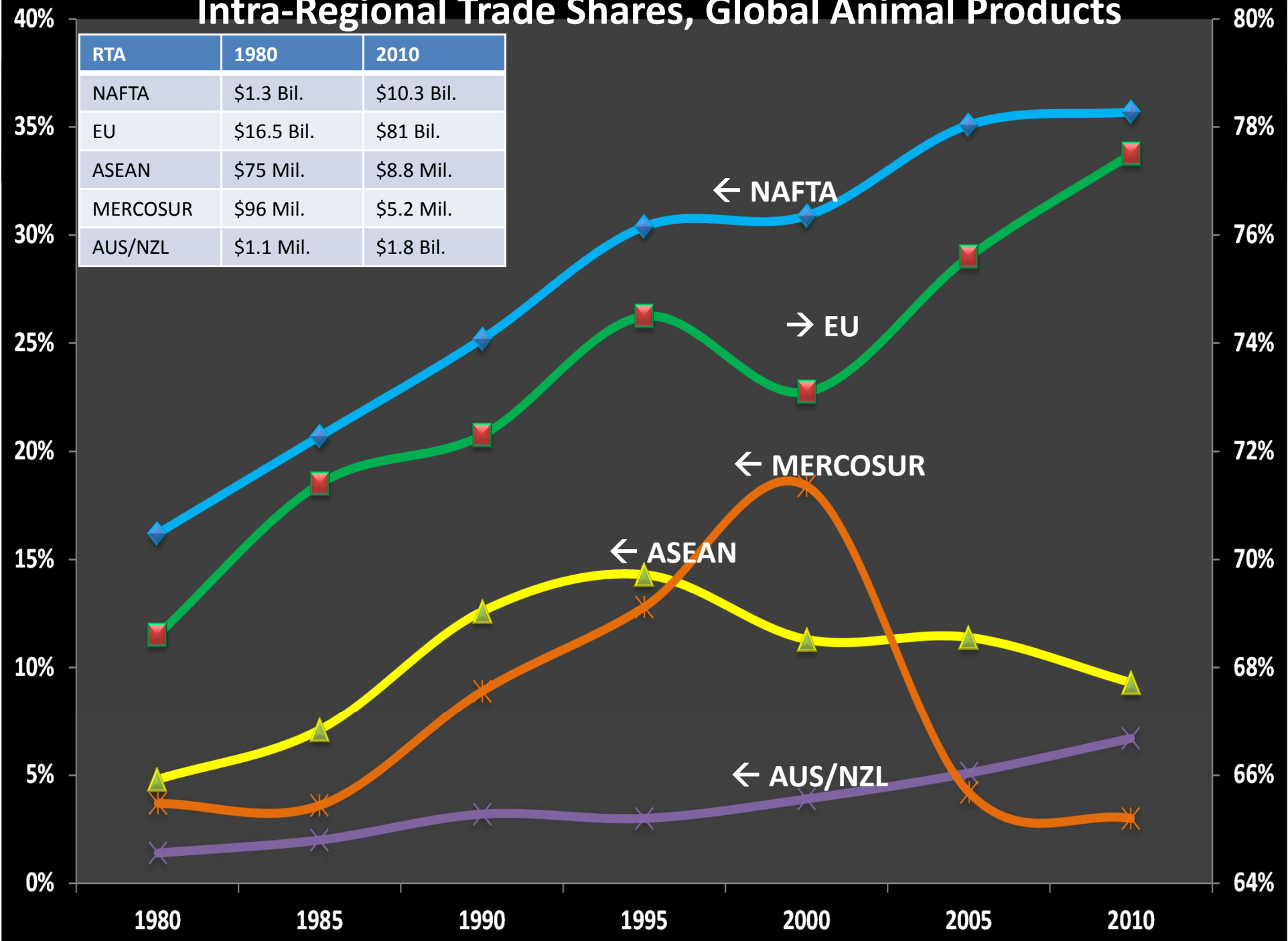
Agreement	Date of Entry into Force	Description
NAFTA	1994	North American Free Trade Agreement (CAN, US, MEX)
EU	'73, '81, '86, '95, '04, '07	European Communities EU9, 10, 12, 15, 25, 27
AUS_NZL	1983	Australia-New Zealand FTA (incl. recent FTAs with Japan and China)
ASEAN	1992	Association of Southeast Asian Nations (IDN MYS PHL SGP THA VNM)
SAFTA	1996	South Asian Free Trade Agreement (BGD CHN IND KOR LKA PAK)
ANDEAN	1988	Andes Community (BOL, COL, ECU, PER)
MERCOSUR	1991	Southern Common Market (ARG, BRA, PRY, URY)
BRICs	2003*	Brazil, Russia, India, China (Goldman Sachs)
N-11	2007*	Goldman Sachs' Next 11 Emerging Markets BGD EGY IDN IRN MEX NGA PAK PHL TUR KOR VNM

