

ENVIRONMENTAL STEWARDS,  
JOB CREATORS, ECONOMIC LEADERS

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*Voice of the Recycling Industry*

Institute of  
Scrap Recycling  
Industries, Inc.

## **Recent Developments in the U.S. and Global Ferrous Scrap Markets**

**American Wire Producers Association**

**2011 Government Affairs Conference**

**Washington, DC**

**September 22, 2011**

**Joseph Pickard**

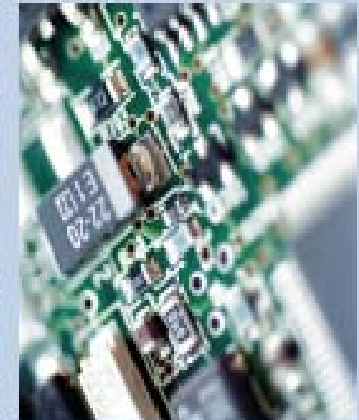
**Chief Economist and Director of Commodities**

**Institute of Scrap Recycling Industries, Inc.**

# About ISRI

The Institute of Scrap Recycling Industries, Inc. (ISRI) represents more than 1,600 member companies that process, broker & consume scrap metals, paper, plastics, glass, textiles, tires and rubber, and electronics.

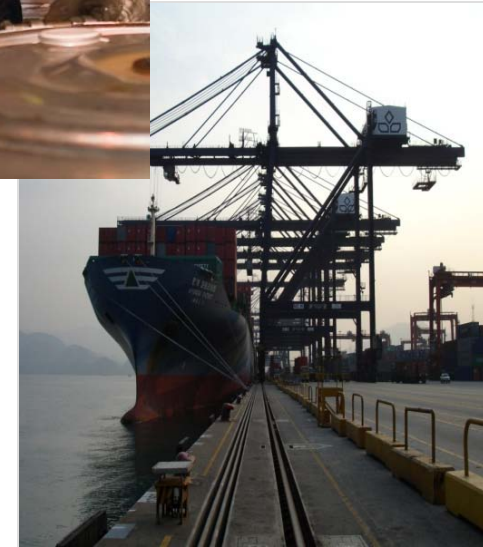
With headquarters in Washington, D.C., the Institute provides education, advocacy, and compliance training, and promotes public awareness of the vital role recycling plays in the U.S. economy, global trade, the environment and sustainable development. For more information about ISRI, please visit [www.isri.org](http://www.isri.org).



# Over 100 Years of Recycling Experience

**Industry directly and indirectly employs more than 450,000 people in the United States and has been creating “green jobs” for decades.**

**Many ISRI members have been in business for three generations or more.**

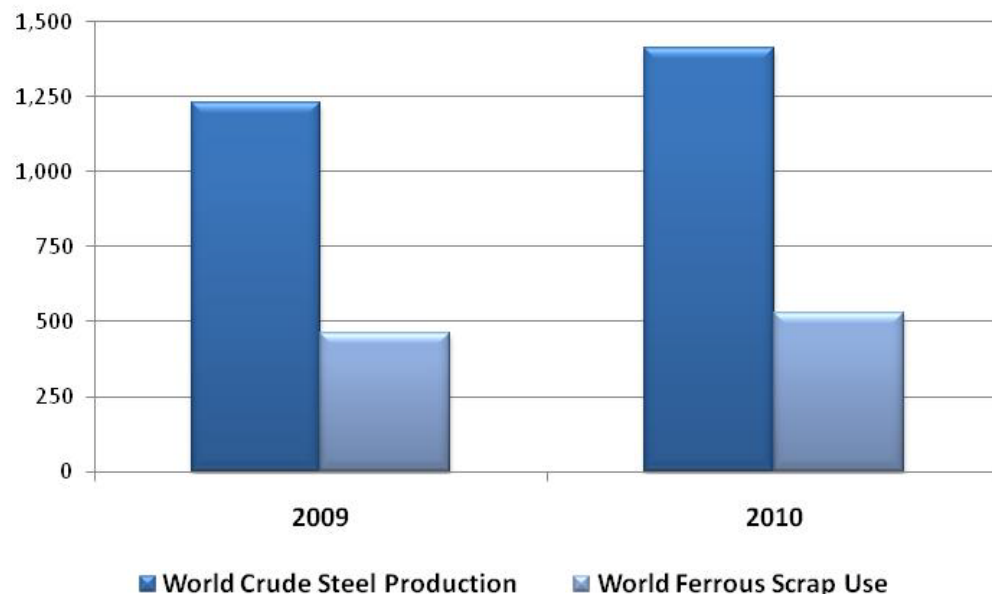


# About the Global Ferrous Scrap Market

- The market for ferrous scrap is increasingly global.
- Scrap has become a key feedstock utilized in manufacturing new products worldwide and supplies a significant amount of global raw material needs.
- Ferrous scrap is a world-traded commodity that becomes less dependent on local supplies and markets every day.
- Scrap material moves to where demand directs it regardless of its original location.

