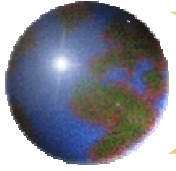


Defining North American Economic Integration

Raymond Robertson

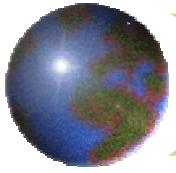
Macalester College

St. Paul, MN



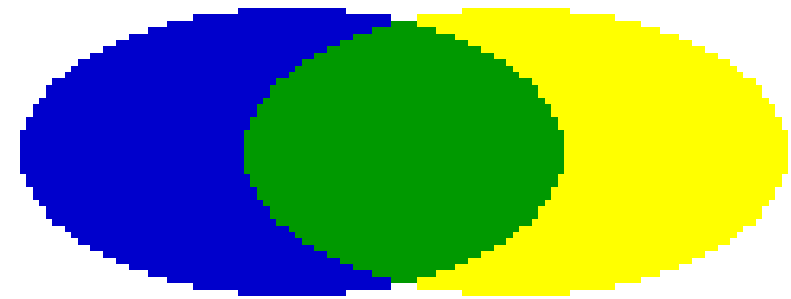
The Quest for Economic Integration

- ❖ Defining Integration
- ❖ The Importance of Integration
- ❖ Four Measures of Integration
 - ❑ Price Convergence
 - ❑ Factor Markets
 - ❑ Trade Volumes
 - ❑ Product Availability



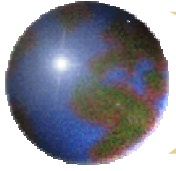
Defining Economic Integration

- ✦ Mixing previously separate groups



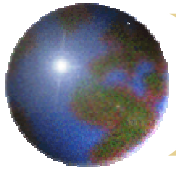
**blue + yellow
= green**

- ✦ "...when product flows between countries are on the same terms and conditions as within countries"
- Knutson & Ochoa



An Active Definition

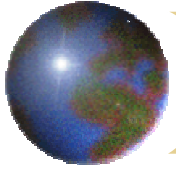
- ✦ We move towards economic integration by removing barriers to commercial exchange.
- ✦ Economic integration is the absence of barriers to commercial exchange.



Three kinds of barriers

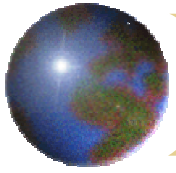
- ⊕ Natural
- ⊕ Cultural
 - ⊕ Information
 - ⊕ Language
 - ⊕ Preferences
- ⊕ Political





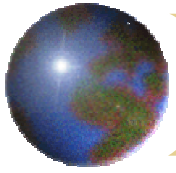
Why Integration Matters

- ⊕ People who trade more live better
 - ⊠ Productivity and Specialization
 - ⊠ Variety
 - ⊠ Consumption
- ⊕ Removing barriers to commercial exchange probably stimulates long-run growth

