



AWPA Annual Meeting Economic Discussion

February 19, 2018

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Introduction to TSG

I

Introduction to TSG

Senior Investment Bankers: Industrial Growth and Business Services



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- John co-founded TSG and has over 25 years of Investment Banking experience covering public and private Technology, Industrial Growth and Business Services companies
- Prior to TSG, John was a Managing Director and co-founder of the West Coast Corporate Finance Group of Banc of America Securities
- John also co-founded General Finance Corporation, a public rental services company, as Chief Operating Officer in 2005 and led 14 acquisitions totaling nearly \$400 million

Industrial Growth

OEM / Aftermarket / Performance

Metals / Fabricated Metal Products

Transportation & Logistics



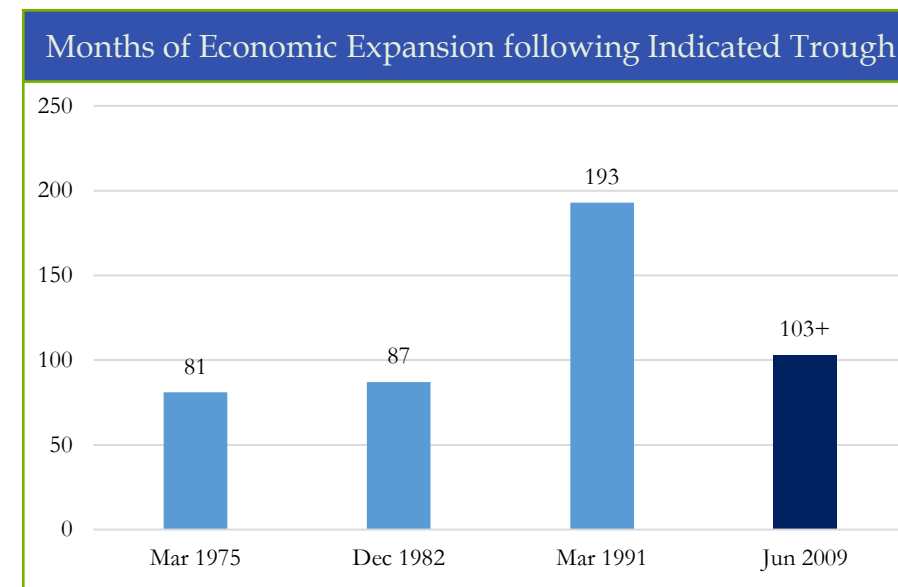
Macroeconomic Filter

II

Macroeconomic Filter

Global Historic Recession Trends

- ◆ Since the end of World War II, there have been four global recessions, all lasting a year, followed by expansion cycles that lasted 120 months, on average
 - ◆ The current cycle is 103 months long (since June 2009)
 - ◆ We are currently in a period of harmonized global growth



Source: IMF

Macroeconomic Filter

Metal Prices, as of 2/16/2018

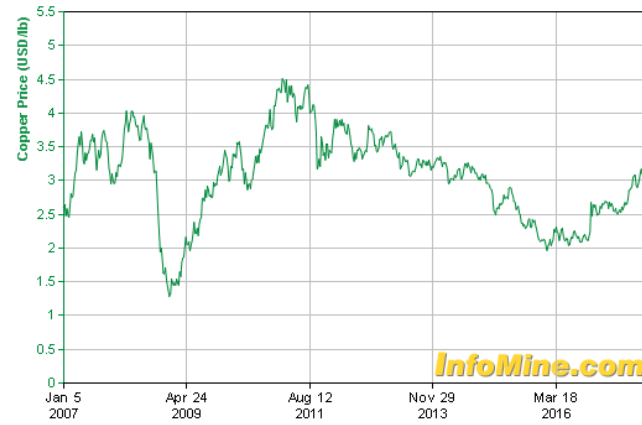
Aluminum

\$0.98/LB



Copper

\$3.22/LB



Nickel

\$6.42/LB



Platinum

\$1010.60/LB



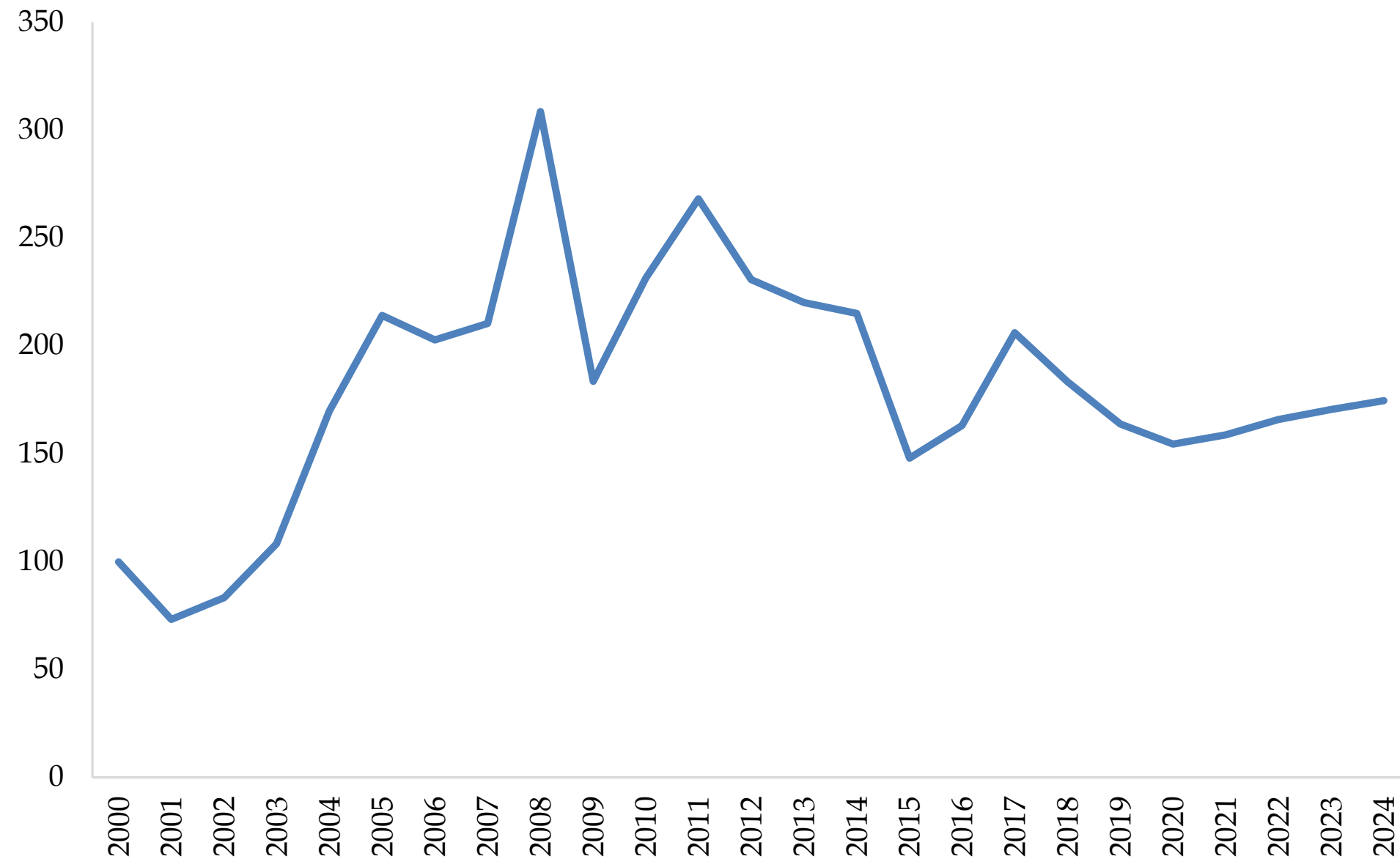
Lead

\$1.18/LB



Source: InfoMine

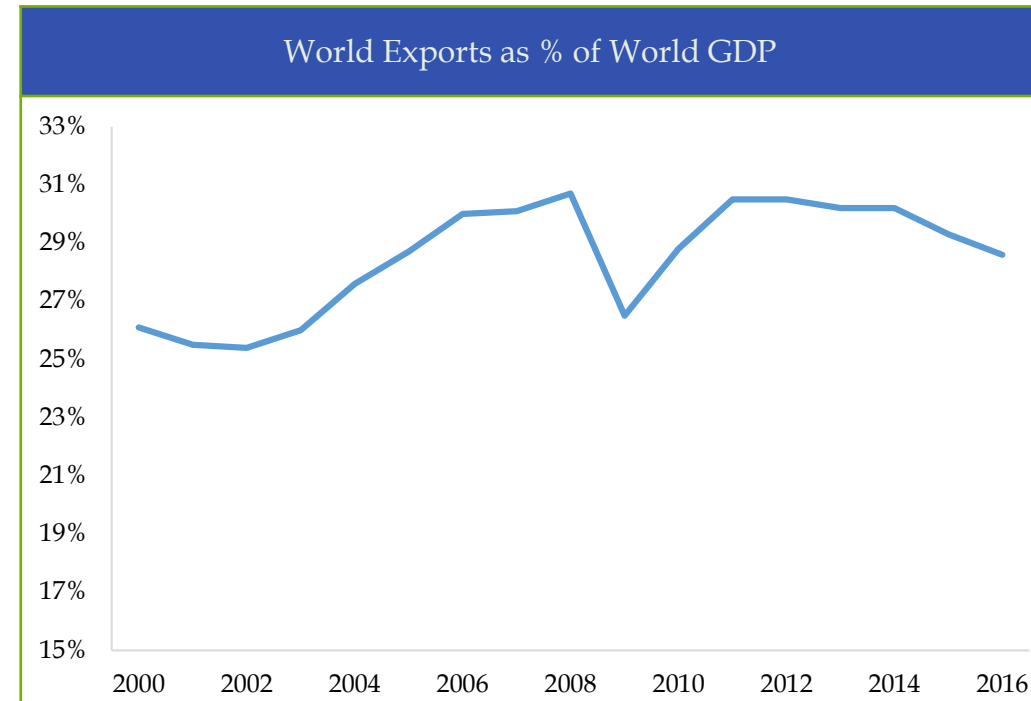
Macroeconomic Filter World Price of Steel Index



