

Forty Years of the BLS Export and Import Price Indexes: Trends and Competition

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40 Years of BLS Export and Import Prices



Original Picture -140 Years



40 Years of BLS Export and Import Prices



In the Beginning

- When BLS was first chartered in 1886, included was the goal “to provide the prices of imported goods in the United States and other countries”
- While that was never done, in 1889 a report was issued comparing U.S prices to those in Western Europe



The First Attempt

- In 1946, the BLS did a pilot study to provide import prices indexes
- Unfortunately, the indexes suffered from the fact that the most recent available trade weights were from 1940
- Any further attempts were terminated in 1948 due to a 50% cut in the BLS budget



Finally Off the Ground

- By 1961, the Stigler committee report acknowledged the need for both import and export price indexes
- That led a new pilot study in 1971 to measure mostly manufactured goods between 1964 and 1970
- Much more successful, that led to the first all import index in 1983 and the first all export index one year later



Reasons to Have Import and Export Price Indexes

- There were two reasons cited for creating market-based price indexes for imports and exports
 - ▶ Statistical Reason
 - ▶ Economic Reason

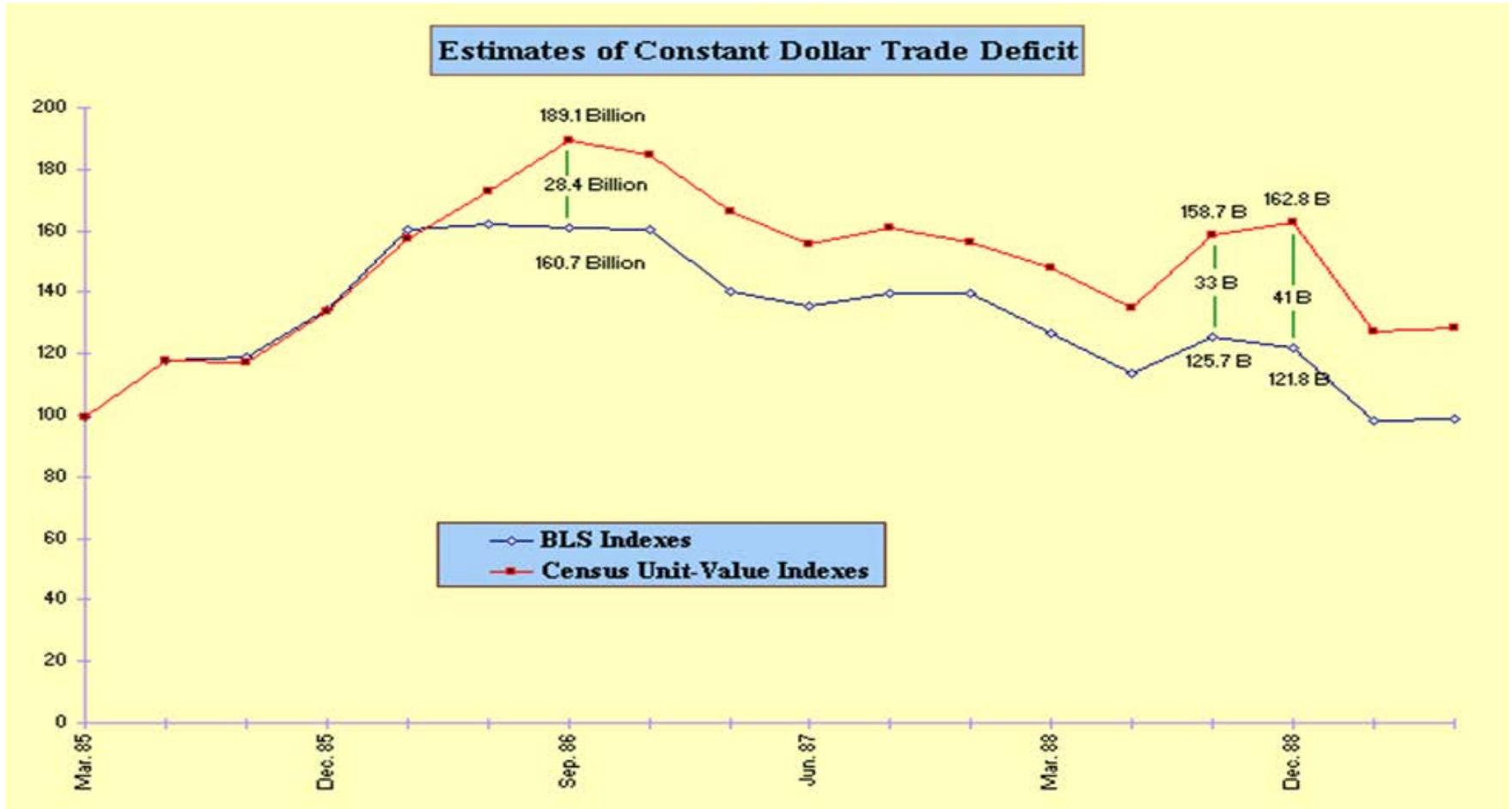


Statistical Reason

- Concerns over the Unit Value Indexes produced by the Census Bureau from 1919
- The BLS Indexes represent “true” price indexes that separate price change from changes to the item mix
- The BLS Indexes also provided greater detail
- The Unit Value Indexes were eventually discontinued in 1989



Comparison of the BLS Indexes to the Unit Value Indexes 1919-1989



Economic Reason

- The desire to measure the ability of the United States to compete in an increasingly global economy
- In 1970, trade was equivalent to 11% of Gross Domestic Product
- Today, that proportion has increased to over 30% of GDP



Economic Reason – Manufactured Industries

- In 1970, import manufactured goods were at a level of about 12% of domestic production
- Today, import manufactured goods in dollar value is roughly the same as domestic production
- In that 45 year period, employment in the manufacturing sector fell by one-third



Uses of IPP Data

- Deflate Trade Statistics
- Measure Import and Export Price Changes
- Elasticity Studies
- Measures of International Competitiveness
- Measure Economic Welfare
- Analyze Exchange Rates



Focus of Discussion

■ Import Side

- ▶ How do exchange rates impact prices
- ▶ How do import prices trend with domestic prices
- ▶ Import prices are generally considered an leading inflation indicator