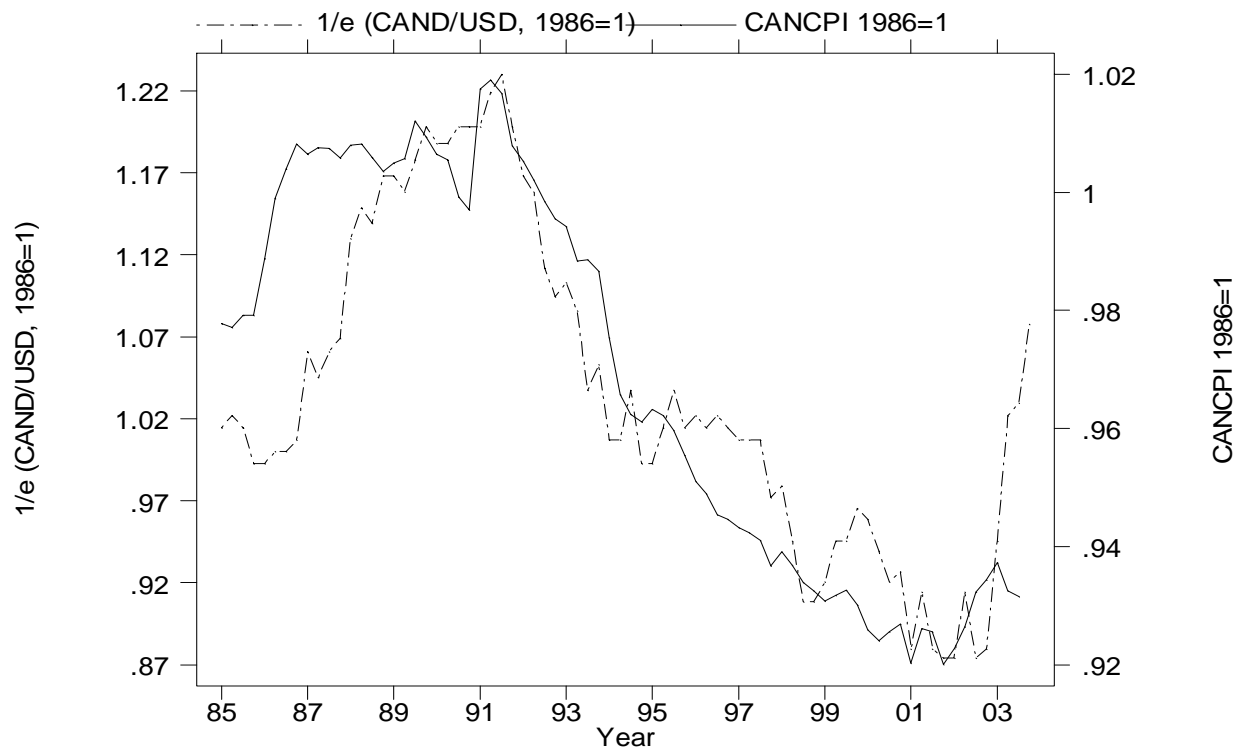


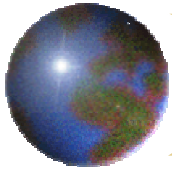
Measuring Integration with Prices

- ✿ Barriers create a wedge between prices
 - ▣ Tariffs are added to prices
 - ▣ Quotas create shortages that drive price up
 - ▣ Transportation costs raise prices
- ✿ Price convergence is evidence of integration
- ✿ Problems: inflation, exchange rates, and other factors also affect prices