## Global Crude Steel Production and Scrap Use (million metric tons)

Source: Bureau of International Recycling



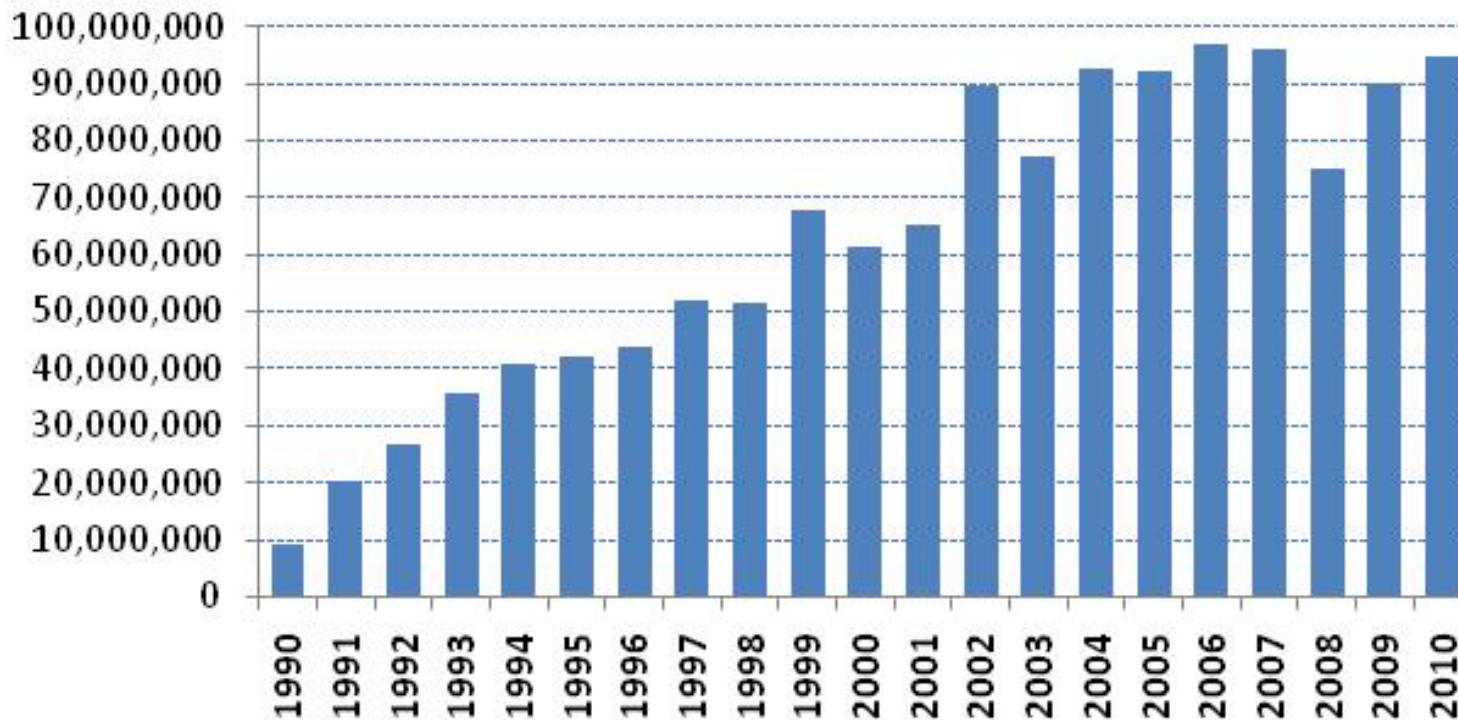
**World Crude Steel Production in 2010:  
1.4 billion tons**