Macroeconomic Filter

Export Demand and Pricing

- ◆ For developing countries, exports are the main element of production
- ◆ Export volume and pricing are primarily determined by the following:
 - ◆ Import dynamics in other countries: at what price and volume are neighboring countries receiving their imports (economic health and relative currencies)
 - ◆ “Hindering Factors” - Trade barriers, transportation costs, cultural discrepancies
- ◆ Exports are ergative and not always in line with GDP cycles, as they are heavily dependent on other countries

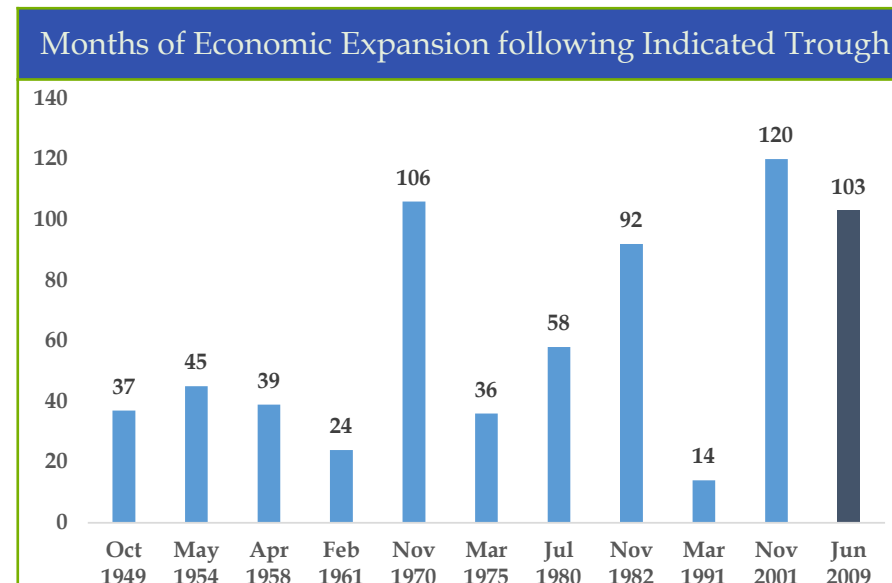


Source: Economic Web Institute, World Bank

Macroeconomic Filter

U.S. Historic Recession Trends

- ◆ The technical indicator of a recession is two consecutive quarters of decreasing GDP
- ◆ Since the end of World War II, U.S. business expansion cycles have lasted 58 months, on average
 - ◆ The current business cycle is 103 months long (since June 2009)
- ◆ A recent survey of people in the real estate industry conducted by PwC reported sentiment in the market is at its lowest value at 69%. The same survey reported an 84% positive sentiment six months ago

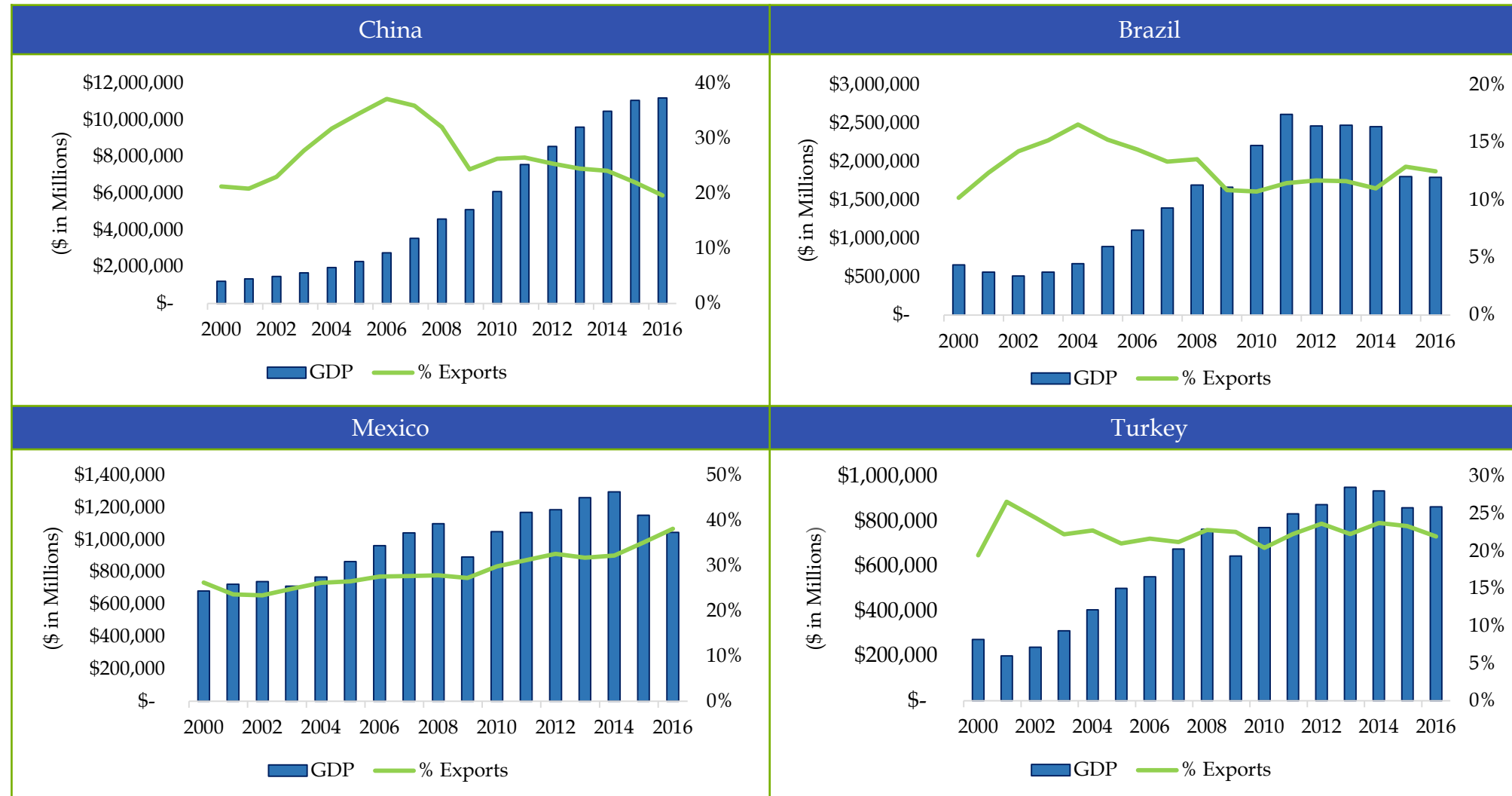


Source: Bloomberg, U.S. Department of Commerce, Fortune, Investopedia

Macroeconomic Filter

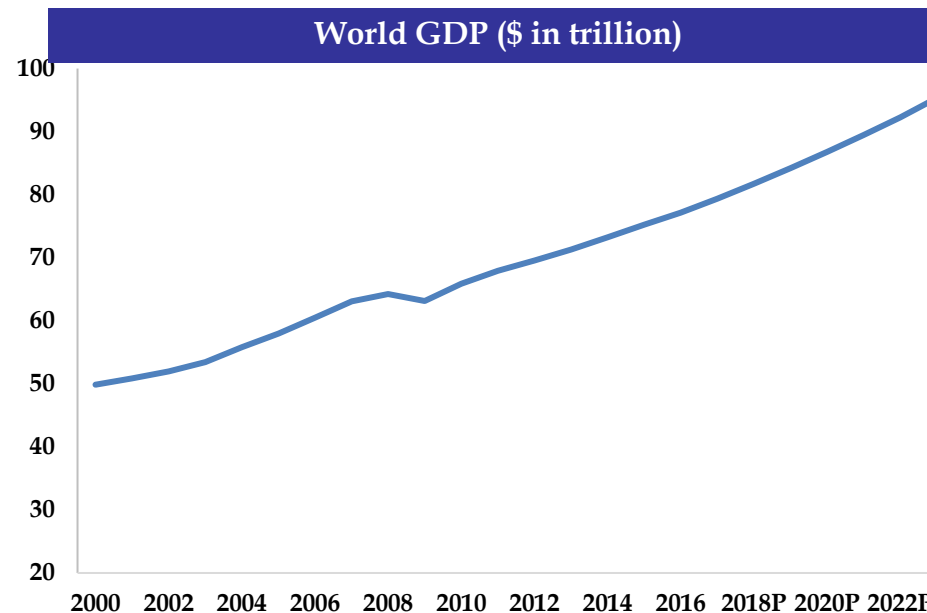
International Economic Development

- ◆ It is likely that the U.S. is at or near its economic peak, and demand is expected to decline
- ◆ The question is whether this decline will correlate with BRIC economies and/or European economies