■ Export Side

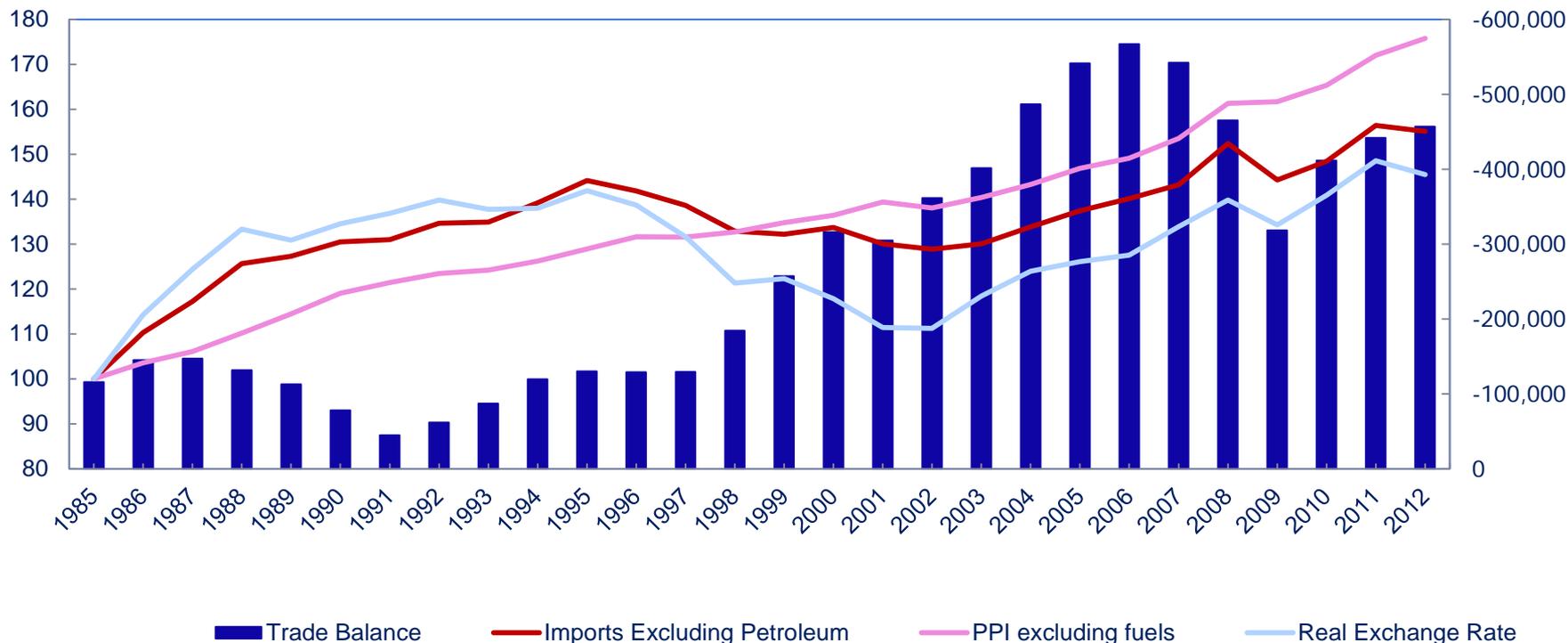
- ▶ Also impacted by exchange rates
- ▶ What does that mean for the price competitiveness of U.S. goods

Import Data 1985-2012

Chart 1: U.S. Trade Balance and Price Trends (1985-2012)

Index (1985 = 100)

Millions of Dollars



Source: Price Indexes from U.S. Bureau of Labor Statistics; Trade Balance from the U.S. Census Bureau; and real exchange rates from the Federal Reserve Bank of St. Louis.

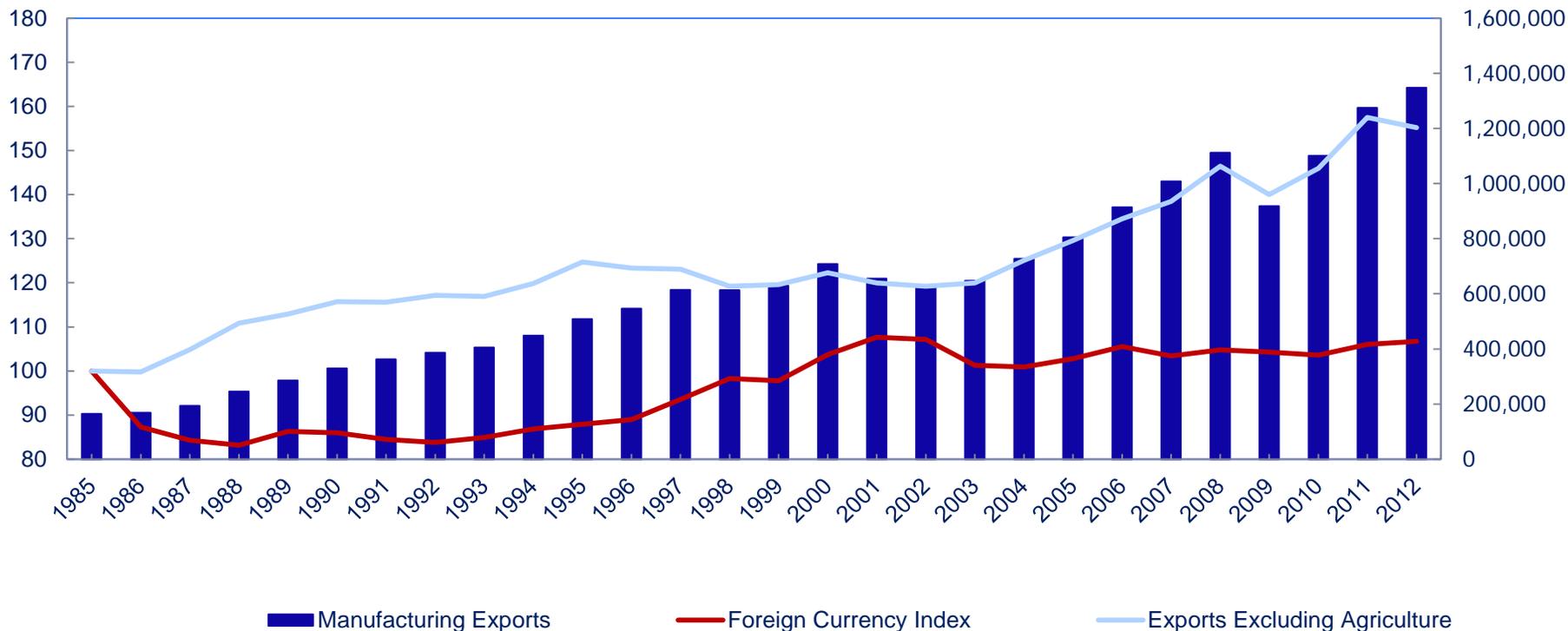


Export Data 1985-2012

Chart 2: U.S. Exports and Export Price Trends (1985-2012)

Index (1985 = 100)

