

FAPRI 2006  
WORLD OUTLOOK  
Presentation



IOWA STATE UNIVERSITY

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**FAPRI**

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Food and Agricultural  
Policy Research Institute

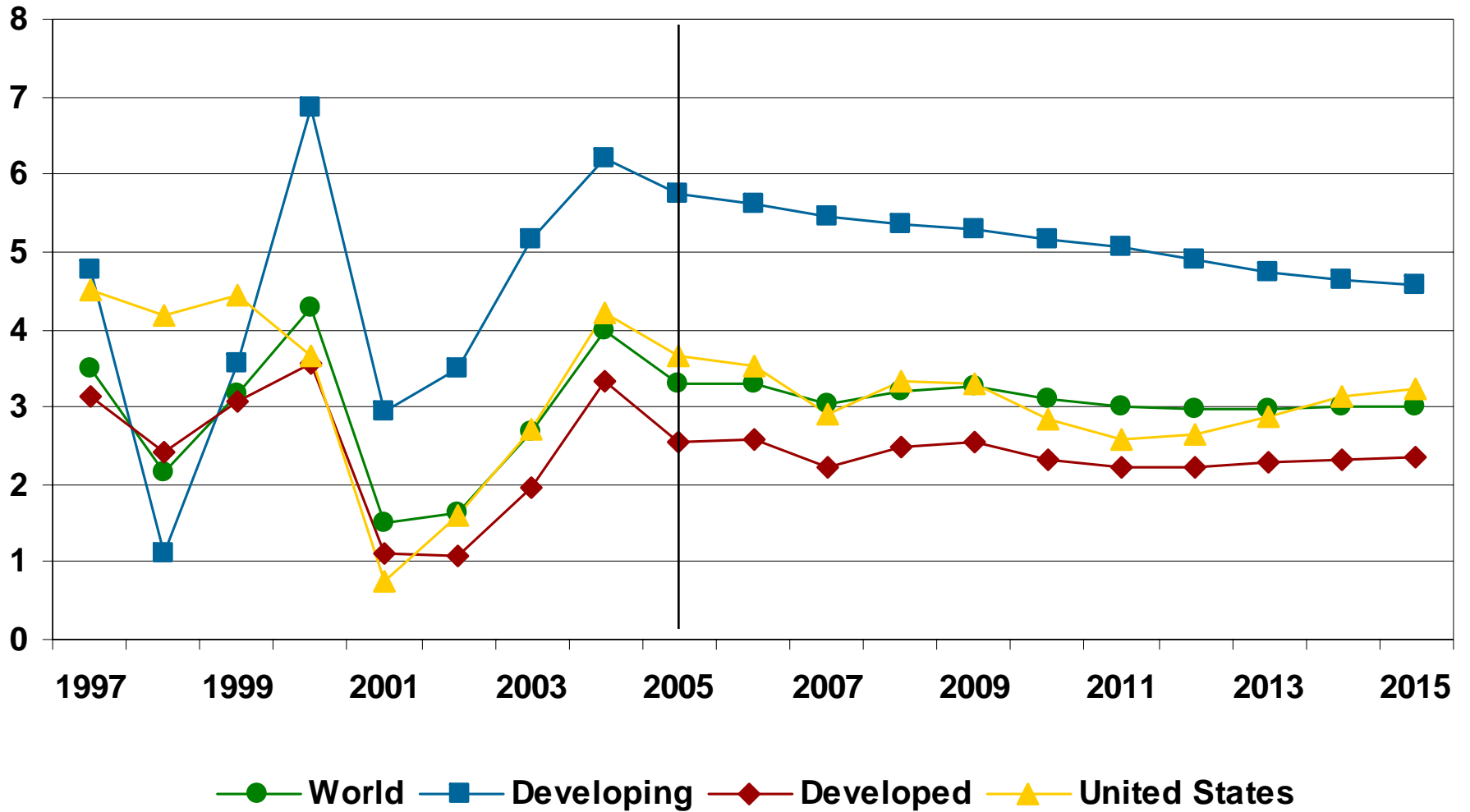
# Global Macroeconomic Overview

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- Sustained and widespread real economic growth for the decade averaging 3.1%.
- Industrialized countries including, the US, EU-15, and Japan post average growth rates of 3.3%, 1.9%, and 1.8%.
- China, India and other Asian economies continue their high growth rates in the coming decade at 7.6% and 6.1%.
- South America shows strong economies with Brazil and Argentina growing at 3.6% and 4.4%.

# Real GDP Growth Rates

percent



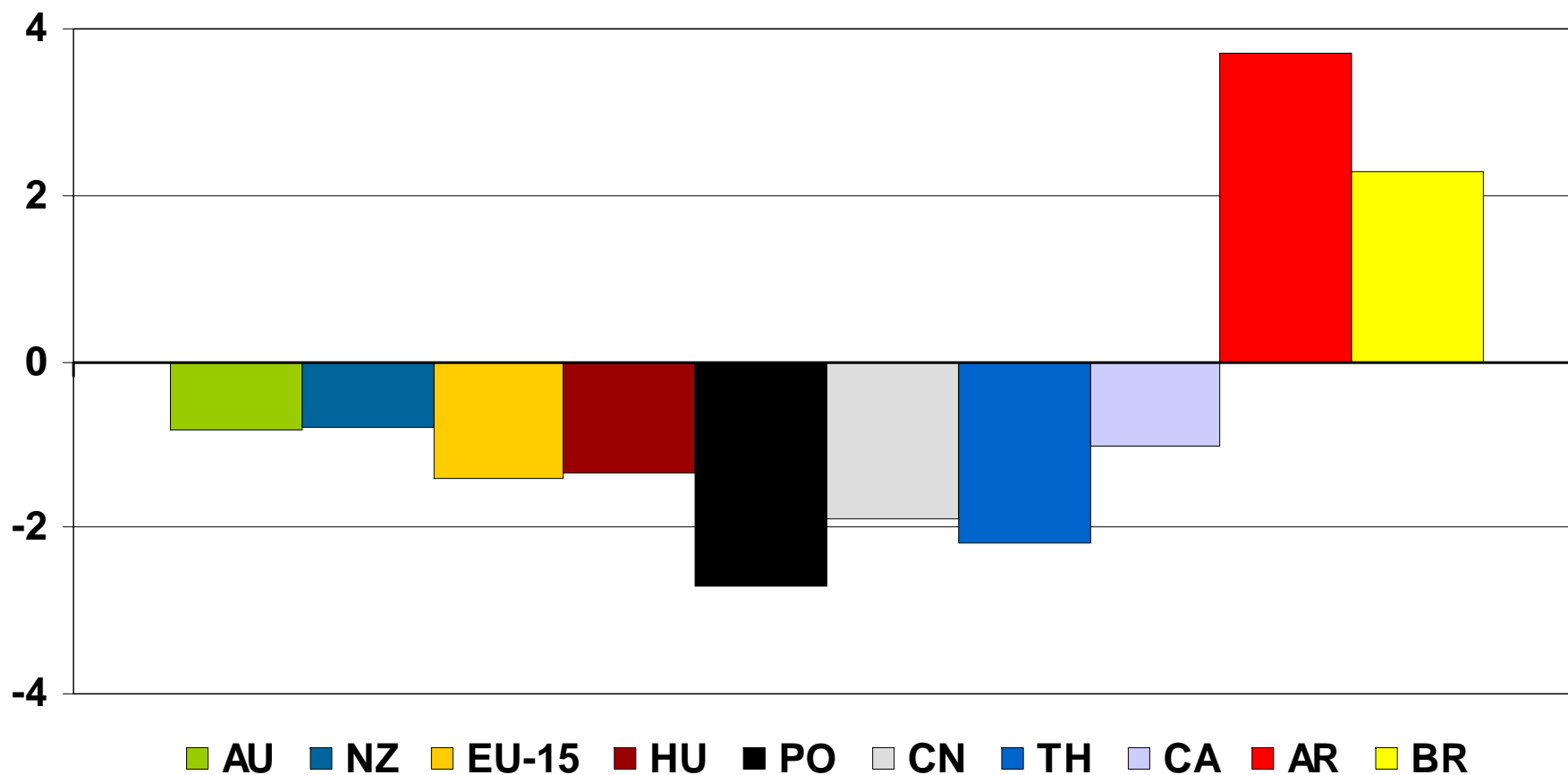
# Global Macroeconomic Overview

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- Strengthening of the Euro and many other OECD currencies against the US dollar (around 1.2 to 3.8 % per year in the next 5 years), inducing increased competitiveness of US exports.
- South American currencies appreciate against the dollar in 2005. From 2006 on, all currencies depreciate at 2.3% to 3.7% for Brazil and Argentina.
- Strengthening of currencies in many CEECs, Baltic, and CIS countries continue relative to the dollar.
- Strengthening of currencies in Malaysia, Taiwan, and Thailand. The Chinese Yuan appreciates by 1.9% annually in the next decade.

# Average Growth in Exchange Rate

percent



# Policy and Other Assumptions

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- EU CAP Reform and Enlargement.
  - EU Sugar Reforms.
  
- Full implementation of the URAA commitments for developed and developing countries.
  
- Recovery from BSE and AI shocks. Limited impact of FMD in Brazil.
  
- Rising interest in renewable fuels.
  - Mandatory 2% blend of biodiesel in 2008 in Brazil.
  - EU's Renewable Fuels Directive of 2003.

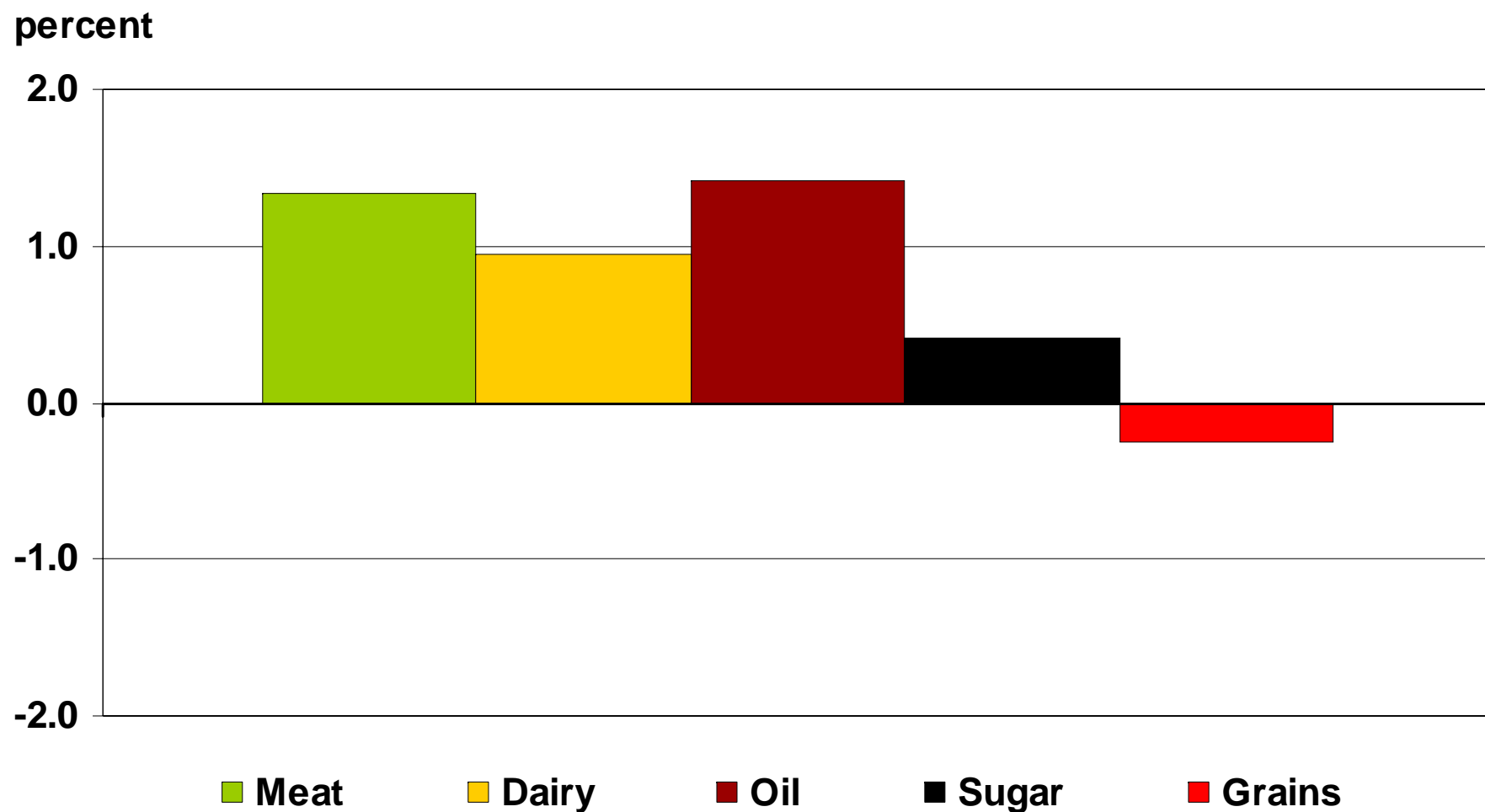
# Meat Outlook Overview

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- SPS shock, BSE in North America, AI in Asia and Russia, and FMD in South America shape the short-run outlook outcomes.
- Demand growth drive long-run outlook.
- After reaching historic highs in the last three years, meat prices adjust downwards in the short-run and strengthens again in the outer period.
- Rising income drives per capita meat consumption to increase by 6.8 kg per person per year in the next decade.
- Strong meat demand fuels trade and production to increase by 25.6% and 20.4%, respectively.
- South American countries gain increasing market share in world meat trade.
- After losing 7 percentage points of market share in 2004, the U.S. regains 4 percentage points by 2010, and maintains its share the rest of the decade.

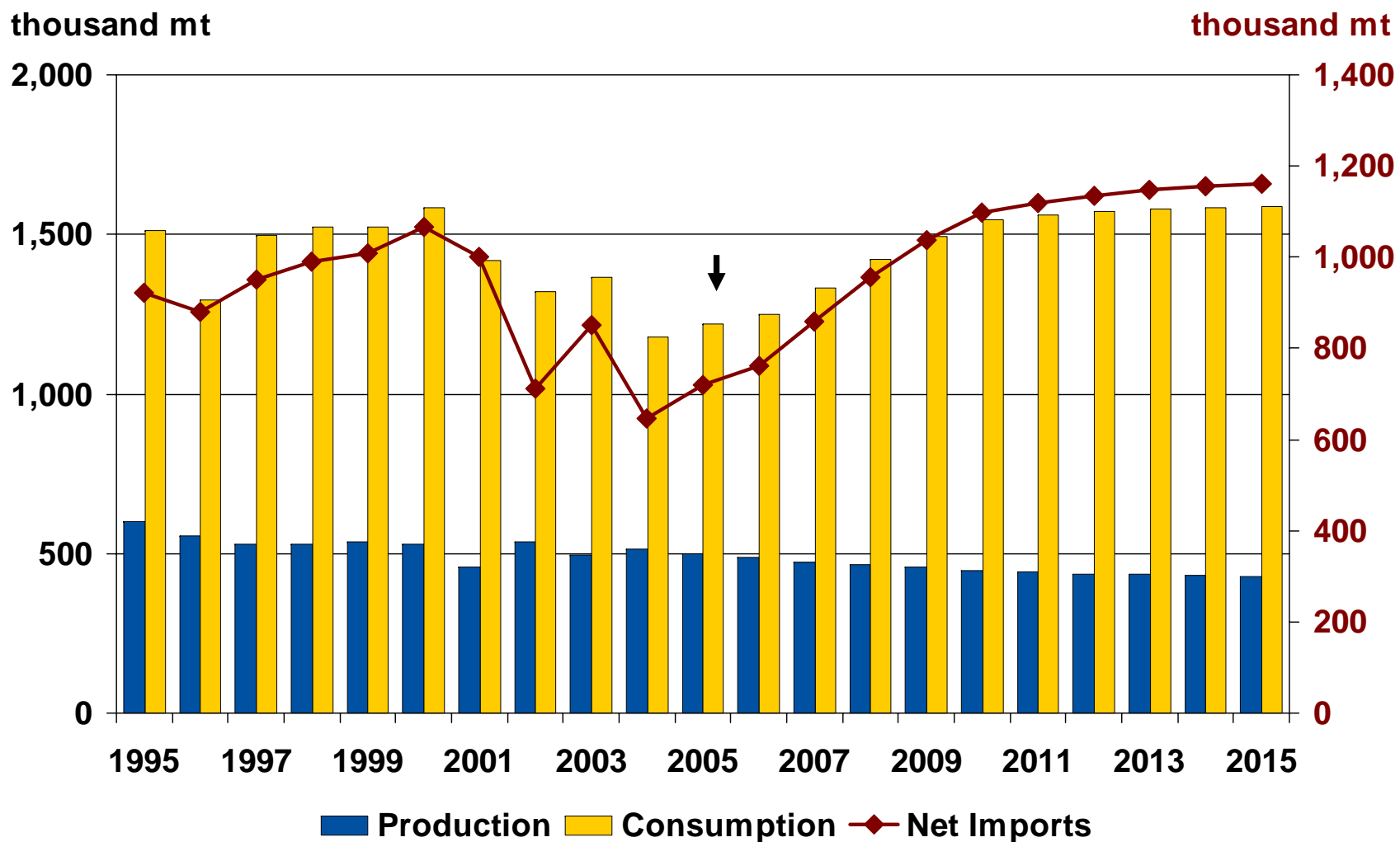
# Change in Average Per Capita Consumption