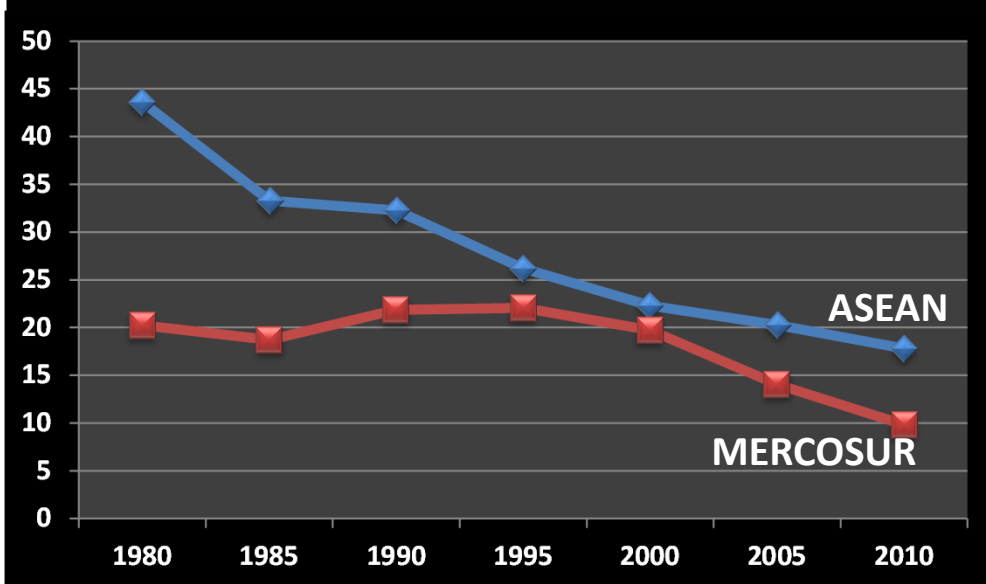
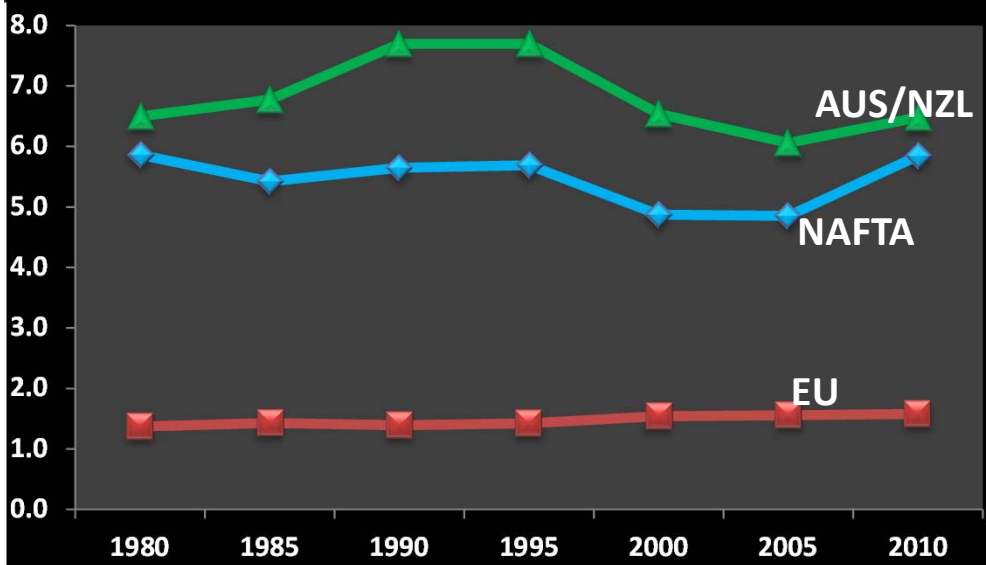


# Intra-Regional Market Shares: Meat and Dairy

# Intra-Regional Trade Shares, Global Animal Products

RTA	1980	2010
NAFTA	\$1.3 Bil.	\$10.3 Bil.
EU	\$16.5 Bil.	\$81 Bil.
ASEAN	\$75 Mil.	\$8.8 Mil.
MERCOSUR	\$96 Mil.	\$5.2 Mil.
AUS/NZL	\$1.1 Mil.	\$1.8 Bil.