**World Ferrous Scrap Usage in 2010:  
530 million tons (+15%!)**

# Global Ferrous Scrap Trade Trends

## Volume of Global Ferrous\* Scrap Exports, 1990 - 2010 (Mt)

Source: UN Comtrade Database



Global Ferrous Scrap Exports in 1990: 9.3 million mt

Global Ferrous Scrap Exports in 2010: 94.7 million mt

\*Includes stainless and alloy scrap

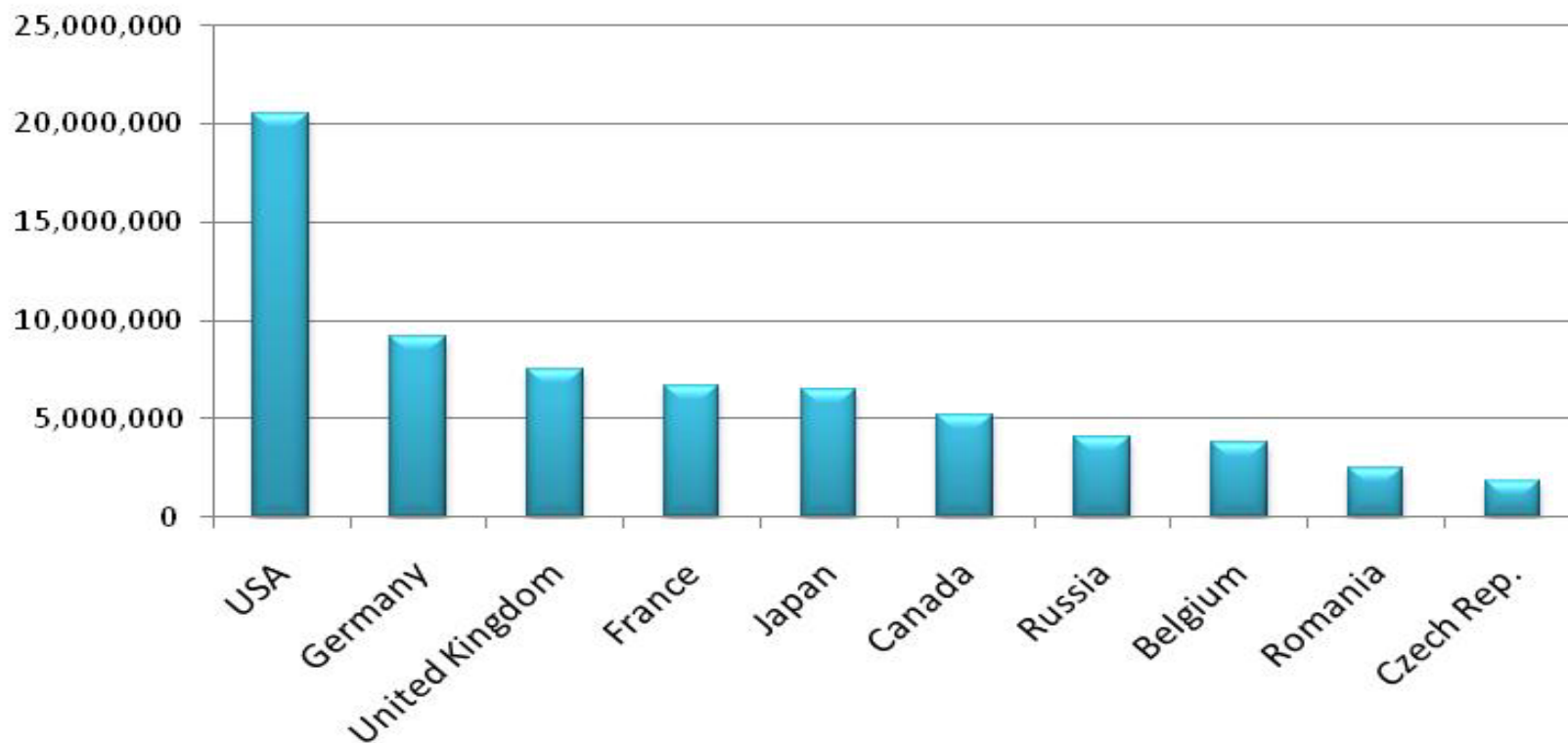
# Top Ferrous Scrap Exporters

## The United States is Global Leader in Ferrous Scrap Exports

### Top 10 Exporters of Ferrous Scrap, 2010

(metric tonnes)

Source: UN Comtrade Data



# About the U.S. Ferrous Scrap Recycling Industry

In the United States alone, **74 million metric tons** of ferrous scrap was processed by the scrap recycling industry last year.

In 2010, the U.S. ferrous scrap industry was valued at **\$26.4 billion**.

Obsolete ferrous scrap is recovered from automobiles, steel structures, household appliances, railroad tracks, ships, farm equipment and other sources. In addition, prompt scrap, which is generated from industrial and manufacturing sources, accounts for approximately half of the ferrous scrap supply.

Both obsolete and prompt scrap are processed by the scrap recycling industry into commodity grade material that is used to produce more than 60% of total raw steel produced in the United States, predominantly at electric arc furnaces.

In addition, the United States exports ferrous scrap to approximately **90 countries worldwide**.

According to UN data, the United States is the **largest exporter of ferrous scrap in the world**, accounting for over 20% of global ferrous scrap loadings last year.

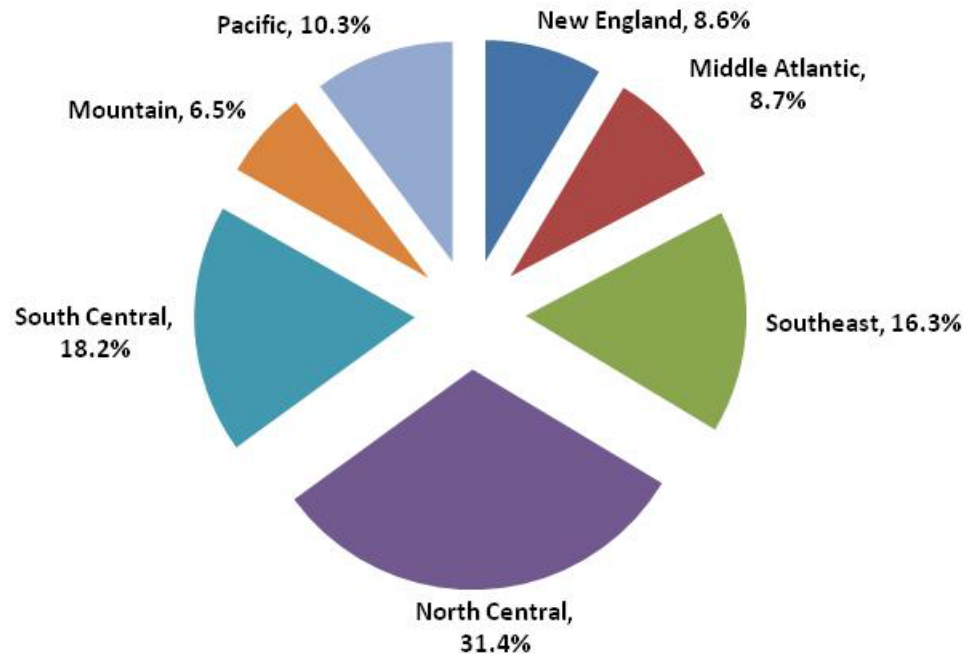


# U.S. Ferrous Scrap Supply: Meeting Demand at Home and Abroad

## Obsolete Ferrous Scrap Supply

A recent study by commissioned by ISRI reports that the U.S. obsolete scrap inventory as of December 31, 2009 stood at 1.18 billion tons