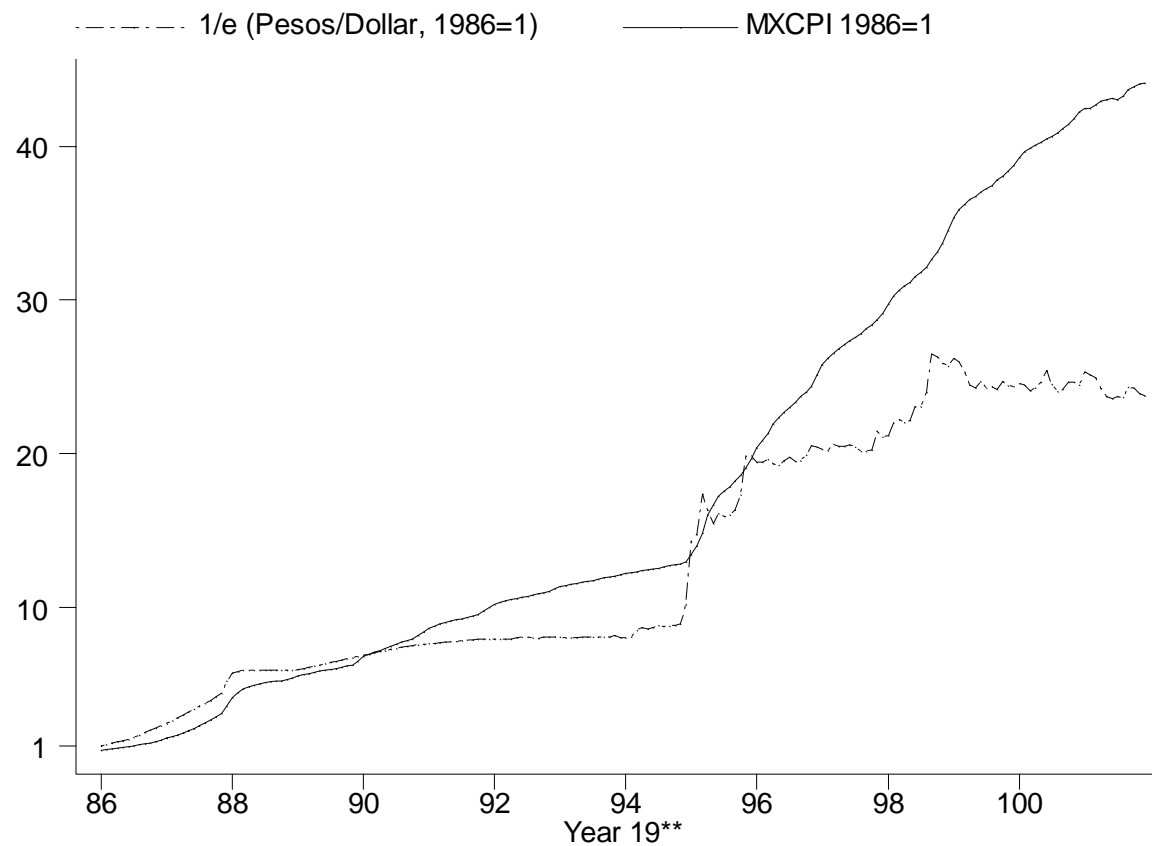


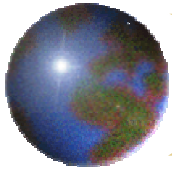
Canada's currency: relatively flexible