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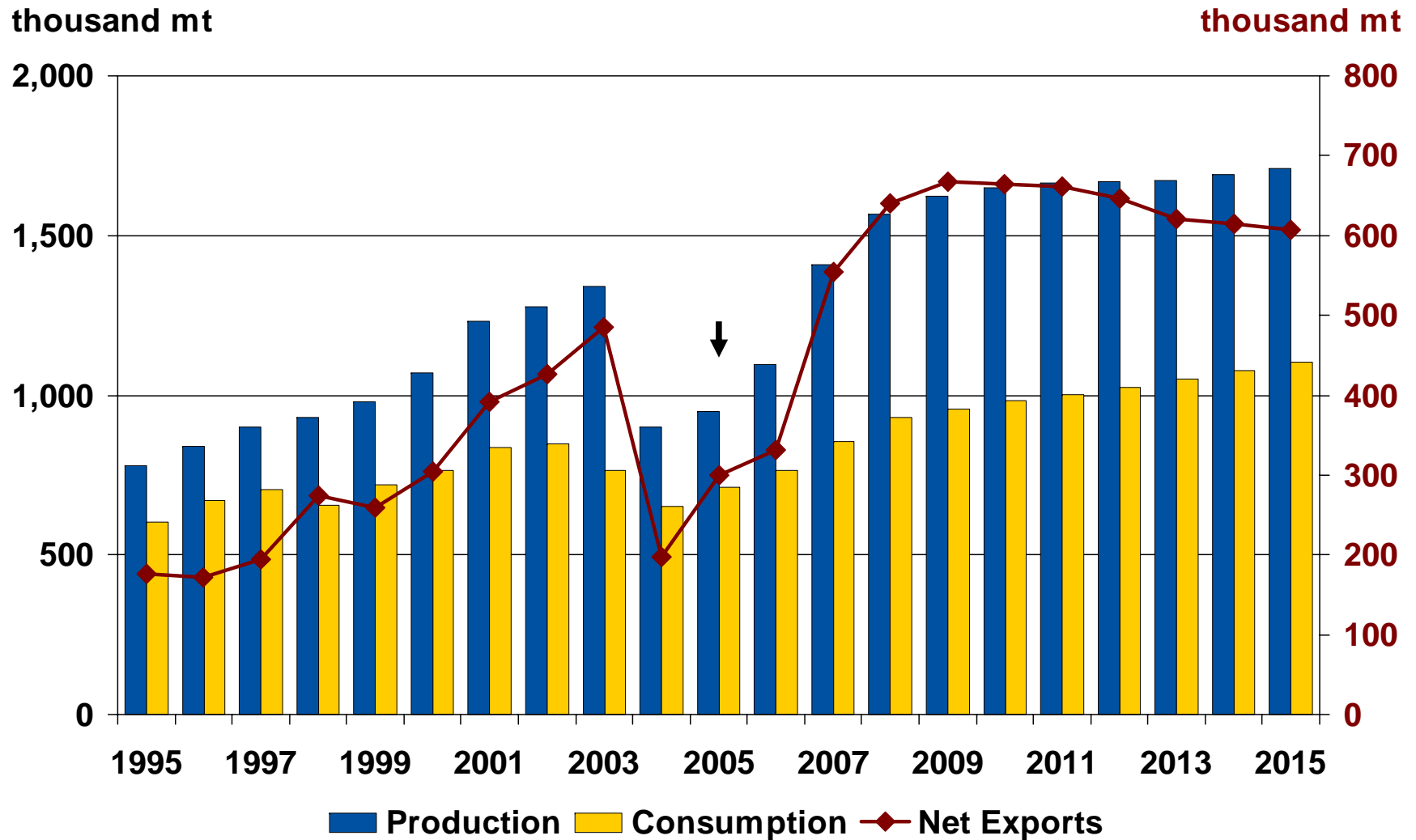