**Estimated Regional Distribution of Inventory of U.S. Obsolete Ferrous Scrap, 2009**

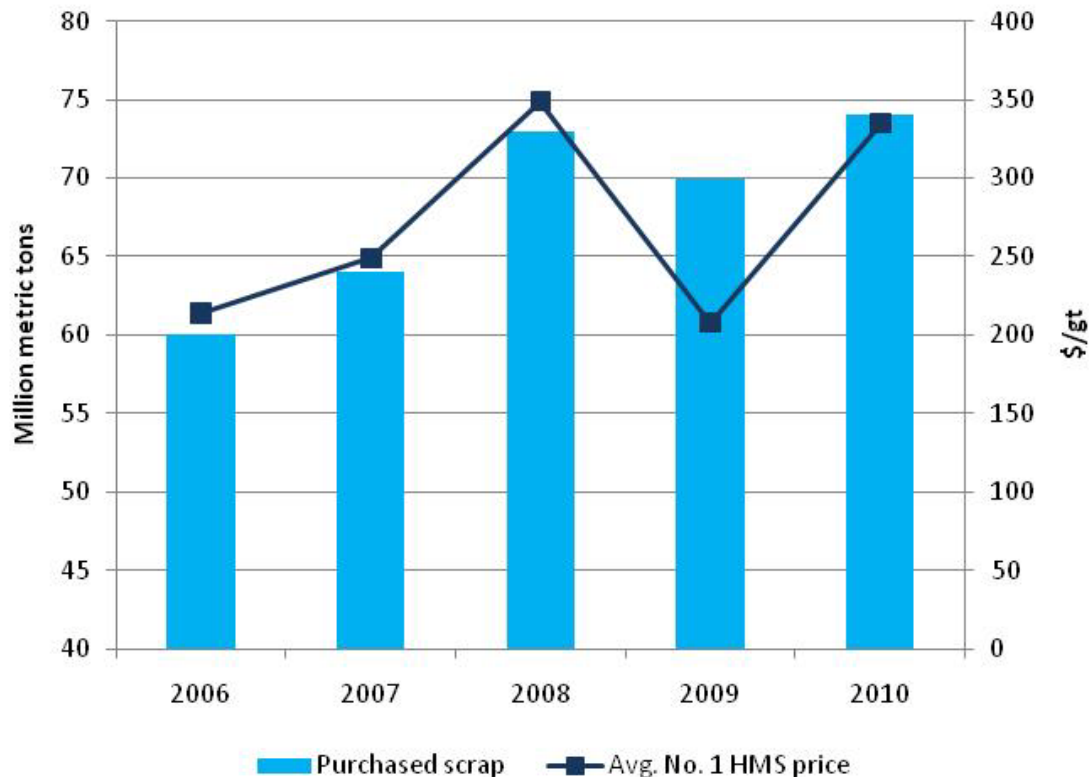




# Scrap Metal Market Dynamics: Prices Provide the Incentive

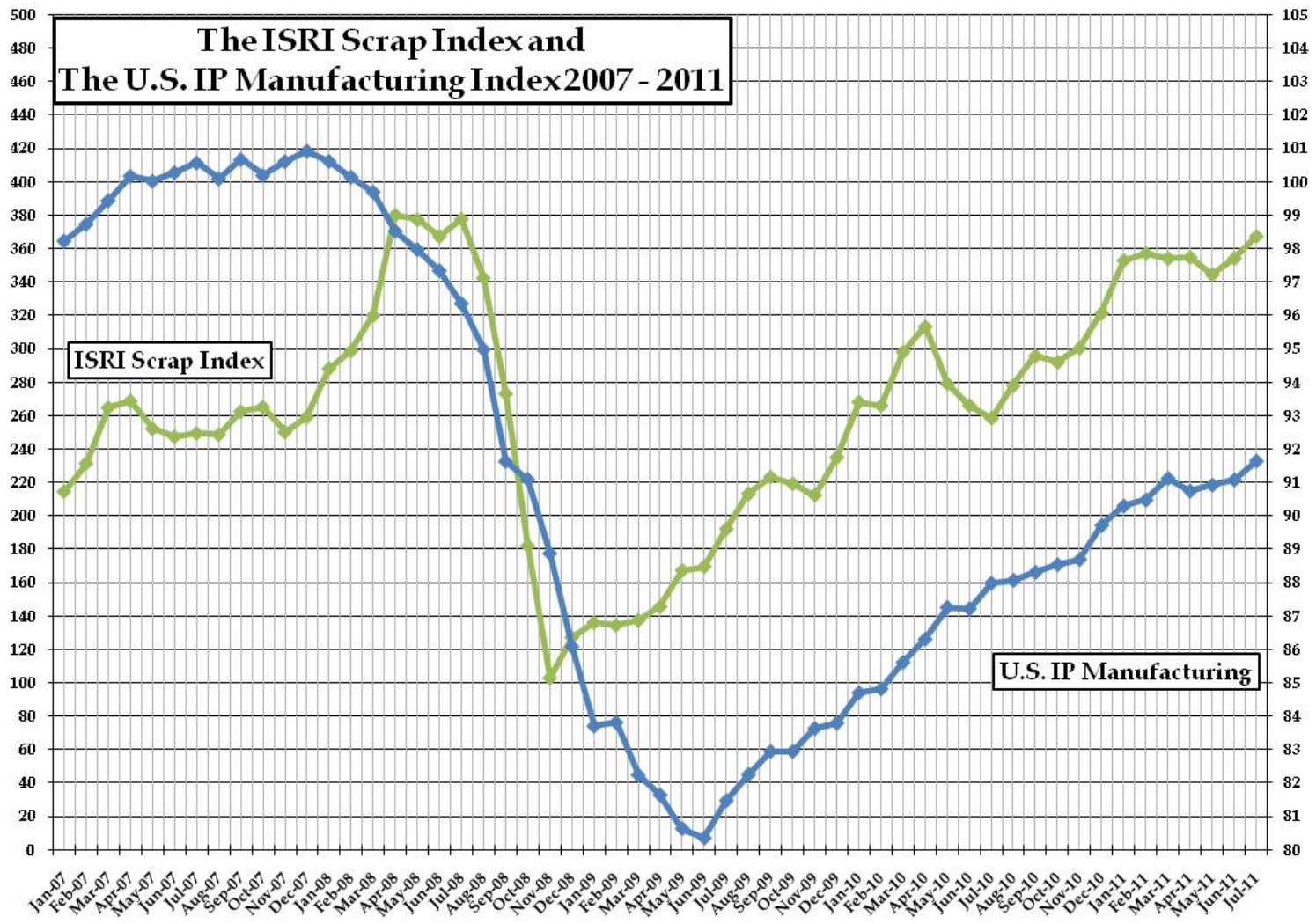
## United States: Purchased Ferrous Scrap\* and Avg. No. 1 HMS Prices, 2006-2010

(Source: US Geological Survey)

