

Mexican Competition and Trade Policy

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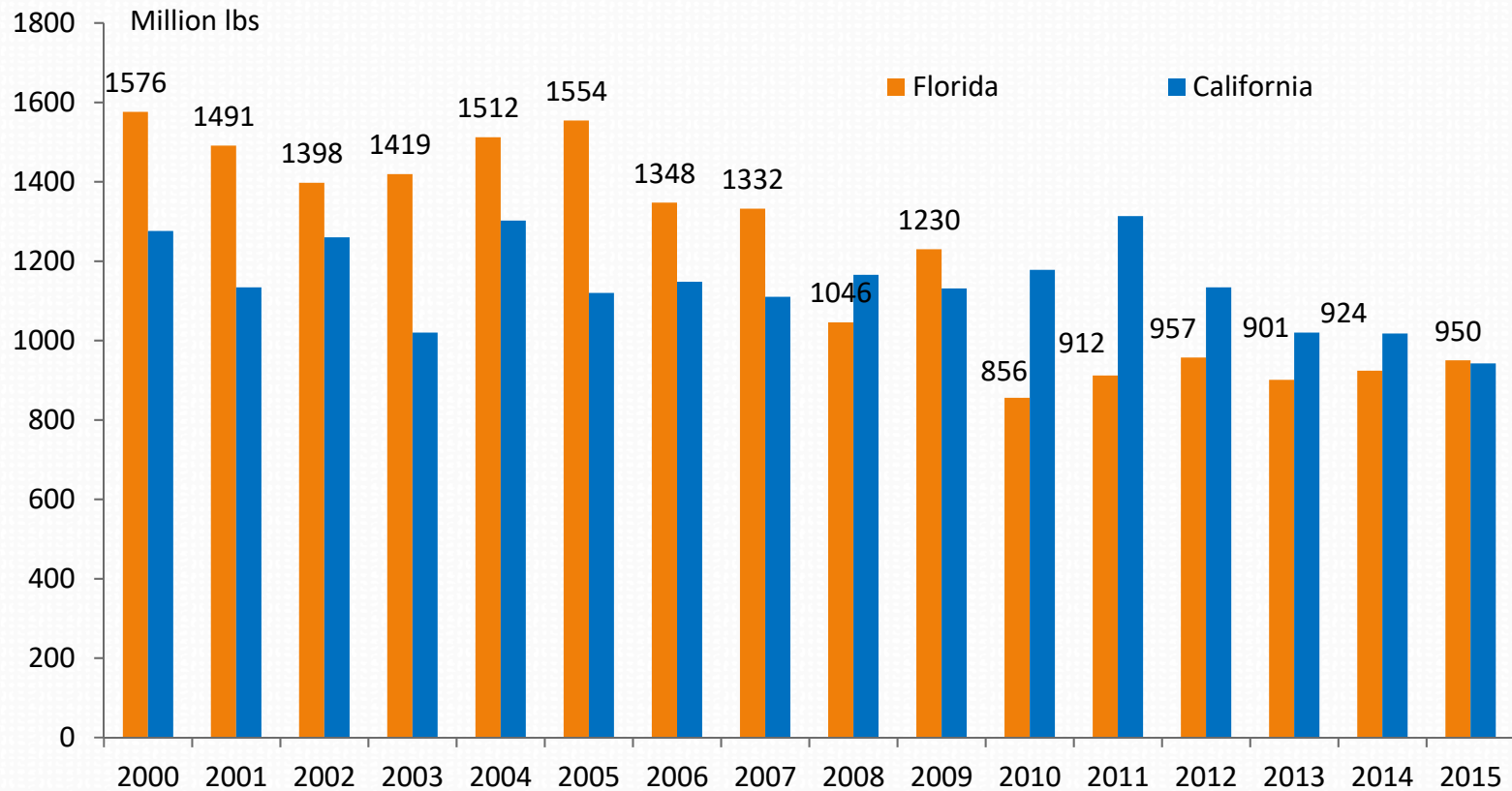
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Outline

- Industry Overview
- Mexican Competition
- Why are they growing so fast?
- Thoughts on Trade
- Conclusions