# Japanese Beef Supply and Utilization

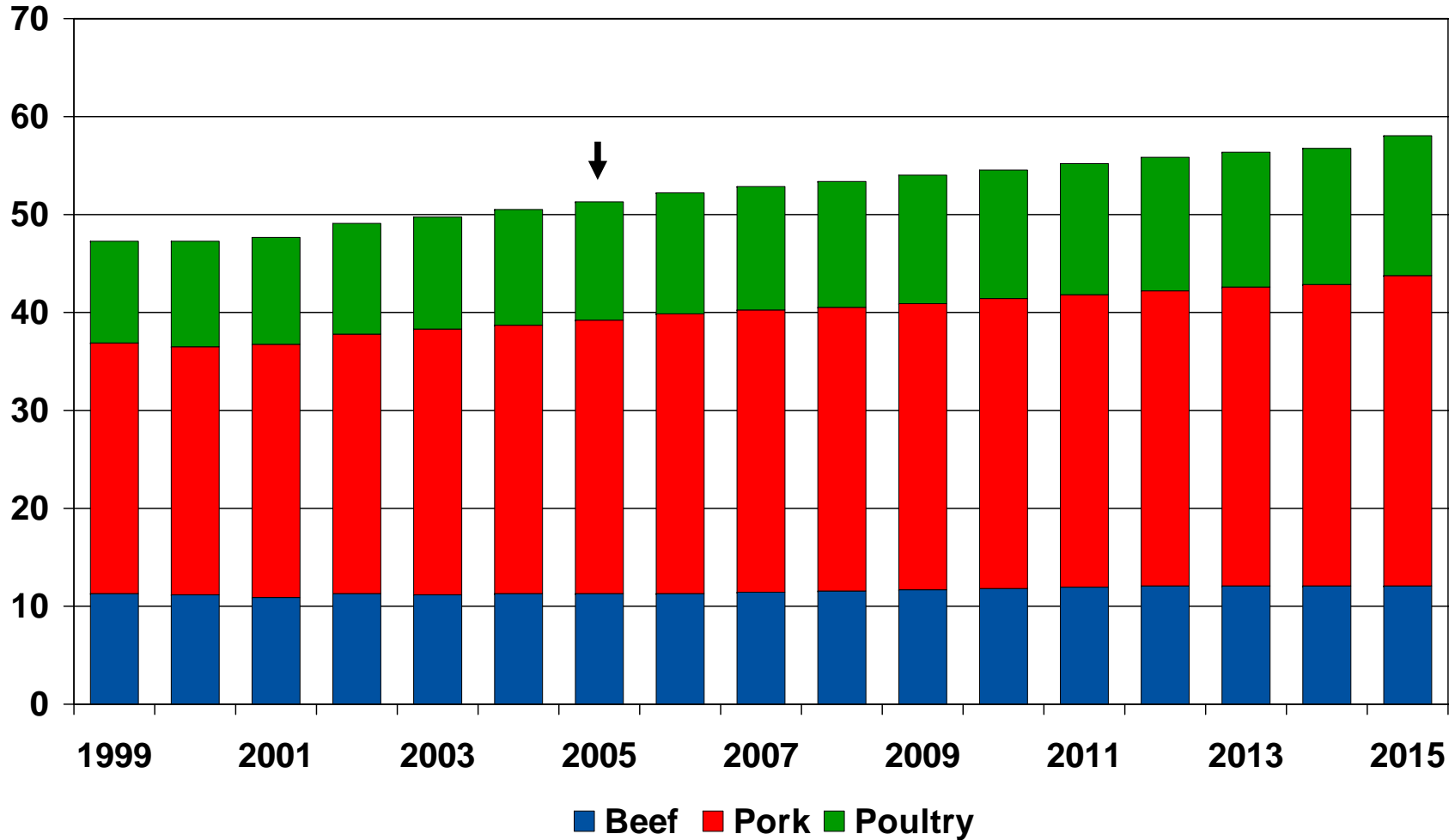


# Thai Broiler Supply and Utilization



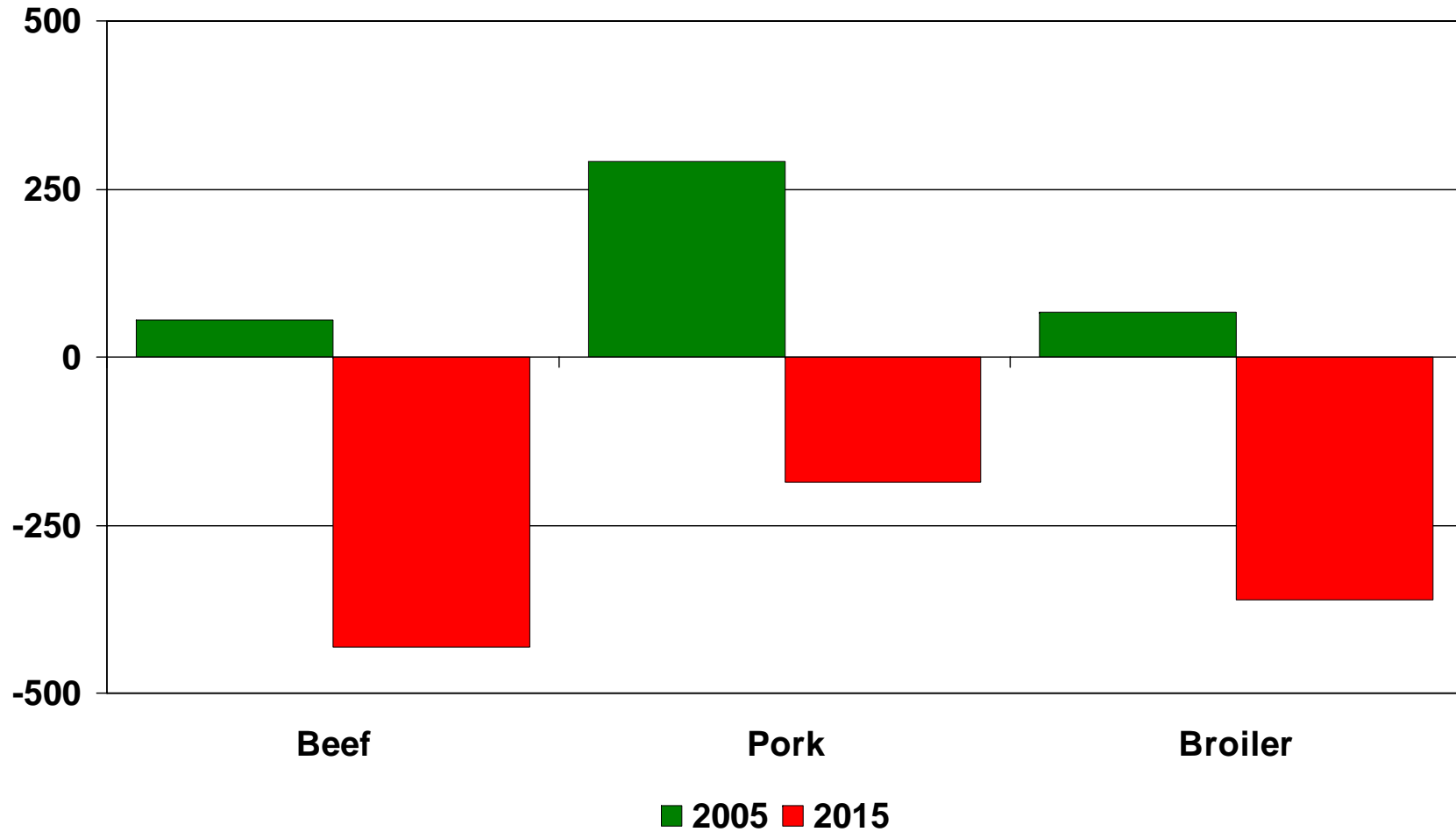
# Per Capita Average Meat Consumption

kg per person

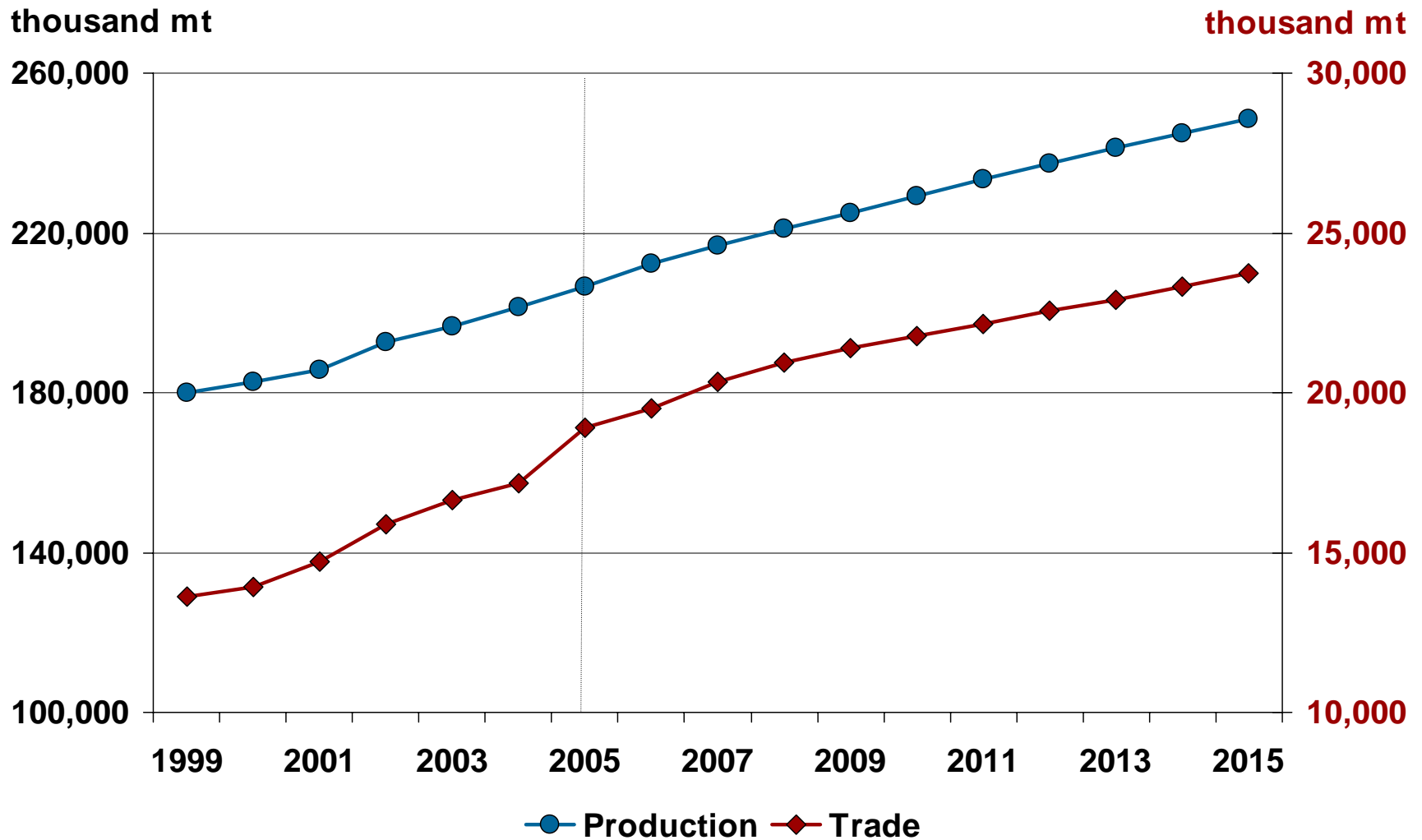


# China Livestock Net Trade

thousand mt



# World Meat Production and Trade

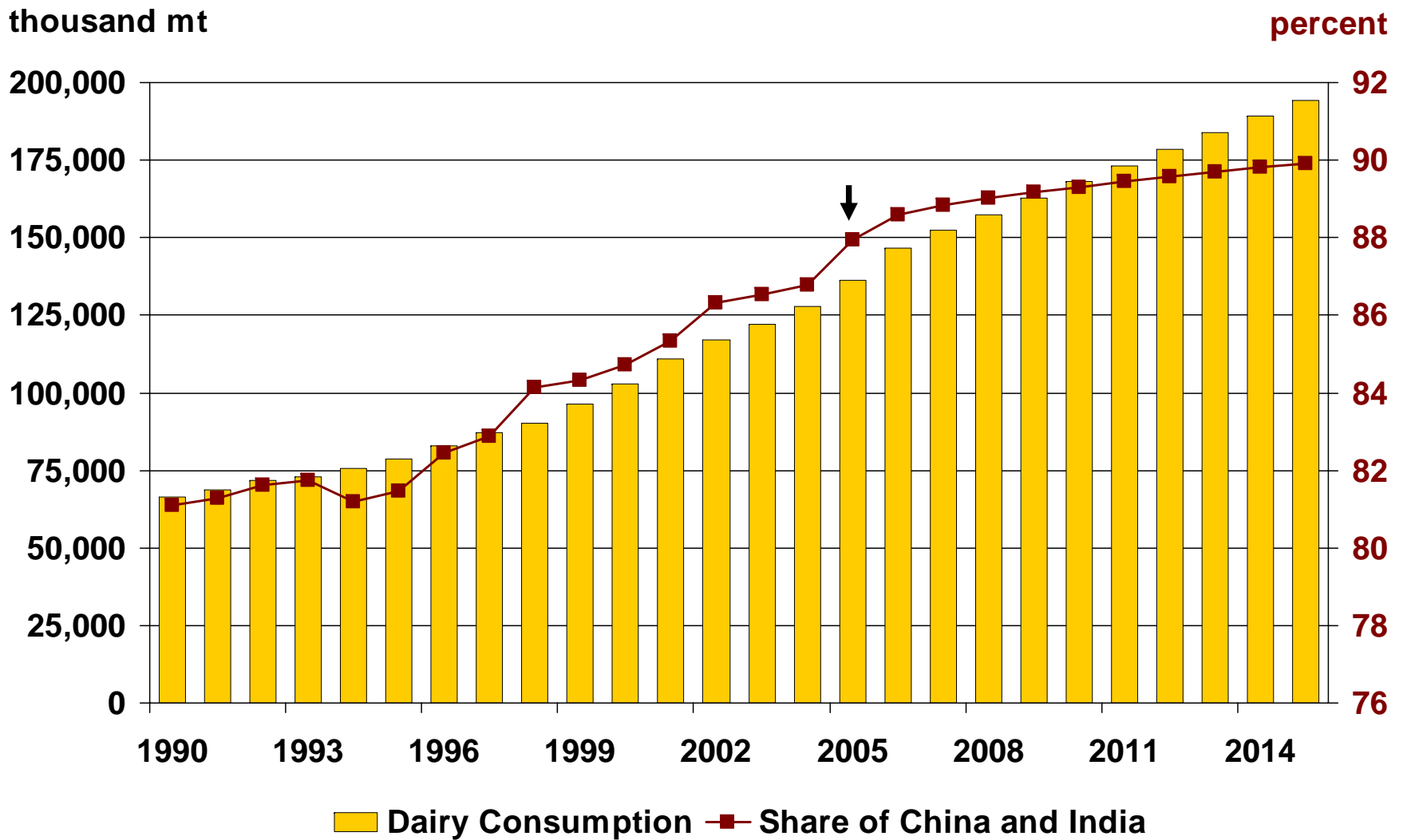


# Dairy Outlook Overview

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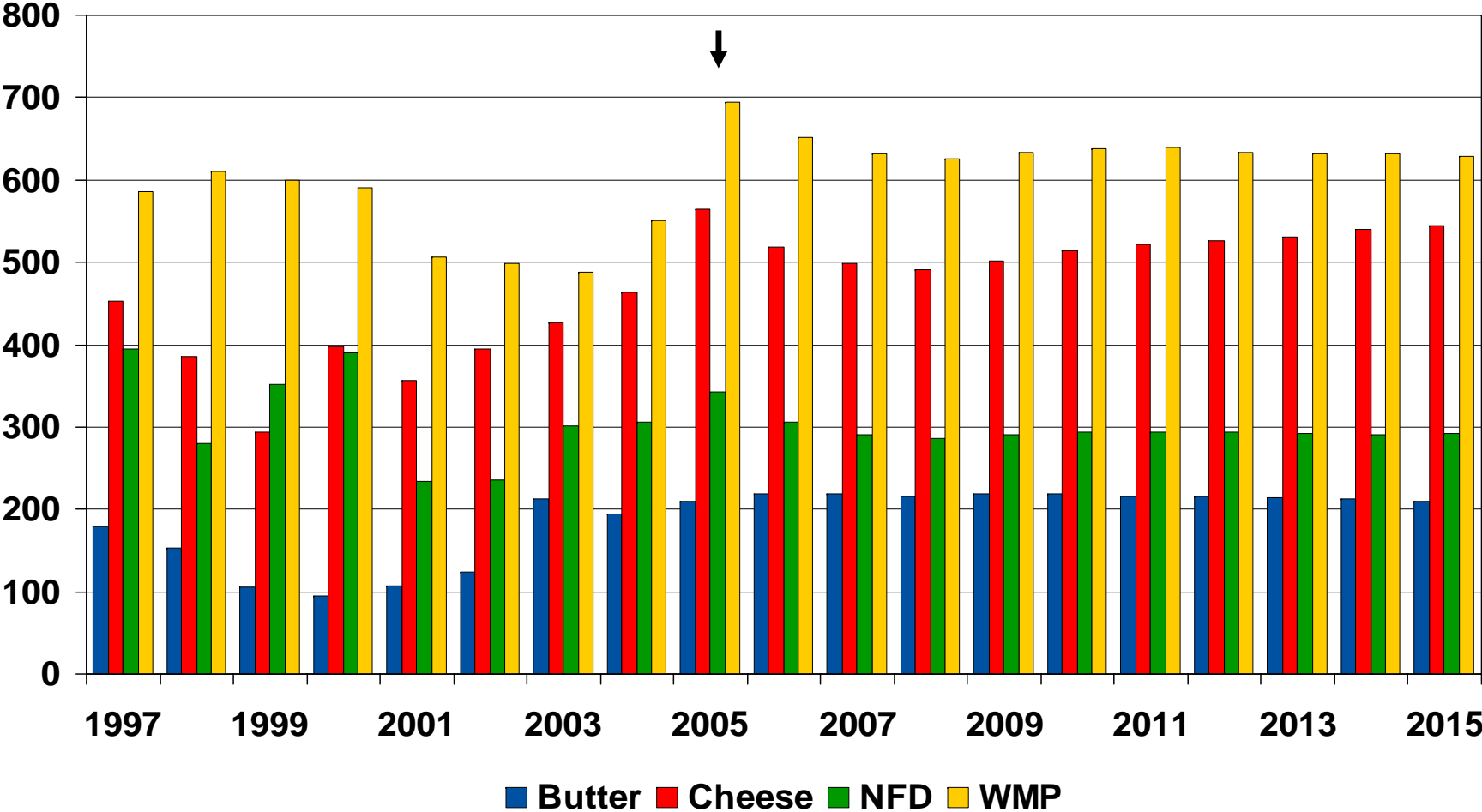
- Steady Asian import, declining EU exports and currency appreciation in major exporter raise prices of milk products.
- EU milk production is restricted by marketing milk quota averaging at 142 million mt.
- China expands milk production meet growing demand with 3.8% growth in dairy cows and 3% growth in productivity.

# Asian Dairy Consumption



# EU Dairy Product Net Trade

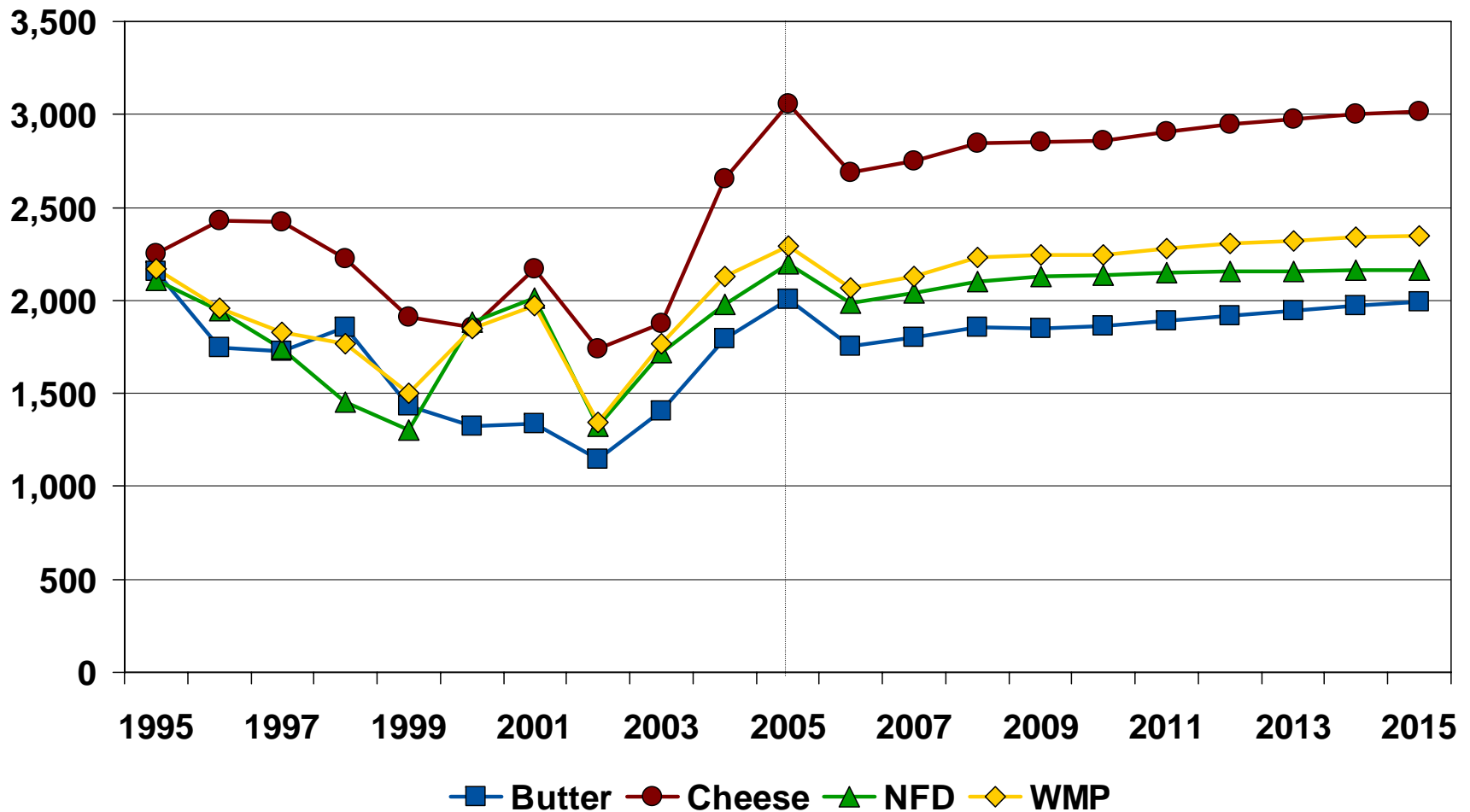
thousand mt





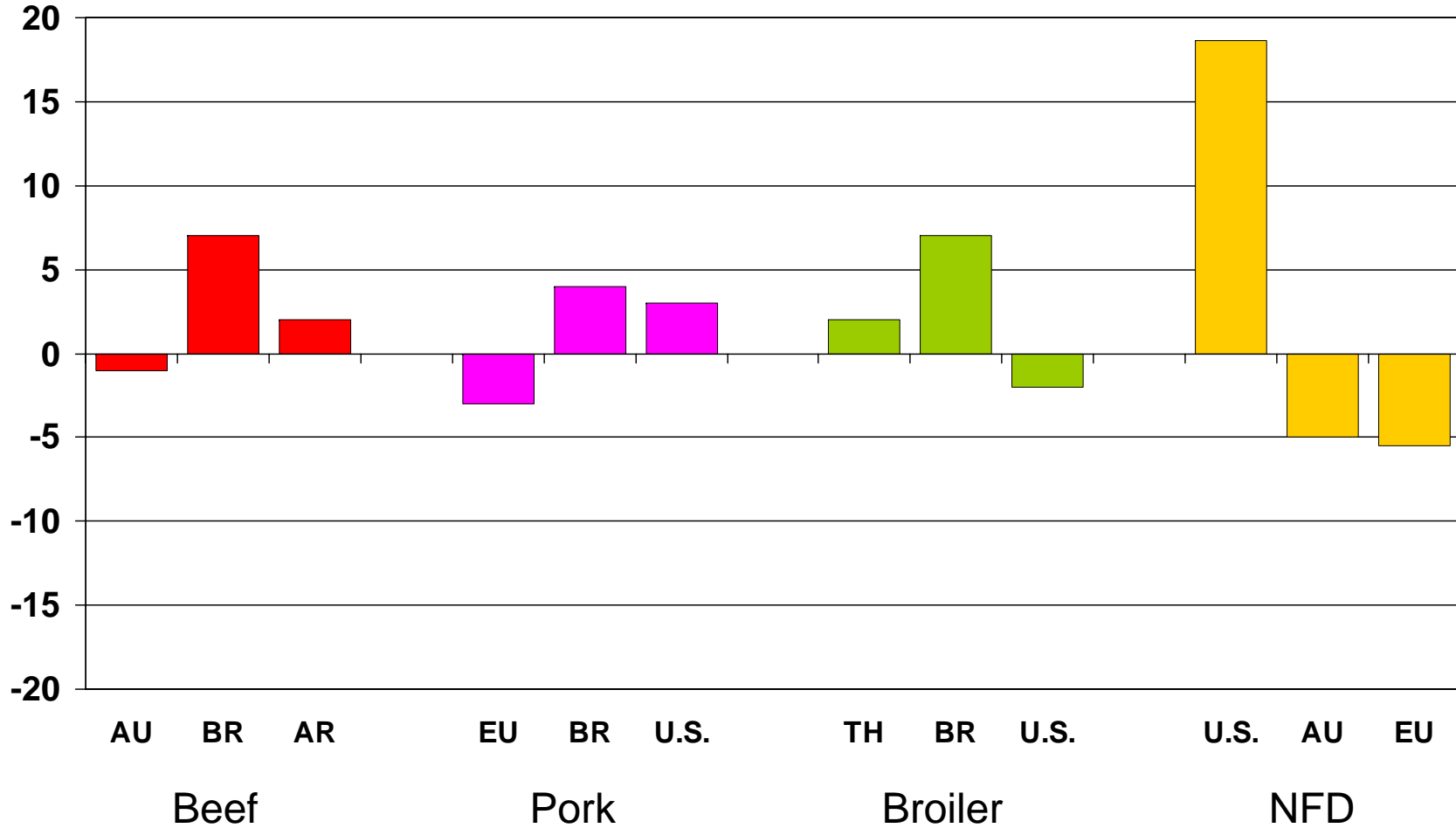
# FOB Northern European Dairy Product Prices