# Regional Concentration Index

- Adjusts intra-regional trade shares by the agreement's share in world trade

$$RCI = \frac{\theta_{BB}}{\theta_{BW}} \frac{\text{Share of Bloc B's intra-regional trade}}{\text{Share of Bloc B's intra-regional trade in world trade}}$$

- Bigger numbers = more intense RTA trade

### Implication:

- Intra-RTA trade indices falling
- EU intra-bloc trade is less significant when adjusted for their share in world trade



# Dynamics in Extra-Regional Meat & Dairy Markets

1. Sum RTA trade with members & nonmembers, by year & RTA Bloc (total RTA trade)
2. Eliminate intra-regional trade in each year
3. Compute U.S. and competing suppliers' export shares to extra-regional RTA markets (year-by-year)



# Country-Specific Extra-Regional Trade Shares of the EU

35%

1975	1980	1985	1990	1995	2000	2005	2010
\$1.6 Bil.	\$3.5 Bil.	\$3.3 Bil.	\$4.4 Bil.	\$5.2 Bil.	\$5.4 Bil.	\$6.2 Bil.	\$9.1 Bil.

30%

\*\* Excludes intra-EU trade

25%

20%

15%

10%

5%

0%

-5%

1980 1985 1990 1995 2000 2005 2010

Brazil

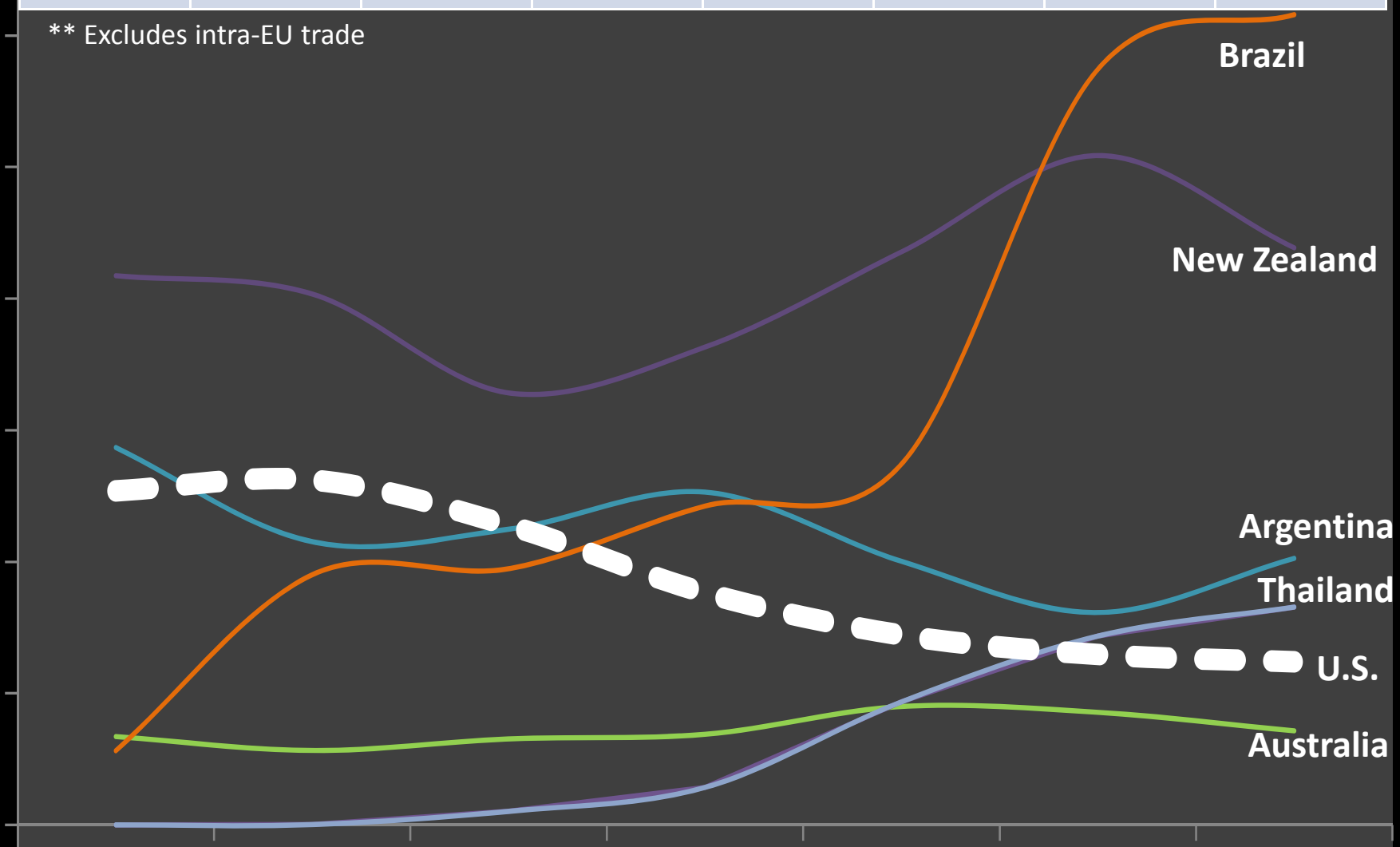
New Zealand

Argentina

Thailand

U.S.