Macroeconomic Filter Weakening U.S. Dollar

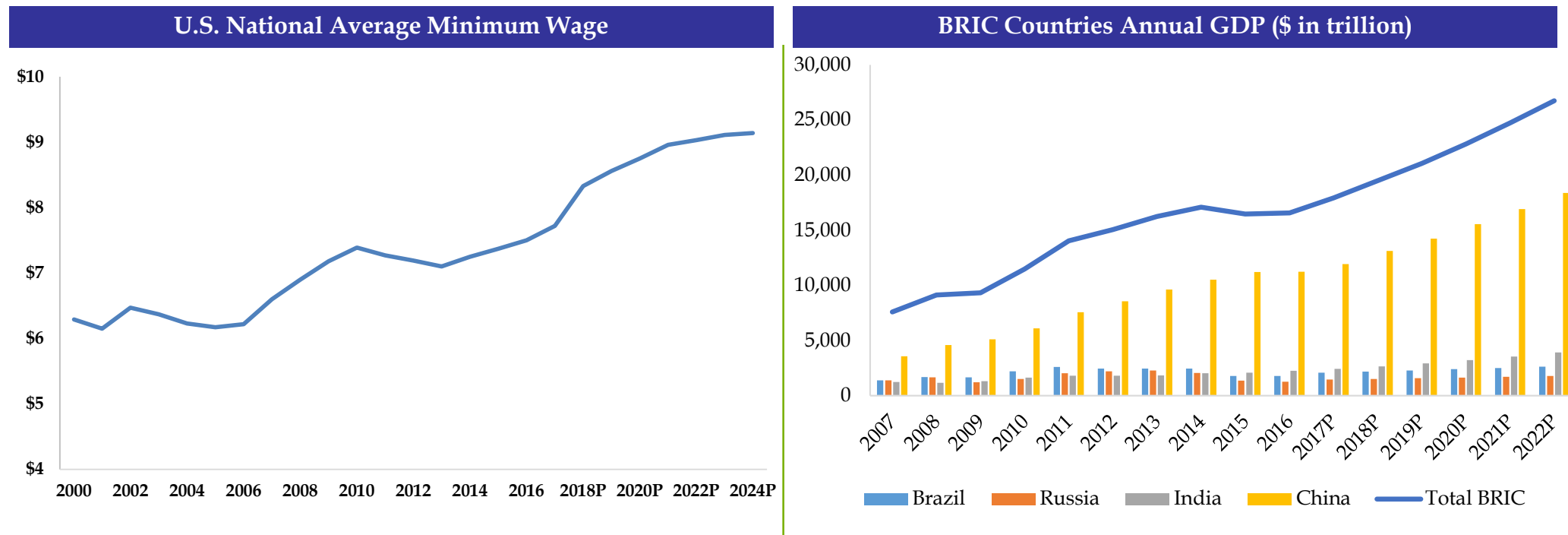
- ◆ The U.S. dollar has already decreased more than 1% in 2018, and it saw a 10% decrease in 2017
- ◆ The weakening of the U.S. dollar will lead to a rise in commodity prices, having a negative impact on wire producers
- ◆ As domestic rod prices go up, a margin compression for the wire producers/converters, especially the those that do not own their own rod mills
- ◆ This decrease is due to several factors, including higher wages, U.S. political uncertainty and higher economic growth in in the BRIC Countries and Europe, particularly Germany and France
- ◆ Estimates show that world GDP grew 3.75% in 2017
 - ◆ However, it is important to put this in perspective: developed economies are growing at a slower pace of 2%-2.5%



Source: U.S. Census Bureau, U.S. Bureau of Labor Statistics, Forbes

Macroeconomic Filter Weakening U.S. Dollar

- ◆ The BRIC economies experienced significant growth, fueled by the E.U.'s and the U.S.'s increased demand for BRIC's manufactured goods
- ◆ From the years 2015 to 2017, Brazil, Russia, India, and China GDP experienced a compounded average annual growth rate of 7.5%, 3.7%, 8.0%, and 3.1%, respectively
- ◆ With China focusing on manufacturing (25%+ of country's GDP) and India specializing in the service industry (61% of GDP), both countries' middle classes are doing exceptionally well
 - ◆ As of 2015, 8% of India's population is middle class, an eight fold increase from 15 years ago

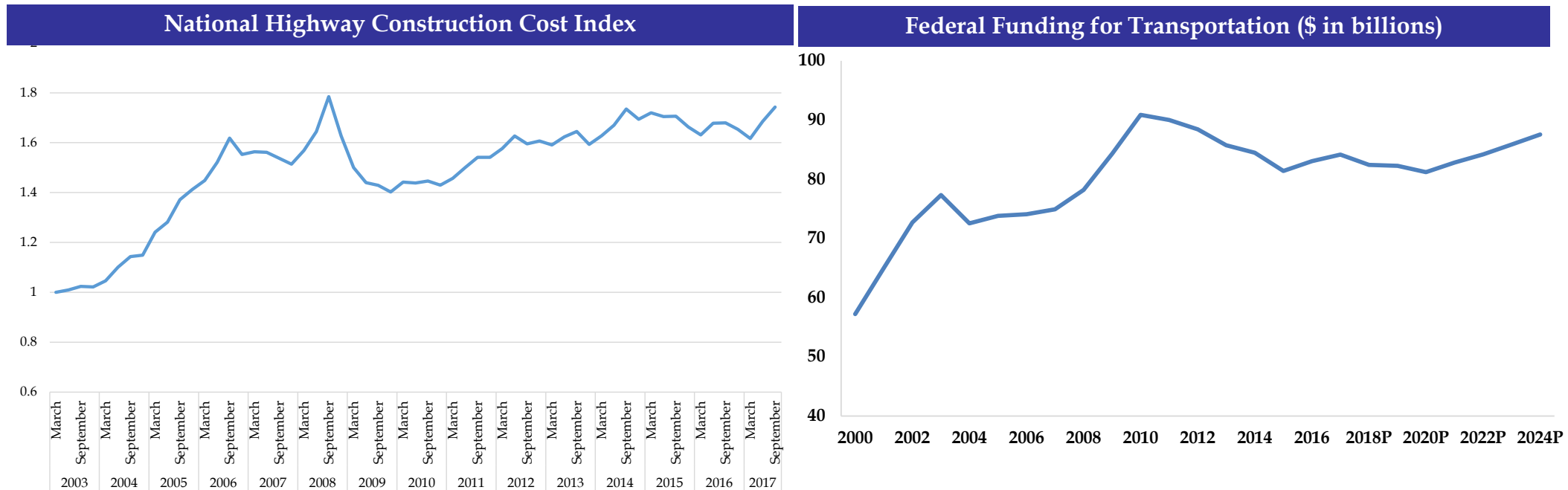


Source: IBISWorld, Trading Economics

Macroeconomic Filter

U.S. 2017 Construction Employment and Costs

- ◆ As of December 2017, construction employment increased in 75% of metro areas (“MSA’s”) in the U.S.
 - ◆ The largest increase occurred in Riverside-San Bernardino-Ontario, CA, which saw 14,300 added construction jobs (15% increase); the second largest was Las Vegas-Henderson-Paradise, which saw an increase of 10,800 construction jobs (18% increase)
- ◆ Construction employment hit an all time high in December 2017 for 38 MSA’s, and no MSA’s saw an all time low in employment; however, 89 MSA’s saw a decrease in construction employment
- ◆ Highway construction prices increased 4.2% from March to June 2017 and 3.4% from June to September 2017
 - ◆ These are the largest quarterly increases since September 2014