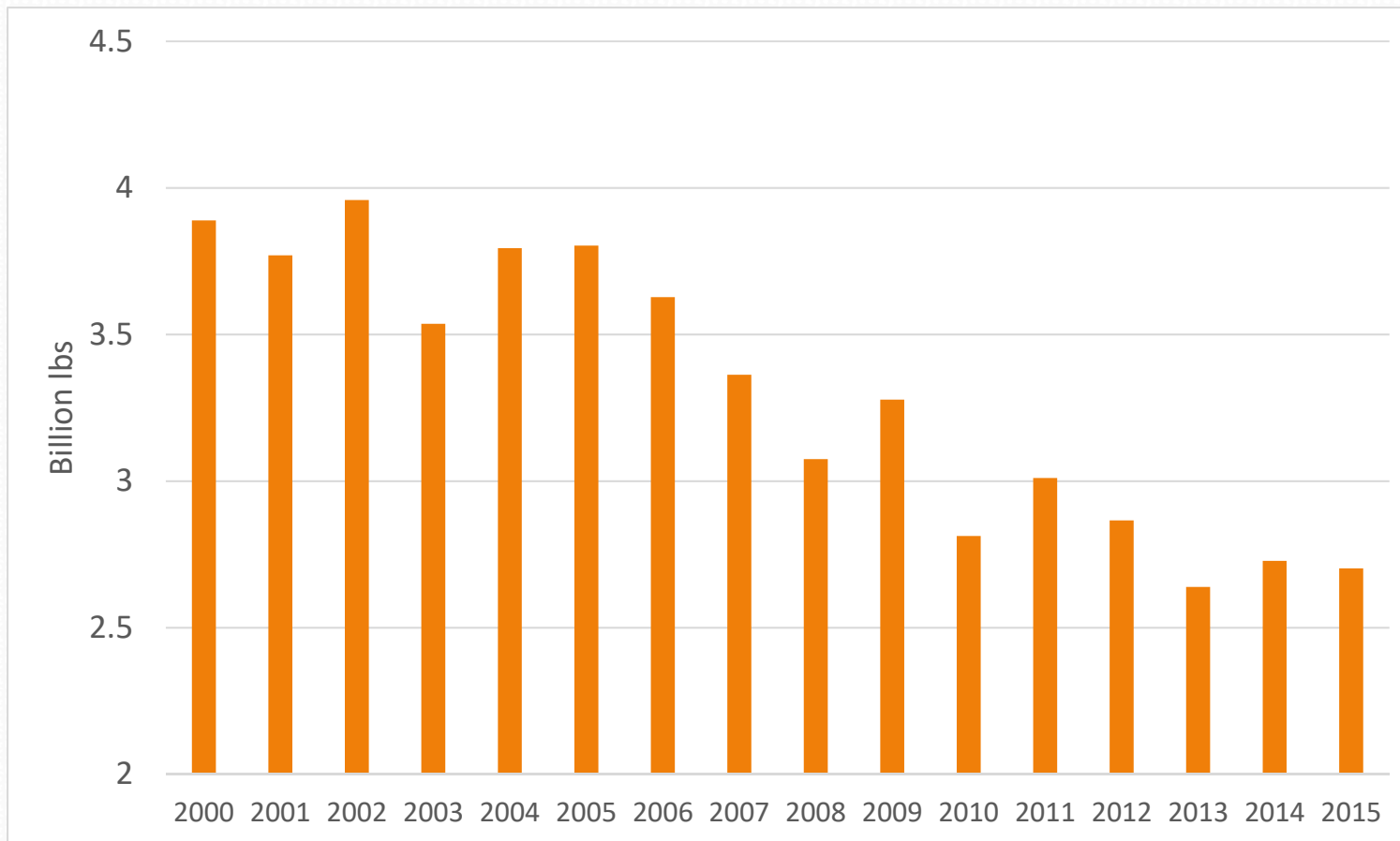
U.S. Fresh Tomato Production



Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service



U.S. Fresh Tomato Production

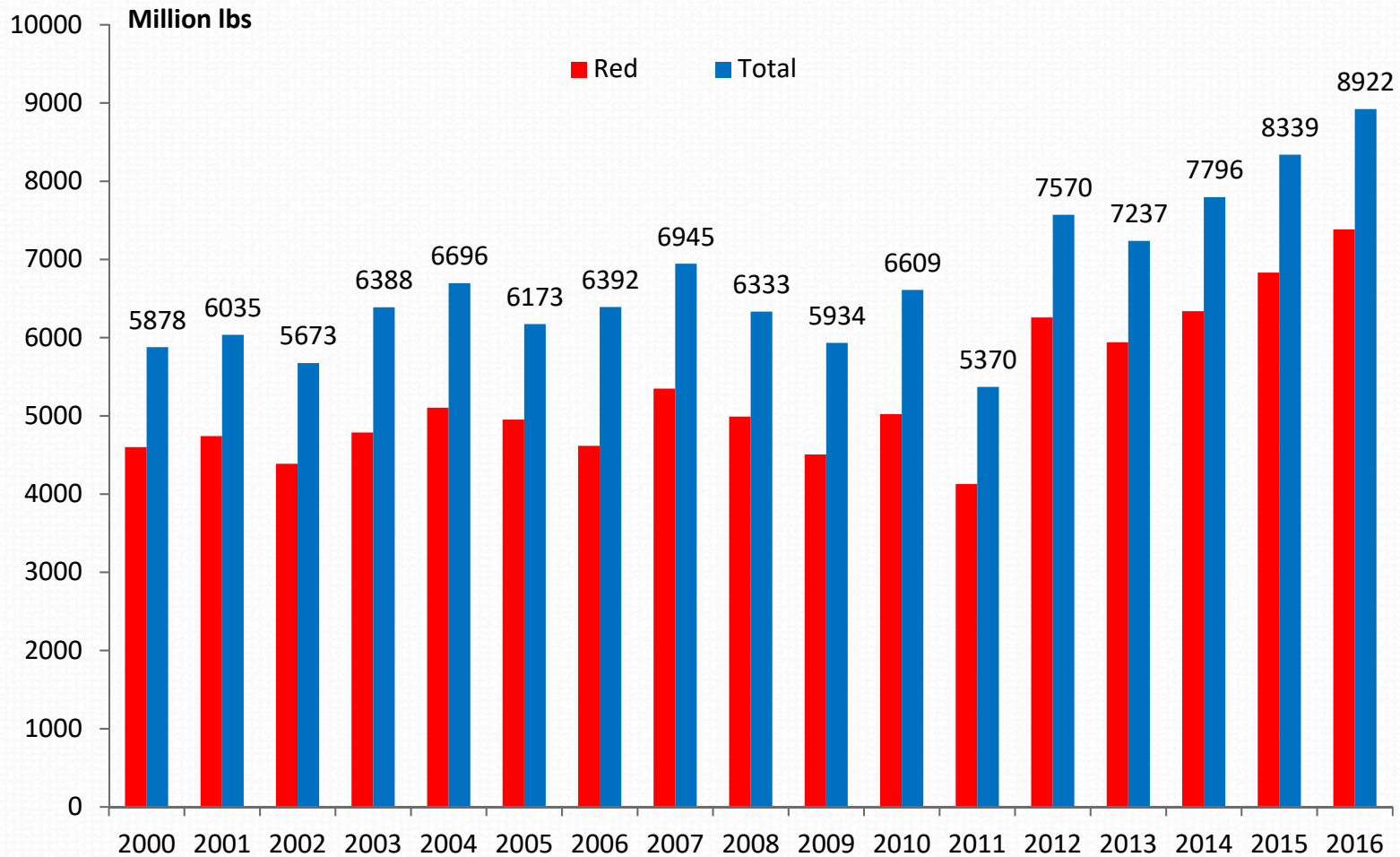


Mexican Competition

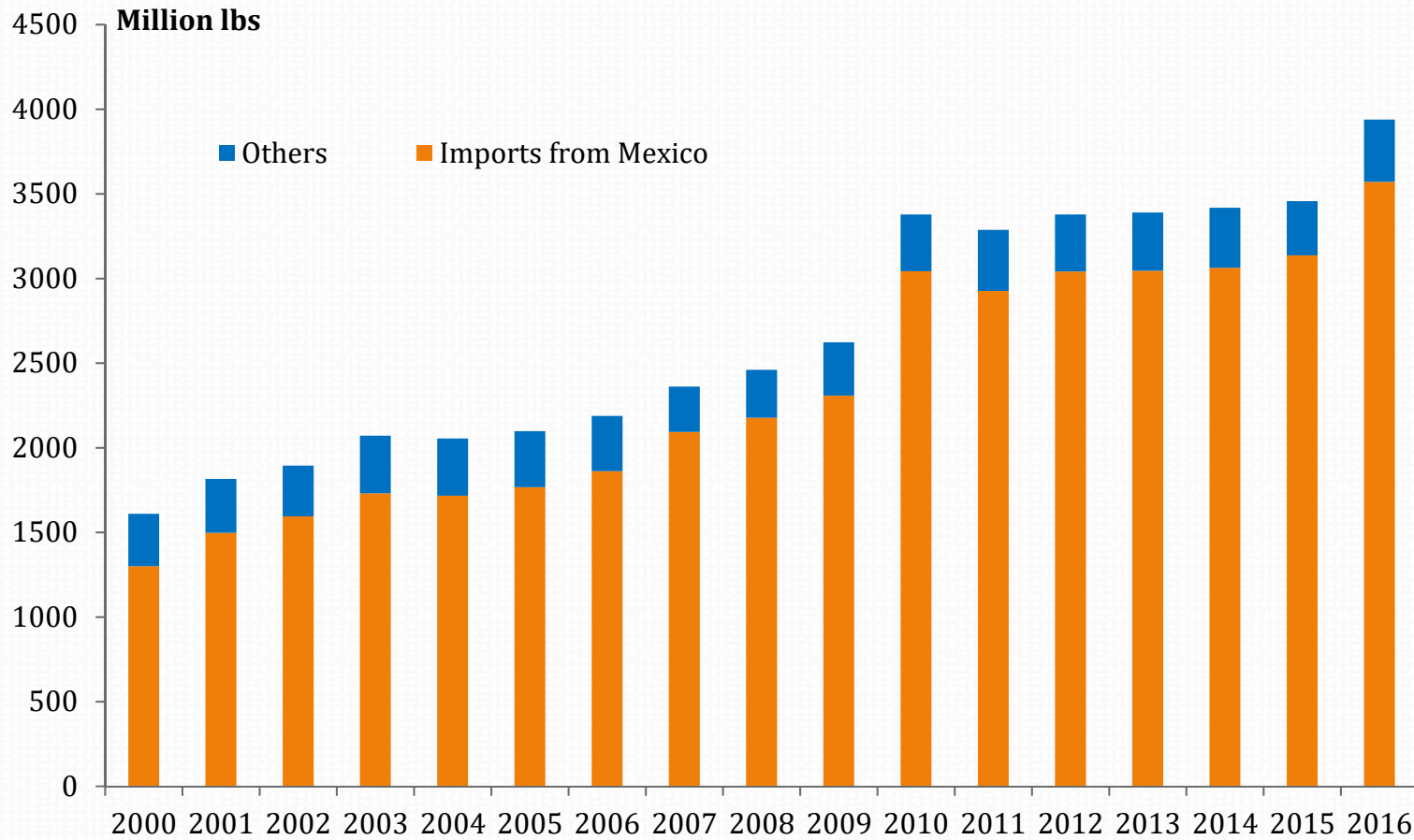
- Mexican Tomato Production
- Tomato Trade with Mexico