dollars per mt

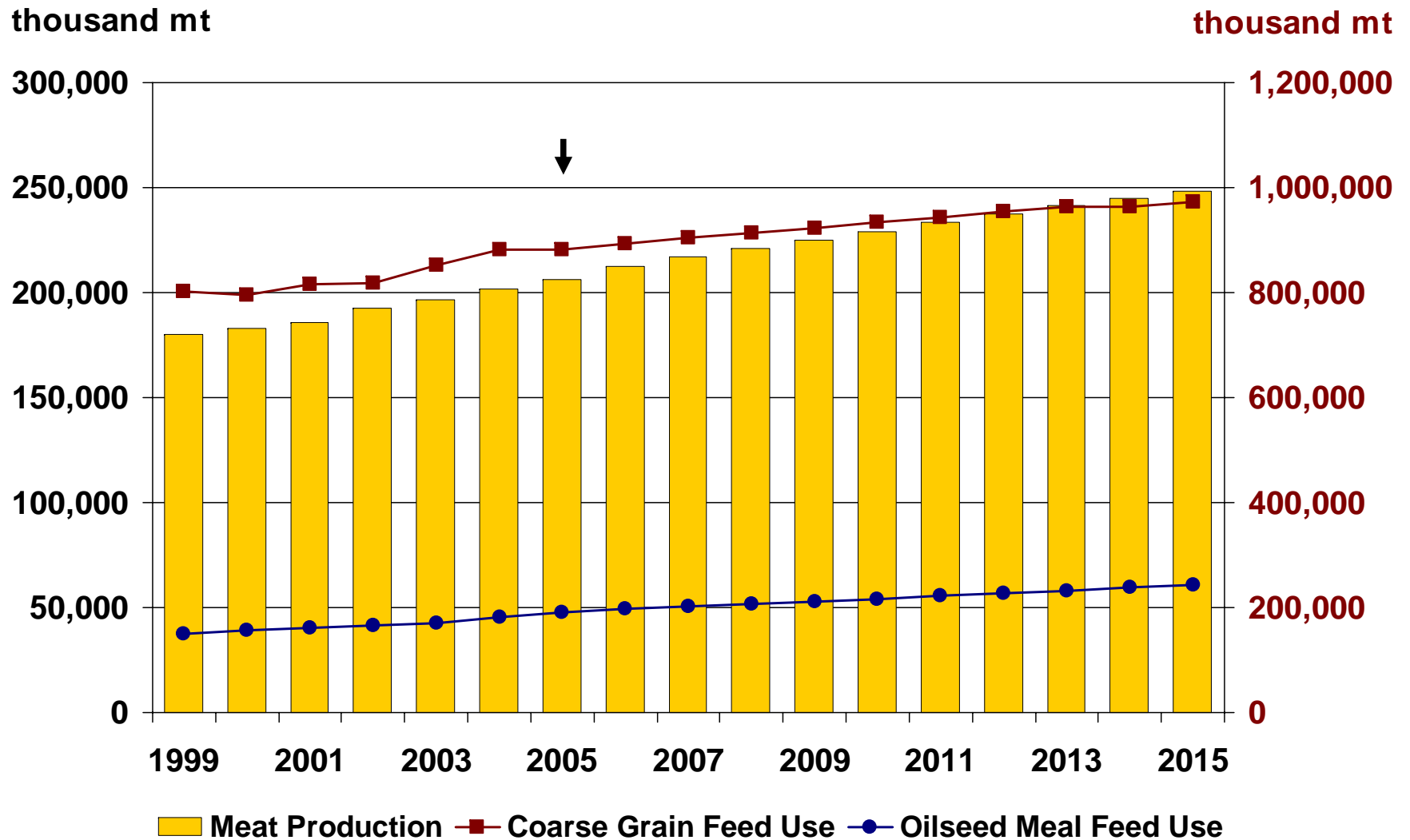


# Livestock and Dairy Market Share Change

percentage point



# Meat Production and Feed Use

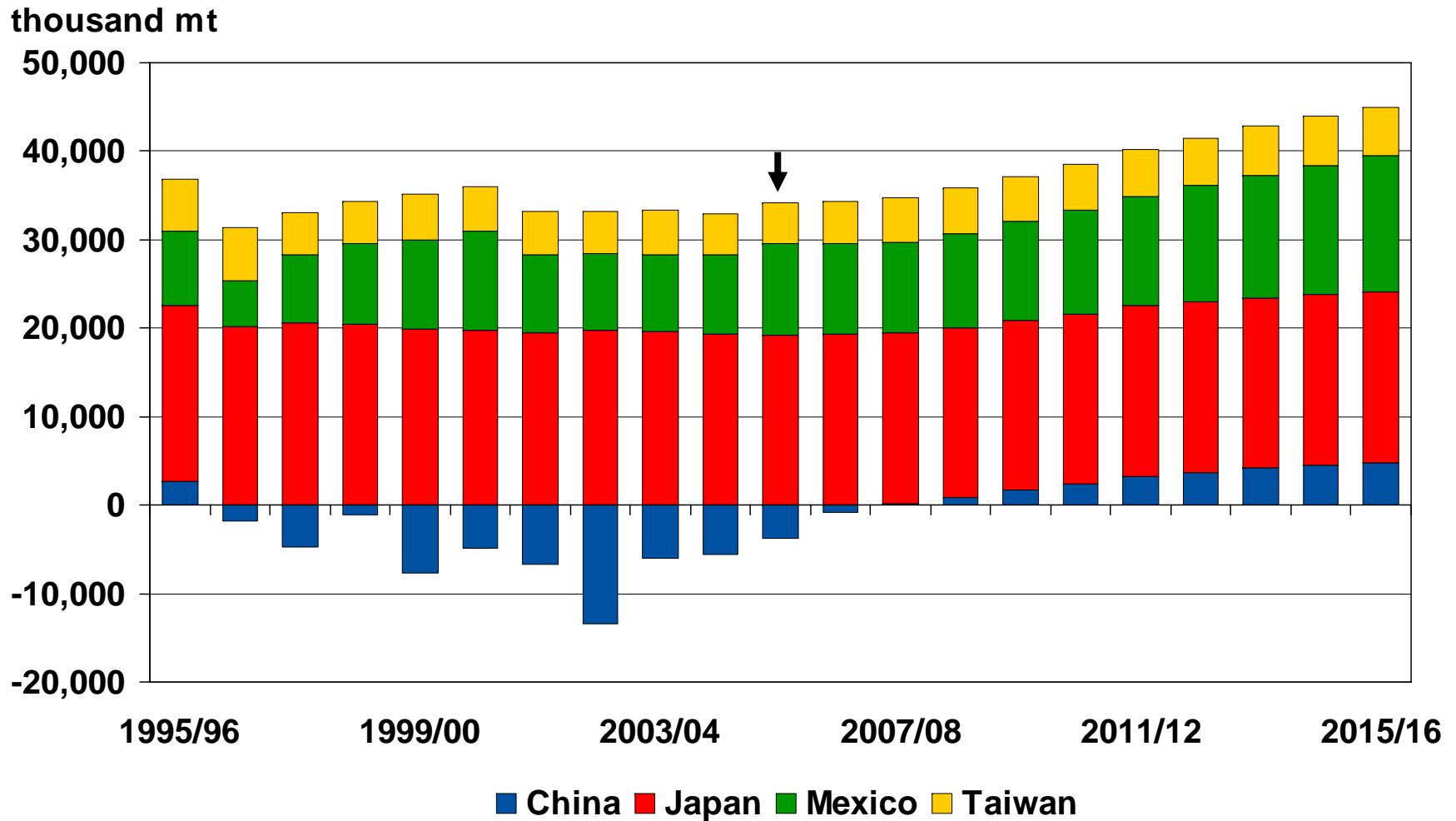


# World Feed Grain Outlook Overview

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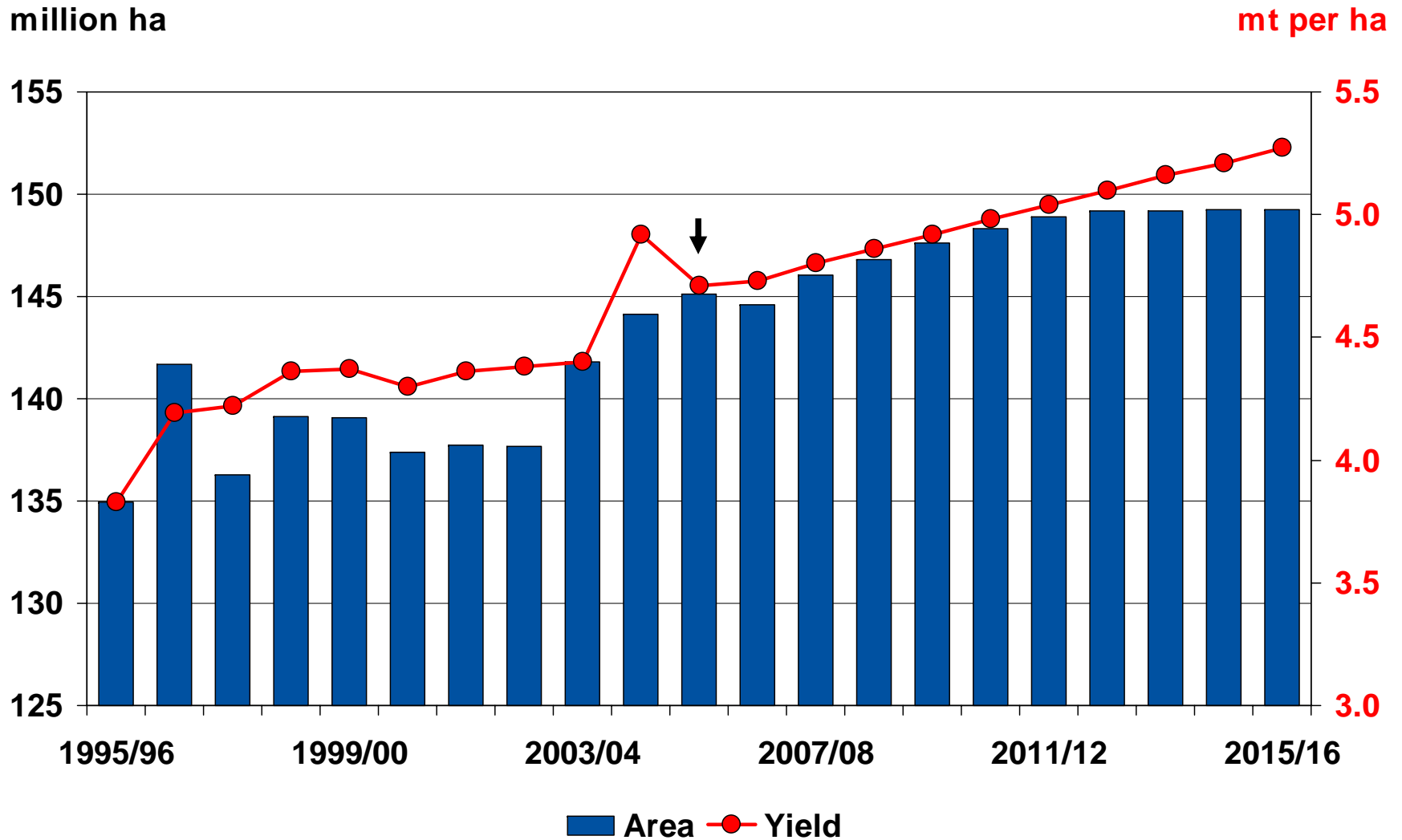
- Growth in livestock sector of Asian and Latin American countries drives the increase in demand for feed grains.
- Stronger prices increase area. Combined with yield growth production increases. Increase in area grows supply in the short-run, while yield improvement is the major source of growth in the long-run.
- U.S. increases its market share at the expense of Argentina and EU New Member States.