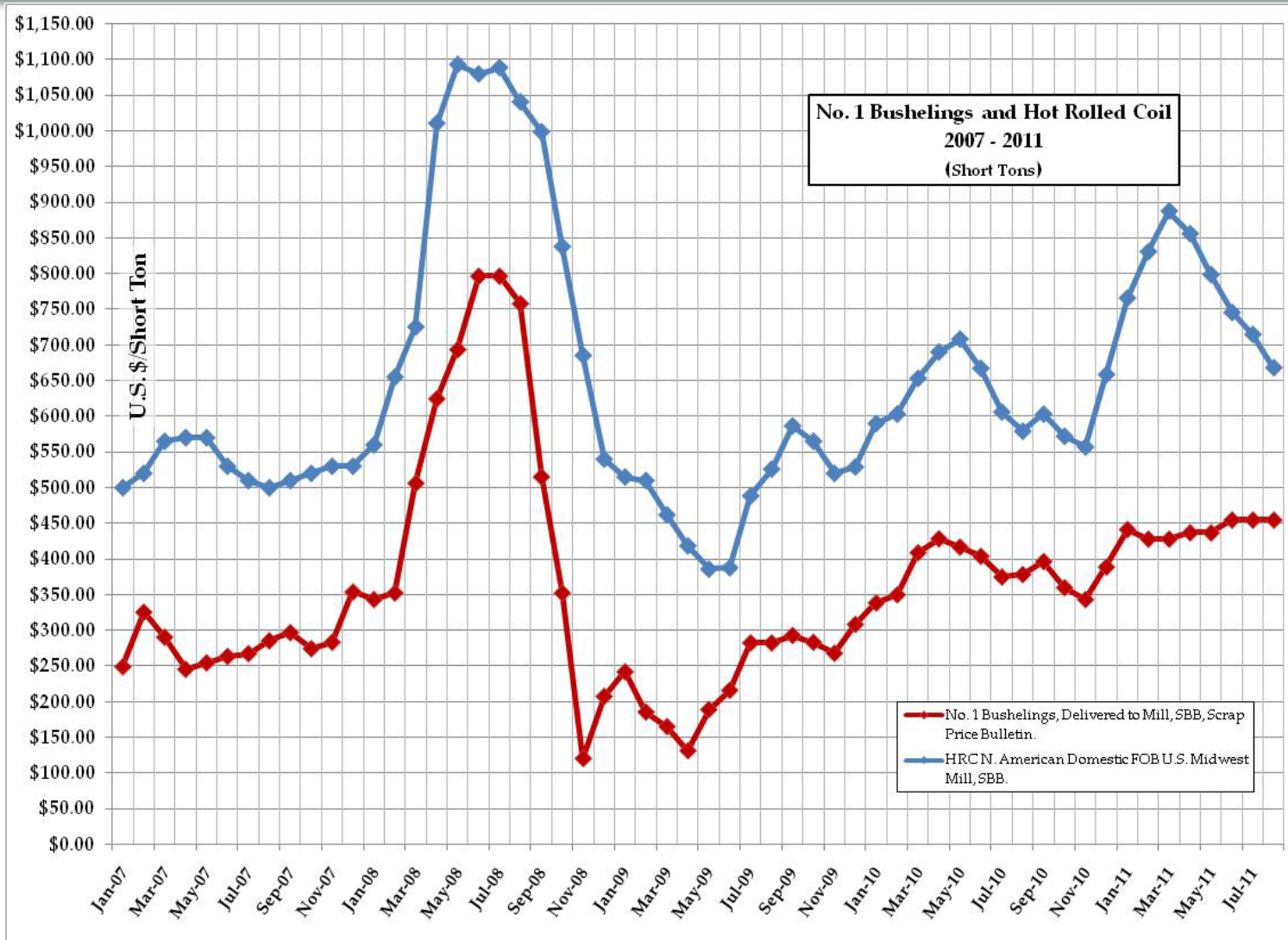


\*Consumer shipments + exports - imports

# Manufacturing and U.S. Scrap Prices



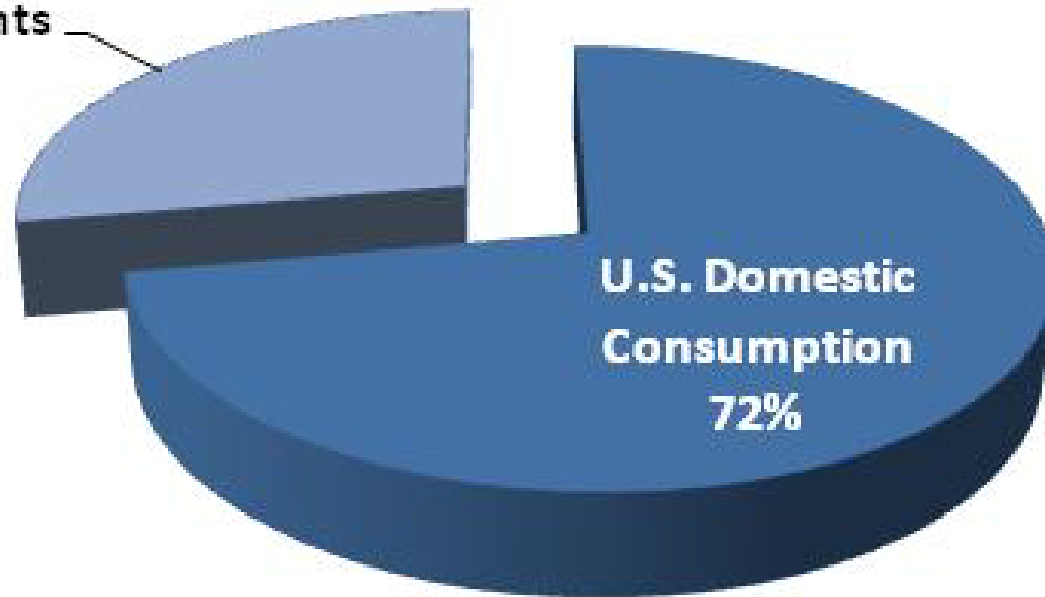
# Recent Trends in Steel and Ferrous Scrap Pricing