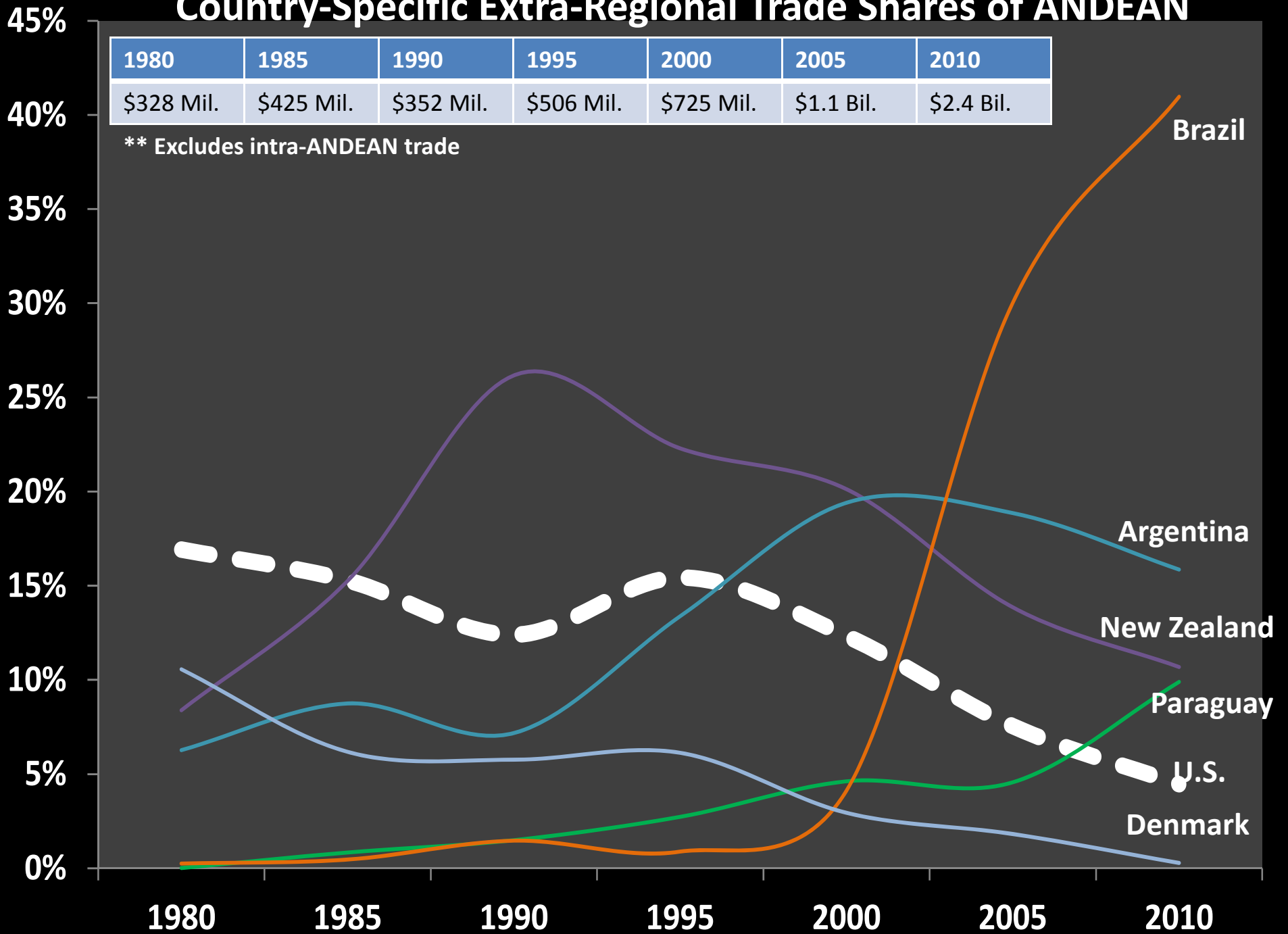
Australia



# Country-Specific Extra-Regional Trade Shares of ANDEAN

1980	1985	1990	1995	2000	2005	2010
\$328 Mil.	\$425 Mil.	\$352 Mil.	\$506 Mil.	\$725 Mil.	\$1.1 Bil.	\$2.4 Bil.