# Coarse Grain Major Importers

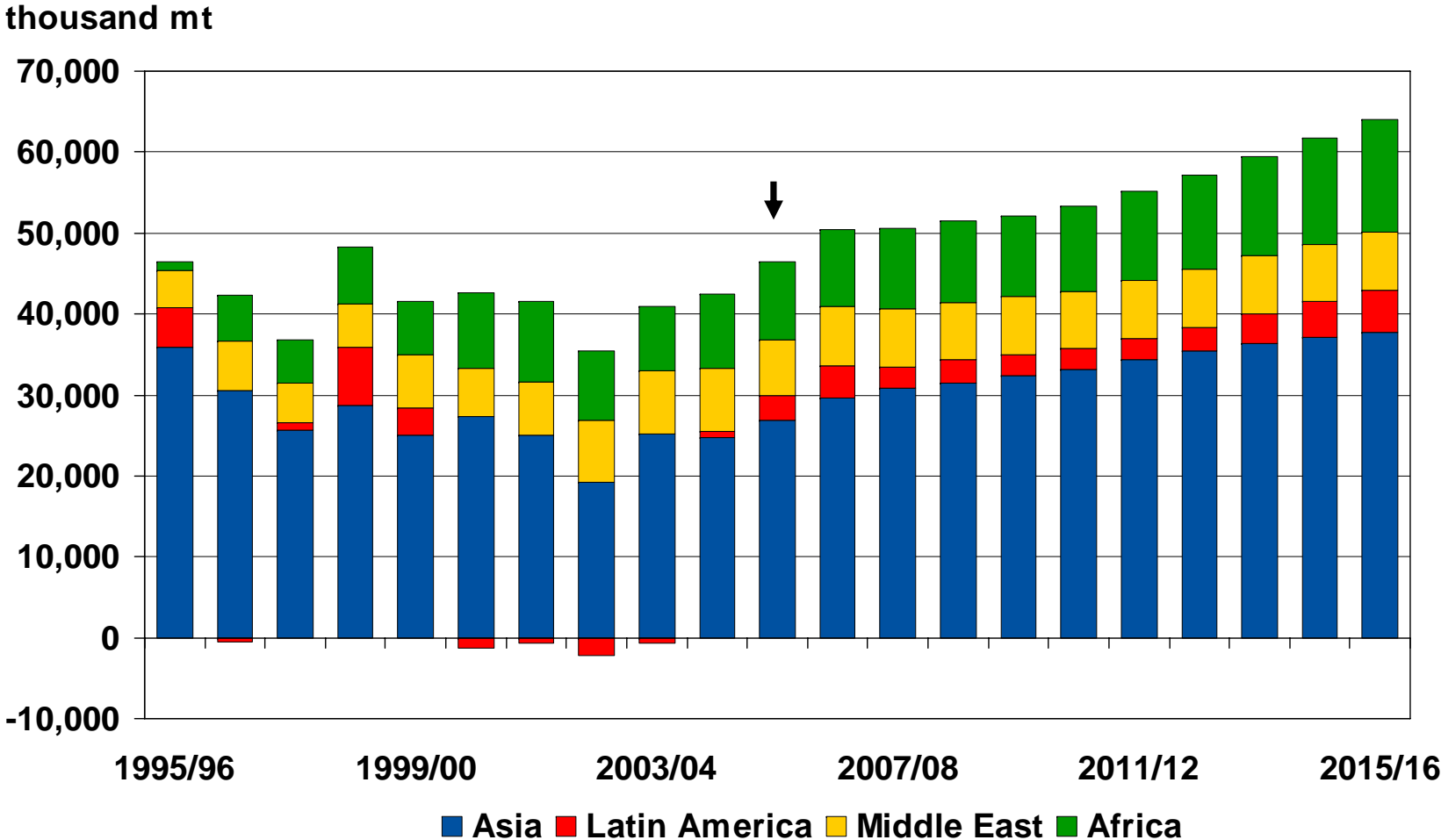


Coarse Grain = Corn, Barley, and Sorghum

# World Corn Area and Yield

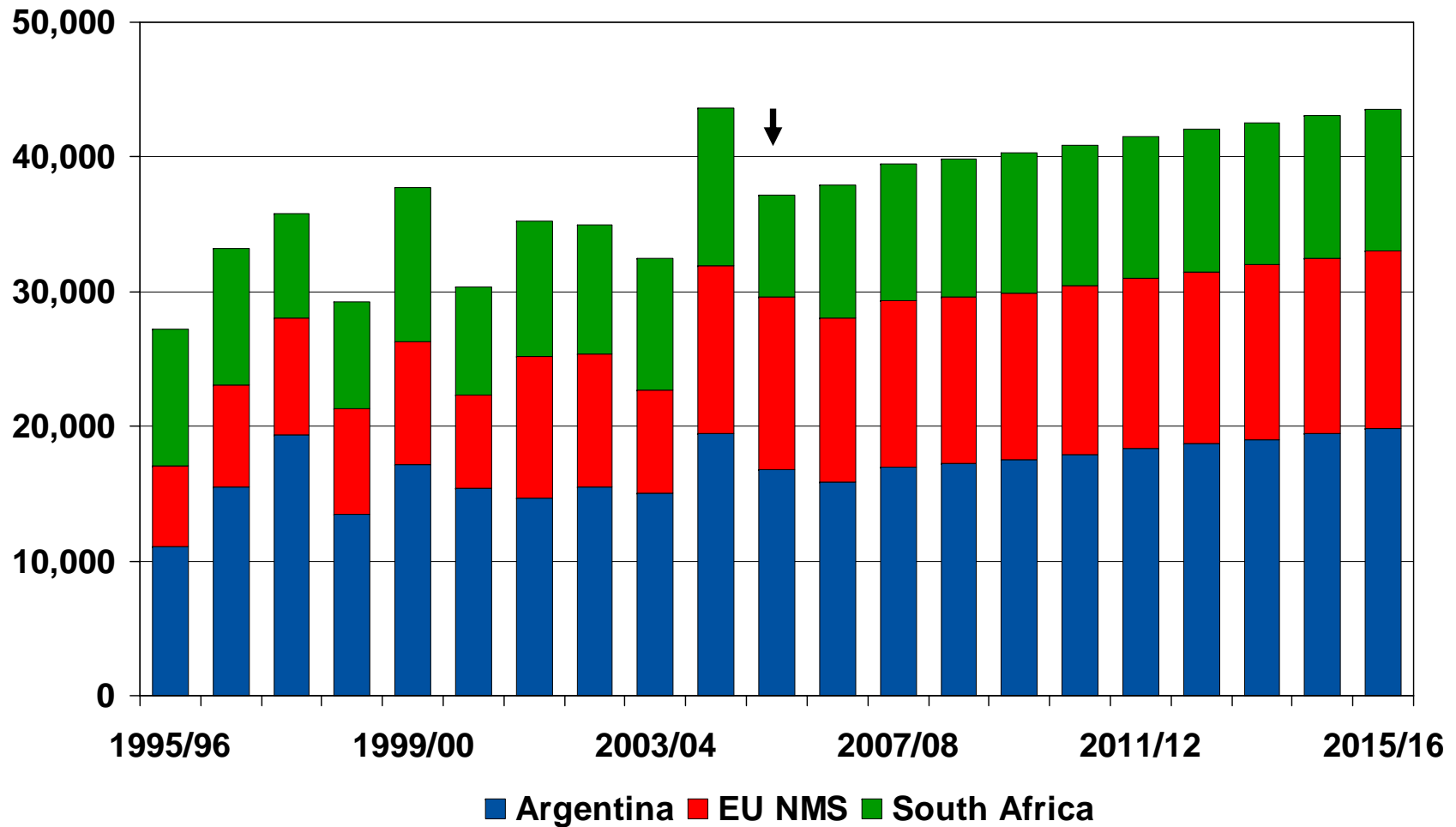


# Corn Net Imports by Major Regions



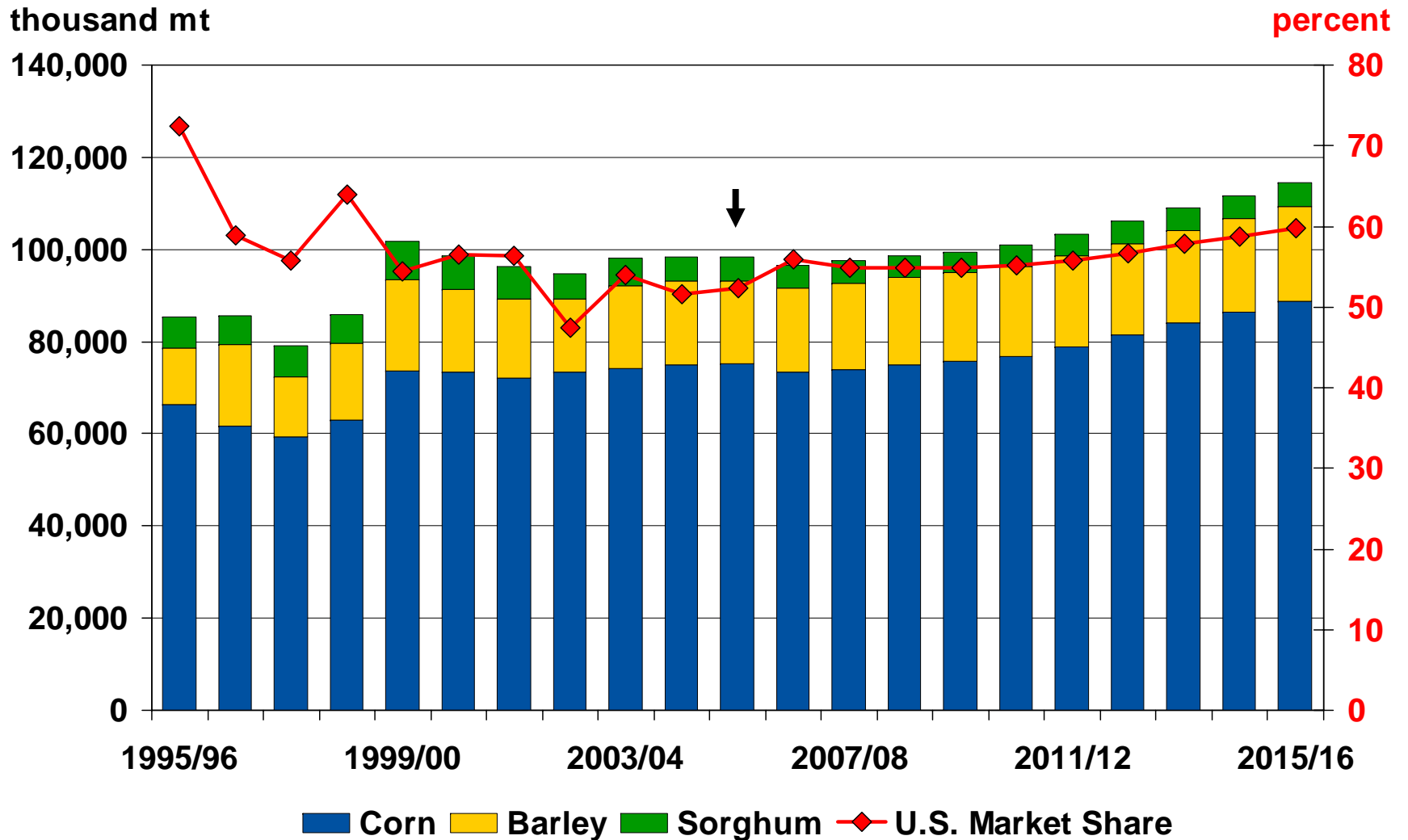
# Corn Production by Major Competitors

thousand mt





# World Coarse Grain Net Trade and U.S. Market Share



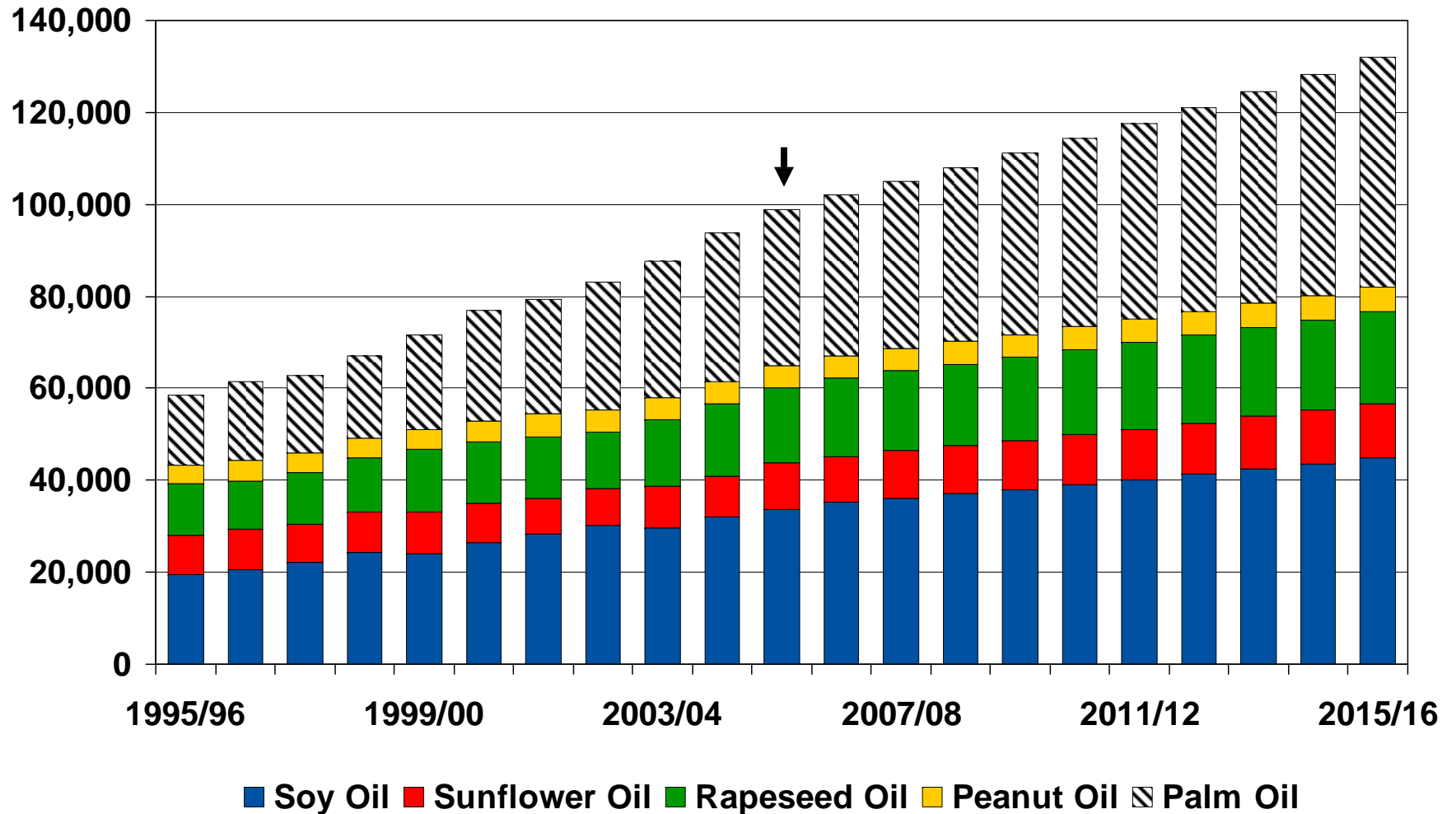
# Oilseed Outlook Overview

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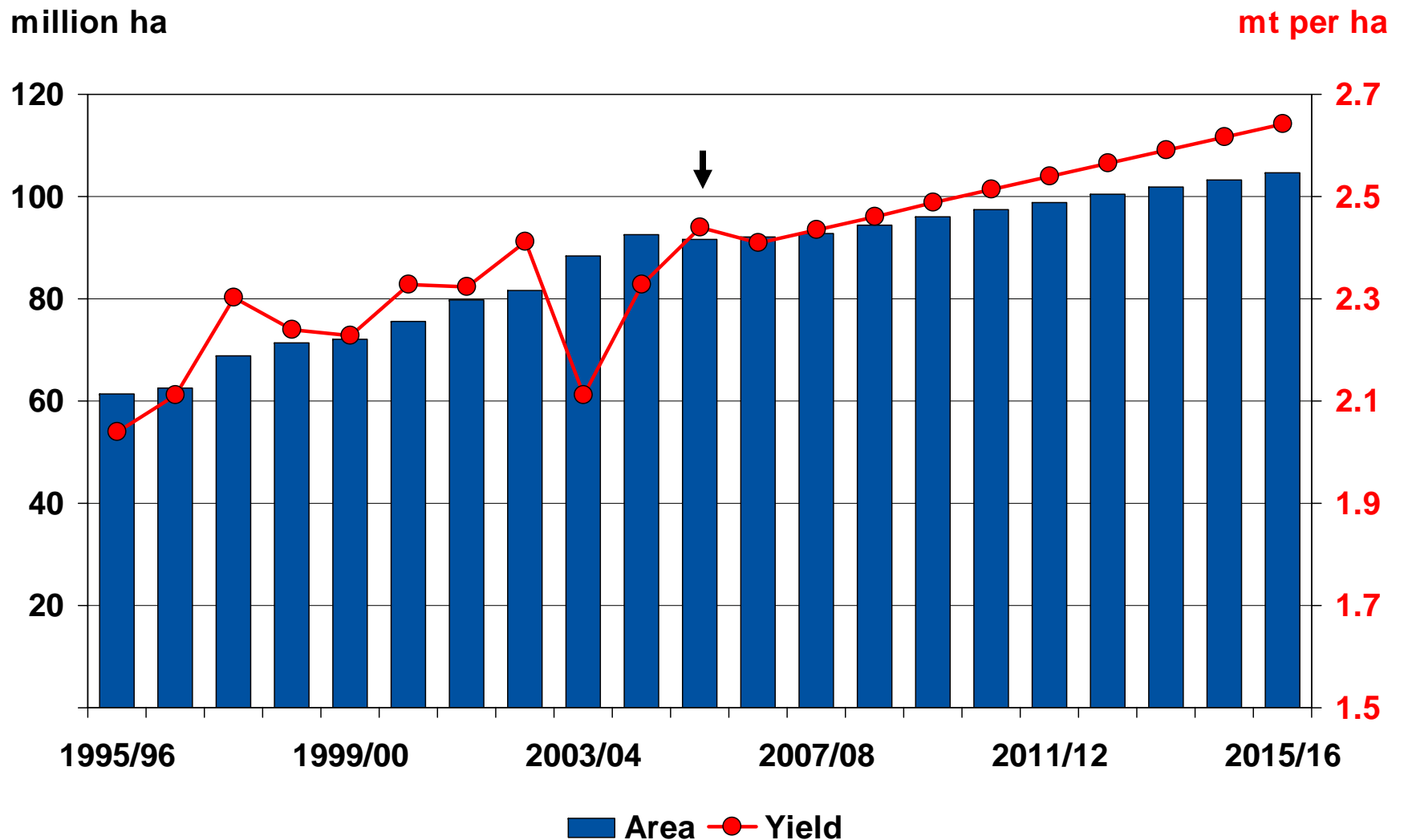
- Oilseed sector grows with strong demand for both oil and meal products driven by population and income growth, and expansion of the livestock sector.
- Both growth in area and improvement in yield contribute to increase in production.
- About 76% of increase in area is due to soybean area expansion in South America.
- China's support of its domestic crushing industry drive faster growth in soybean trade compared to oil and meal products.
- Room for area expansion in South America dampens price growth in the next decade.
- Increasing interest in renewable fuels.