Millions of Dollars

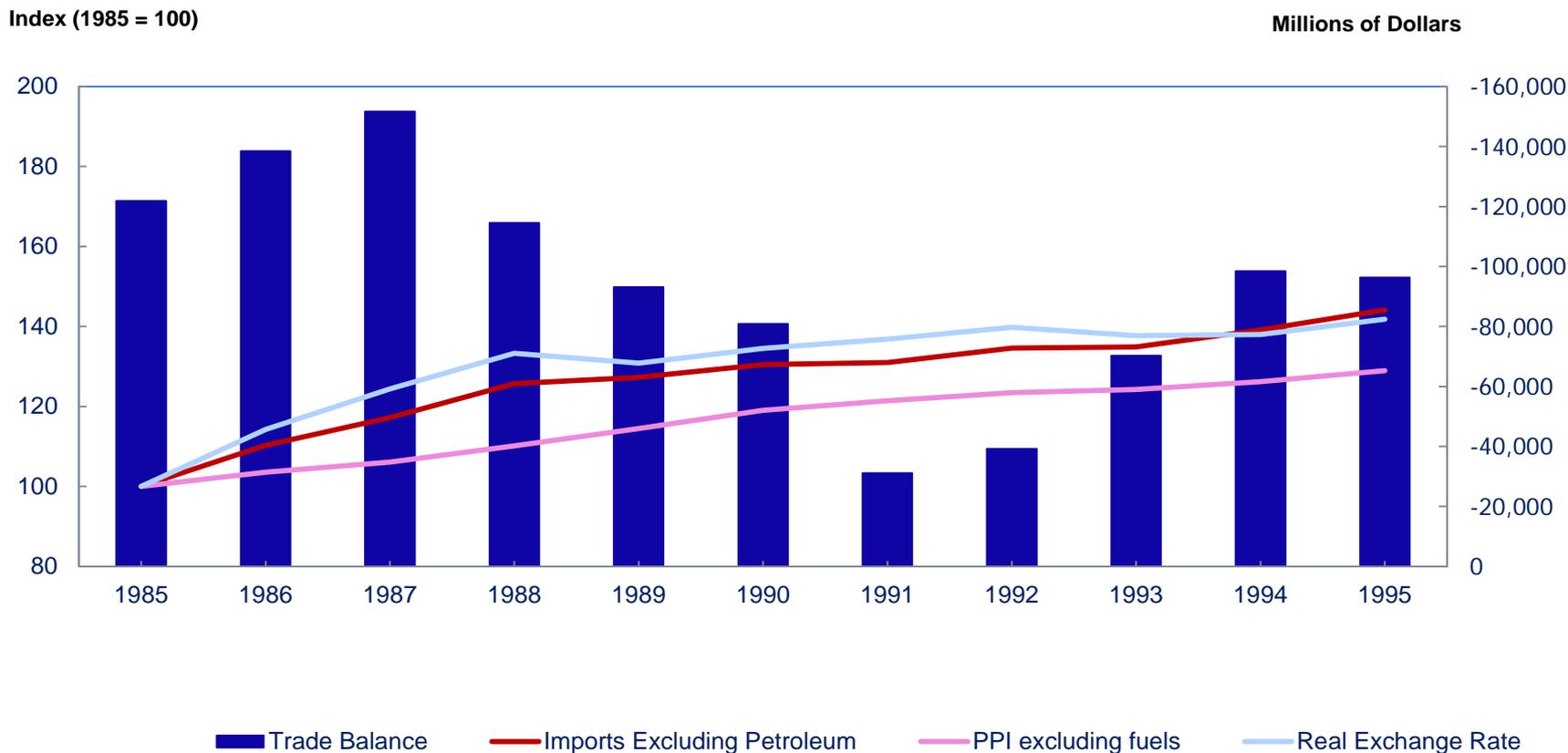


Source: Price Indexes from U.S. Bureau of Labor Statistics; Manufacturing Exports from U.S. Census Bureau ; and exchange rates from the Federal Reserve Bank of St. Louis.



Focus Point Imports 1985-1995

Chart 1: U.S. Trade Balance and Price Trends (1985-1995)



Source: Price Indexes from U.S. Bureau of Labor Statistics; Trade Balance from the U.S. Census Bureau; and real exchange rates from the Federal Reserve Bank of St. Louis.