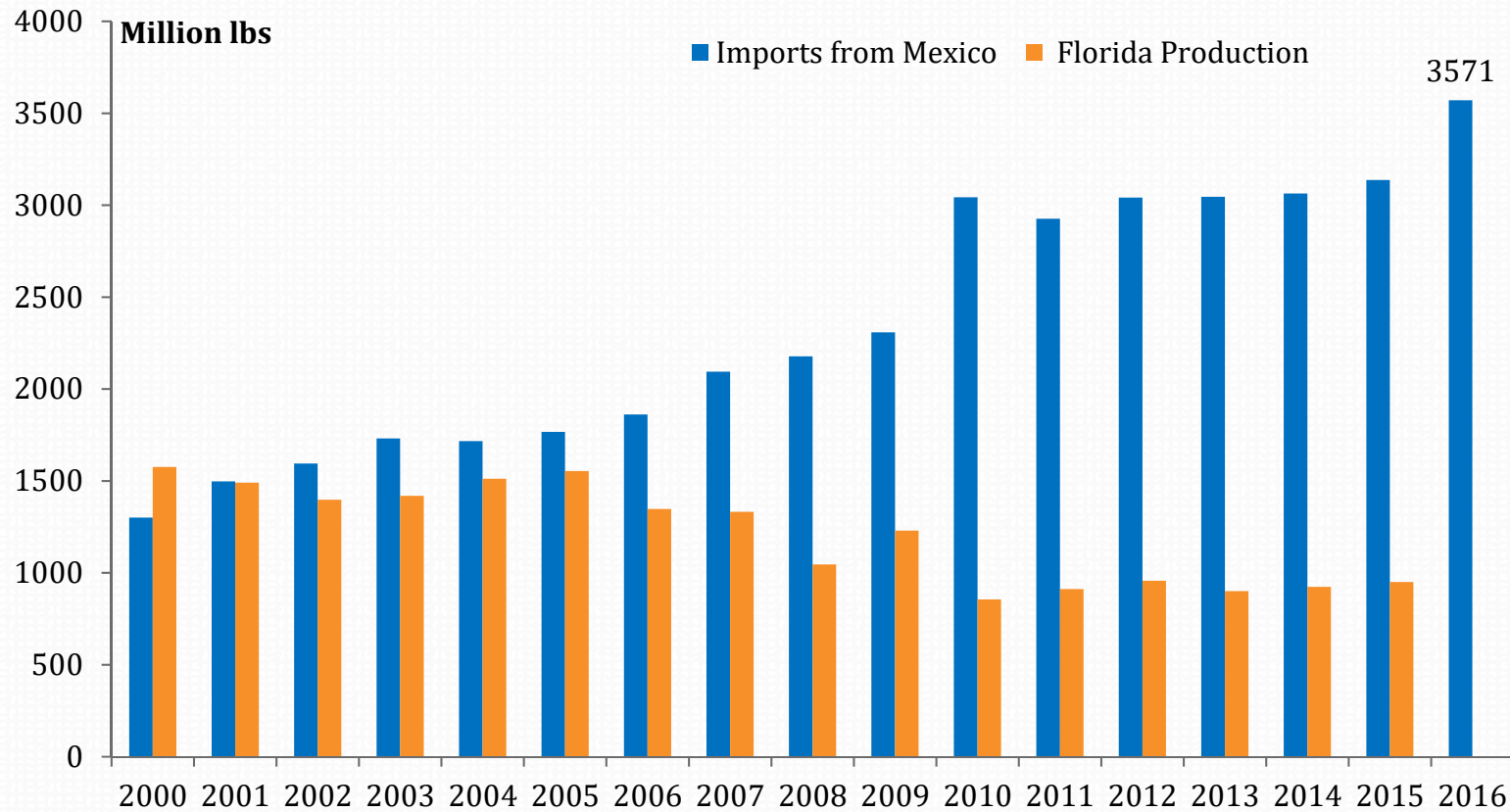
Mexican Tomato Production



Mexican imports account for 90% of total imports



FL Production & Imports from Mexico



Source: U.S. Department of Commerce



Why are they growing so fast?

- NAFTA
- Exchange Rate
- Labor Costs
- Government Support
- Regulation



NAFTA

The U.S. Tariff on Fresh Tomatoes and Phase-out Schedule under NAFTA

Season	Base Tariff	Phase-out Years
Mar 1-Jul 14	2.09 cents/pound	9
Jul 15-Aug 31	1.5 cents/pound	4
Sep 1-Nov 14	2.09 cents/pound	4
Nov 15- Feb 28/29	1.5 cents/pound	9

NAFTA

- Quota Limit for Imports of Fresh Tomatoes from Mexico during the NAFTA Phase-out period

Year	Quota Limit (in Million lbs)	
	Mar 1 to Jul 14	Nov 15 to Feb 28/29
1994	364.86	No limit
1995	375.81	379.86
1996	387.08	391.25
1997	398.70	402.99
1998	410.66	415.08
1999	422.98	427.53
2000	435.67	440.36
2001	448.74	453.57
2002	462.20	467.17
2003		481.19