# World Vegetable Oil Consumption

thousand mt

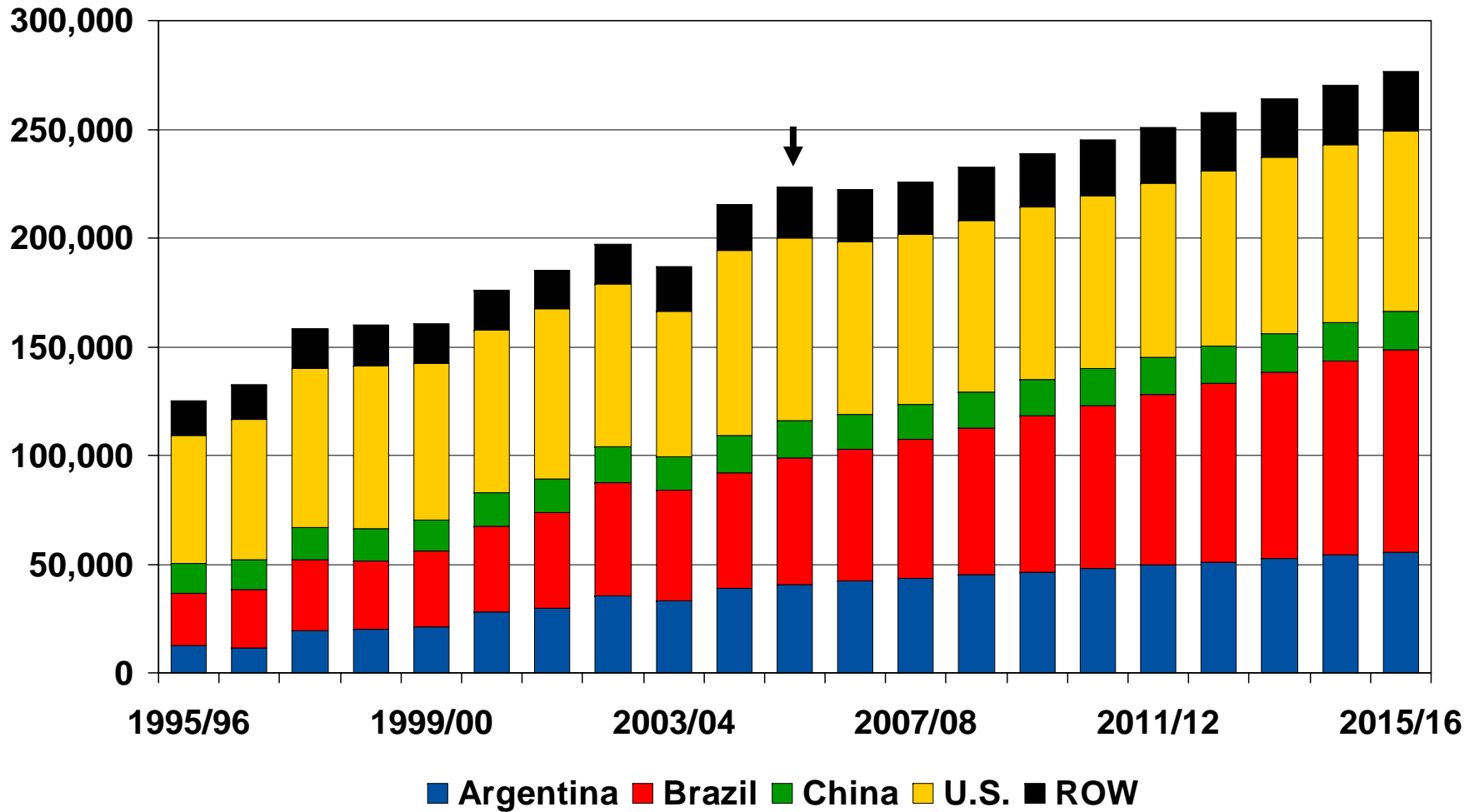


# World Soybean Area and Yield



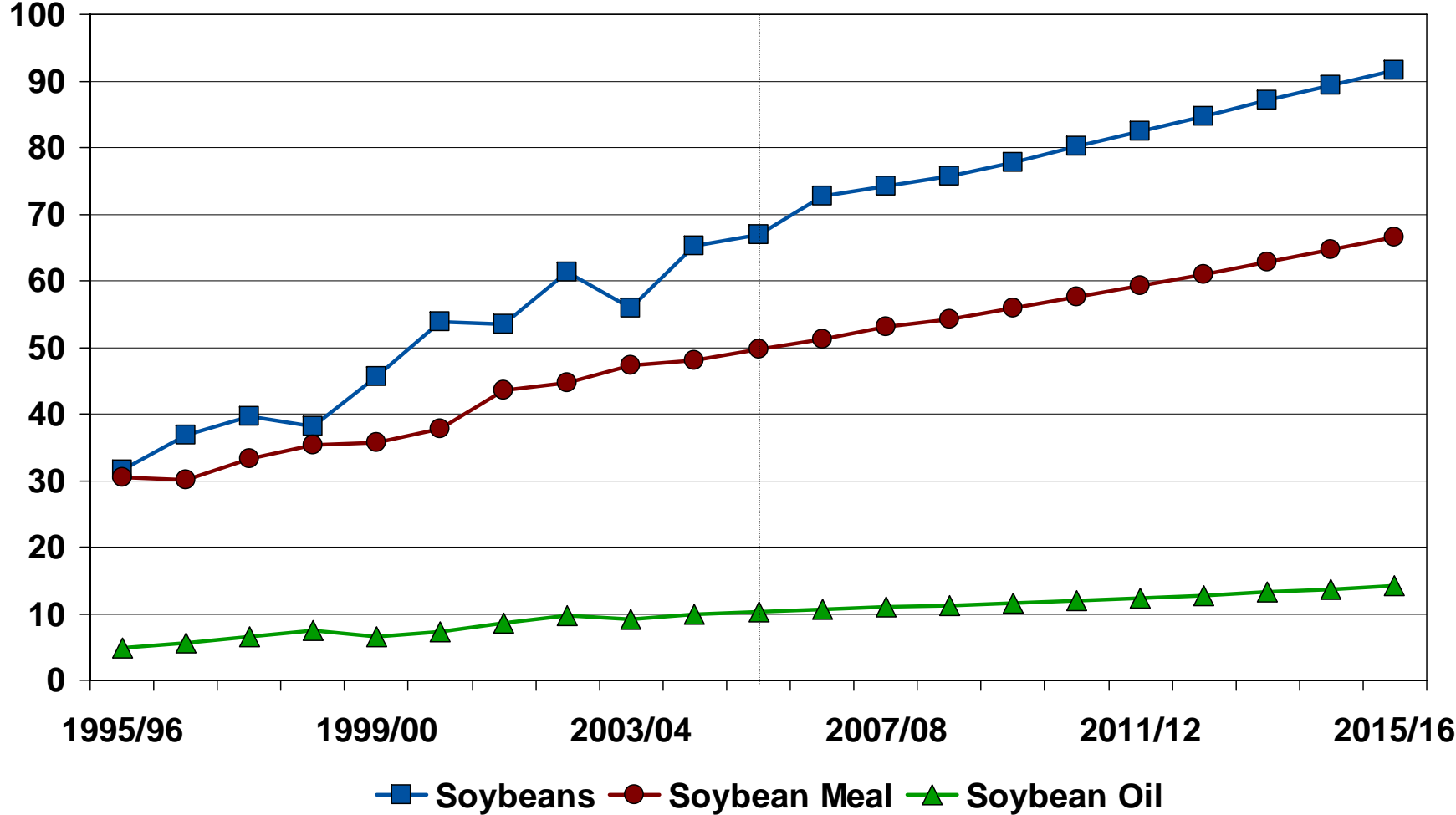
# World Soybean Production

thousand mt

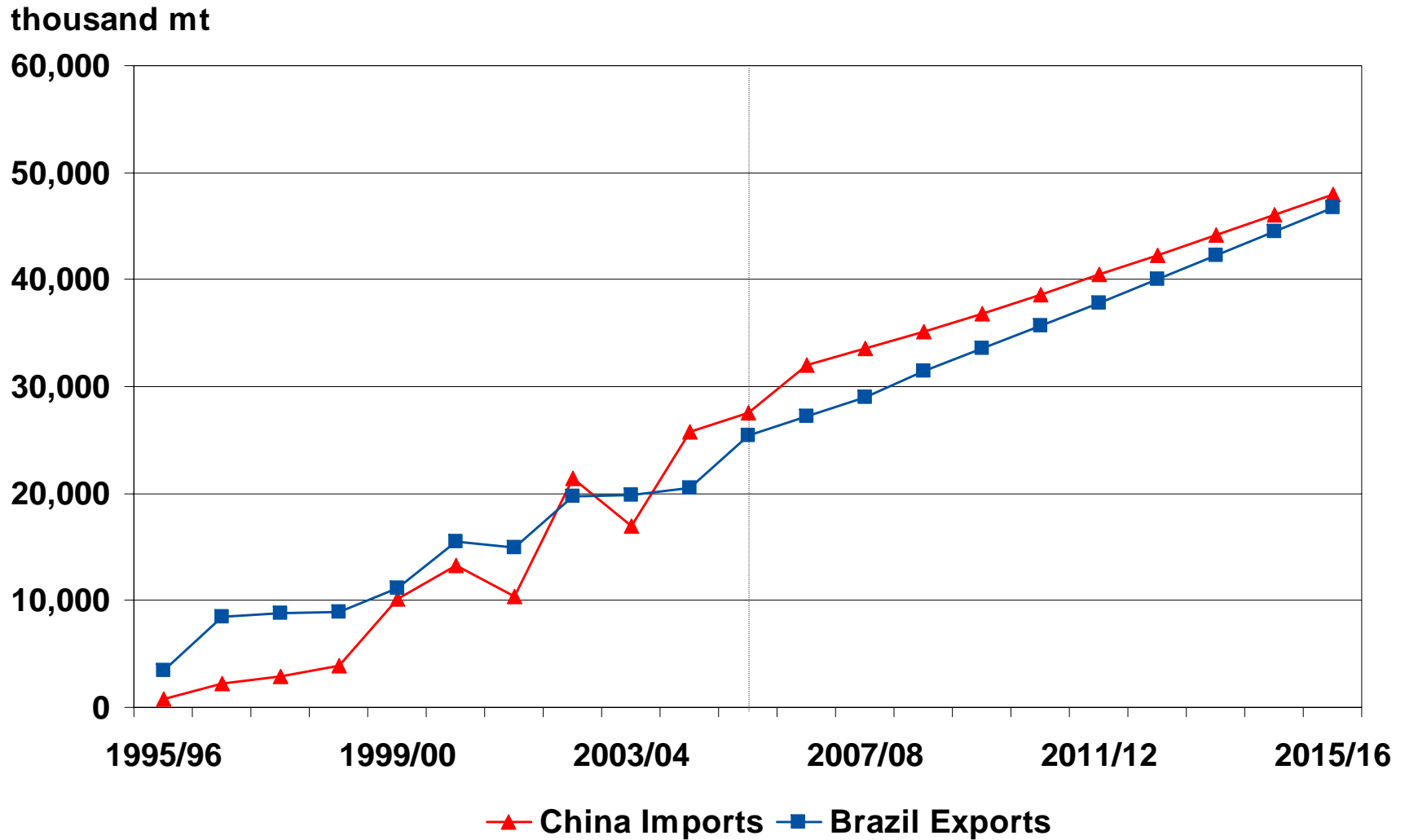


# World Soybean and Products Trade

thousand mt

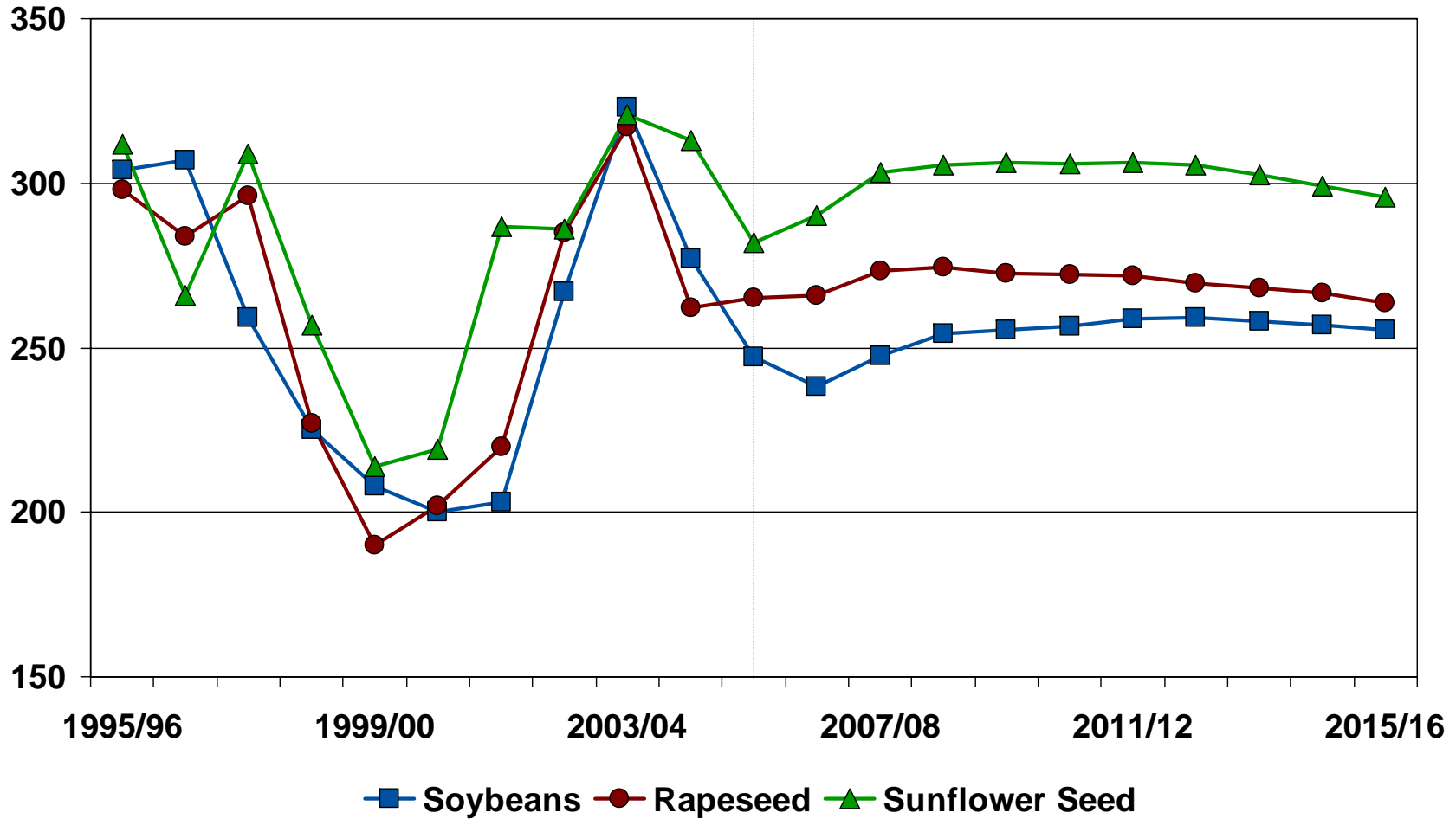


# Brazilian and Chinese Soybean Trade



# World Oilseed Prices

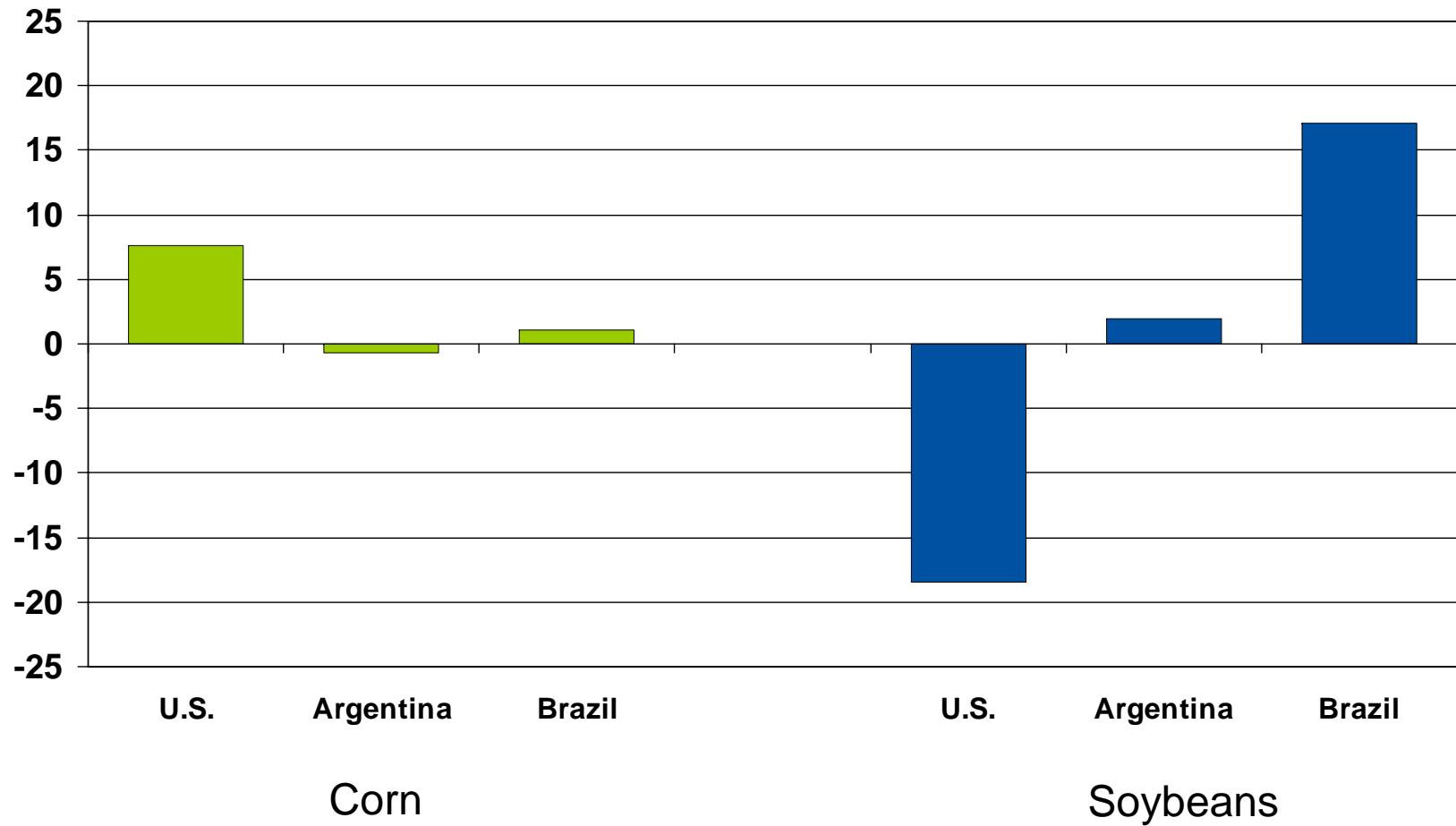
dollars per mt





# Crops Market Share Change

percentage point



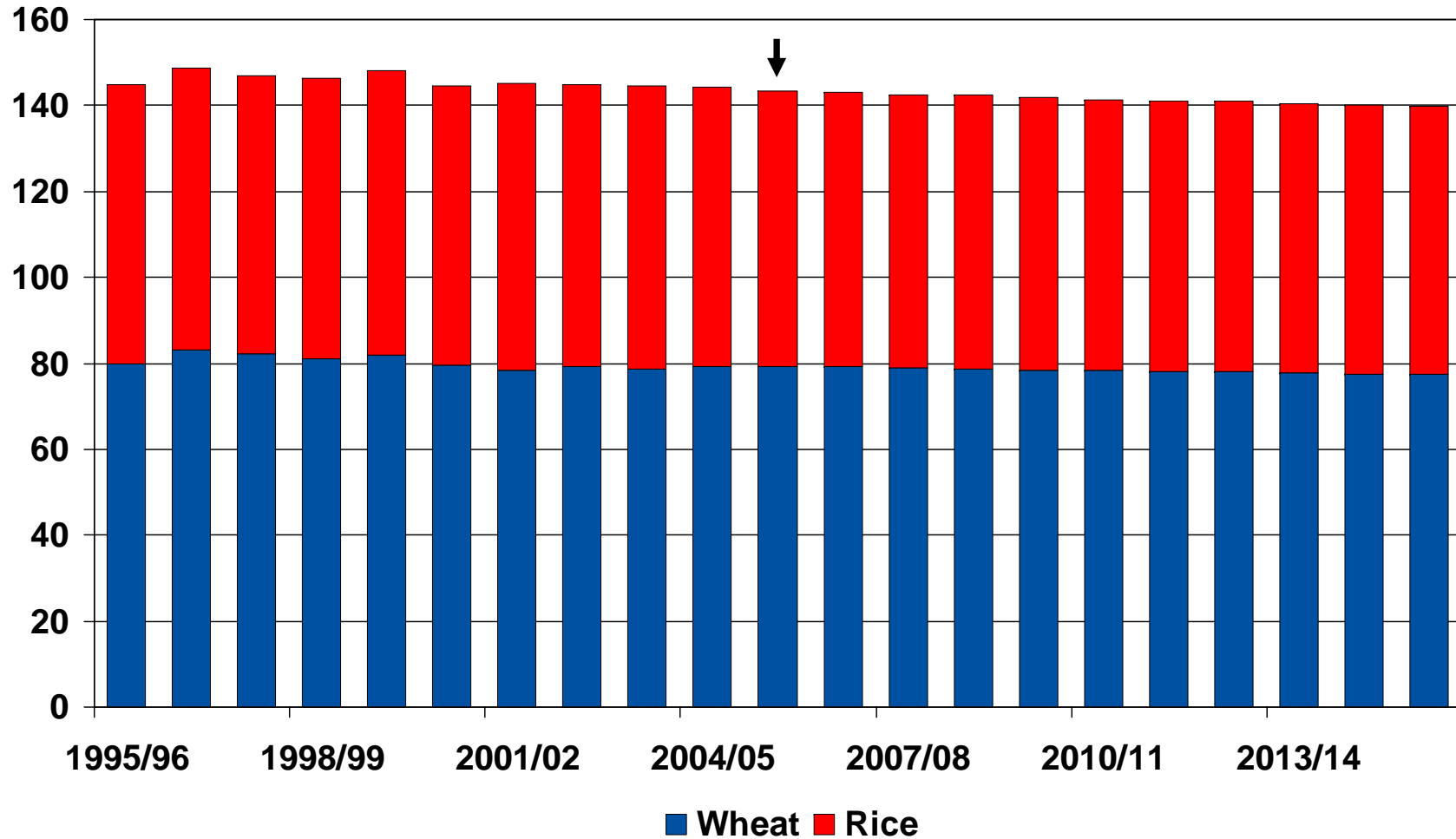
# World Food Grain Outlook Overview

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- Food grain per capita consumption declines with growth in income as consumers “trade-up” away from staple crops to protein rich products.
- With declining per capita consumption, demand growth comes mainly from population growth.
- Growth in consumption in regions such as Asia, Africa, and the Middle East with limited potential to meet expanding demand fuels growth in trade and strengthen food grain prices.
- Long-run production growth driven by yield improvement.
- Australia, the EU, and Argentina regain market share, while Canada and the U.S. lose market share.

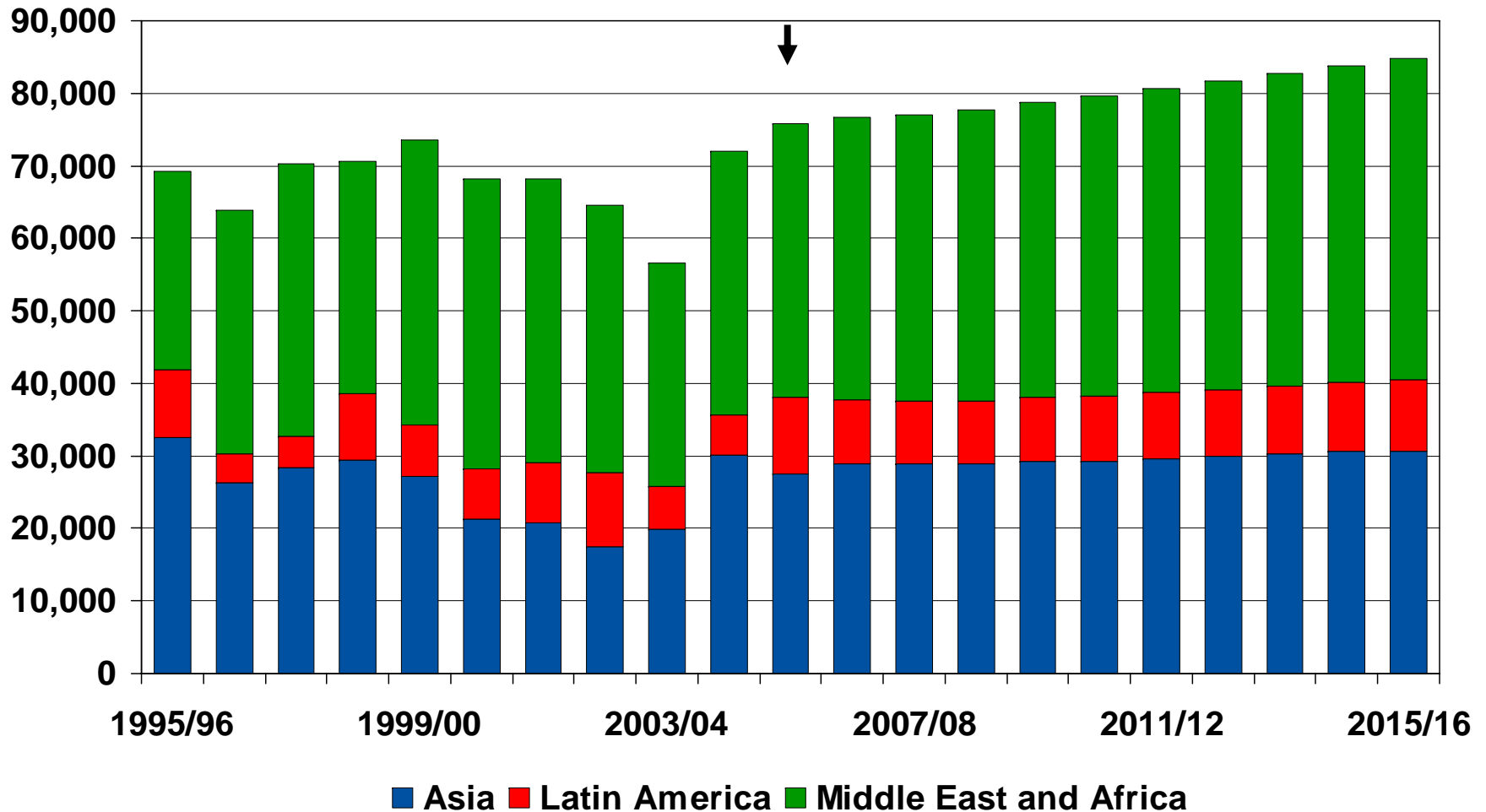
# World Per Capita Food Grain Consumption