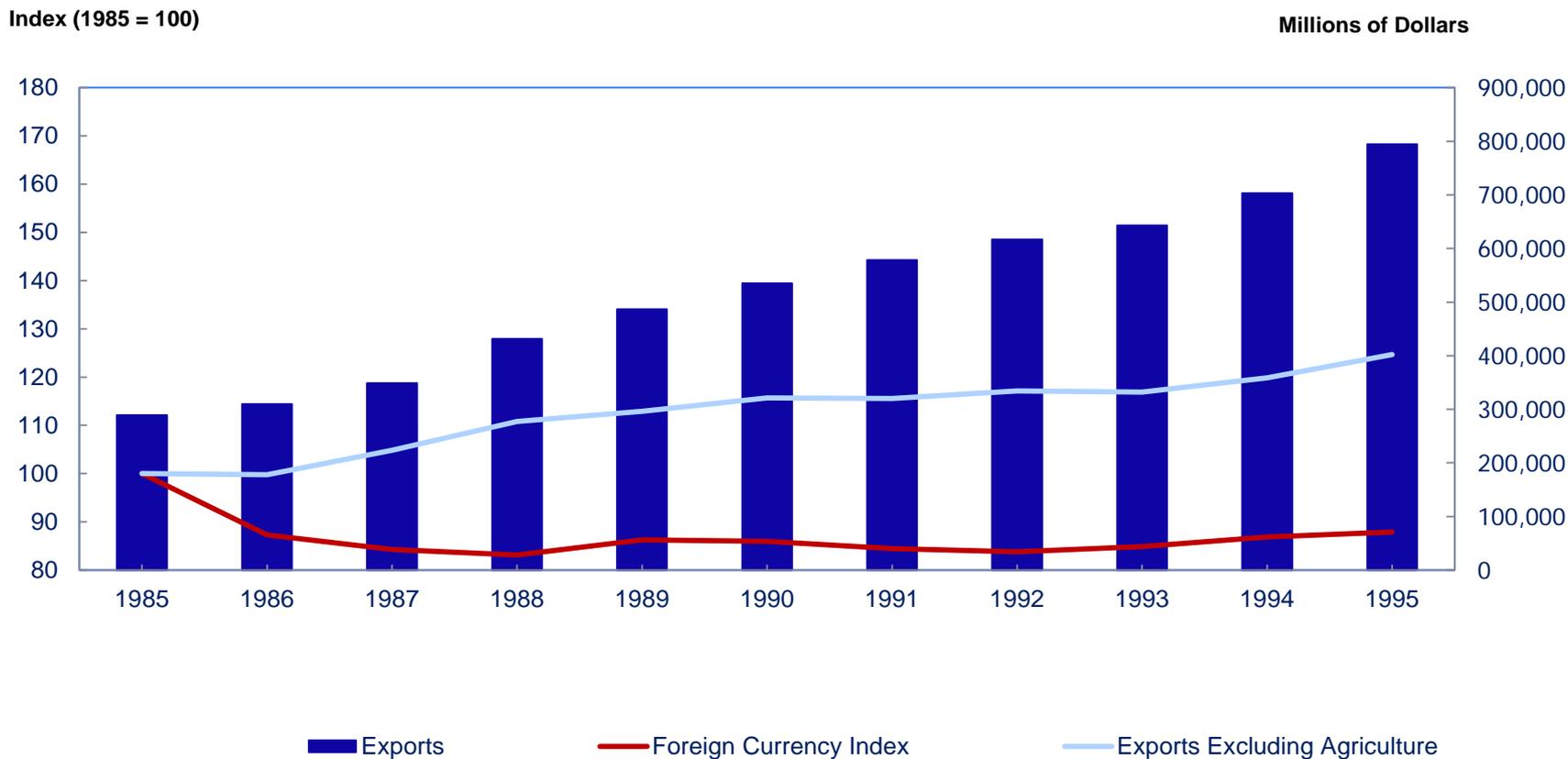
Points of Interest: 1985-1995

- Import prices rose over the period as the value of the dollar fell
- Not only were import prices rising, they were increasing at a greater rate than domestic prices



Focus Point Exports 1985-1995

Chart 2: U.S. Exports and Export Price Trends (1985-1995)



Source: Price Indexes from U.S. Bureau of Labor Statistics; Manufacturing Exports from U.S. Census Bureau ; and exchange rates from the Federal Reserve Bank of St. Louis.



Points of Interest: 1985-1995

- The BLS price index for exports also rose with the weakening dollar – a somewhat counterintuitive result from economic theory
- Even more interestingly, the value of exports rose more rapidly the higher the increase in the export price index
- Why?

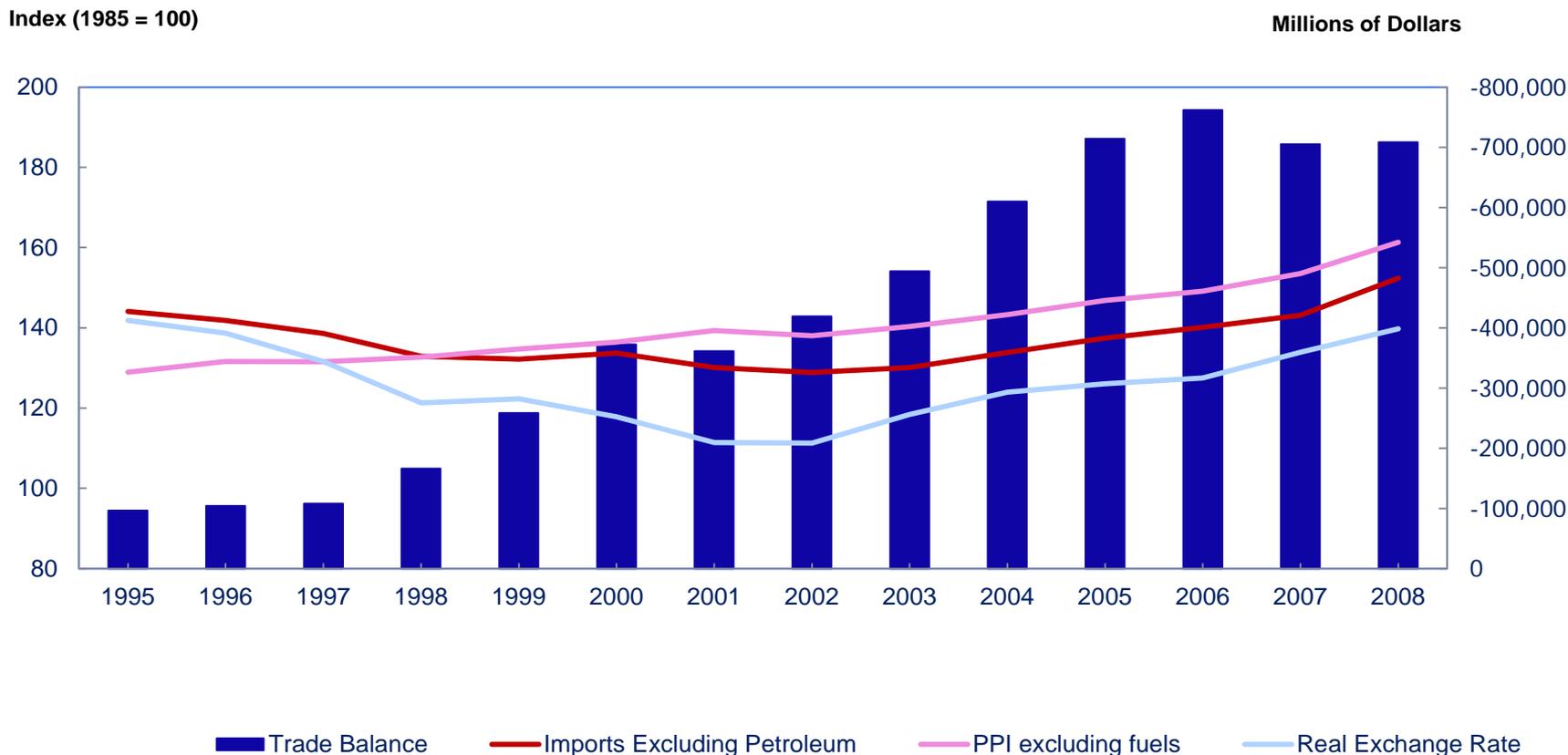


Why did Export Prices rise with the falling dollar?

- The U.S. Export Price Indexes are priced in dollar terms
- In reality, while exporters were getting more dollars for their products, those dollars were worth less
- If instead looking at the perspective of the buyers of U.S. exports in terms of their currency, the price of American exports went down over the period

Focus Point Imports 1995-2008

Chart 1: U.S. Trade Balance and Price Trends (1995-2008)



Source: Price Indexes from U.S. Bureau of Labor Statistics; Trade Balance from the U.S. Census Bureau; and real exchange rates from the Federal Reserve Bank of St. Louis.



Imports: 1995-2002

- The U.S. dollar appreciated against major currencies over this period
- Import prices also turned around and began to trend lower than domestic prices
- With import prices falling, manufacturing began to shift to importers
- Total manufactured imports rose 45% between 1996 and 2002



Imports: 2002-2008

- Over the six-year period, the dollar reversed and lost nearly 30% of value on average against major currencies
- Interesting though, even though import prices began to rise, manufactured imports continued to grow
- Why?