# Most Important Scrap Market for the the U.S.: The U.S.

## Consumption/Shipments of U.S. Ferrous Scrap, 2010

U.S. Export  
Shipments  
28%

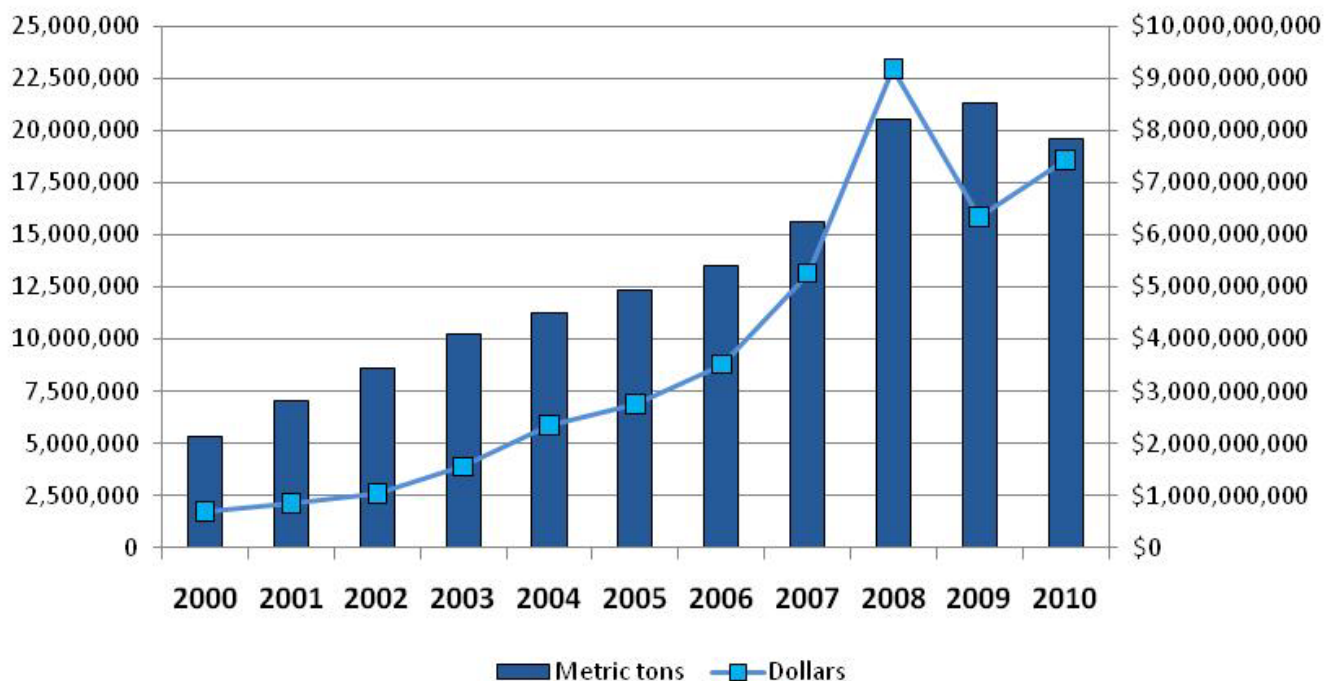


# U.S. Ferrous Exports

## U.S. Ferrous Scrap Exports by Value and Volume, 2000-2010

U.S. Ferrous Scrap Exports in 2000: 5.3 million mt

U.S. Ferrous Scrap Exports in 2010: Nearly 20 million mt



# Demand for U.S. Ferrous Scrap by Grade

## Overseas Demand for US Ferrous Scrap

### US Ferrous Scrap Exports by Grade (Metric tons)

	2010	% Chg.
Cast Iron Scrap	516,747	-23%
Tinned Iron	81,838	-27%
No. 1 Bundles	325,874	5%
No. 2 Bundles	53,282	-3%
Borings, Shovelings, Turnings	61,643	-42%
Shavings, Chips, etc.	236,565	9%
No. 1 HMS	5,646,271	-3%
No. 2 HMS	1,024,206	14%
Cut Plate and Structural	824,711	-38%
Shredded Steel	7,438,729	-13%
Other Ferrous Scrap	2,444,515	25%

# Key Export Markets for U.S. Ferrous Scrap

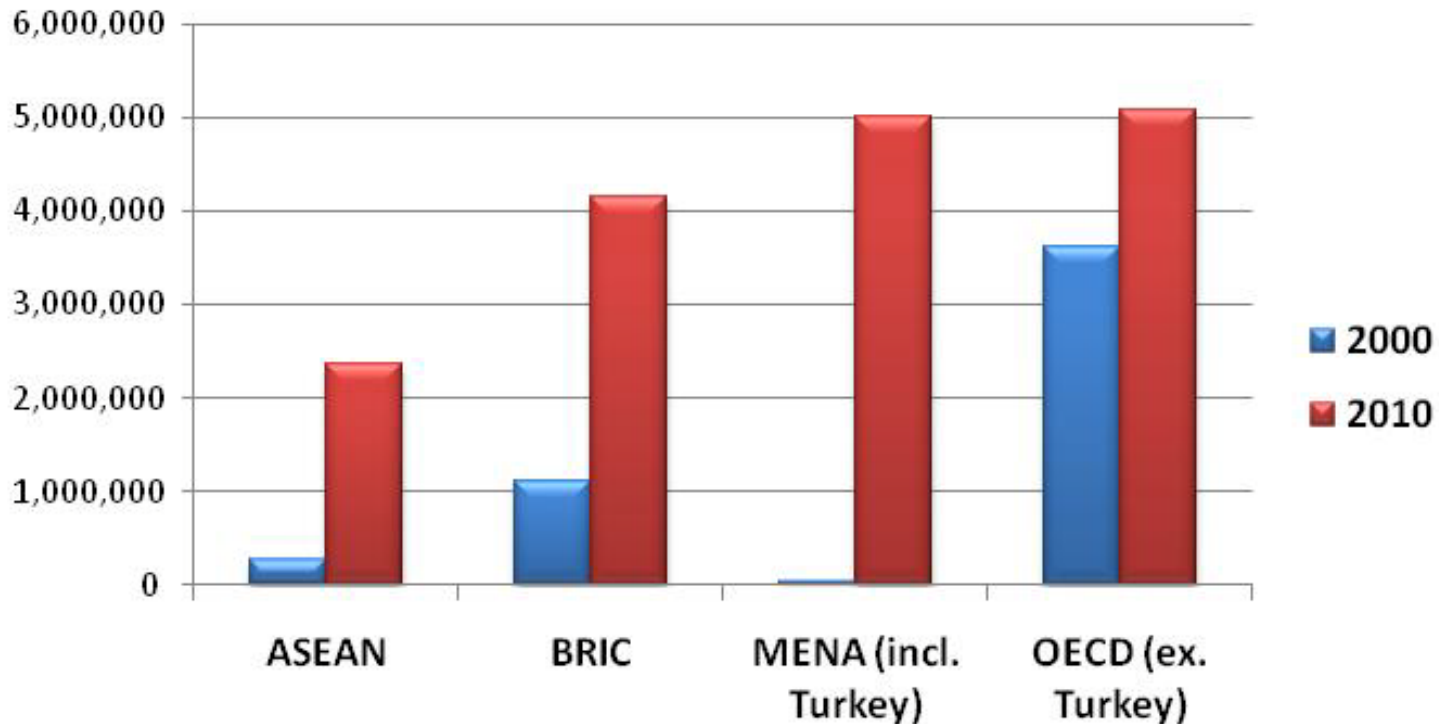
## Top 10 Destinations for US Ferrous Scrap in 2010 (thousand mt):