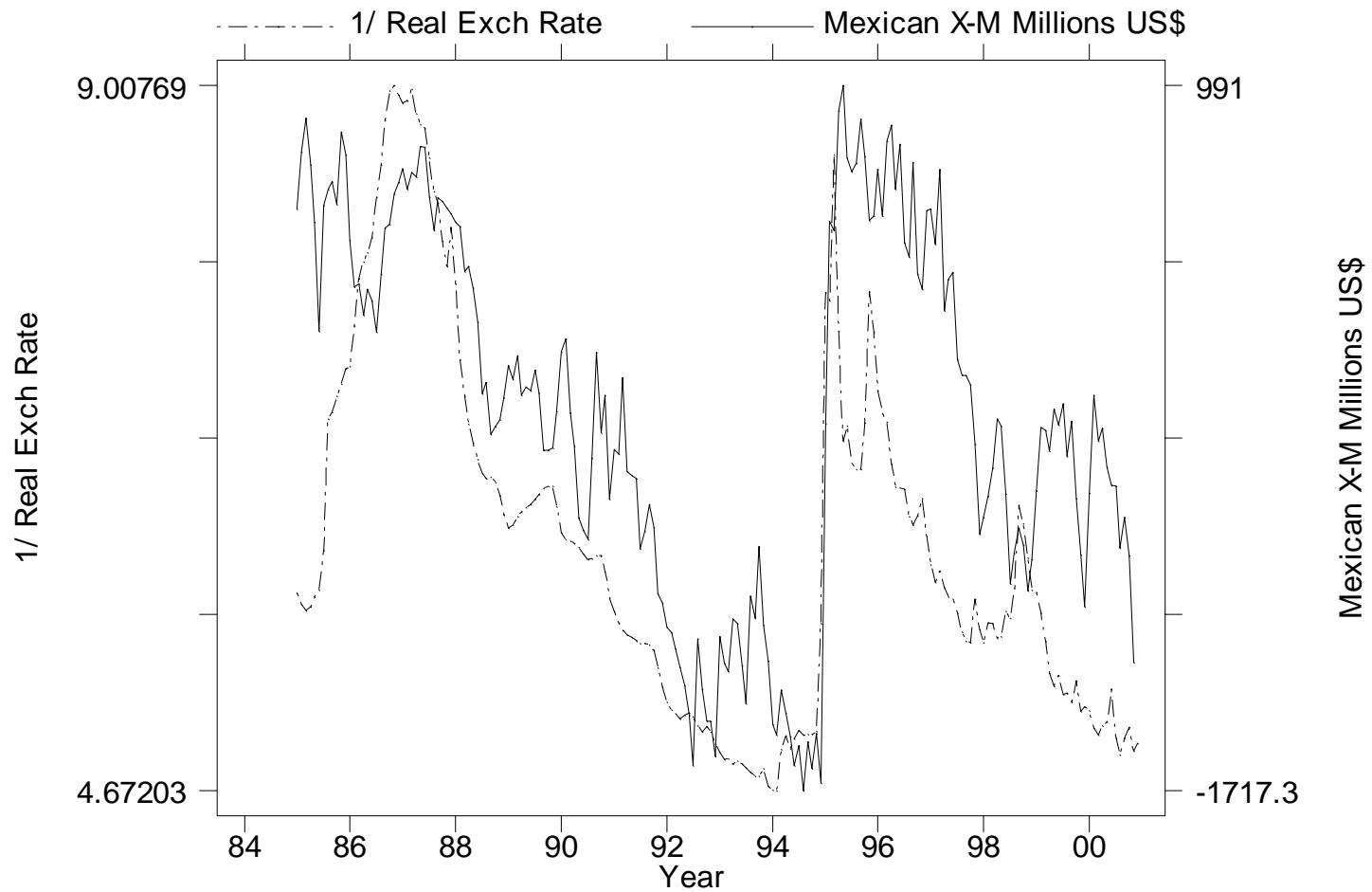


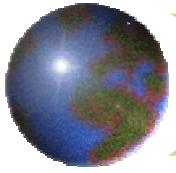
Mexico's currency: relatively inflexible