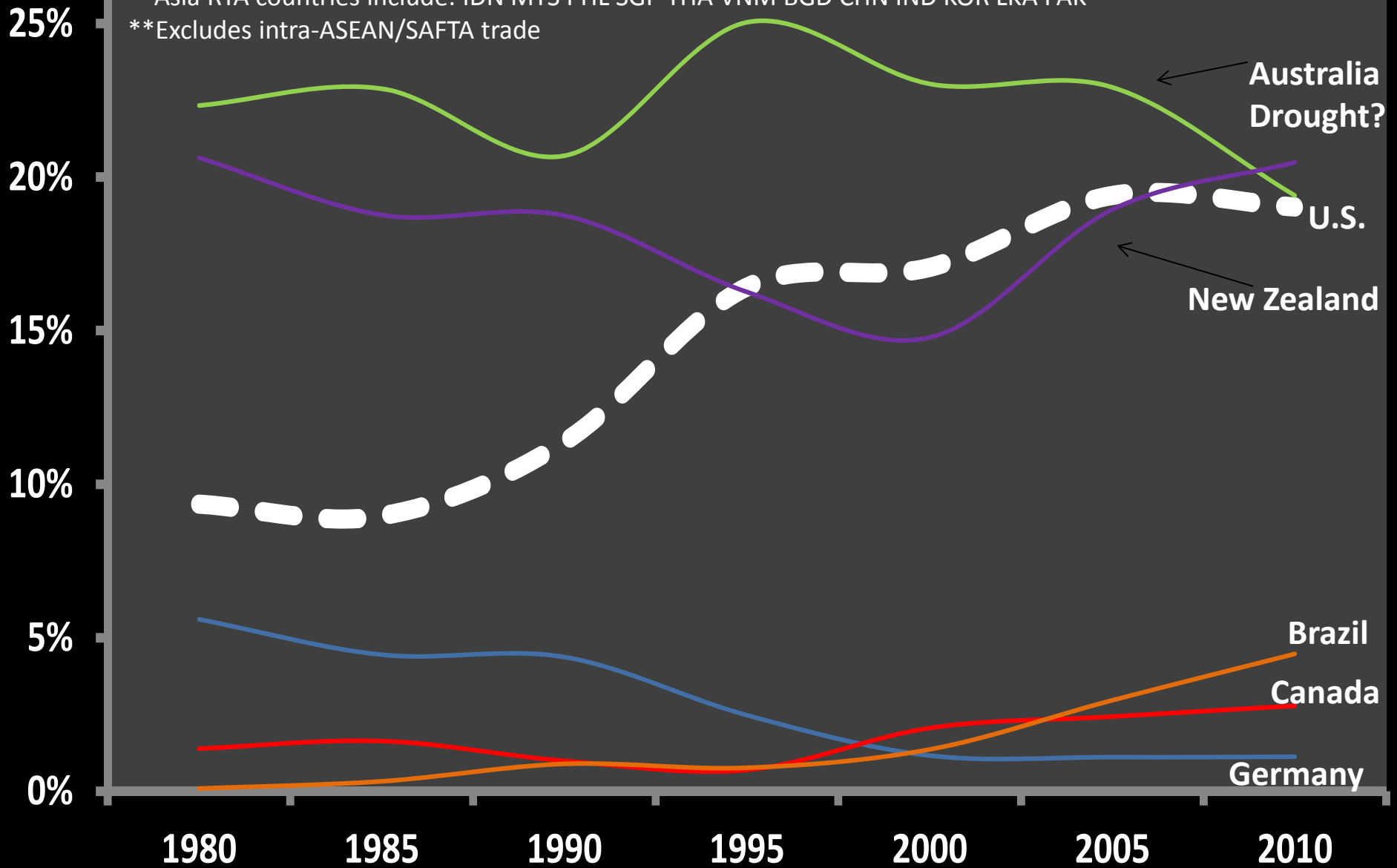
\*\* Excludes intra-ANDEAN trade



# Country-Specific Extra-Regional Trade Shares of ASEAN/SAFTA

1975	1980	1985	1990	1995	2000	2005	2010
\$7.8 Mil.	\$1.0 Bil.	\$1.3 Bil.	