Tomato Suspension Agreements

Setting the reference/floor prices for Mexican tomatoes

NAFTA took effect: Jan 1994

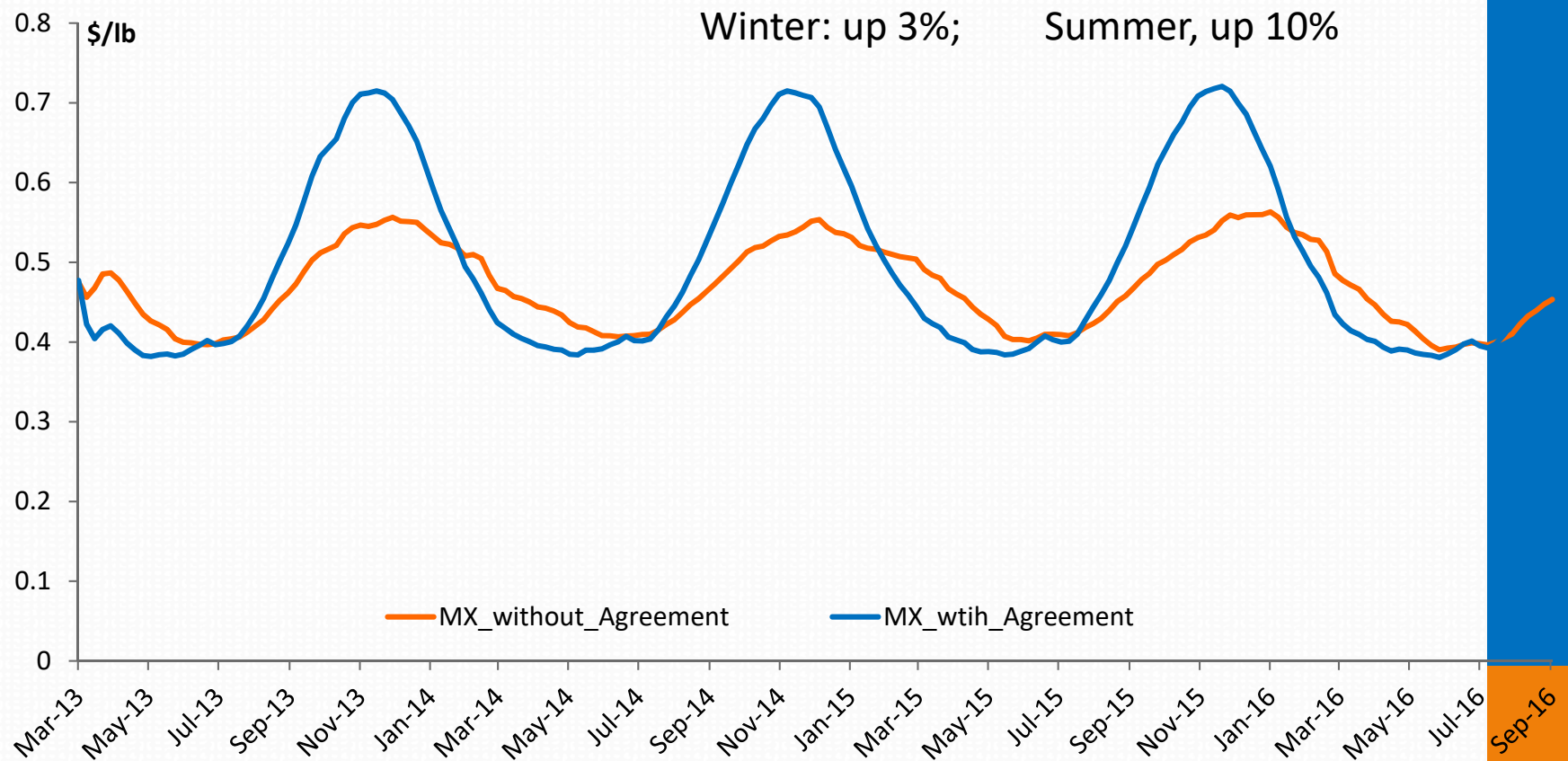
1st Suspension Agreement 1996

- Reference Prices – Open field (\$/lb)

Agree. Dates	Winter (Oct 23-Jun 30)	Summer (Jul 1-Oct 22)
1996	0.2068	
1998 amend.	0.2108	0.1720
2003	0.2169	0.1720
2013	0.3100	0.2458

Effect of 2013 Suspension Agreement

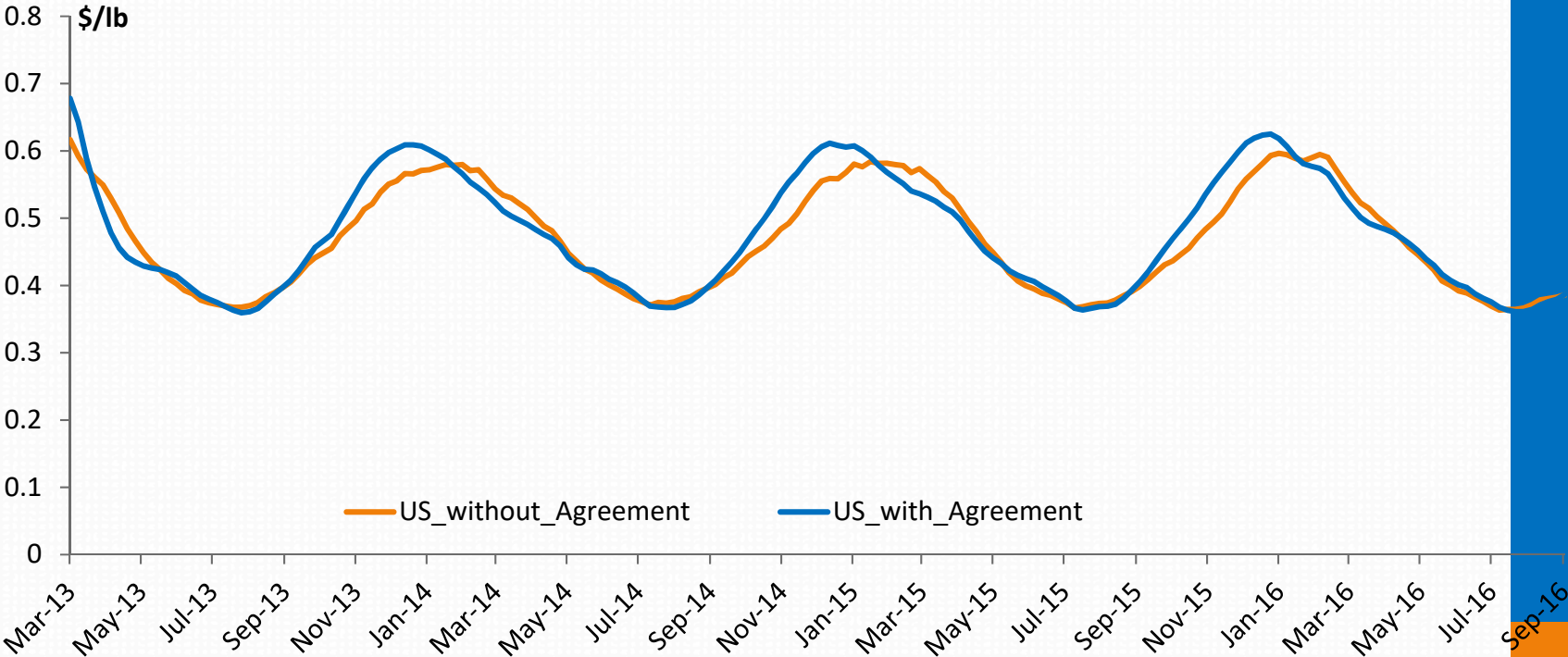
Effect on Mexican Tomato Price Overall average increased from \$0.47/lb to \$0.50/lb, up 6%