1. Turkey (4,354)
2. China (3,126)
3. S. Korea (2,682)
4. Taiwan (2,368)
5. Canada (1,337)
6. India (951)
7. Malaysia (803)
8. Mexico (665)
9. Egypt (650)
10. Vietnam (614)

# Demand Trends for U.S. Ferrous Scrap by Selected Regions

## U.S. Ferrous Scrap Exports by Region/Economic Development, 2000 & 2010 (metric tons)

Source: U.S. Census Bureau/U.S. International Trade Commission

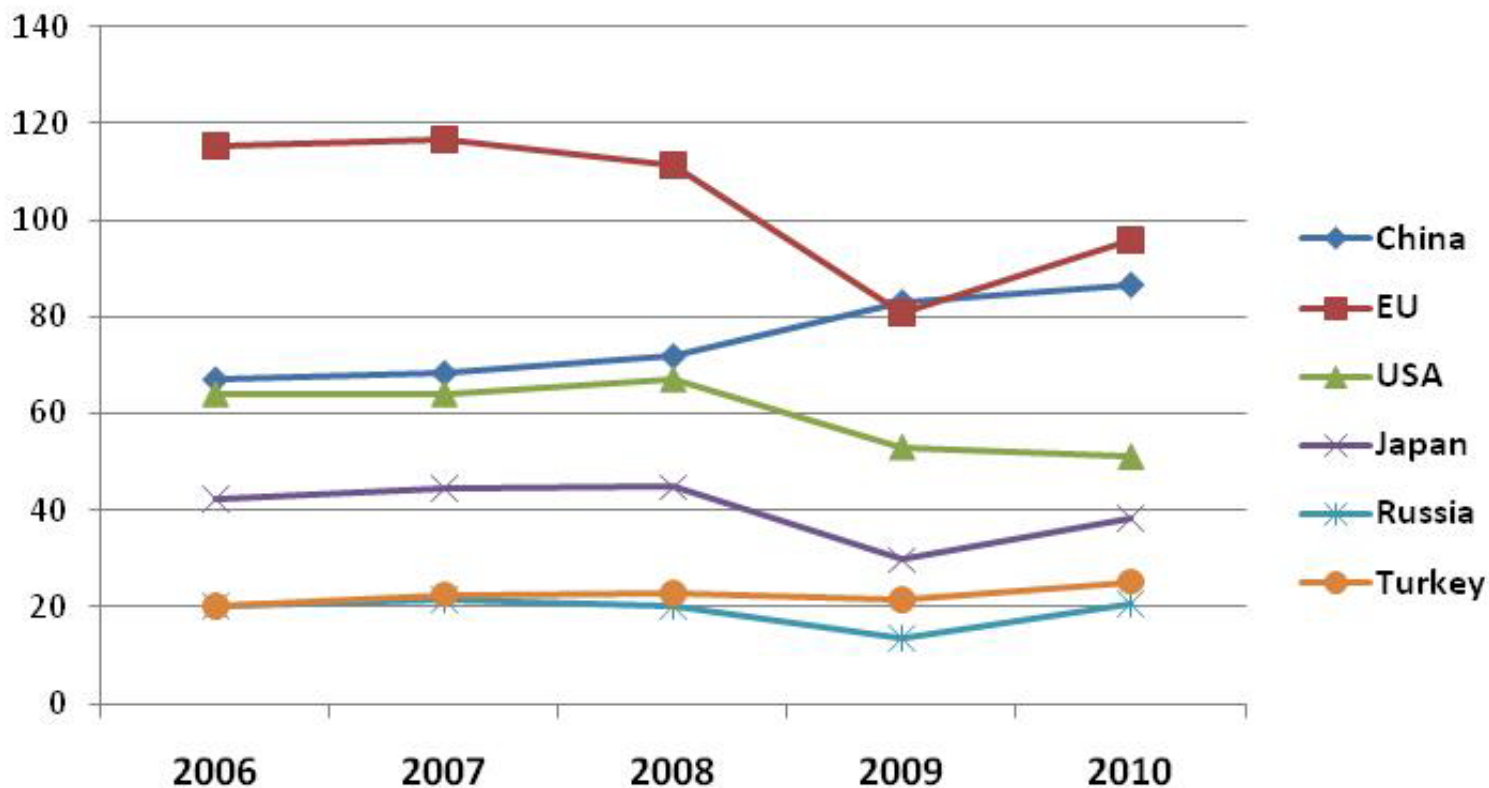




# Recent Trends in Ferrous Scrap Consumption

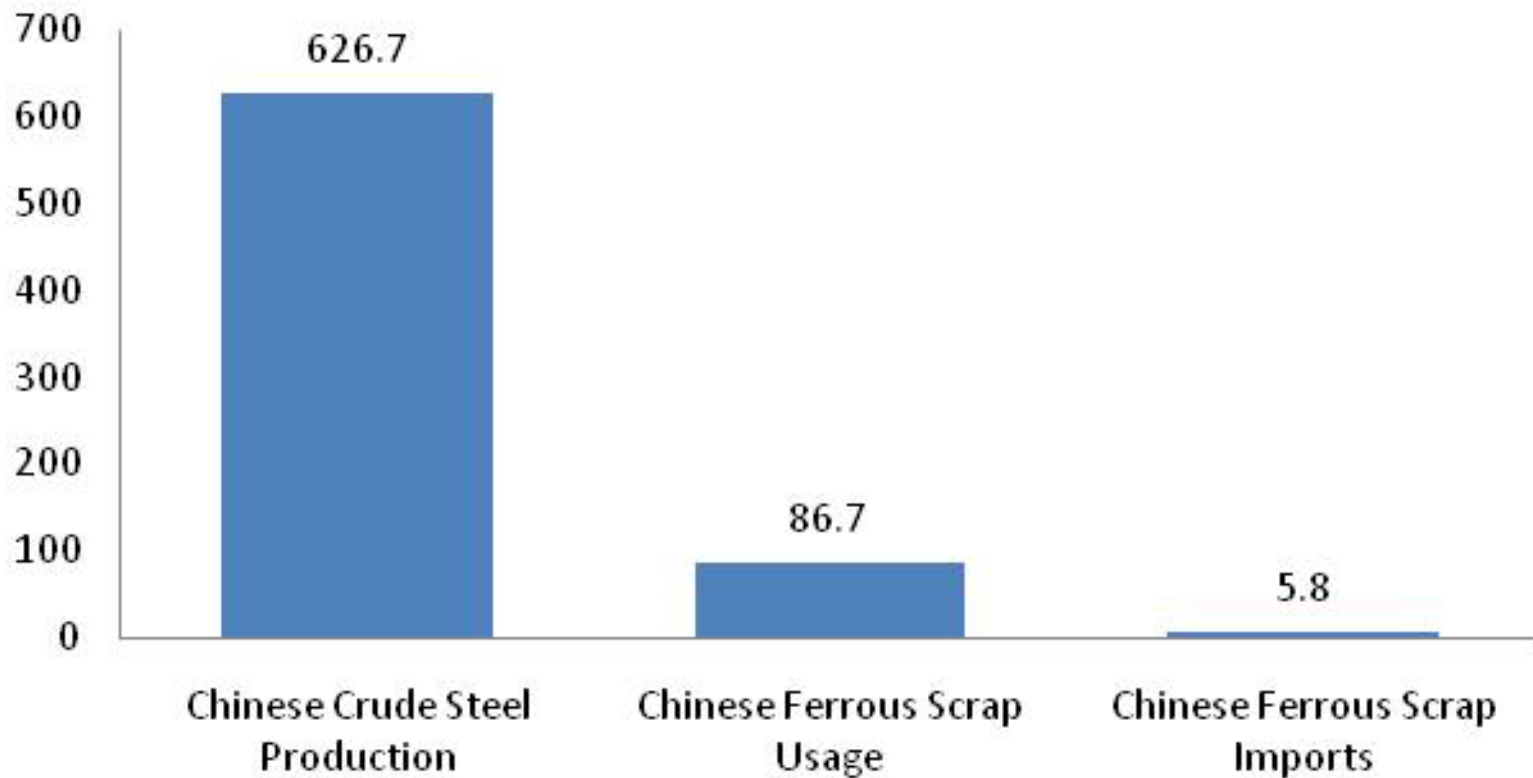
## Ferrous Scrap Consumption by Major Consumer, 2006-2010 (million mt)

Sources: BIR & USGS