\$1.7 Bil.	\$3.2 Bil.	\$5.2 Bil.	\$7.0 Bil.	\$13.1 Bil.

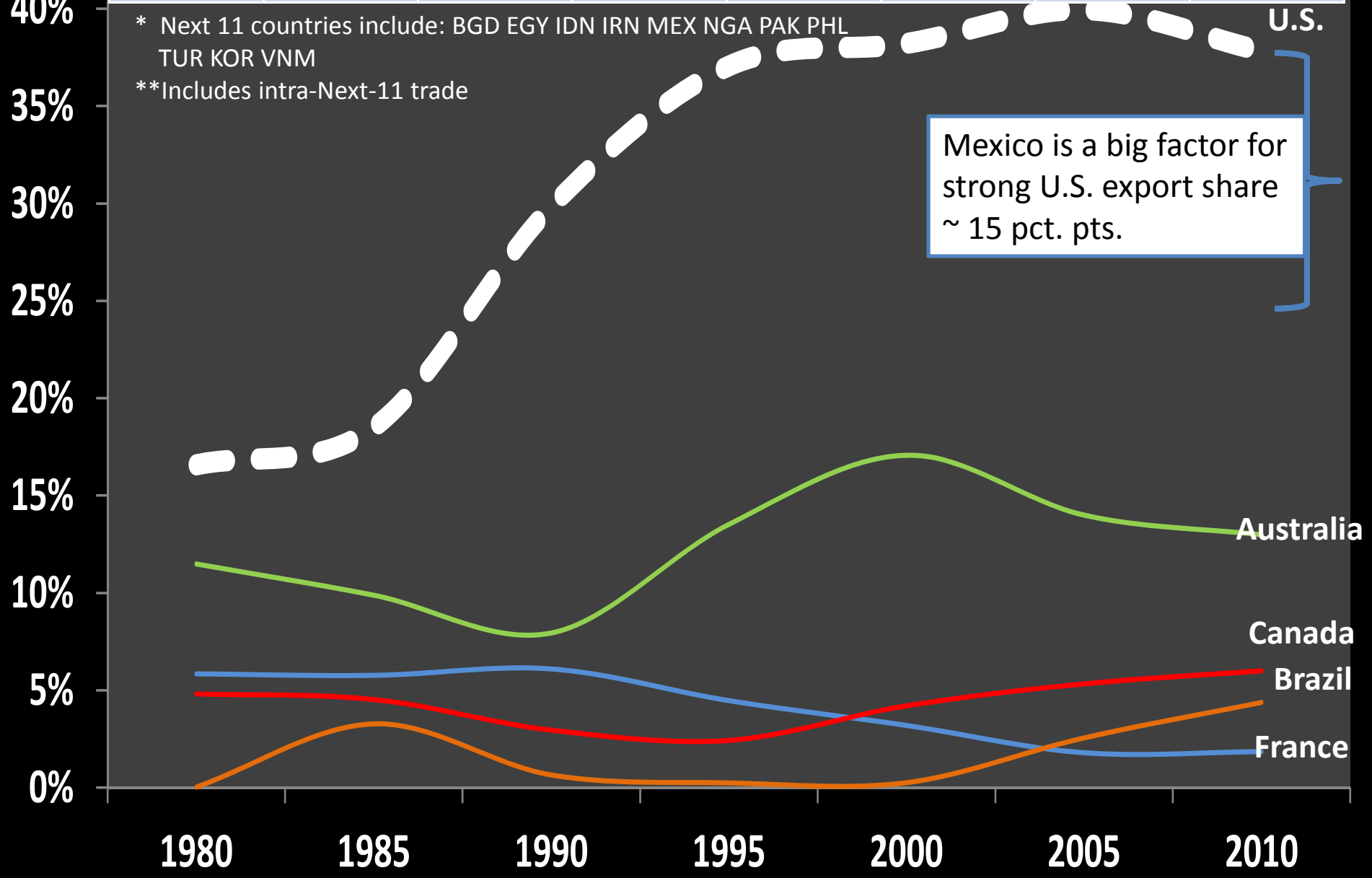
\* Asia RTA countries include: IDN MYS PHL SGP THA VNM BGD CHN IND KOR LKA PAK  
 \*\* Excludes intra-ASEAN/SAFTA trade