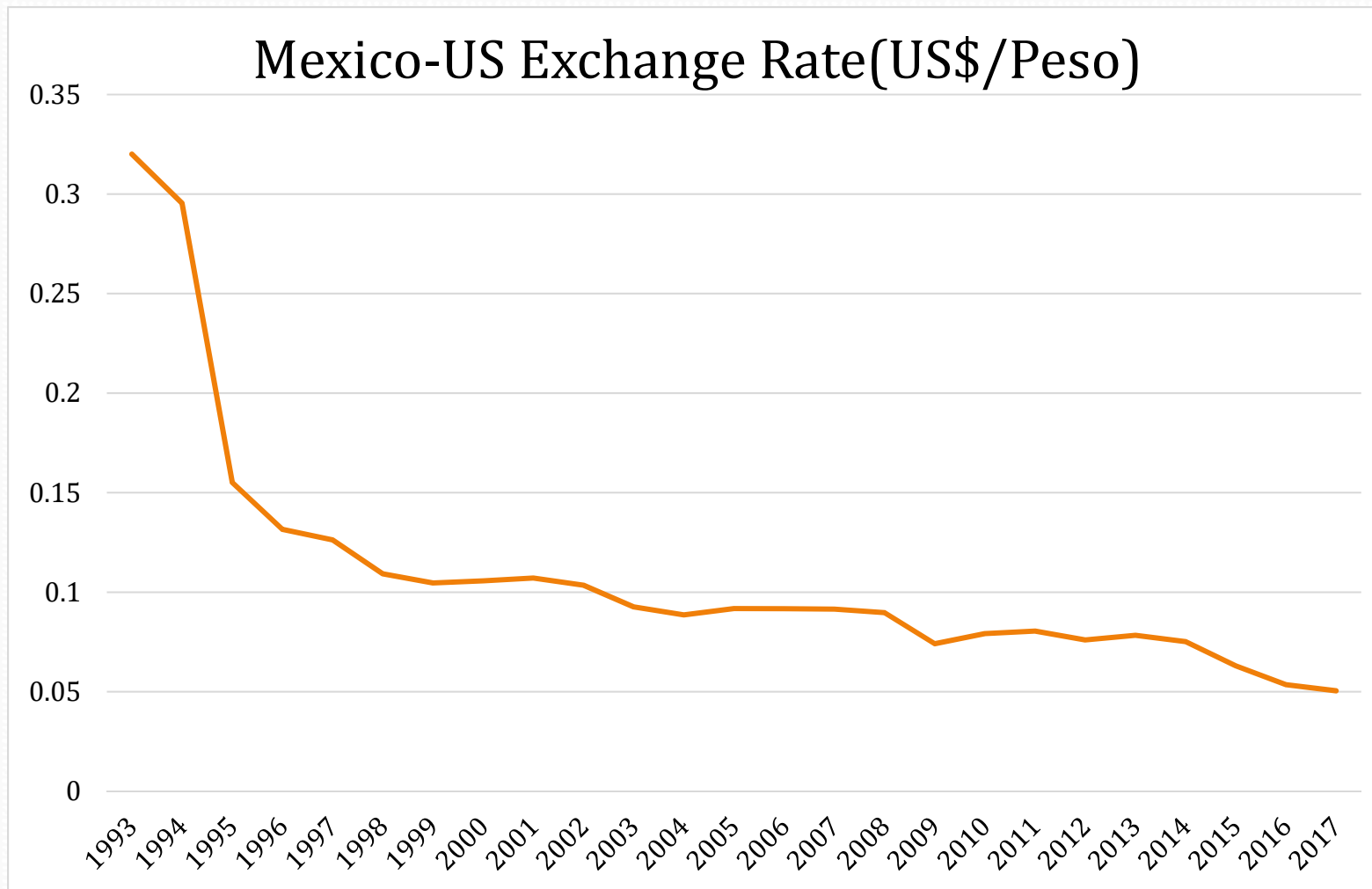
Effect of 2013 Suspension Agreement

Effects on US Tomato Price

Overall average increased from \$0.47/lb to \$0.475/lb, up 1.3%

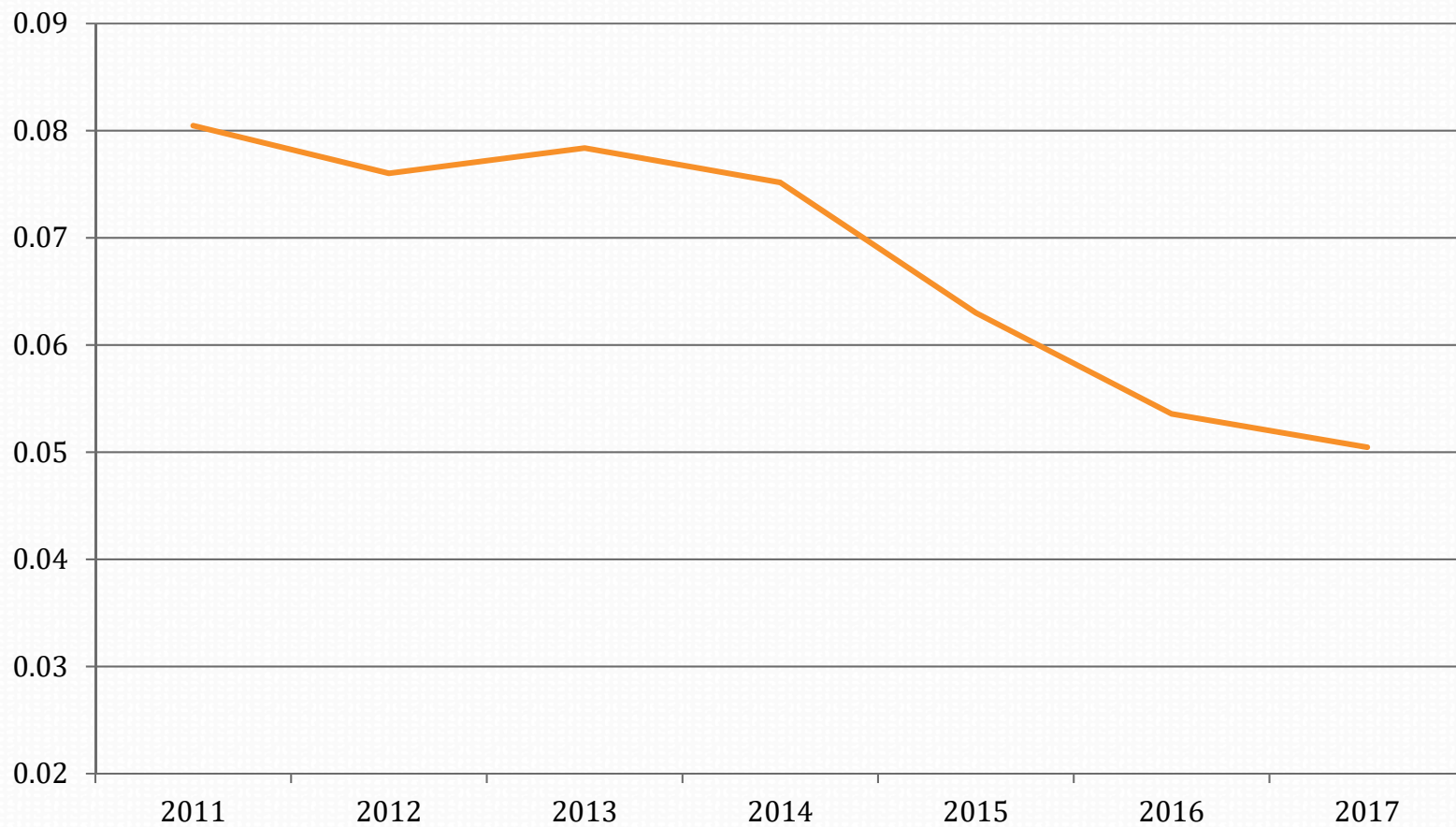


Exchange Rate



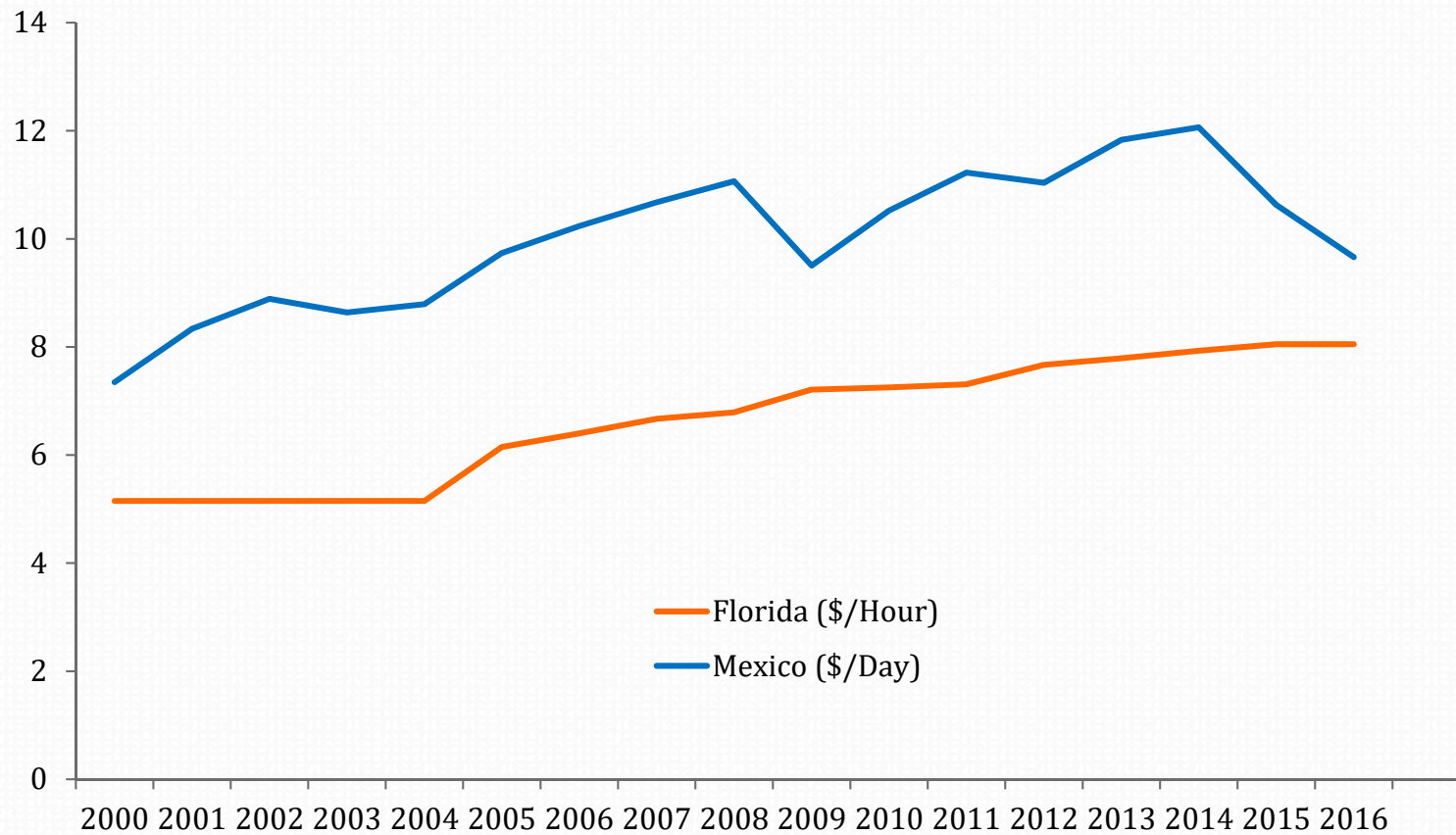
Exchange Rate

Mexico-US Exchange Rate (US\$/Peso)



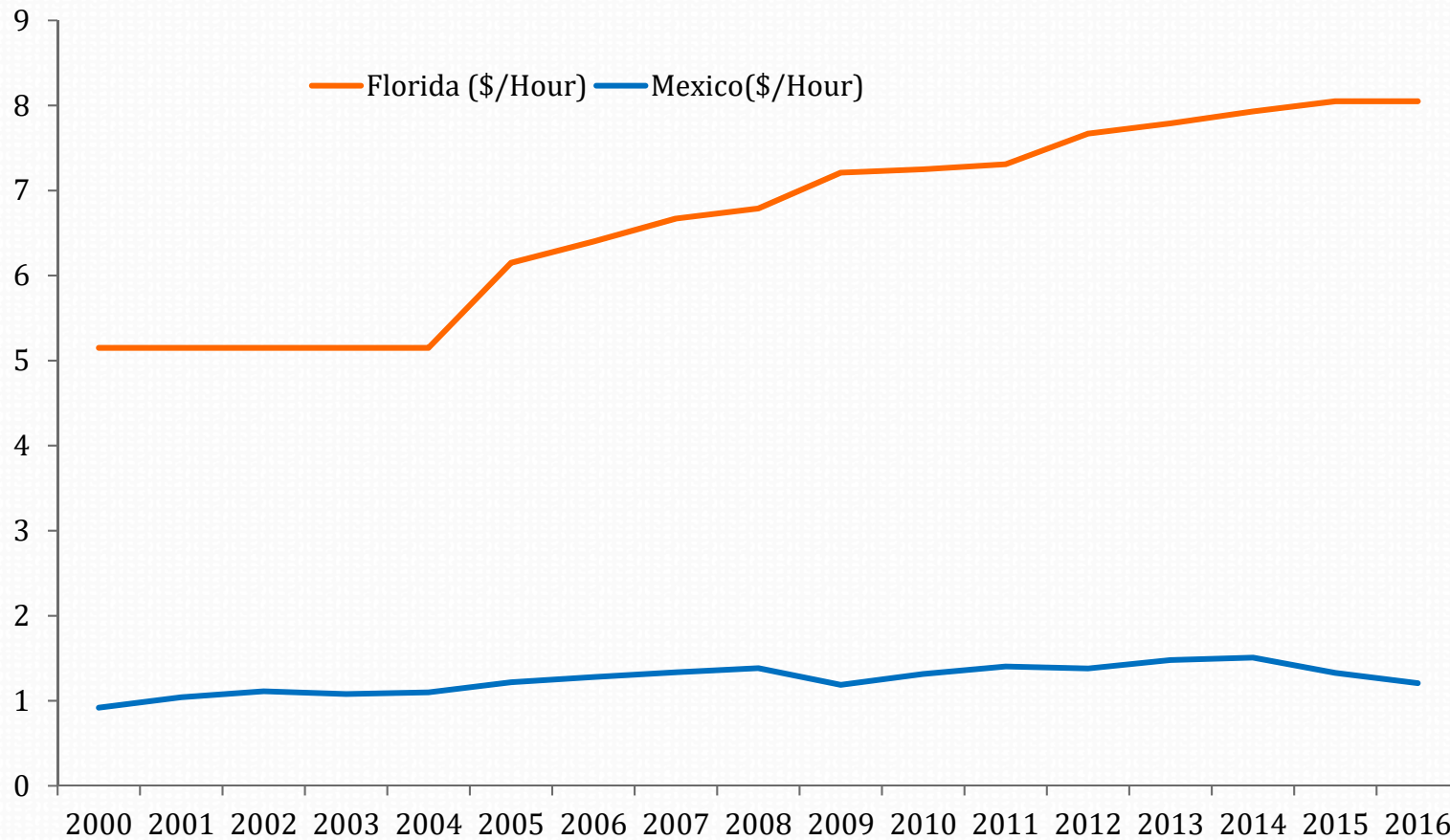
Labor Cost Gap

- Mexican Agricultural Wage(\$/day) vs Florida Minimum Wage (\$/hour)



Labor Cost Gaps

- Mexican Agricultural Wage(\$/Hour) vs Florida Minimum Wage (\$/Hour)



Labor Cost Gaps

- Southwest Florida Tomatoes 2014/15 (Van Sickle, 2016):
for **Mature Green Tomatoes**

Categories	Costs
General Farm Labor	\$800/acre
Tractor Driver Labor Expense	\$466.8/acre
Pick, Pack and Haul	\$2.05/box
Total (1700 boxes)	4751.8/acre
Unit Labor Cost(\$/box)	\$2.80/box

Labor Cost Gaps

- Labor Costs of Greenhouse Tomatoes in 2015 at Chiaulta, Mexico(M. J. Rojas, 2016):
 - 500 m² greenhouse (0.123 acre)
 - Production: 10,700 kg (943.58 box)
 - Labor Costs: 27,180 pesos(US\$1649.77)
- **Unit labor cost:\$1.75/box → ~ 40% cheaper**
- Yield→ 7640 boxes/acre → 4.5 times higher than Florida's

Mexican Government Support

- National Development Plan
 - One objective: Increase competitiveness of Mexican ag products
 - Managed by SAGARPA
 - 2013-2016: total **budget** 264 billion pesos (US\$15 billion)