kg per person



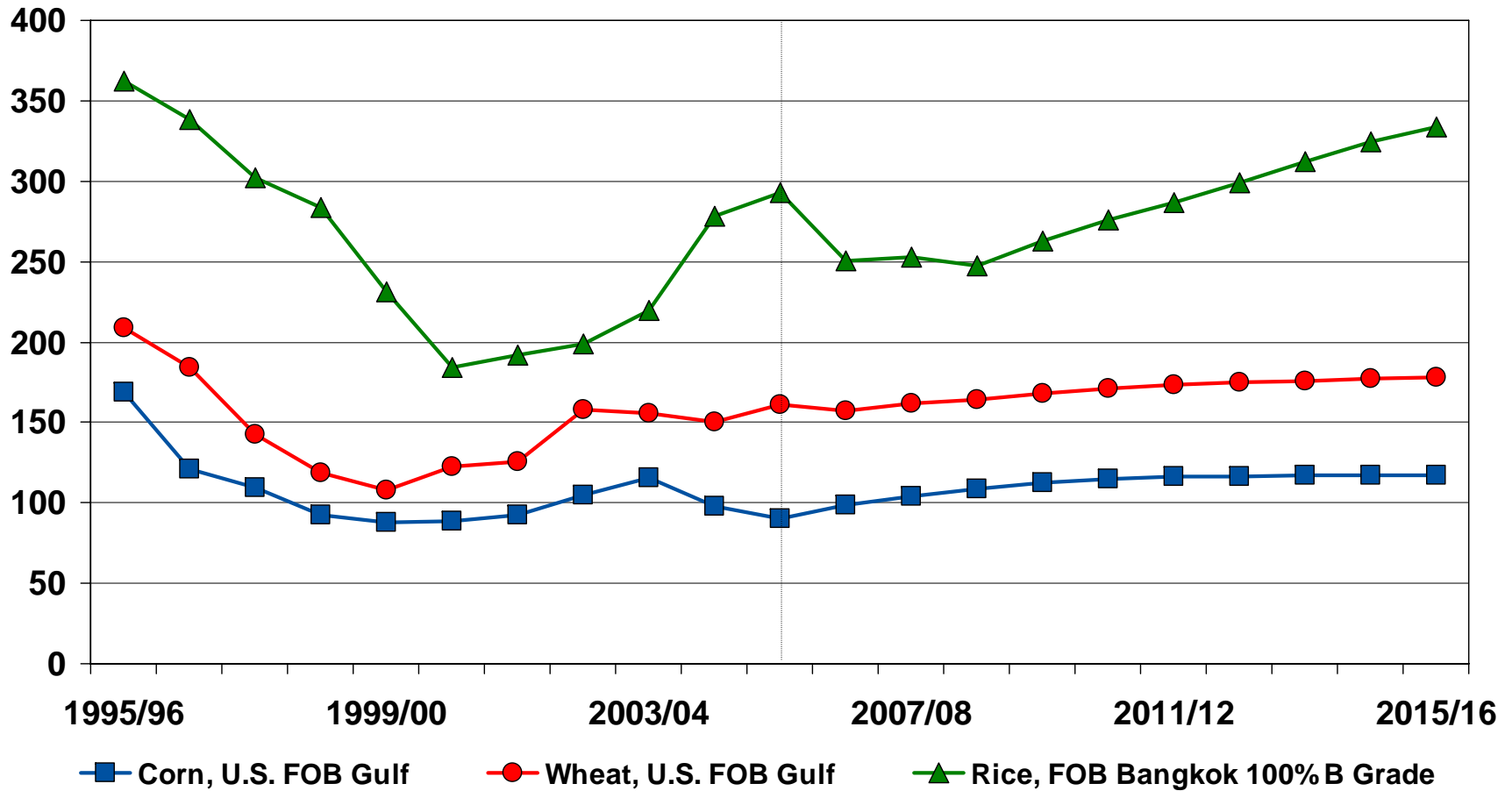
# Wheat Net Imports by Major Regions

thousand mt



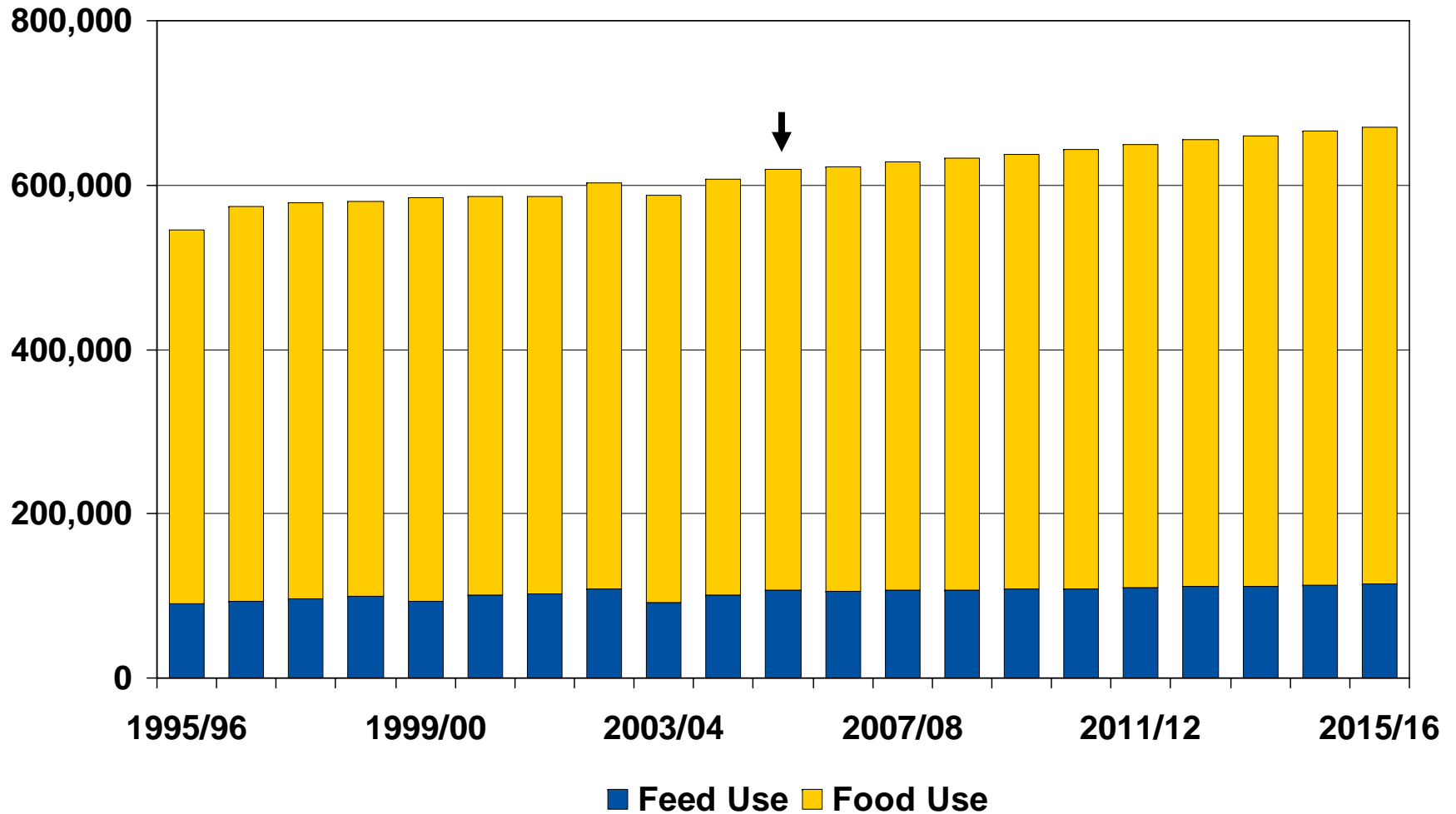
# World Grain Prices

dollars per mt

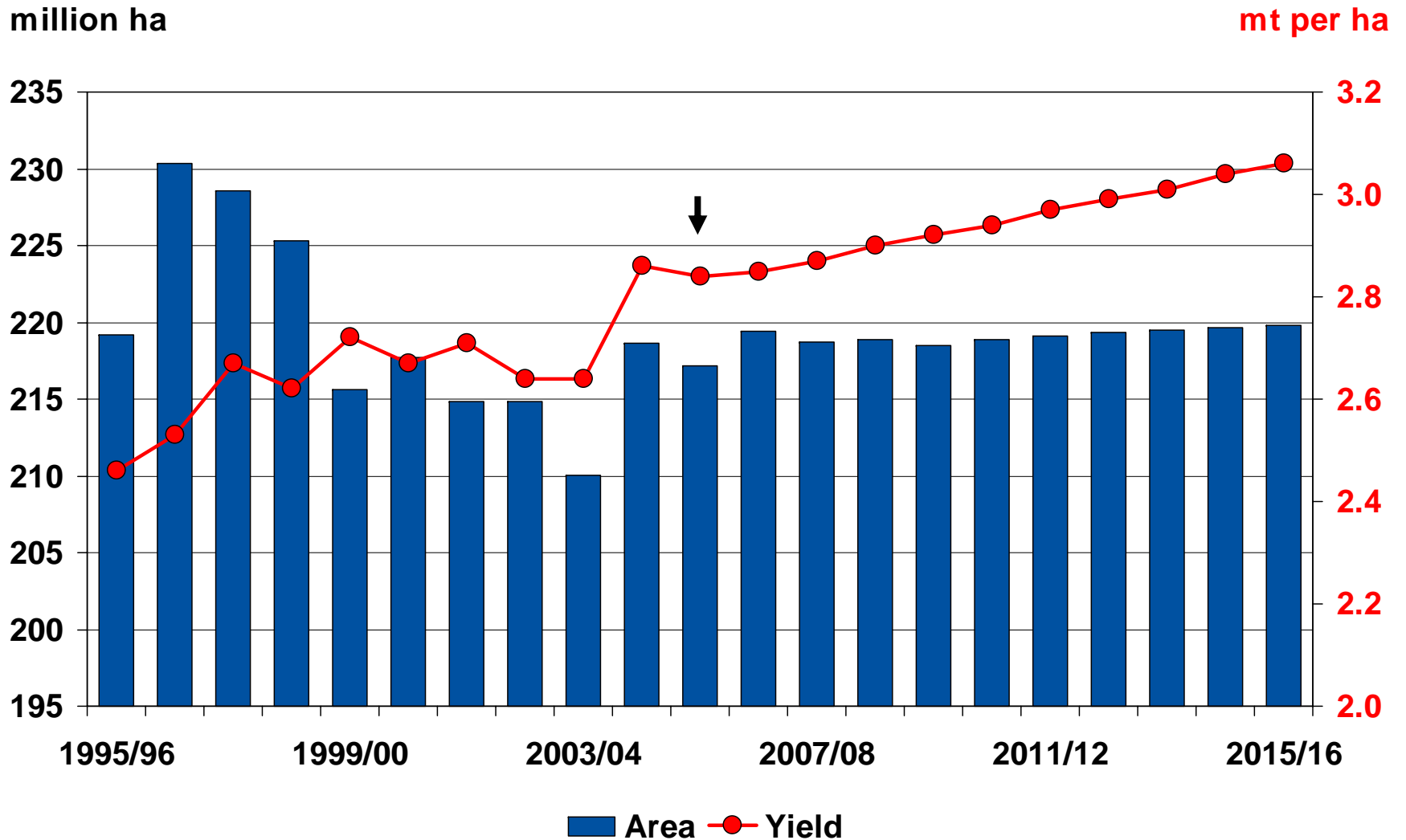


# World Wheat Feed and Food Use

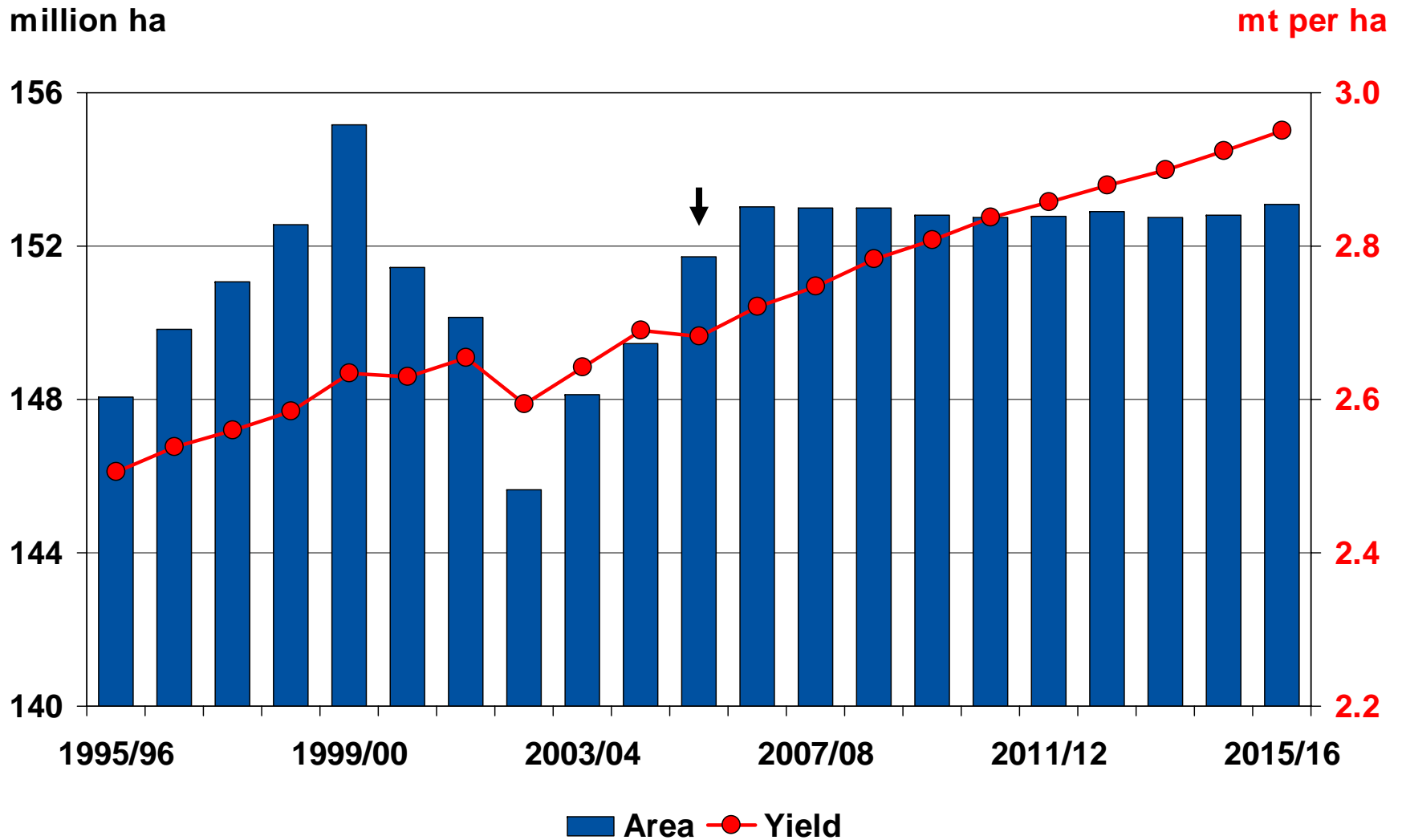
thousand mt



# World Wheat Area and Yield



# World Rice Area and Milled Yield





# Other Crop Outlook Overview

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## ■ Sugar

- Sugar reform in the EU tightens world excess supply fueling prices to rise.
- Area and yield growth drive the increase in production.

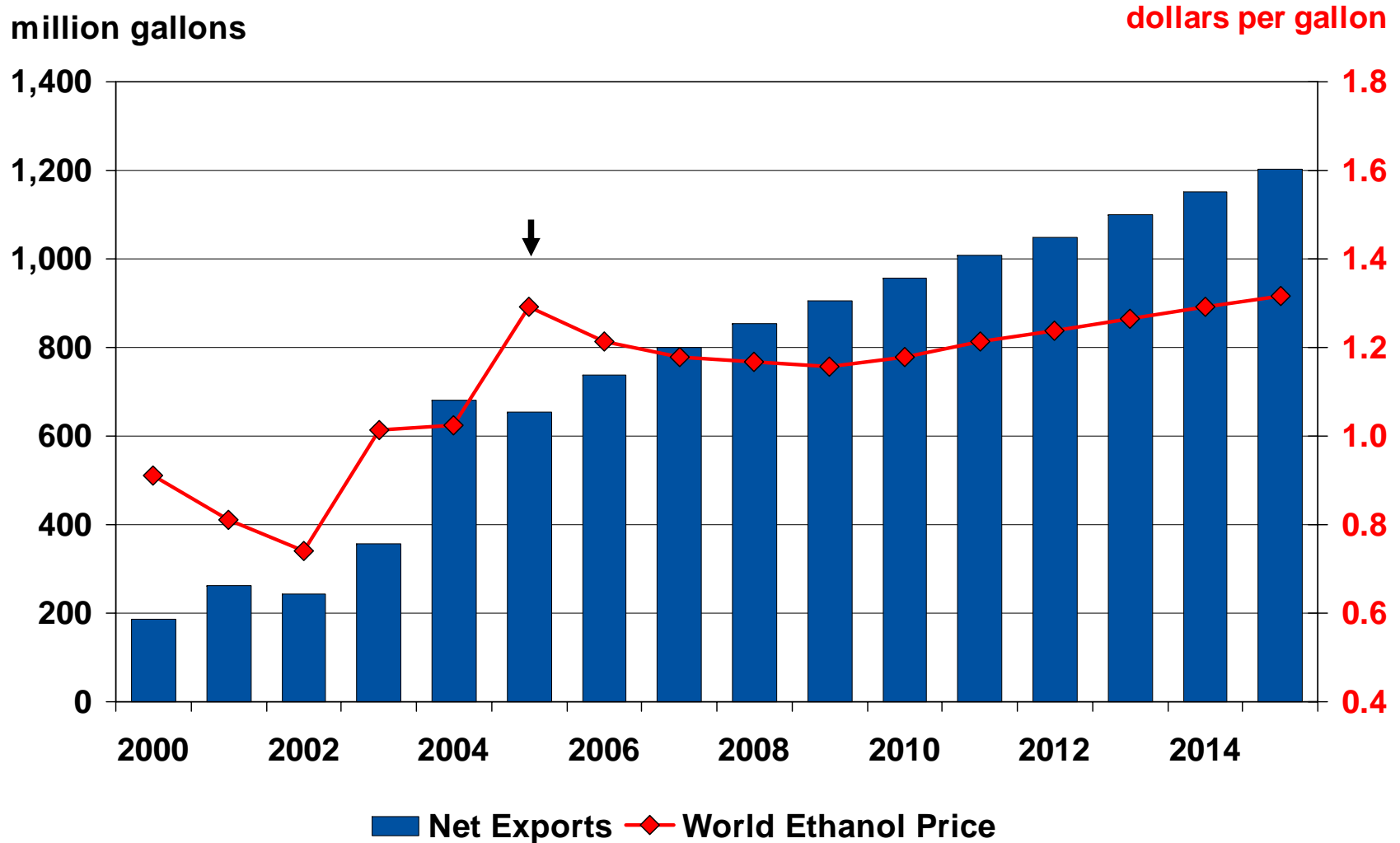
## ■ Ethanol

- Rising interest in renewable fuels boost world ethanol trade and sustains price strength in the outer period.
- Brazil expands ethanol production to meet growth in domestic and export demand.

## ■ Cotton

- Chinese cotton consumption and imports sustain modest price strength under consecutive large world crops.