# Country-Specific Extra-Regional Trade Shares of Next 11

1975	1980	1985	1990	1995	2000	2005	2010
\$6.7 Mil.	\$1.2 Bil.	\$1.8 Bil.	\$2.3 Bil.	\$3.9 Bil.	\$5.1 Bil.	\$7.6 Bil.	\$12.9 Bil.

\* Next 11 countries include: BGD EGY IDN IRN MEX NGA PAK PHL  
TUR KOR VNM  
\*\*Includes intra-Next-11 trade



1980 1985 1990 1995 2000 2005 2010

U.S.  
Australia  
Canada  
Brazil  
France



# Summary

- ON A BRIGHT NOTE:
  - Significant presence in Asia and N-11 destinations (despite not being party to their growing list of RTAs)
    - N-11 viewed as the future growth prospects for agri-food trade (Meilke & Cairns 2011)
    - Asia: mrkt shares rising from lows of 8% in '80s to near 20% in 2010
    - N11: mrkt share rising from 15% in '80s to almost 40% in 2010 (25% if exclude MEX)
    - Brazil's presence in Asia and N11 is insignificant but rising (recently)
- CHALLENGES
  - Intra-EU market is ~ \$80 billion but difficult to penetrate
  - Brazil is clear leader in South America and Europe with extra-regional markets of \$2.4 and \$9 billion, respectively



# Is our Preference Margin Shrinking in Extra-Regional RTA Markets?





# Relative Preferential Tariff Margins

- Salient feature of the growth of regionalism is that a large share of world trade is not subject to a country's Most Favored Nation (MFN) tariff
  - MFN vs. preferential tariff rates less relevant
  - Preferential margins may be eroding because other ctrys have some form of preferences in place
  - True extent of preferences should be judged relative to our competing suppliers (Hoeckman and Nicita 2008)
- The relative preference margin evaluates the tariff vector of country  $i$  with respect to the tariff vector of its competitors:

$$\tau_{ji \notin w} = \underbrace{\sum_k \theta(\varepsilon_{jk}) t_{ijk}}_{\text{Preference Margin of } i \text{ (i.e., the U.S.)}} - \underbrace{\sum_{hs \in k} \phi(\varepsilon_{jk}) t_{wjhs}}_{\text{PM of competing supplier (w) (i.e., Brazil)}}$$