 - 2015: **actual** support 70B pesos = US\$ 4.2 billion
-
- Programs
 - 1) **Support Program for Investments in Equipment and Infrastructure**
 - 2) Agricultural Income Enhancement for Better Living (PROCAMPO)
 - 3) Prevention and Risk Management
 - 4) Capacity Development, Technological Innovation, and Rural Extension
 - 5) Sustainability of Natural Resources

Mexican Government Support

- **Support Program for Investments in Equipment and Infrastructure**

- 1) agriculture, livestock, and fisheries

- 2) **protected agriculture**

- 3) provision of electricity to aquacultural farms

- 4) fisheries and aquacultural infrastructure

- 5) **postharvest management**

- 6) modernization of fishing boats and improvement of fishing operations

- 7) genetic resources (for agriculture, livestock, and aquaculture)

- 8) **irrigation technology**

Protected Agriculture

- Support Rules for Protection Structures across Years

Structure	Amount per ha *			Maximum amount		
	(1000 pesos/ha)			(1,000 pesos/per project)		
	2013	2014	2015	2013	2014	2015
Micro-tunnels	100	N/A	N/A	1,000	N/A	N/A
Macro-tunnels	200	90	150	1,500	2,700	2,700
Shadehouses	400	300	300	2,400	2,700	2,700
Anti-hail mesh structures	N/A	70	100	N/A	700	1,000
Greenhouses	1,200	900	900	3,000	2,700	2,700

Note: Per hectare support rules are 50% of cost per hectare or the amount listed, whichever is lower.