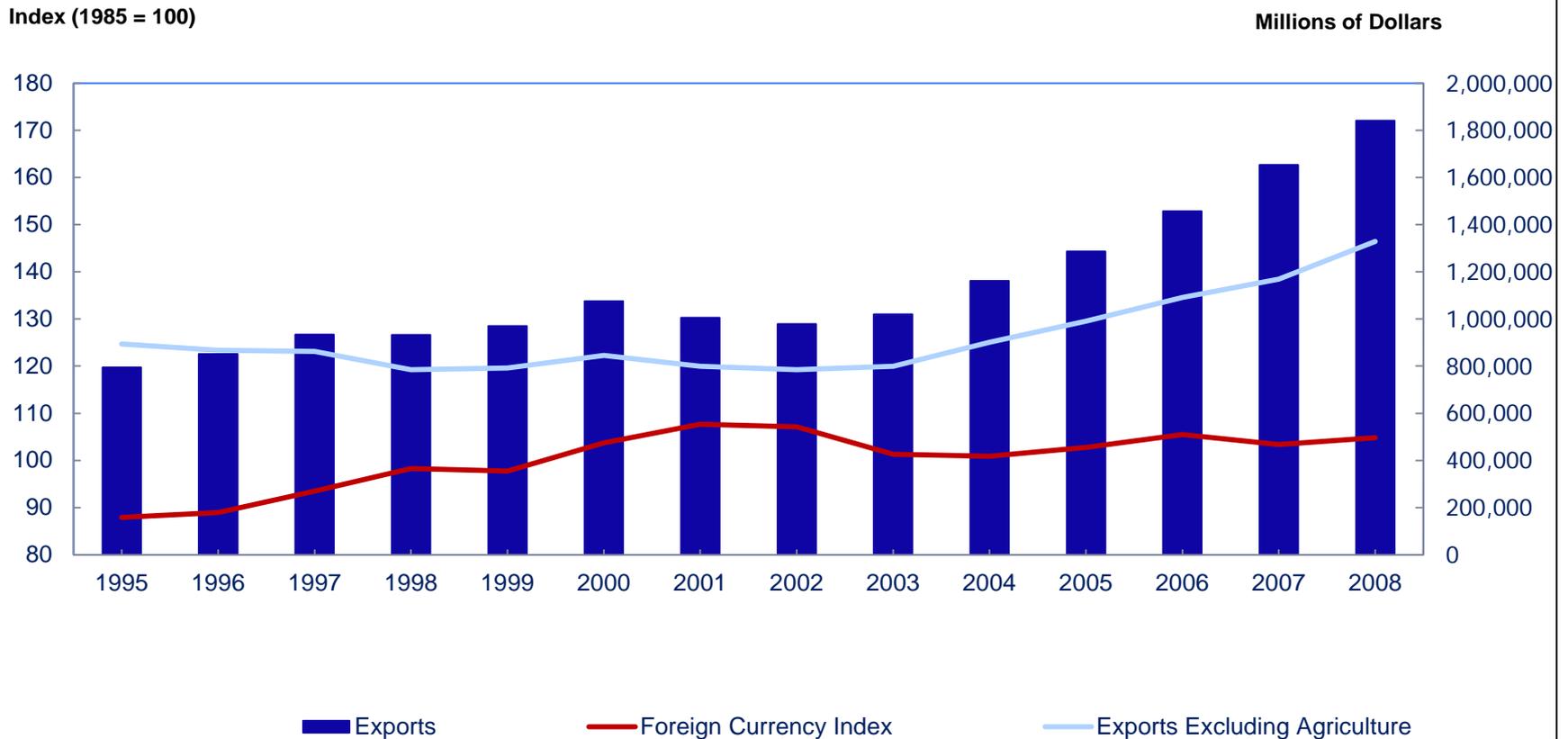
The China Factor

- Although the dollar fell against most major currencies, the same was not true with the Chinese yuan where there was very little movement
- While not official policy, most experts agree that the yuan over that period was pegged to the dollar
- Much of the import growth from 1995-2002 came from the value of imports from China
- China went from being a relatively insignificant trade partner of the U.S. to the top importer today, surpassing Canada about five years ago



Focus Point Exports 1995-2008

Chart 2: U.S. Exports and Export Price Trends (1995-2008)



Source: Price Indexes from U.S. Bureau of Labor Statistics; Manufacturing Exports from U.S. Census Bureau ; and exchange rates from the Federal Reserve Bank of St. Louis.



Exports: 1995-2002

- In dollar terms, export prices leveled off with the stronger value of the currency
- In foreign currency terms though, U.S. export prices rose over the period
- Even though the value of exports continued to rise, they only went up 13% after more than doubling in the earlier 1985-1995 period



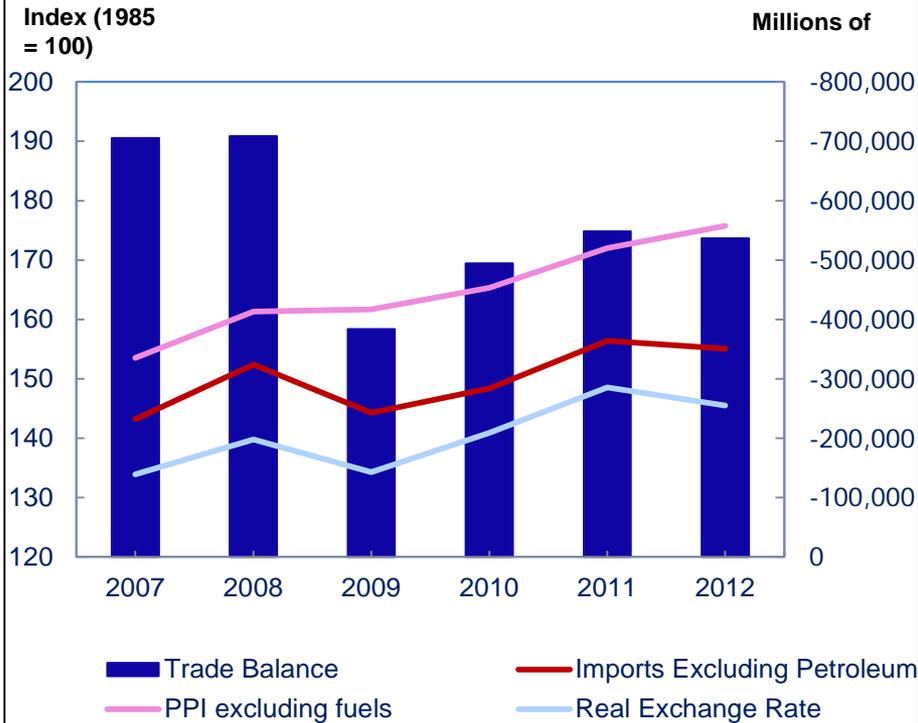
Exports: 2002-2008

- In dollar terms, nonagricultural export prices increased 22.9% with the sharp drop in the value of the dollar
- In foreign currency terms though, U.S. export prices remained stable over the period, actually falling 2.2 percent
- Most notable though over the period is the value of exports rose nearly 80 percent