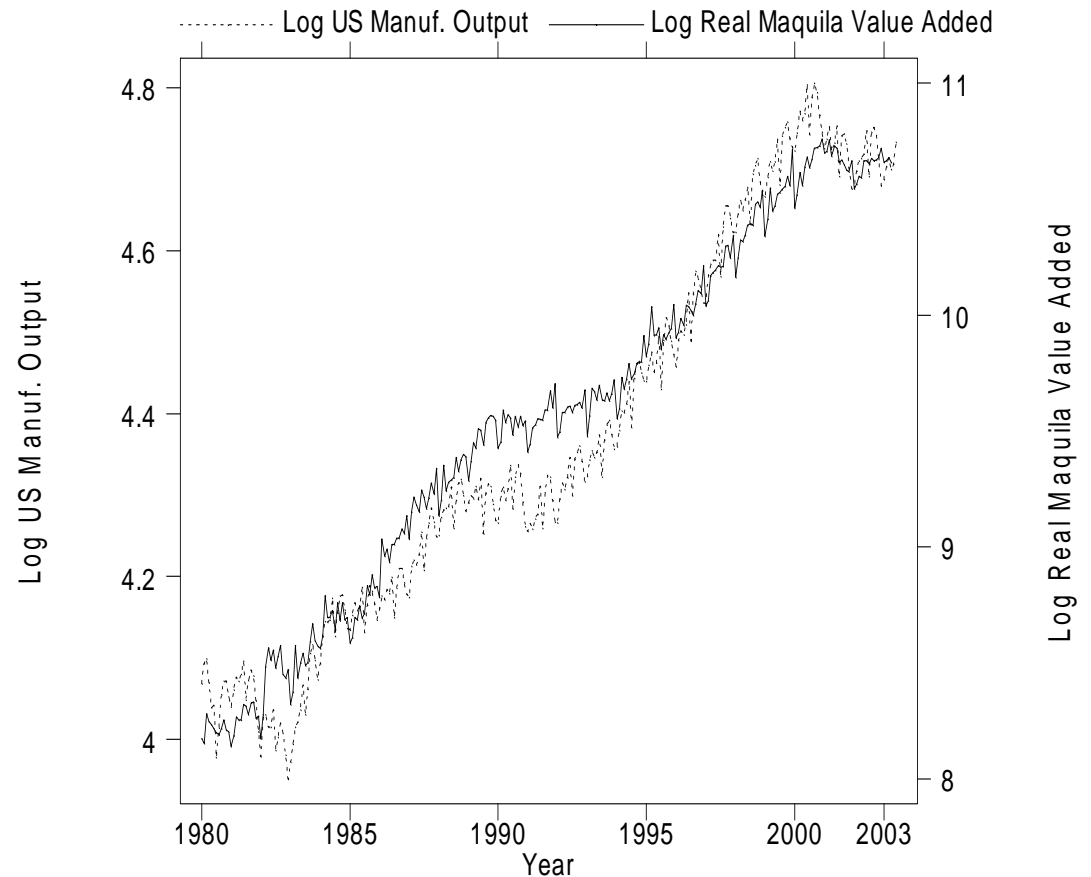
Result of inflexibility

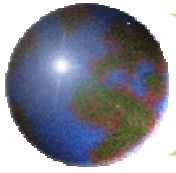




Factor Markets: Capital

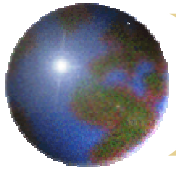
- ✚ Capital flows have increased with NAFTA
 - ▣ Rising FDI component
 - ▣ Tied closely to U.S. manufacturing





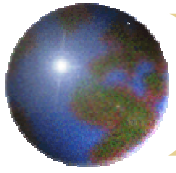
Factor Markets: Labor

- ❖ Large wage differentials persist
- ❖ North American labor markets are closely integrated
 - ❑ Wage movements in the United States affect wages in Mexico
 - ❑ Border region is more closely integrated than the Mexican interior
- ❖ Integration has not increased with NAFTA



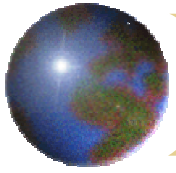
NAFTA and Factor Markets

- ❖ NAFTA changes encouraged capital flows: capital markets are more integrated.
- ❖ Unrelated to NAFTA, the United States increased border enforcement that may have neutralized NAFTA's effects on labor market integration: labor markets are not more integrated.