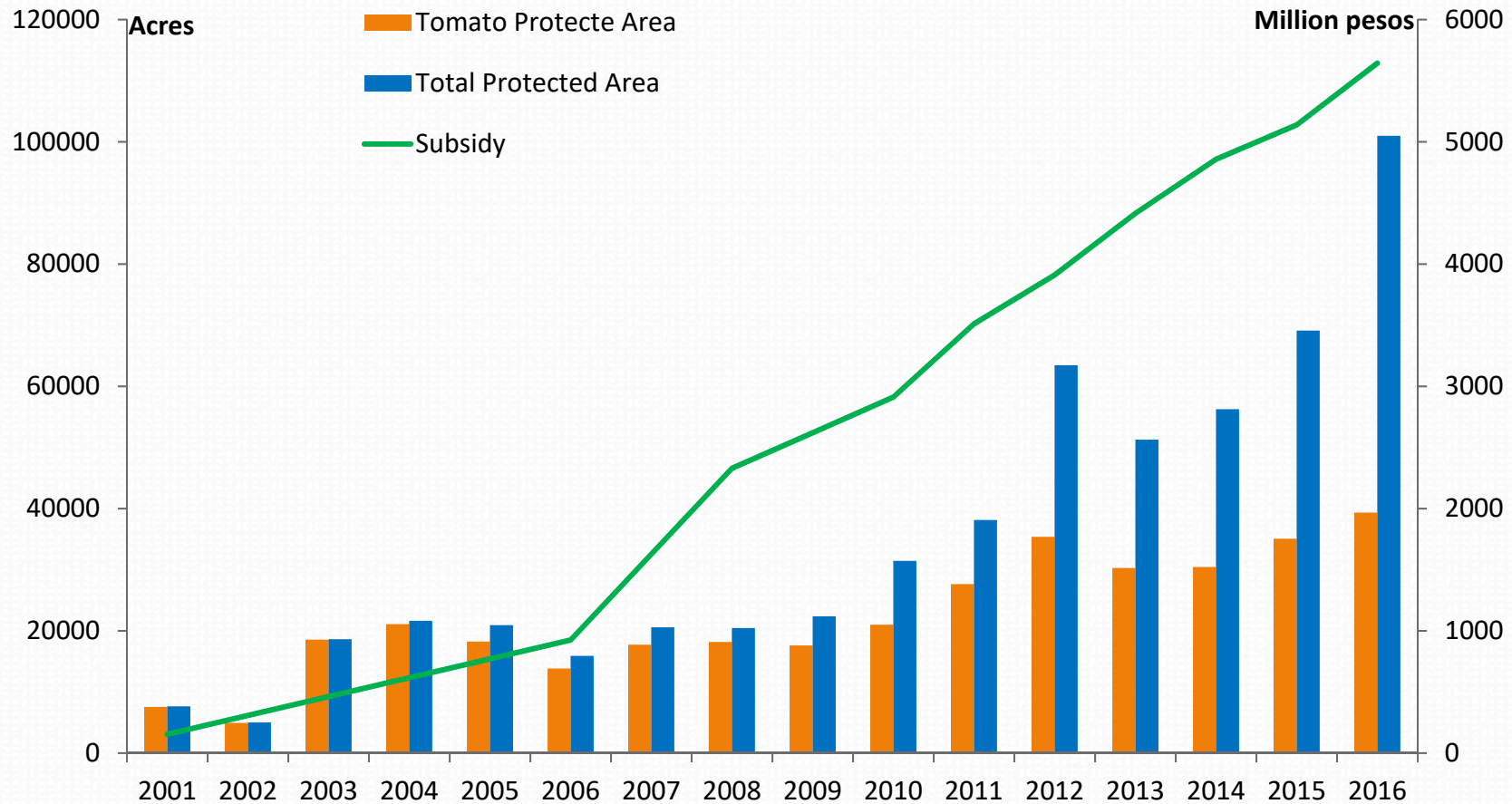
Protected Agriculture

- Mexican Support for Protected Agriculture, 2001–2016

Year	Support Amount (in 1,000 pesos)	Support Amount (in 1,000 USD)
2001–2006	925,700*	90,032
2007–2008	1,401,100*	126,745
2009	N/A	N/A
2010	N/A	N/A
2011	598,895	46,272
2012	400,179	29,221
2013	504,593	38,011
2014	441,470	31,898
2015	281,482	17,054
2016	504,551	25,961

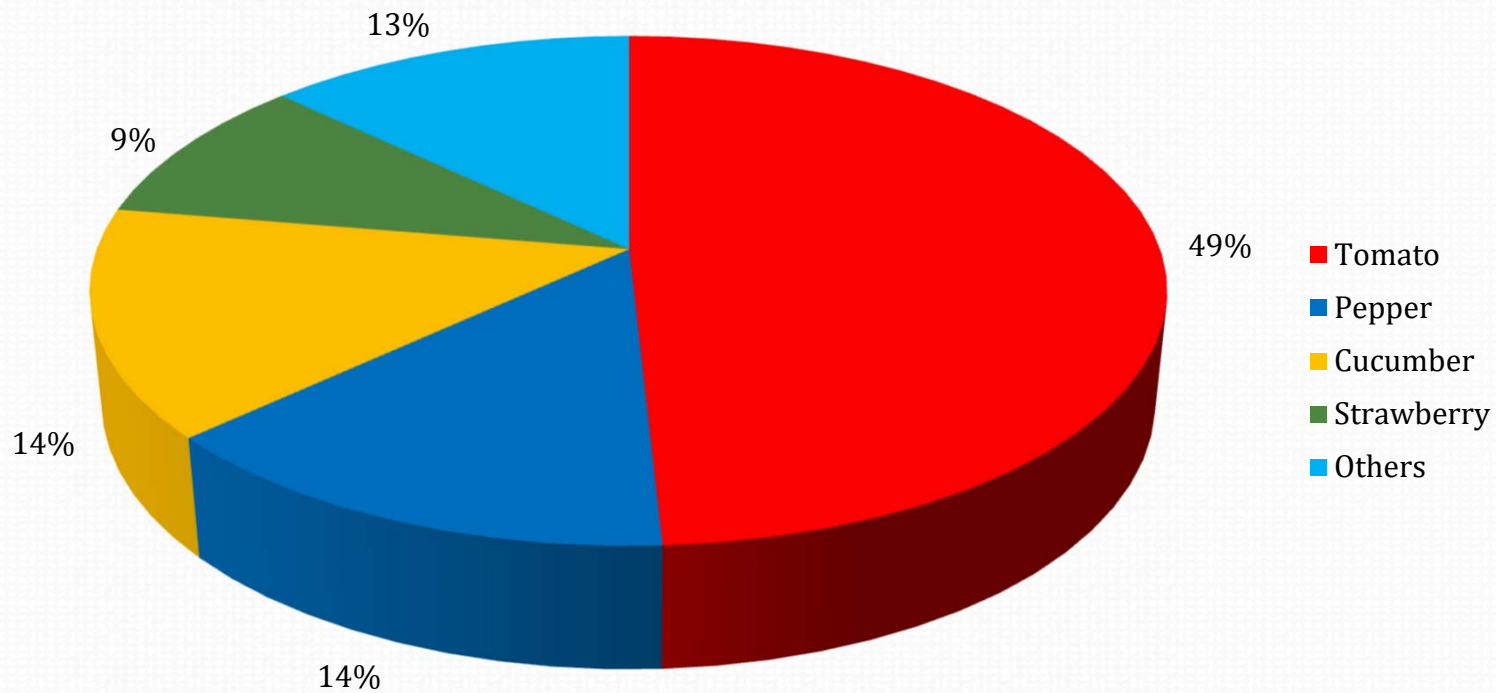
Note: * denotes total amount over the period. Average exchange rates were used.