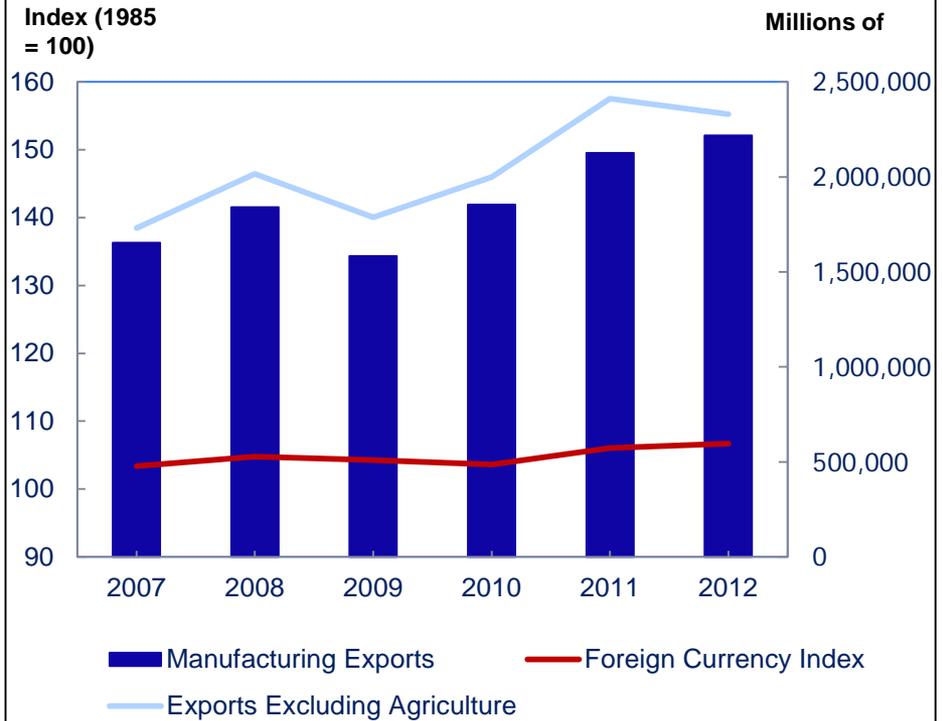
The Great Recession of 2008-09

Chart 1: U.S. Trade Balance and Price Trends (2007-2012)



Source: Price Indexes from U.S Bureau of Labor Statistics; Trade Balance from the U.S. Census Bureau; and real exchange rates from the Federal Reserve Bank of St. Louis.

Chart 2: U.S. Exports and Export Price Trends (2007-2012)

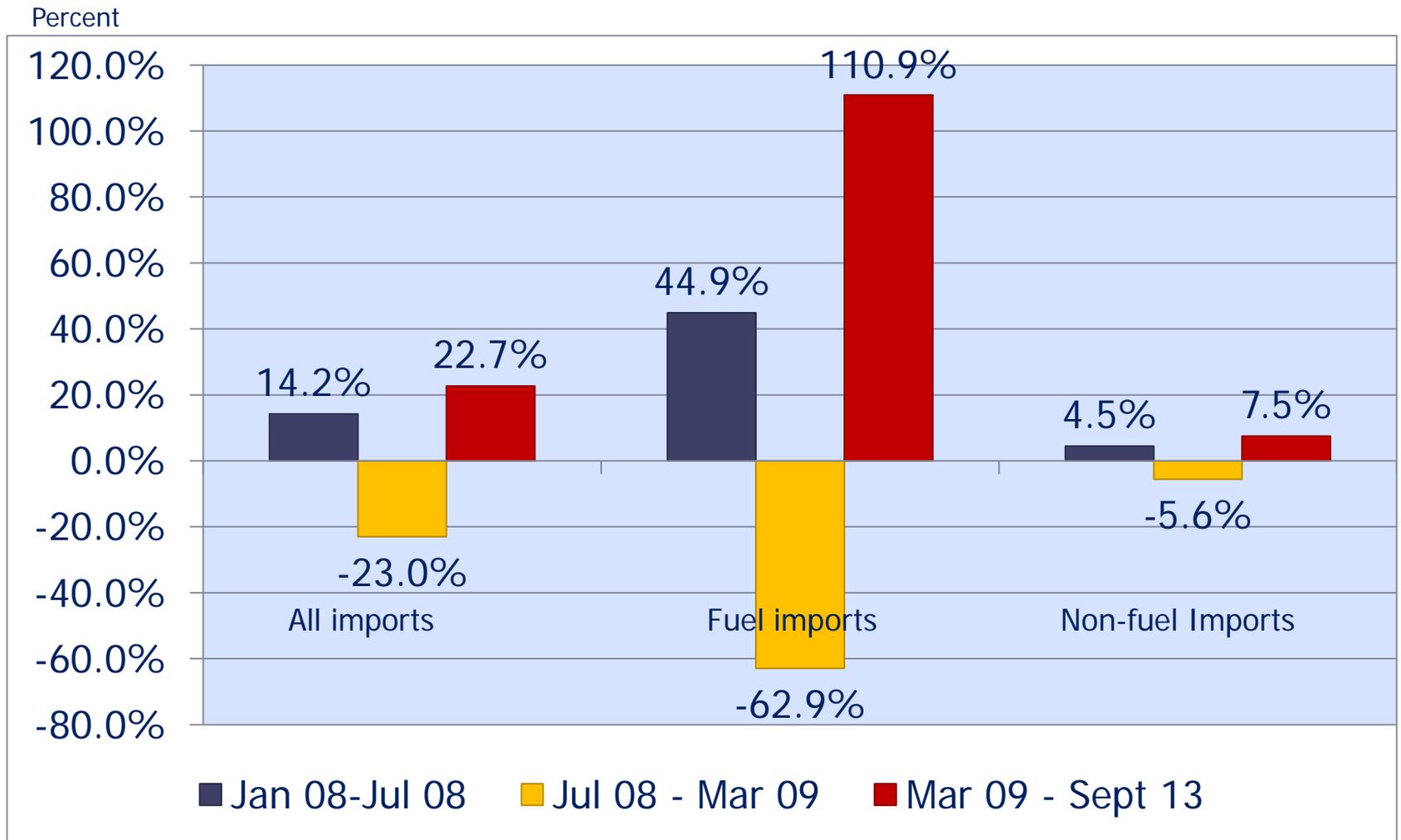


Source: Price Indexes from U.S Bureau of Labor Statistics; Manufacturing Exports from U.S. Census Bureau ; and exchange rates from the Federal Reserve Bank of St. Louis.