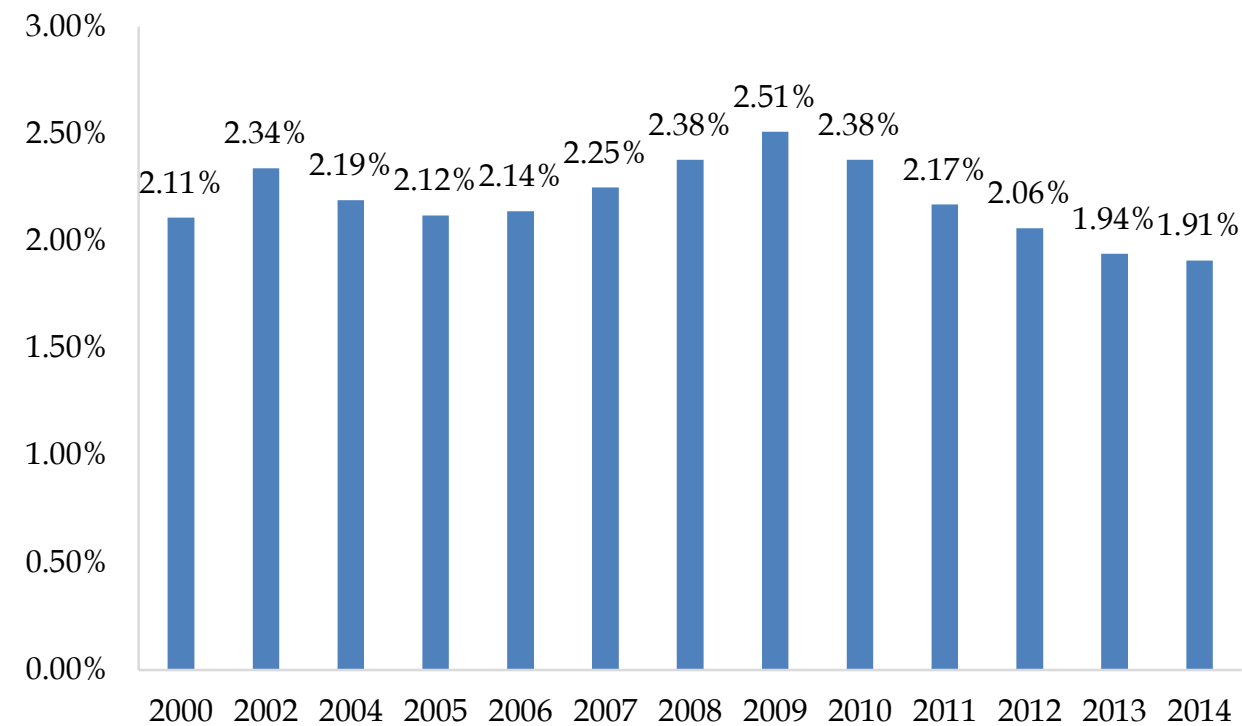


Source: Federal Highway Administration

Macroeconomic Filter

Historical Infrastructure Spending

U.S. State and Local Capital Spending as % of GDP

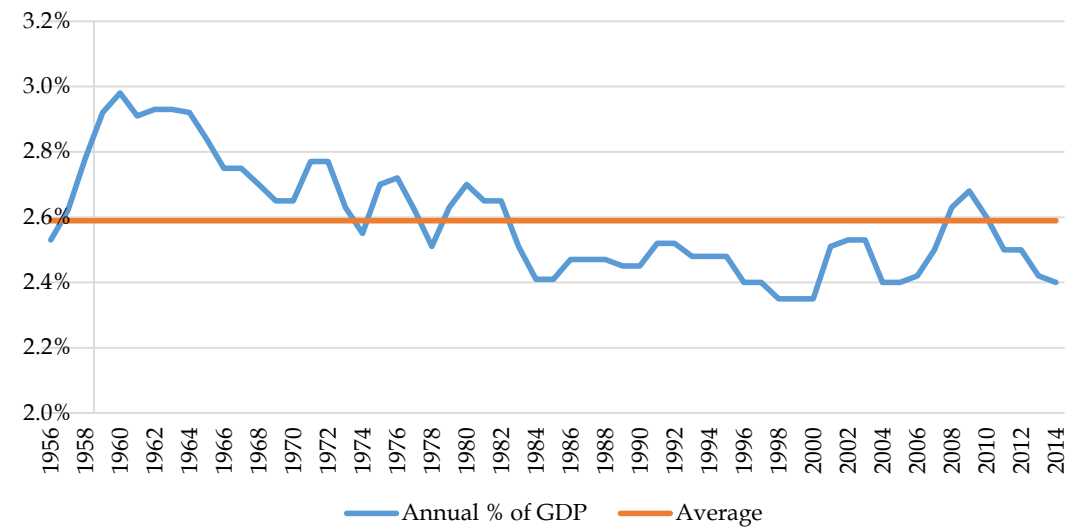


Source: Federal Highway Administration

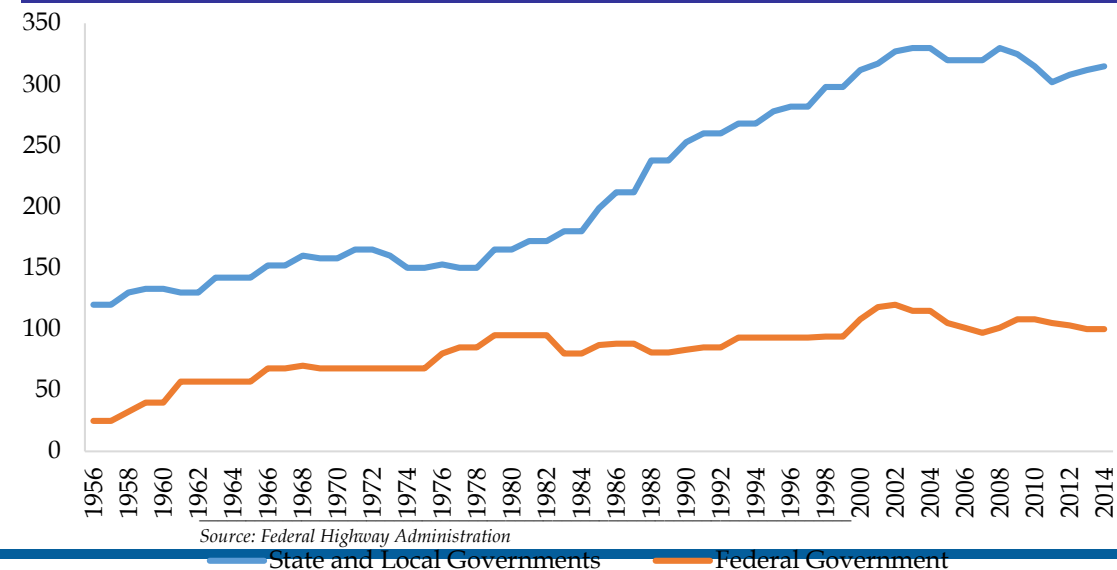
Macroeconomic Filter

Historical Infrastructure Spending

Public Infrastructure Spending as a Share of GDP



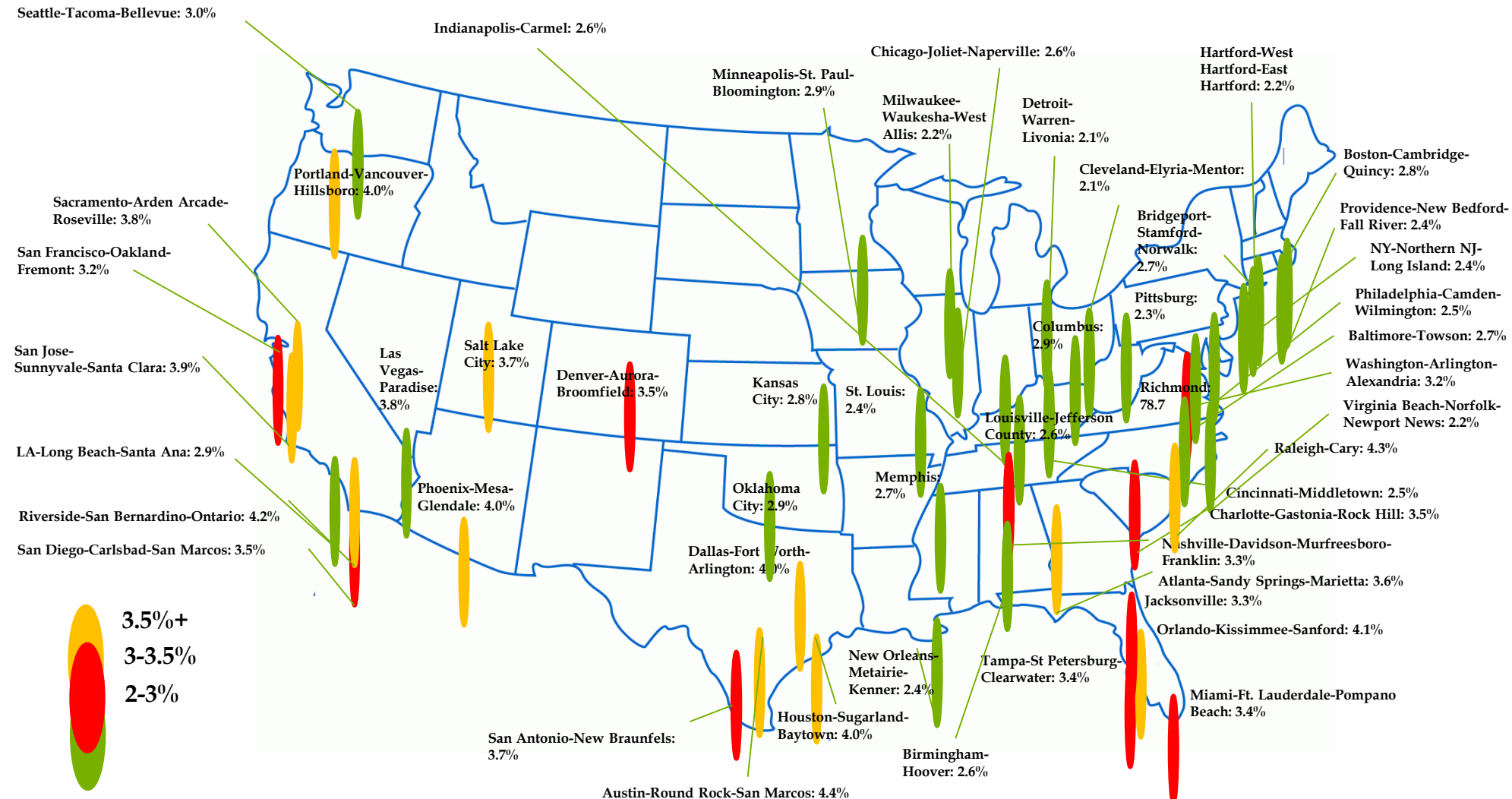
Real Infrastructure Spending by Federal vs State & Local Governments