Mexican Protected Production Area



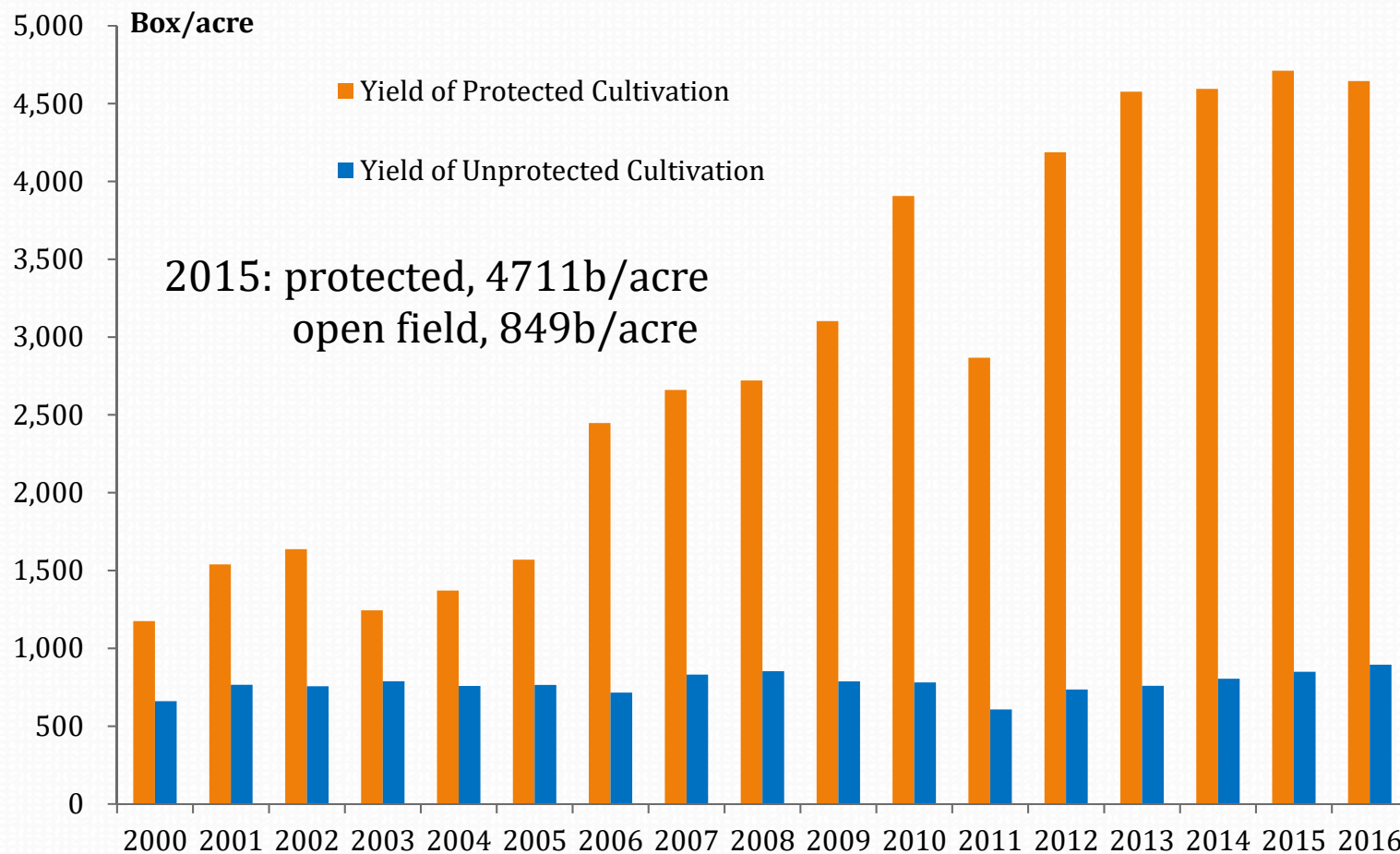
Mexican Protected Production Area

- % of Crops under Protected Production Area in 2015



Higher Yield

- Yield Comparison between Protected vs Unprotected Cultivations



Irrigation Technology

- Support Rules of Irrigation Technology

Categories	Maximum Amounts (pesos)
Purchase and installation of irrigation systems	\$750,000/individual; \$1,000,000/company
a) multi-floodgate irrigation systems	\$10,000/ha
a) sprinkler systems	\$15,000/ha
a) microsprinkler and drip irrigation systems	\$20,000/ha
a) irrigation systems for greenhouses already in operation	\$30,000 for 2500 m ² of greenhouse or in proportion

Source: SAGARPA, Diario Oficial (2010).

Irrigation Technology

- Mexican Support for Irrigation Technology, 2013–2016

Year	Support Amount (in 1,000 pesos)	Amount (in 1,000US\$)	Covered Acreage (Acre)
2013	1,305,496	98,342	223,783
2014	1,598,000	115,462	288,142
2015	1,605,272	97,260	289,382
2016	1,741,360	89,599	278,408

Post-Harvest Management

- Support Rules of Post-Harvest Management

Categories	Support Amount (pesos)
Infrastructure and equipment	49% of the costs, up to \$5,000,000
Pre-operation expenses	49% of the expenses, up to \$200,000
Complementary services	49% of the costs, up to \$1,000,000
Support for the establishment of private investment funds that serve postharvest projects	35% of all contributions to the fund, up to \$5,000,000

Sources: SAGARPA, Diario Oficial (2010).

Post-Harvest Management

- Mexican Support for post-harvest management

Year	Support Amount (in 1,000 pesos)	Amount (in 1,000US\$)
2013	1,695,273	122,491
2014	N/A	N/A
2015	1,369,000	82,970
2016	N/A	N/A

Thoughts on Trade

- Free Trade in Agriculture?
- Distribution of benefits
 - across regions/industries
 - among players
 - “sacrificial lamb”
- Food Security
- Smallholders got bankrupt and lost their jobs/businesses
- Ecosystem service of Ag: open space, wildlife habitat...
 - Not traded on the market but has a value
- Other factors...



Thoughts on Trade

- Ag is a **SPECIAL** industry
- There are certain **BOTTOM LINES**
- Needs to be **FAIR**:
 - No Subsidy
 - Labor standard, human/worker rights
 - Environmental standard
 - Benefit distribution between countries,
within countries across regions/industries
- → Role of Government



WHAT CAN WE DO?

- Industry: Innovate and Change, and be Competitive, but this is will be a slow process.
- Government: public investment in research and development, e.g., in

Labor-saving technology: Mechanical Harvesting

...

Conclusion

- The Florida industry has been trending down due to increased competition.
- Mexican government support and labor cost gaps caused surging Mexican export to the U.S.
- The government support reduced capital constraint and cost burden for producers and have accelerated technology adoption and growth of export
- Time to rethink ag trade: how to make it fair?

Questions?



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