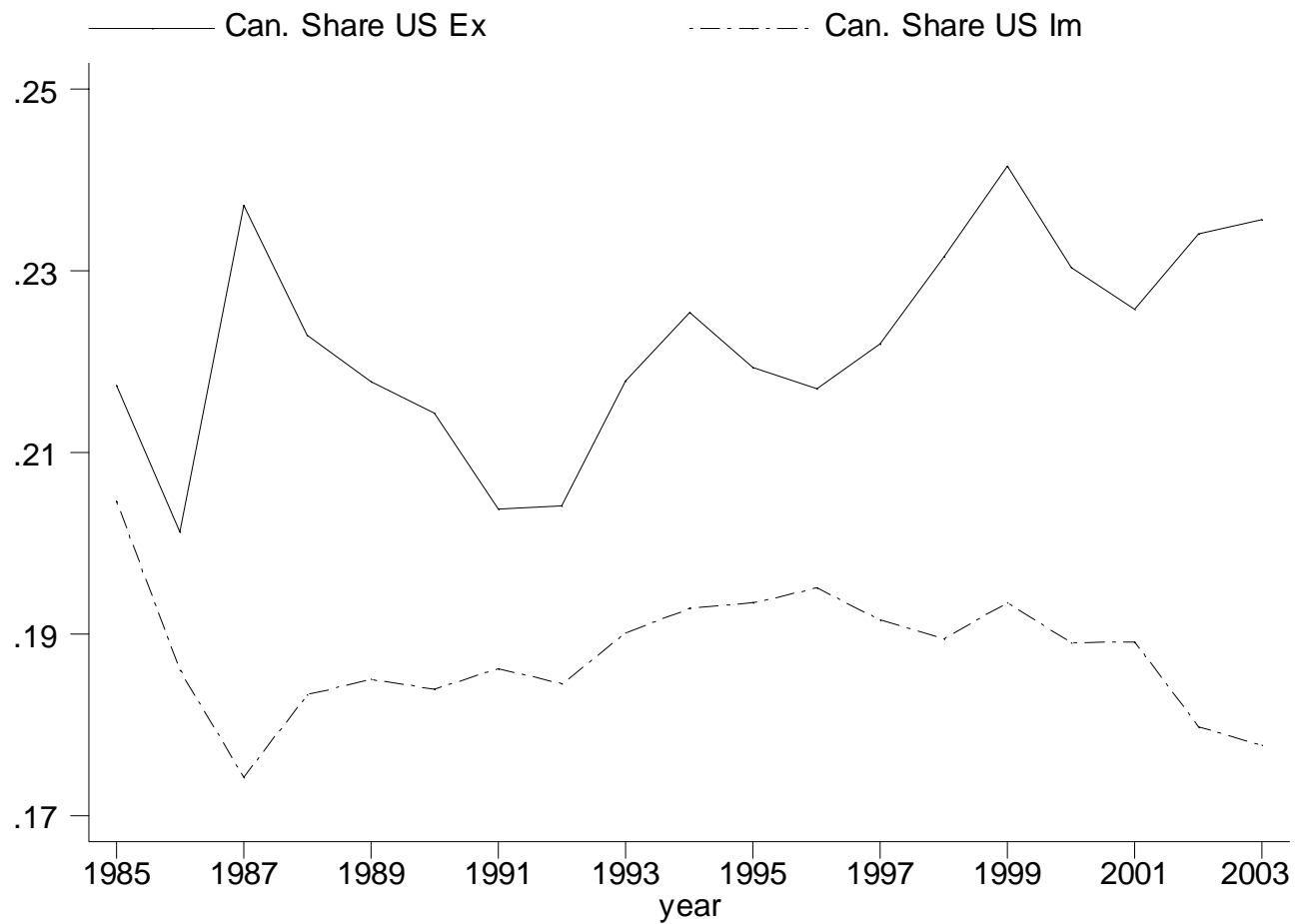


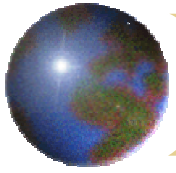
Trade Volumes

- ✦ If barriers restrict trade, trade should rise as barriers fall
- ✦ Trade data are easy to find and analyze
- ✦ Trade as a share of GDP illustrates the relative effects of trade liberalization