Macroeconomic Filter

Expected Growth Until 2020 of 50 MSAs by GMP

Expected Growth Until 2020 of Top 50 MSAs by GMP

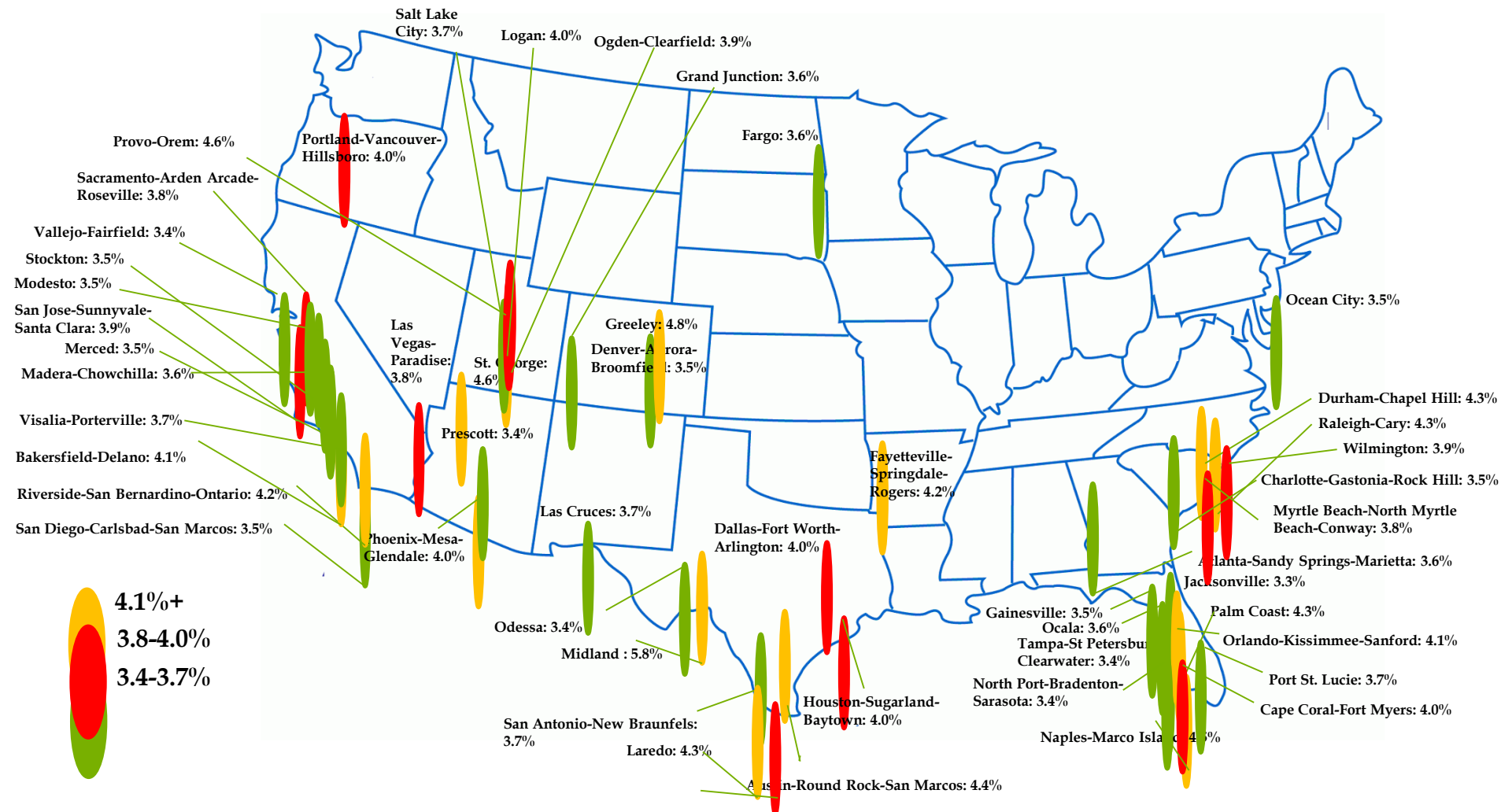


Source: TSG Research, United States Conference of Mayors

Macroeconomic Filter

Top 50 MSAs by Expected GMP Growth Until 2020

Top 50 MSAs by Expected GMP Growth Until 2020



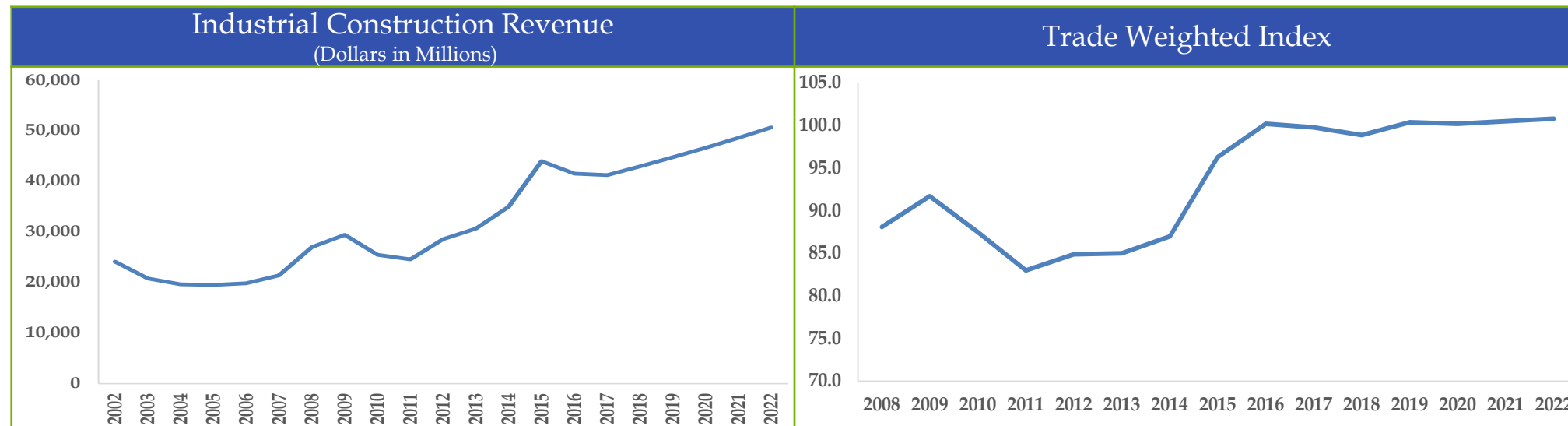
Source: TSG Research, United States Conference of Mayors

Source: TSG Research, United States Conference of Mayors

Macroeconomic Filter

U.S. Industrial Building Outlook

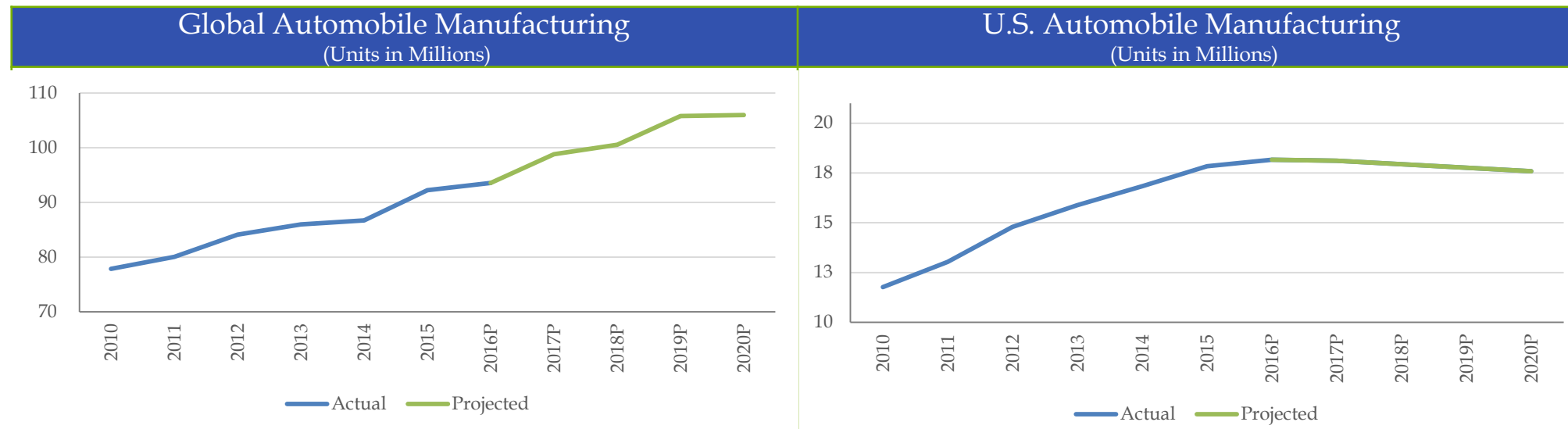
- ❖ The Rod & Wire industry performance is sensitive to industrial building construction in the U.S.
- ❖ Revenue in the U.S. industrial building construction industry is expected to grow 4.2% to \$41.2 billion at an annual compounding growth rate during the next five years. This is a substantial decrease of the five years to 2017 growth of 7.6%
 - ◆ The Federal Reserve is expected to continue raising interest rates throughout 2018, making borrowing costs more expensive and limiting expansion of inflation rates.
 - ◆ These forecasts never include a recession



Macroeconomic Filter

Car & Automobile Manufacturing Outlook

- ❖ The Rod & Wire industry performance is also impacted by the number of new vehicles produced and demand for automobile parts.
- ❖ Global demand from the Car and Automobile Manufacturing industry is expected to increase at an annual compounding growth rate of 1.5% during the next five years to 2022; this is a \$2.5 trillion industry
- ❖ U.S. demand from the Car and Automobile Manufacturing industry is expected to decline at an annual compounding growth rate of -0.3% during the next five years to 2022
 - ◆ However, total U.S. transportation construction and related market activity, which includes investment in highways, bridges, public transit, rail, ports, waterways, airports, roads, and parking was expected to see 1.3% growth in 2017



Macroeconomic Filter NAFTA

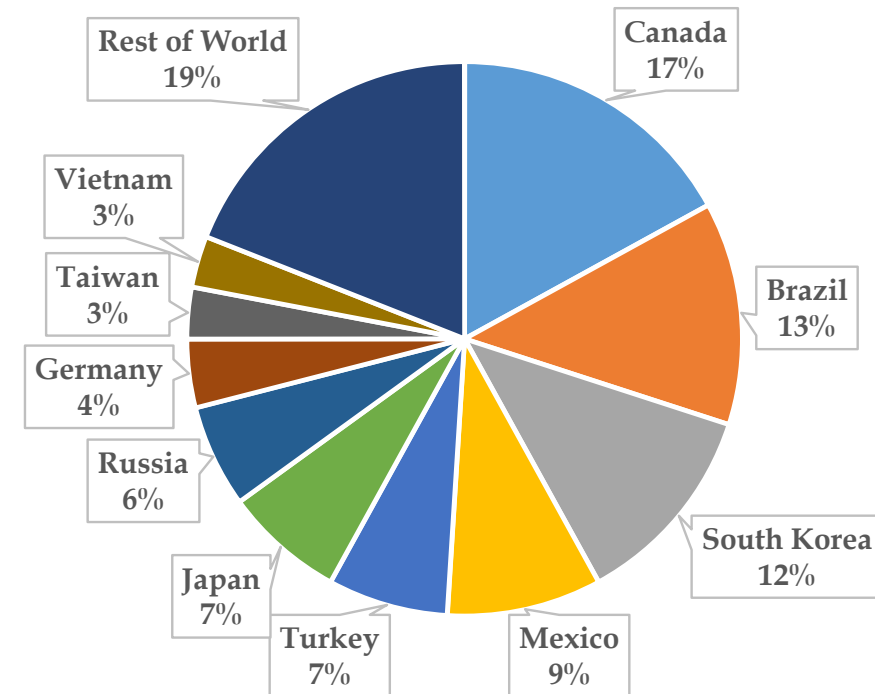
- ◆ Implemented between 1994 and 2008, NAFTA eliminated tariffs on products traded in between Canada, Mexico, and the United States
- ◆ Although there are many benefits to the agreement, the deal has become a point of discussion for many political candidates, including President Trump
- ◆ President Trump has also threatened to completely withdraw from NAFTA, leading to serious consequences for the U.S., these include
 - ◆ 3.5% tariffs per WTO rules, a portion of which consumers will pay for
 - ◆ Disruption of current North American supply chains that take advantage of differing costs and resources
- ◆ In May 2017, NAFTA renegotiations started between the three countries
- ◆ Although specific details have yet to be released, it has been said that the U.S. will focus on reducing the U.S. trade deficit, tightening rules-of-origin requirements, reforming the investor-state dispute resolution mechanism, and updating the pact for digital services and intellectual property

Source: New York Times

Macroeconomic Filter Section 232

- ◆ President Trump is *possibly* moving with his pledge to protect domestic steelmakers against unfairly priced steel imports with Section 232
- ◆ Anti-China sentiment, which is currently the U.S.'s 11th largest source of steel imports, is thought to be a primary reason for the campaign pledge
- ◆ Because many countries could be affected by the blanket Section 232 ruling, European countries, particularly the U.K., worry supplies from their region will have to deal with duties that could hit their steelmakers disproportionately hard
- ◆ Canada and Mexico are both in the top five steel exporters to the U.S., along with Brazil, South Korea, and Turkey
- ◆ 81 % of U.S. imports come from ten countries