# Chinese Market: Steel Output and Scrap Demand

**Selected Chinese Steel Industry Figures,  
2010 (million mt)**



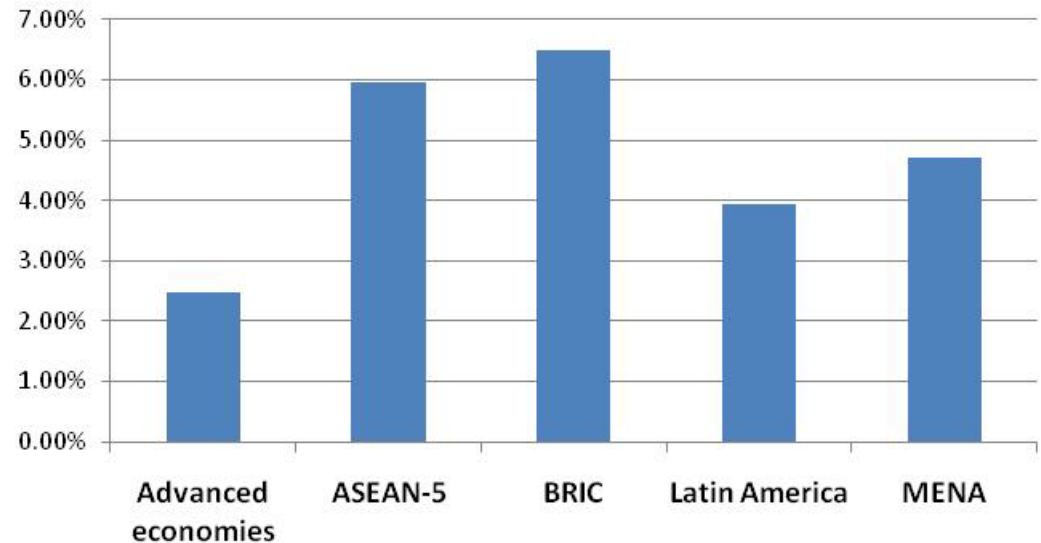
# Key Drivers and Outlook

## Key Trends/Drivers:

- Rapidly changing/increasingly global market
- Regional Economic and Manufacturing Growth
- Production Process/ Technology
- Energy and Transportation Costs
- Infrastructure /Economic Development in China and Developing Economies
- Shifting Consumption Patterns
- U.S. presence and growth potential

## Average Forecast GDP Growth 2012-2016 by Selected Regions

Source: IMF World Economic Database



# Thank you!

For more information please visit:  
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