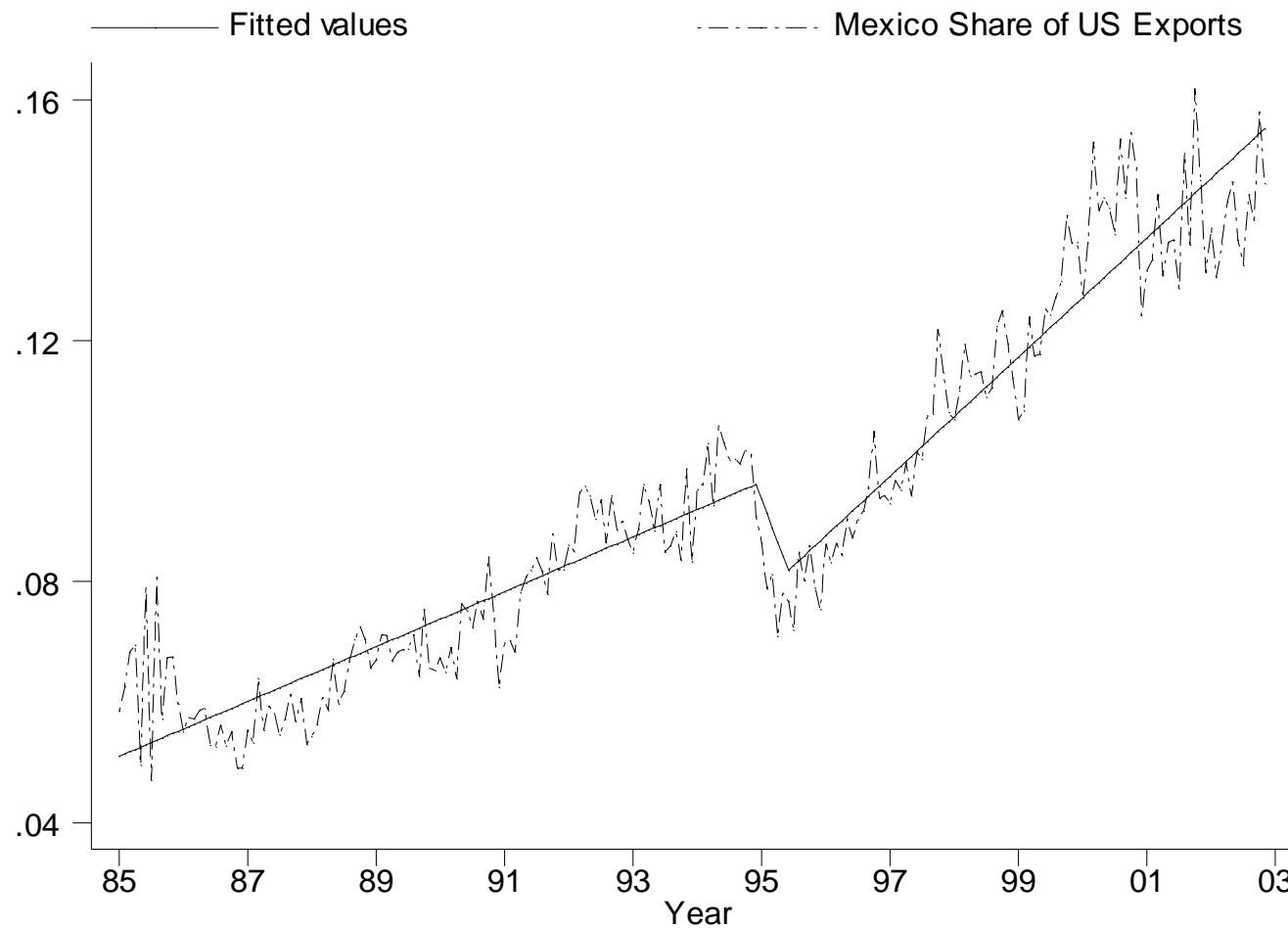


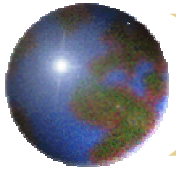
Canada's Share of U.S. Trade



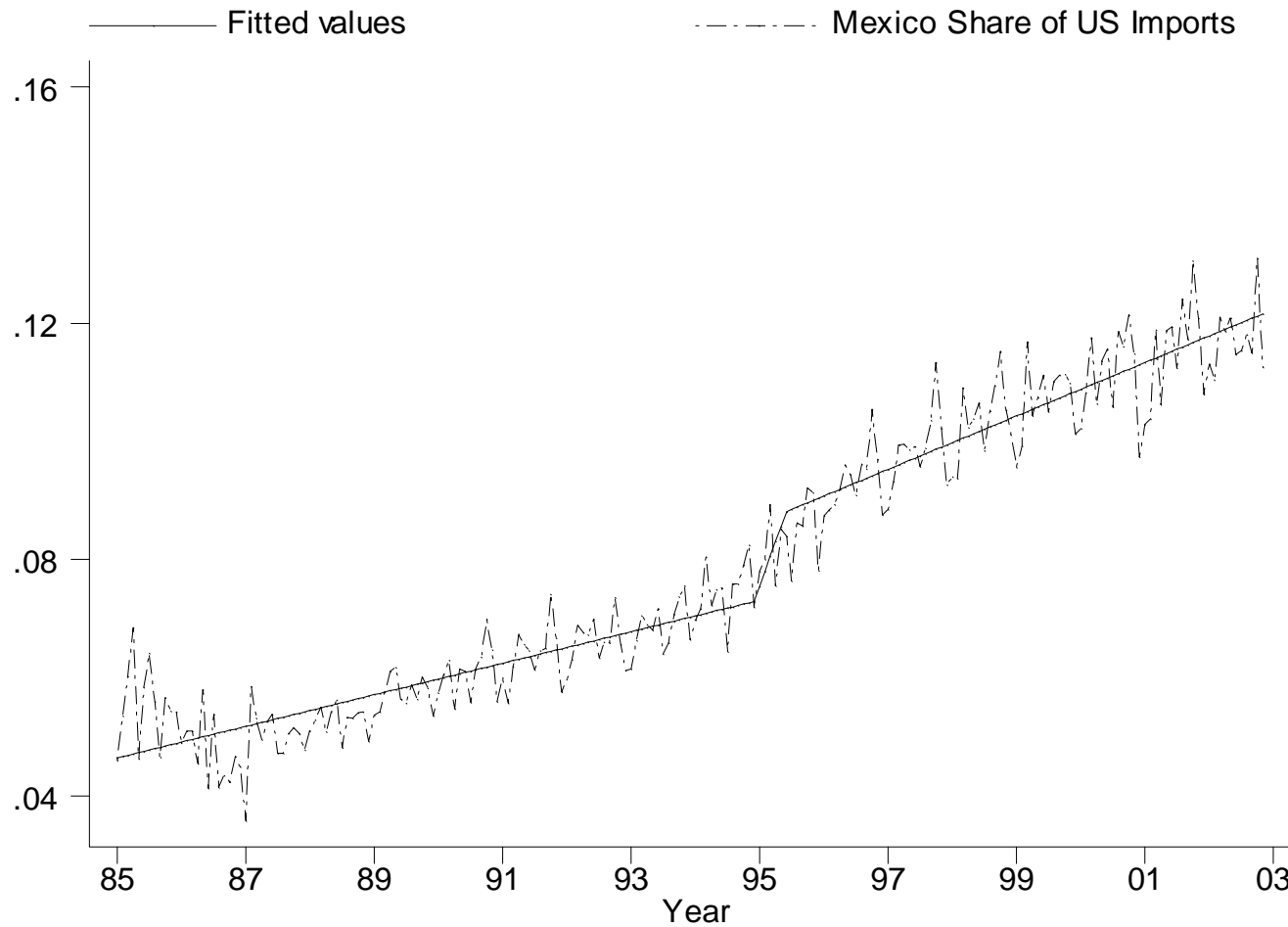


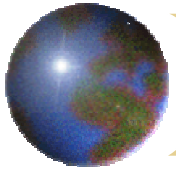
Mexico's Share of U.S. Exports





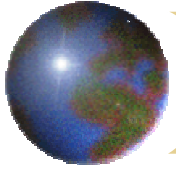
Mexico's Share of U.S. Imports





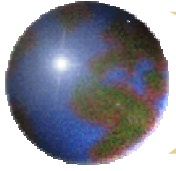
Share of U.S. Trade

- ❖ Canadian and Mexican shares of U.S. exports have been rising
- ❖ Canadian share of U.S. imports has been falling recently
- ❖ Mexican share of U.S. imports has been rising
- ❖ Overall, these suggest increasing integration (possible trade diversion)



Product Availability

- ✦ Can you get what you want?
- ✦ Expanding the *range* of traded products
- ✦ Gains from increasing the range can be large (3% increase in estimated United States welfare)
- ✦ Fertile topic for future research



Conclusions

- ⊕ We integrate markets by lowering barriers to commercial exchange
- ⊕ Economic integration raises welfare on average (in the long run)
- ⊕ There are several ways to measure economic integration
- ⊕ Rising trade volumes, capital flows, and product variety suggest NAFTA is contributing to economic integration
- ⊕ Integration is still incomplete in some markets