U.S. Steel Imports - Top Sources 2016



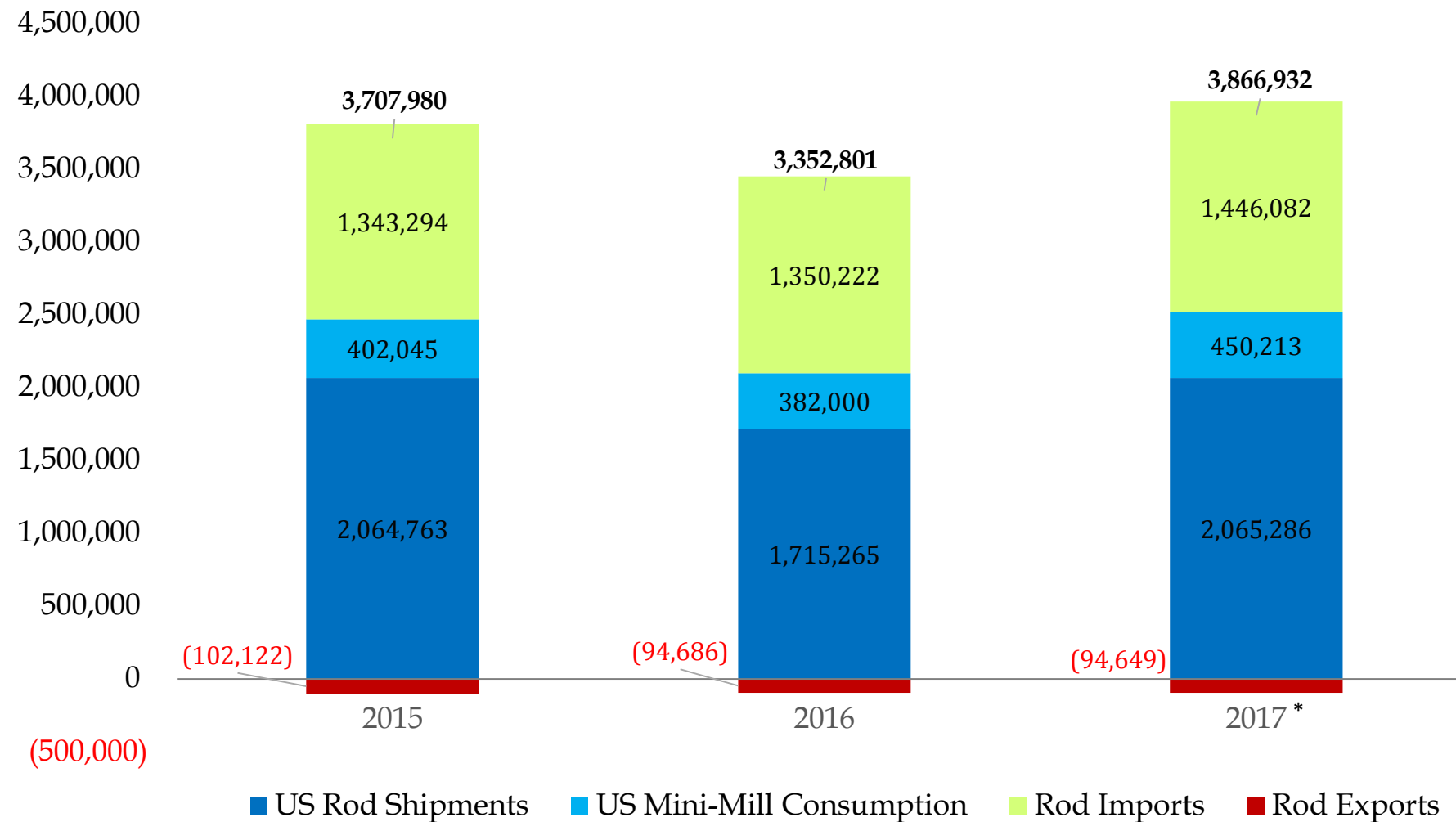
Source: New York Times

Competitive Outlook

IV

Competitive Outlook

U.S. Rod Market Volumes in units



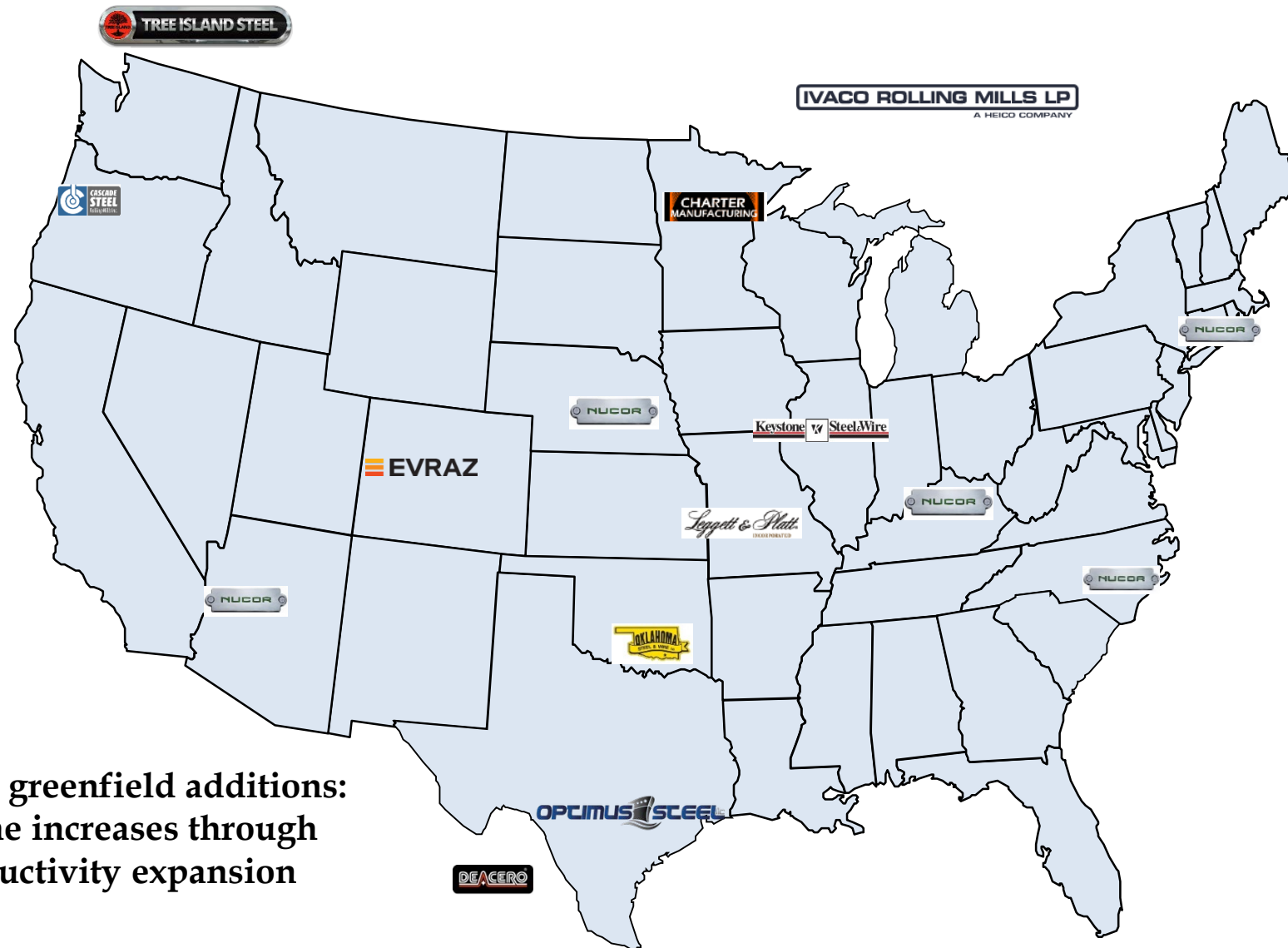
*2017 annualized based on January - October

Source: American Wire Producers Association

Competitive Outlook

Rod Mill Competitive Landscape – Upstream Producers

Locations of U.S. Carbon Rod Mills



Limited greenfield additions:
volume increases through
productivity expansion

Competitive Outlook

Intermediate Rod/Wire Processors

Representative Examples



Taubensee
Steel & Wire Company



















































































MID SOUTH WIRE
— EST. 1967 —



Competitive Outlook

Wire Products – Finished Products/End Markets

Leading Processors – by Wire Product Type

Carbon Steel	Stainless Steel	Specialty Steel (Annealed, bright, galvanized, etc.)	Aluminum	Copper	Electrical	Other (Nickel, Titanium, Brass, etc.)
    <i>Central Steel & Wire Company</i>               <i>Rochester Wire and Cable, LLC</i>     	  <i>Central Steel & Wire Company</i>           <i>NORTH AMERICAN STAINLESS</i>	                   <i>Rochester Wire and Cable, LLC</i>     	   <i>Central Steel & Wire Company</i>         	                  	                   <i>Rochester Wire and Cable, LLC</i>       	          

Competitive Outlook

Wire Products – Finished Products/End Market

Leading Processors – by Wire Product Type (Green = generally higher margins)



Competitive Outlook

Wire Products – Finished Products/End Market

Leading Processors – by Wire Product Type (cont.) (Green = generally higher margins)





Competitive Outlook

Two Different Growth Strategies

Vertical Integration

- >60% capacity from owned specialty fabricators located near rod-mills
- More reliable and projectable shipments and revenue
- Control over input prices



End Market Concentration

- Fabricators dispersed around the U.S. or near customers
- Obtain long term supply agreements with customers/mills
- Just-In-Time delivery, low shipping costs



Competitive Outlook

Growth Strategies Drivers - Currencies

- A weak dollar means U.S. currency purchases less of another country's products or services
- This leads to an increase in import pricing
- A weak dollar could lead to more competitive export pricing for the U.S., which can create U.S. jobs, if capacity existed
- China, like many other government controlled economies, manages its currency, making its export products more attractive
- Currency conflicts can lead to trade wars and import tariffs, which are often counterproductive



Capital Markets

V

Capital Markets

Availability of Capital is Tied to the Economy

- ◆ The financial system facilitates economic growth by providing four basic services:
 - ◆ Facilitating trade;
 - ◆ Facilitating risk management for various individuals and businesses;
 - ◆ Mobilizing resources; and
 - ◆ Obtaining information, evaluating businesses and individuals based on this information, and allocating capital
- ◆ As businesses grow they can access both debt and equity financing, and the mix of these two, called the “capital structure” decision, is an important choice every business makes
- ◆ **A rich diversity of financing sources is provided by the U.S. financial system.**
 - ◆ This diversity helps U.S. consumers and businesses to better manage their risks and lowers their cost of capital, but is cyclical
- ◆ The ability of businesses to access debt and equity financing is tied strongly to the economy
 - ◆ **During periods of economic growth, access to capital is readily available**
 - ◆ **On the contrary, during recessions, finding capital investments is much more restricted**