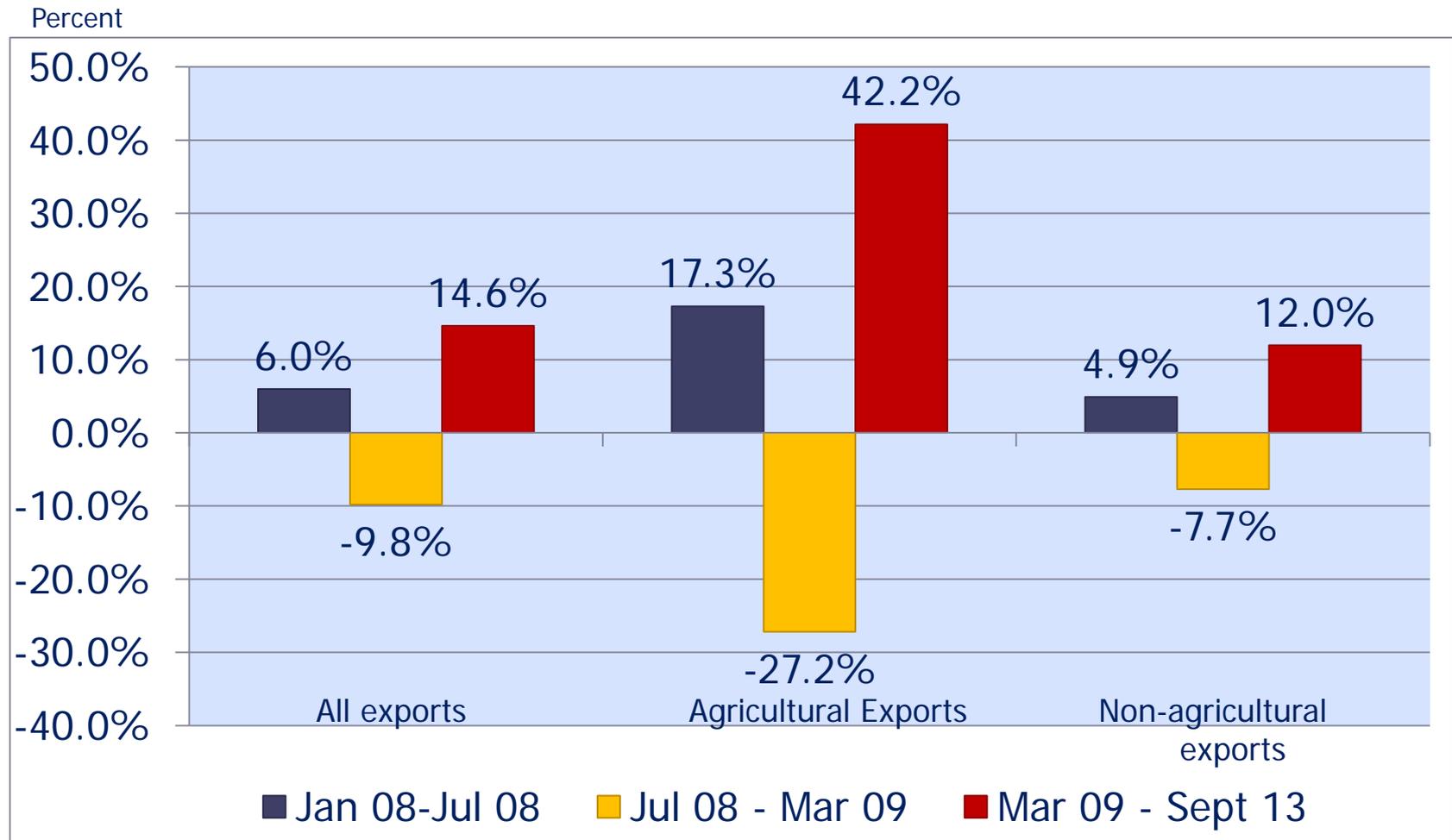
Impact on Price Indexes

- Unlike earlier periods, the impact of exchange rates was not the driving factor behind the price changes
- Over the first three-quarters of 2008, commodity prices spiked, notably food and fuel
- That was followed then by a crash in prices that helped lead to the recession in 2009

Import price inflation, selected periods, not seasonally adjusted annual rates



Export price inflation, selected periods, not seasonally adjusted annual rates



Impact on U.S. Trade

- The value of both imports and exports declined sharply between 2008 and the heart of the recession in 2009
- Both fell, but imports at a greater rate which meant the trade deficit actually fell in 2009
- Interesting though, the trade sector recovered shortly after, rising modestly from 2010-2012
- The trade deficit also climbed again starting in 2010, but remained below the level in 2008