# U.S. Relative Preference Margins

< 0 indicates relative preference disadvantage

> 0 indicates relative preference advantage

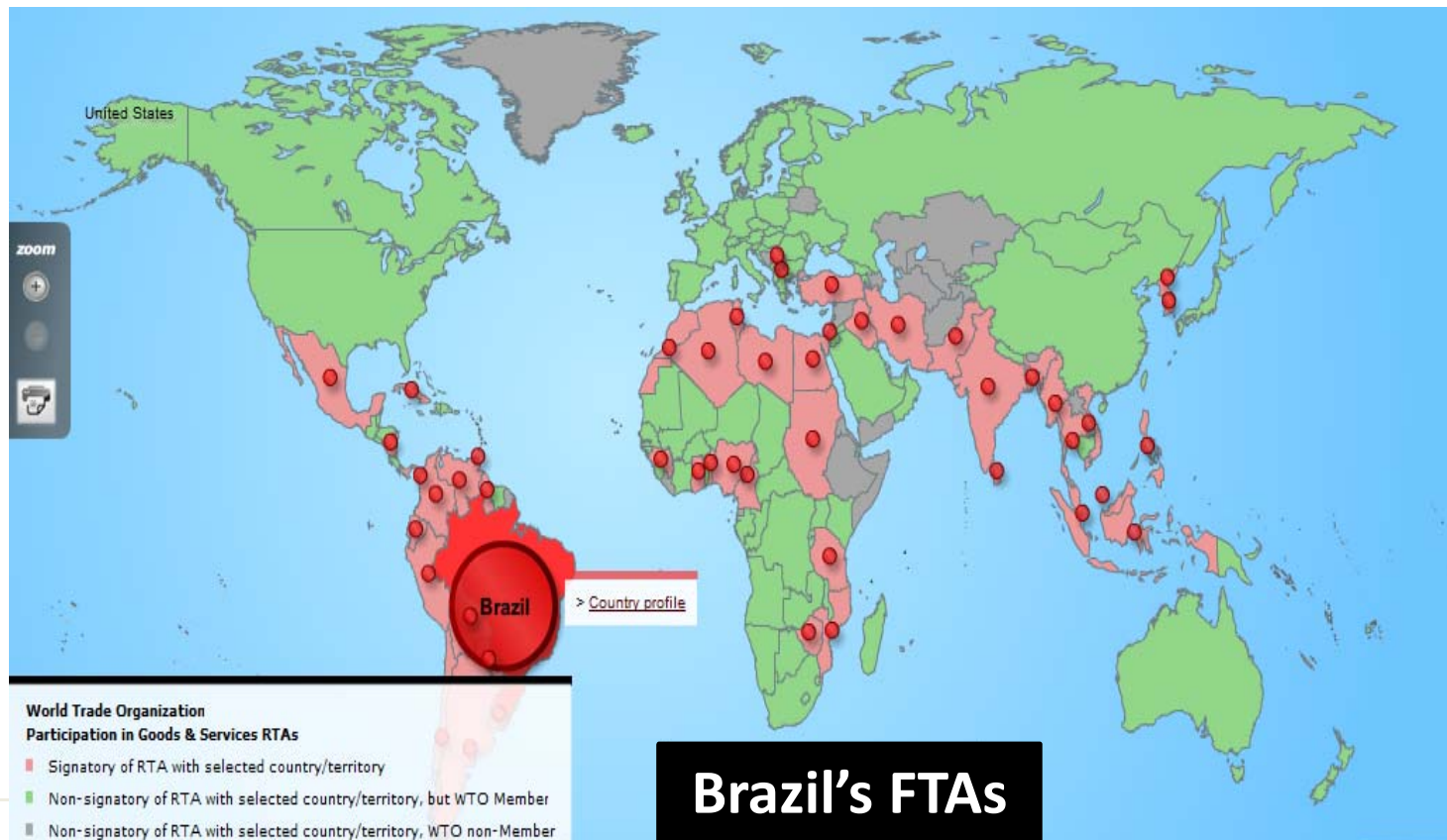
-----Competing Suppliers-----

Extra-Regional Import Market	Brazil	Canada	New Zealand	Australia
EU-25	-0.05	0.02	-0.03	0.00
ASEAN	-0.05	0.02	-0.03	0.00
SAFTA	-0.05	-0.01	0.04	0.01
MERCOSUR	-0.12	-0.01	0.03	-0.06
BRICS	-0.04	-0.02	0.01	0.00
N-11	0.09	0.00	-0.02	-0.03



# Conclusions

- Regional trade agreements (RTAs) are not new, but their significance is on the rise and the U.S. (& Canada) find themselves party to few agreements outside western hemisphere





## Conclusions

- FTAs can be significant policy option to gain greater access to foreign markets
- However, they are an exception to multilateral free trade because they are discriminatory
- Hard to say whether tariffs are driving dynamics in extra-regional import markets (more analysis in the works)
- Host of factors that can shut down markets, even inside RTAs
  - Preferences (hormone treated beef, mandatory labeling)
  - Food safety (BSE, chlorine rinse issues)