Capital Markets

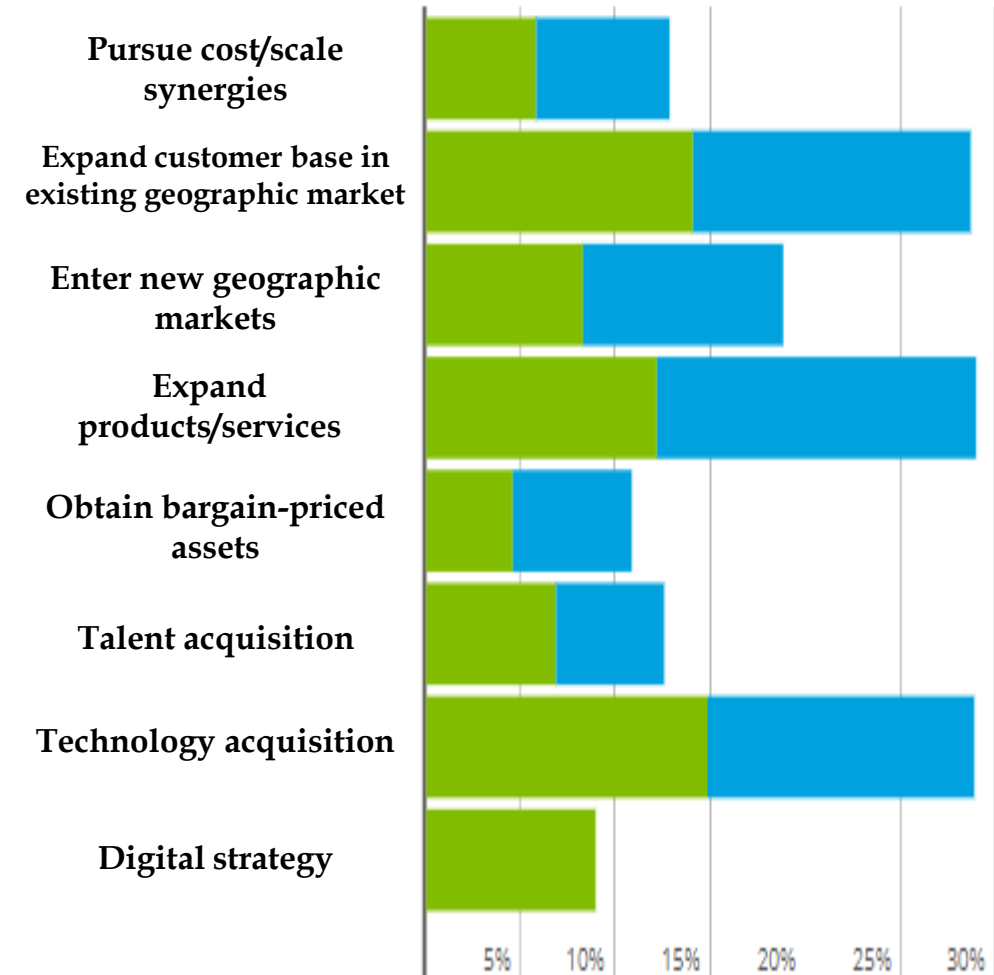
Mergers & Acquisitions Driven by Need for Growth

- ◆ Mergers and acquisitions volume is driven by companies' desire for continued growth ("Inorganic growth")
- ◆ Also, often large, well-established companies, as well as smaller companies, turn to M&A in need of long-term growth
- ◆ M&A is often undertaken with the intention to expand customer base, geographic, scale/expansion, and vertical or horizontal integration ("investment themes")
 - ◆ Companies must simultaneously exploit existing profitable business models to run their core business and also explore new products, markets, and models to drive growth
 - ◆ The intention, quite reasonably, is that the resulting combination of products, people and pipelines will grow ROIC/ROE
 - ◆ Revenue synergies also alter the competitive balance of power and create opportunities to change market dynamics, sell more products, or raise prices

Capital Markets

Mergers & Acquisitions Driven by Need for Growth

Internal M&A Drivers	External M&A Drivers
Customer base	Regulation
Geography	Energy costs
Economies of scale	Environmental
Vertical integration	Labor
Horizontal integration	Currency fluctuations
Product/service expansion	Technology
Retail synergies	