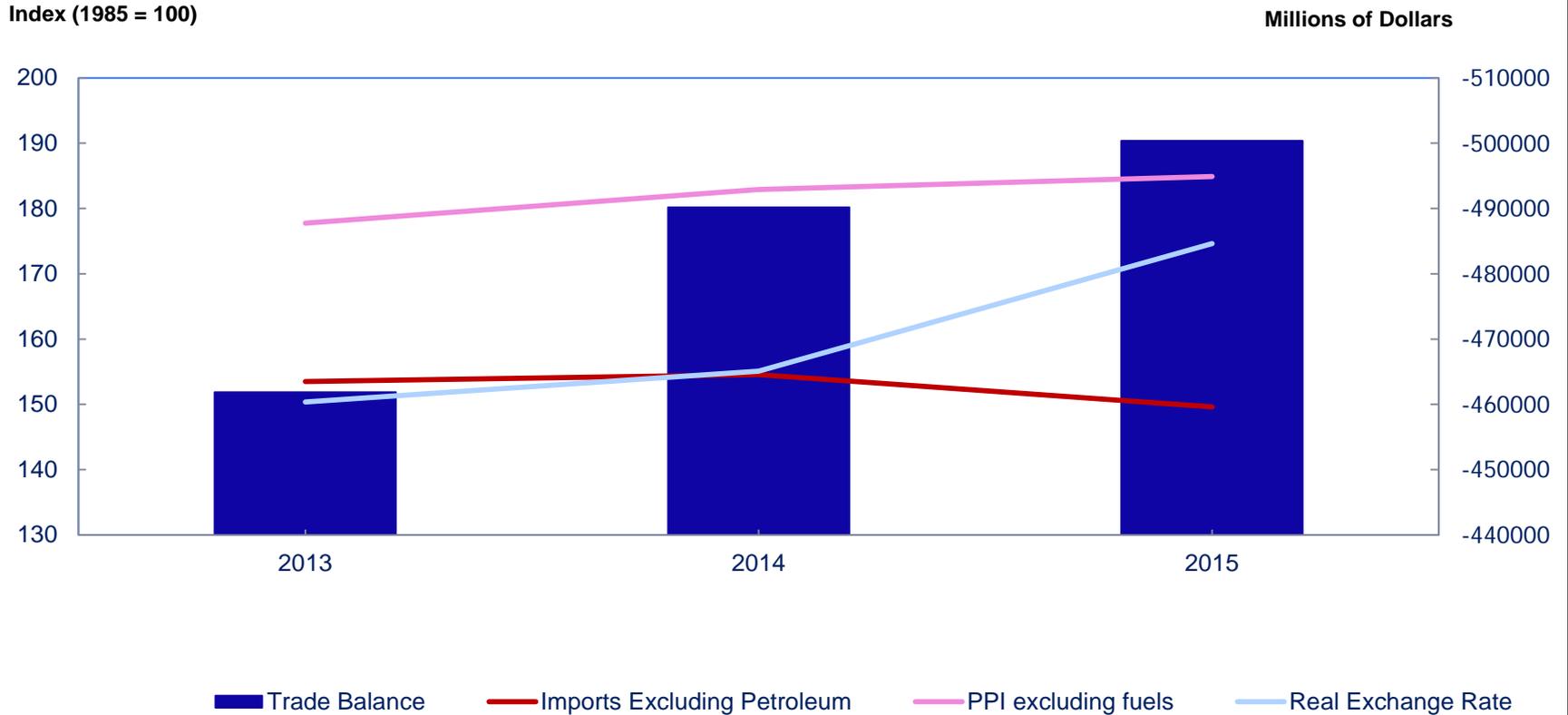
Post Paper 2012-2015

- Since 2012, the most interesting story in import and export prices was the large jump in the value of the U.S. dollar in 2015
- Overall, the dollar rose 11.8 percent in 2015 against the currencies of the U.S. major trading partners



Imports 2013-2015

Chart 1: U.S. Trade Balance and Price Trends (2013-2015)



Source: Price Indexes from U.S. Bureau of Labor Statistics; Trade Balance from the U.S. Census Bureau; and real exchange rates from the Federal Reserve Bank of St. Louis.



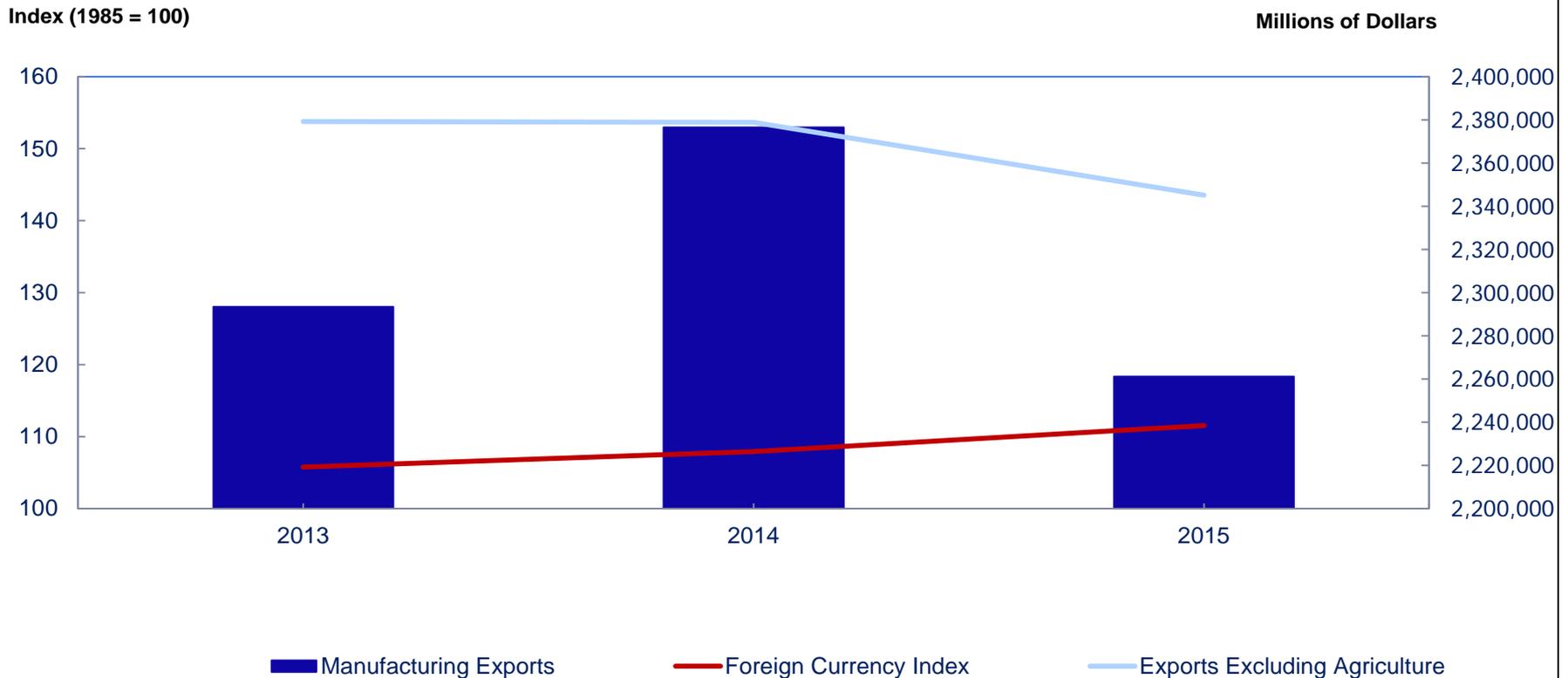
Import Points 2015

- With the rise in the value of the dollar, import prices fell 8.3% over the year
- In comparison, domestic prices rose only slightly for the year



Exports 2013-2015

Chart 2: U.S. Exports and Export Price Trends (2013-2015)



Source: Price Indexes from U.S. Bureau of Labor Statistics; Manufacturing Exports from U.S. Census Bureau ; and exchange rates from the Federal Reserve Bank of St. Louis.

Export Points 2015

- Export prices in dollar terms also fell in 2015, decreasing 6.6% - the largest calendar year decline since the indexes were first published
- And yet, U.S. exports were actually more expensive – In foreign currency terms they rose 6.1%
- As a result, the value of exports plunged in 2015 leading to a larger trade deficit



2015 and Beyond

- The price indexes will continue to provide insight into the global economic situation
- In 2014 the importance of the program was tested when the export price indexes were briefly put on the chopping block
- Today there are 24,742 subscribers to just the IPP indexes and another 69,836 that subscribe to IPP indexes as a package with the other price index releases



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