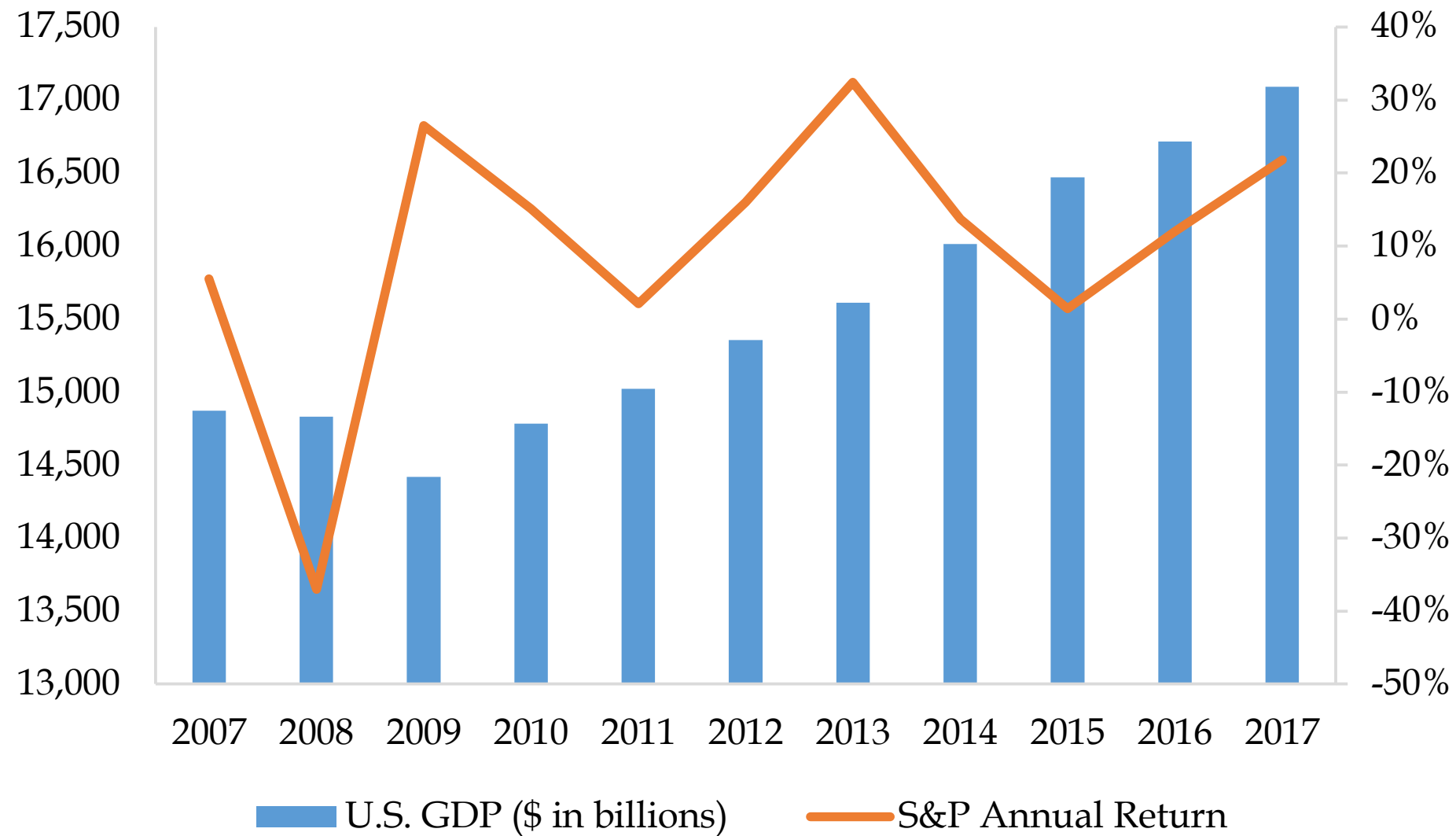
Fall 2017

Fall 2016

Source: Hinge Marketing

Capital Markets

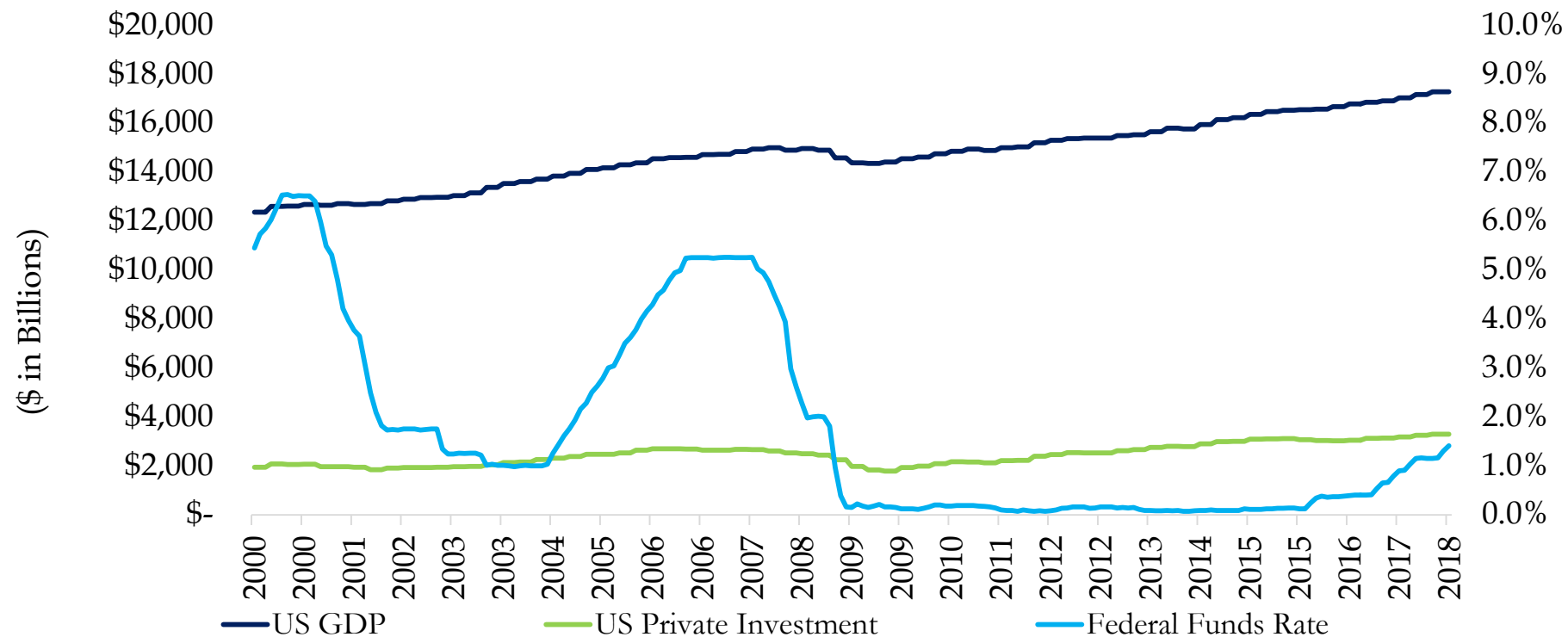
Wilshire Total Market And U.S. GDP



Capital Markets

GDP, Private Investment and the Federal Funds Rate

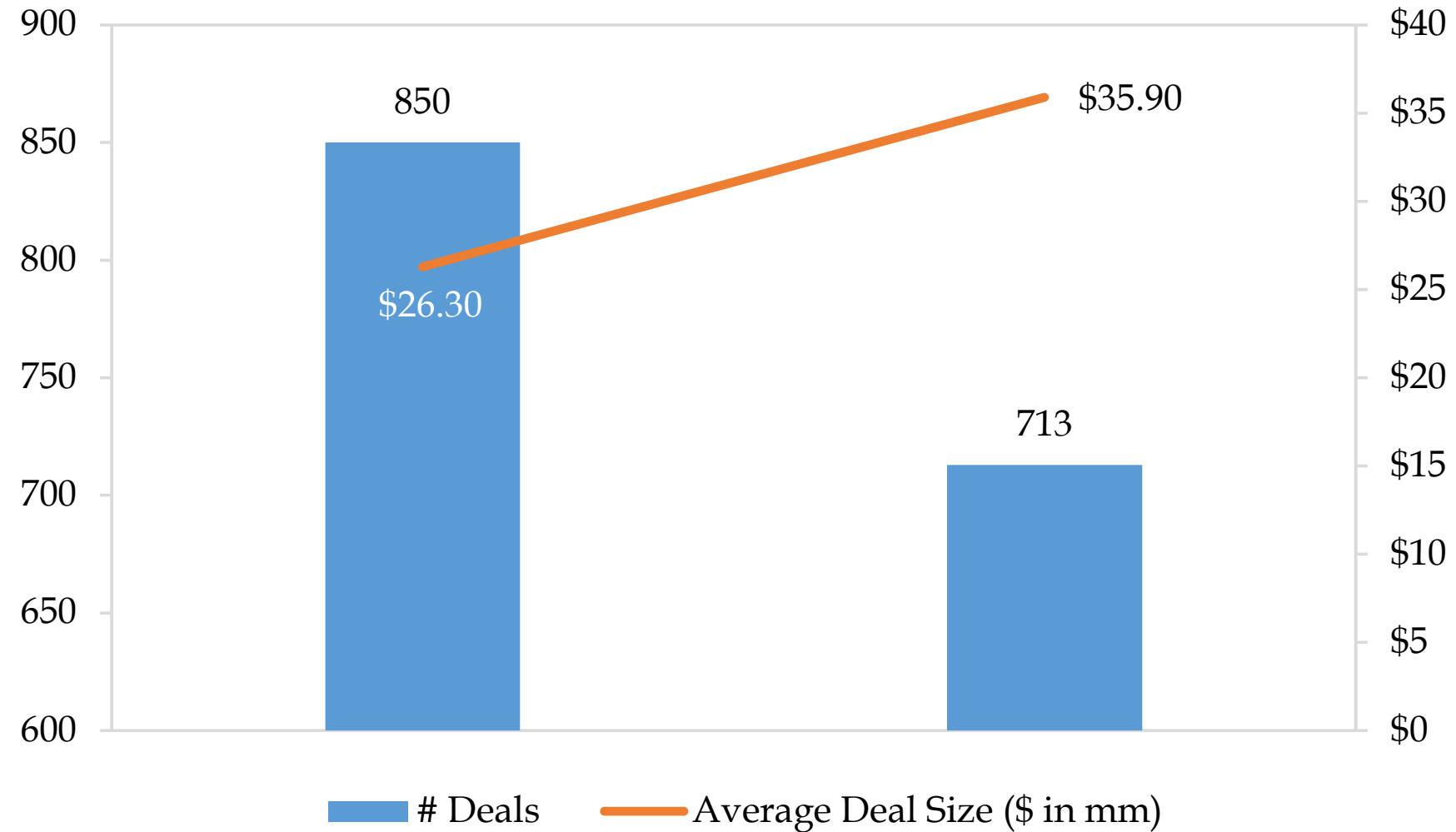
- ◆ Lower interest rates encourage investment spending, boosting the economy in times of slow growth
- ◆ The Federal Reserve Board sets the interest rates to increase and decrease demand for services
- ◆ Recently the U.S. has been periodically increasing the interest rate, and that trend is expected to continue
- ◆ During the 2008, the Fed lowered rates to 0.25% and it remained there until the end of 2015, when it was raised to 0.5%
- ◆ The Federal Reserve is expected to increase the rate to 2% in 2018, 2.5% in 2019, and 3% in 2020



Source: Federal Reserve Bank of St. Louis.

Capital Markets

Metals and Mining M&A Summary

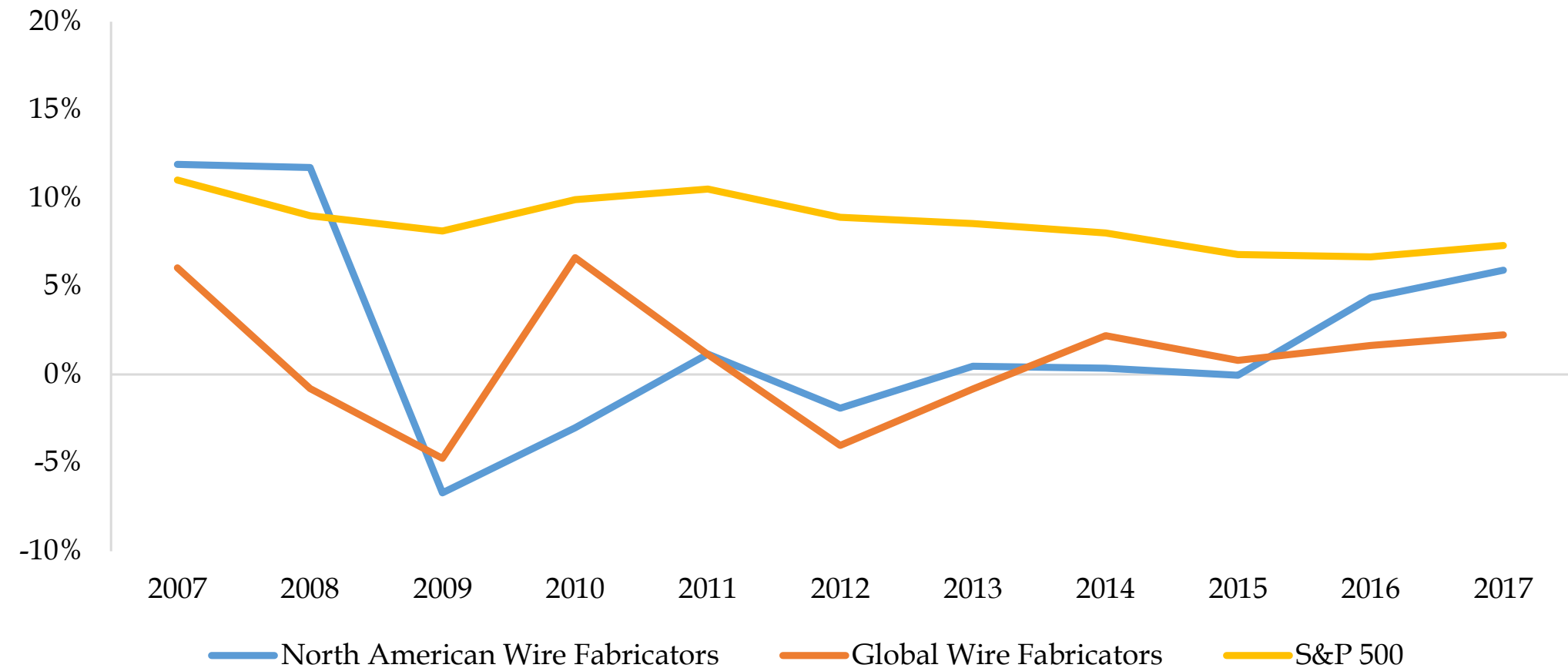


Source: Pitchbook.

Consolidation

III

Consolidation Industry Historical ROI



Consolidation

Trends and Opportunities – Rod and Wire

- ❖ Rod and wire investing themes are cyclical, as the industry is heavily influenced by commodity prices, the health of the U.S. and global economy, government policy, and foreign exchange rates
- ❖ Moving forward, product price improvements will help increase capital flows, as will the shift of demographics in age as well as movement to the Sun Belt
- ❖ The wire market should experience increased consolidation, particularly in the U.S., in order to improve margins, reduce excess capacity and diversify product mix, but only after baby-boomer ownership looks to retire and seek liquidity
 - ◆ Organic growth in upstream/intermediate is very difficult as the market is over capacitated with swing imports (limited Greenfields)
 - ◆ The current trade environment and weakening U.S. Dollar will lead to consolidation
 - ◆ Energy, wage and regulatory costs make it harder for domestic wire manufacturers to remain profitable
 - ◆ Companies will need to scale to effectively leverage the rod market at various price points

U.S. and Canada Metal and Mining Companies	
Ownership	# Enterprises
Public	2,466
Sponsor-Backed	814
Independent	18,933
Total	22,213



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