# World Ethanol Price and Net Trade





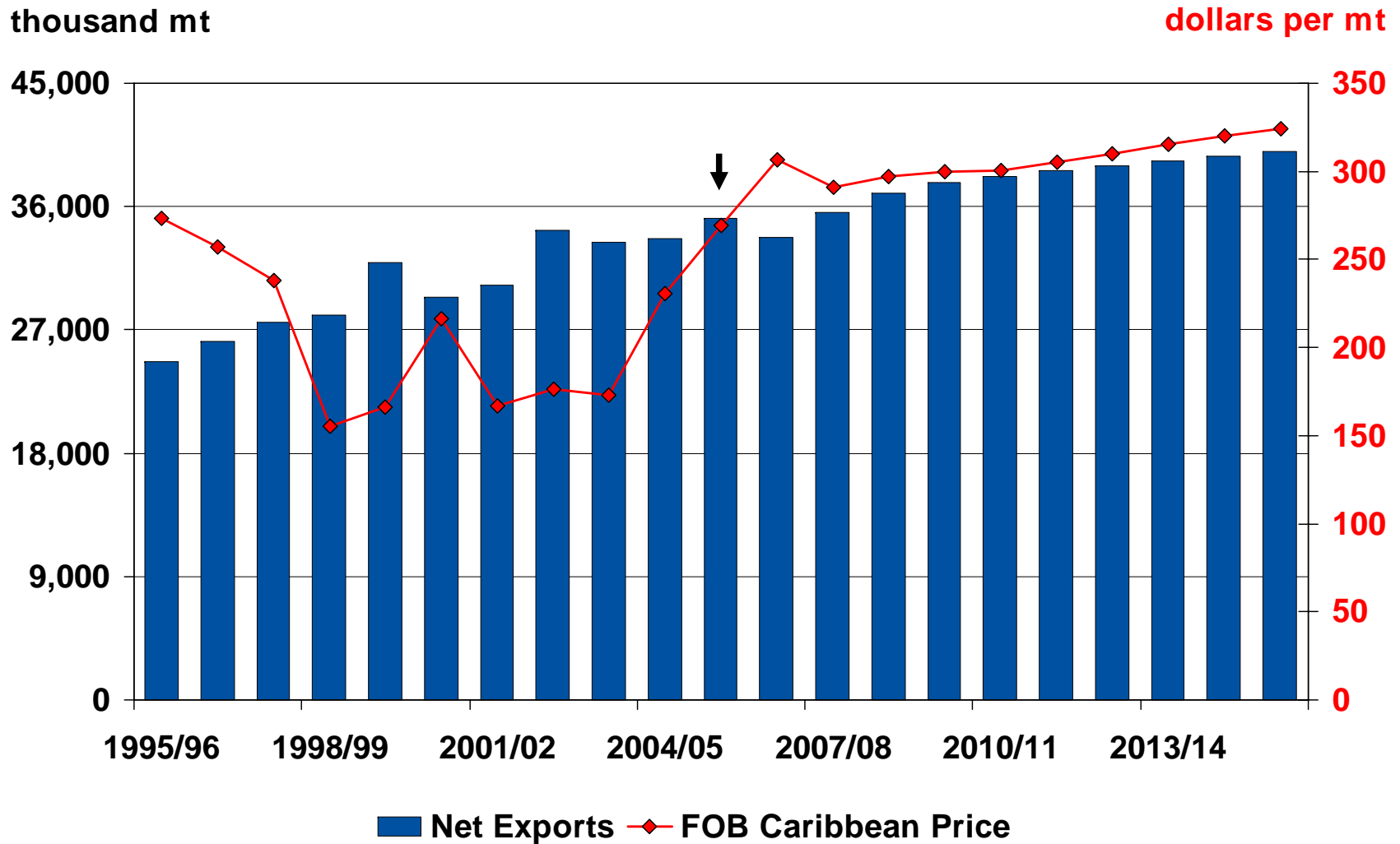
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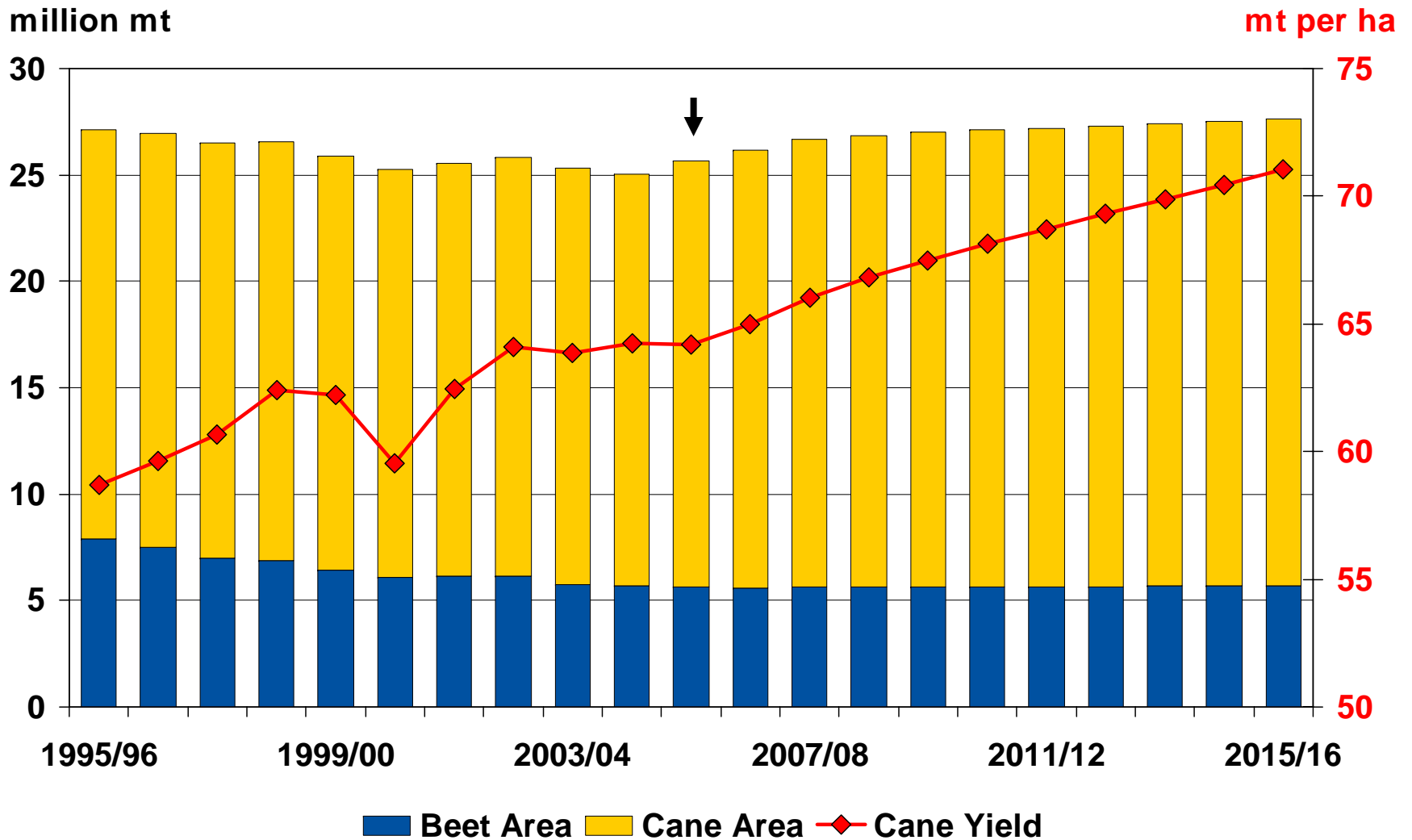
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**Thank You!**

# World Sugar Price and Net Trade

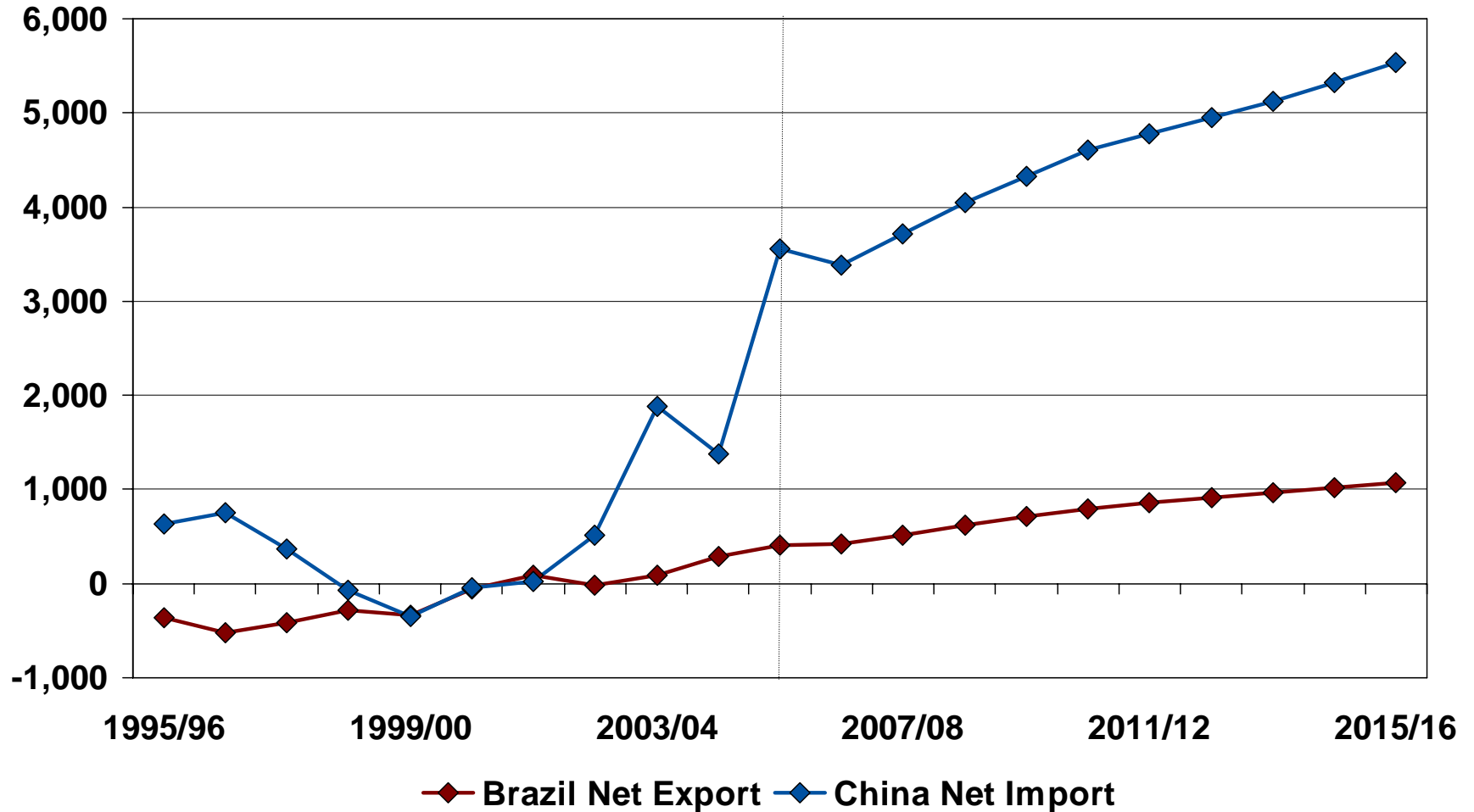


# World Sugar Area and Yield

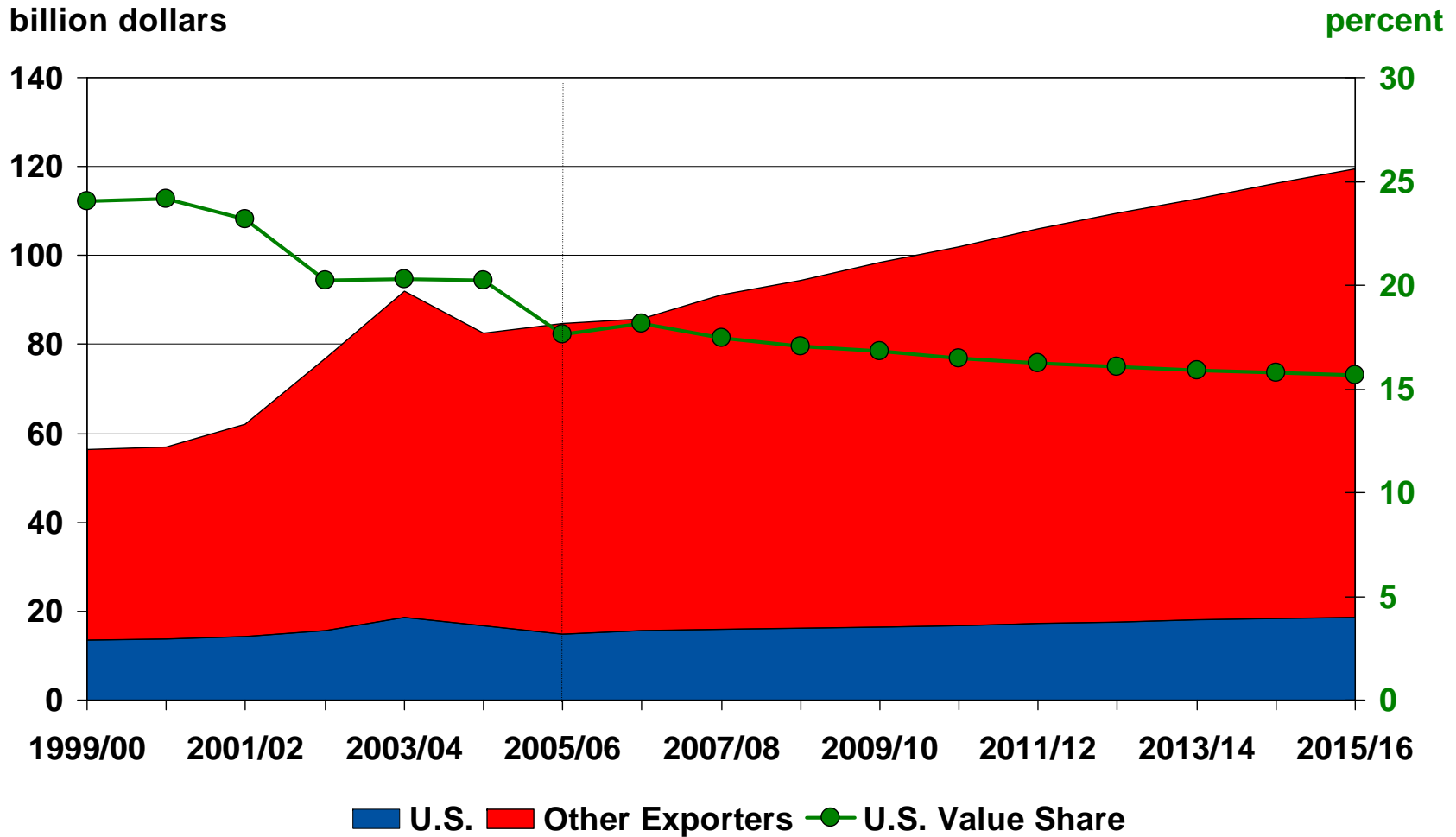


# World Cotton Trade

thousand mt

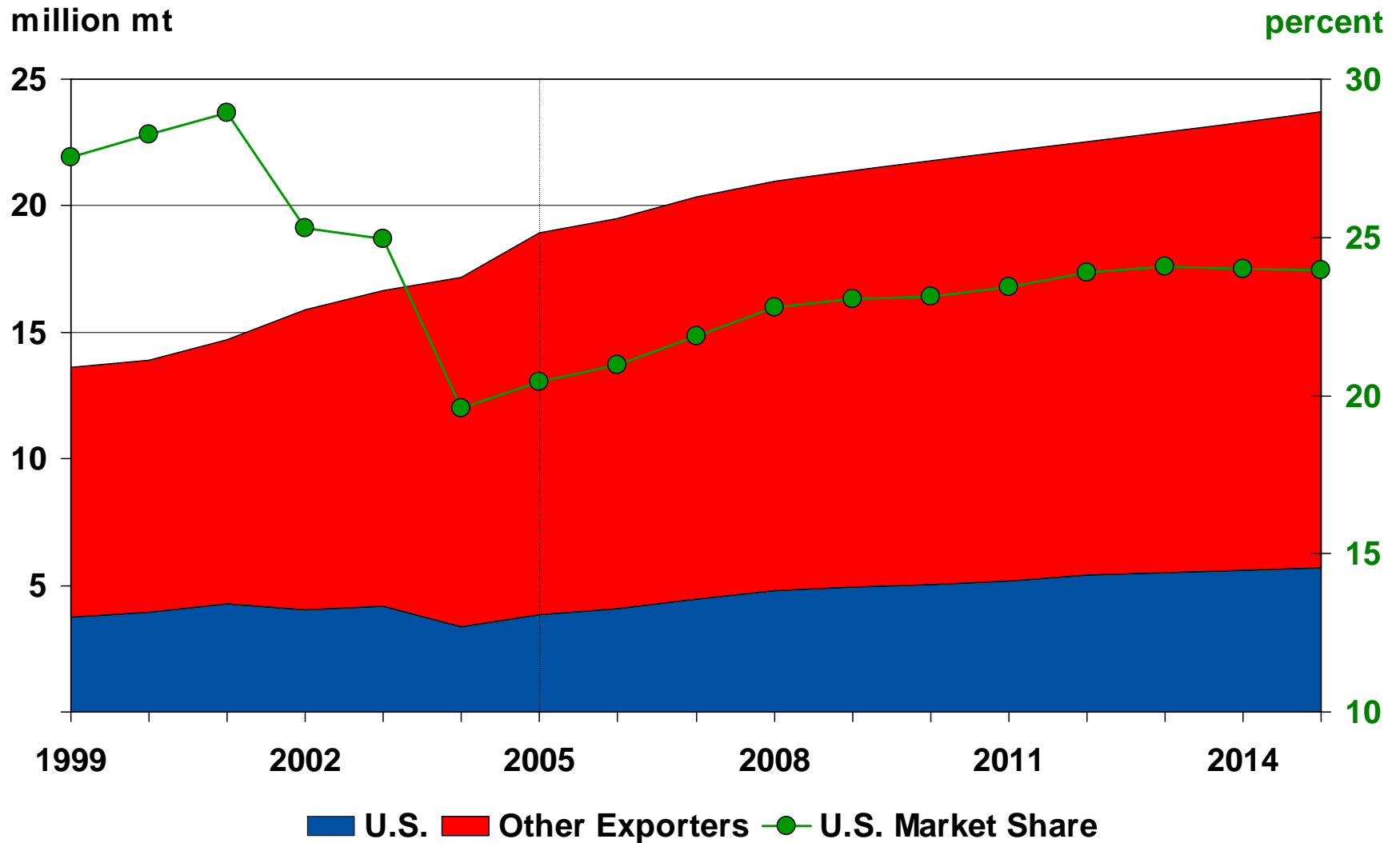


# World Crop Trade and U.S. Value Share



Crops include wheat, rice, corn, sorghum, barley, soybean, rapeseed, peanuts, and sunflower.

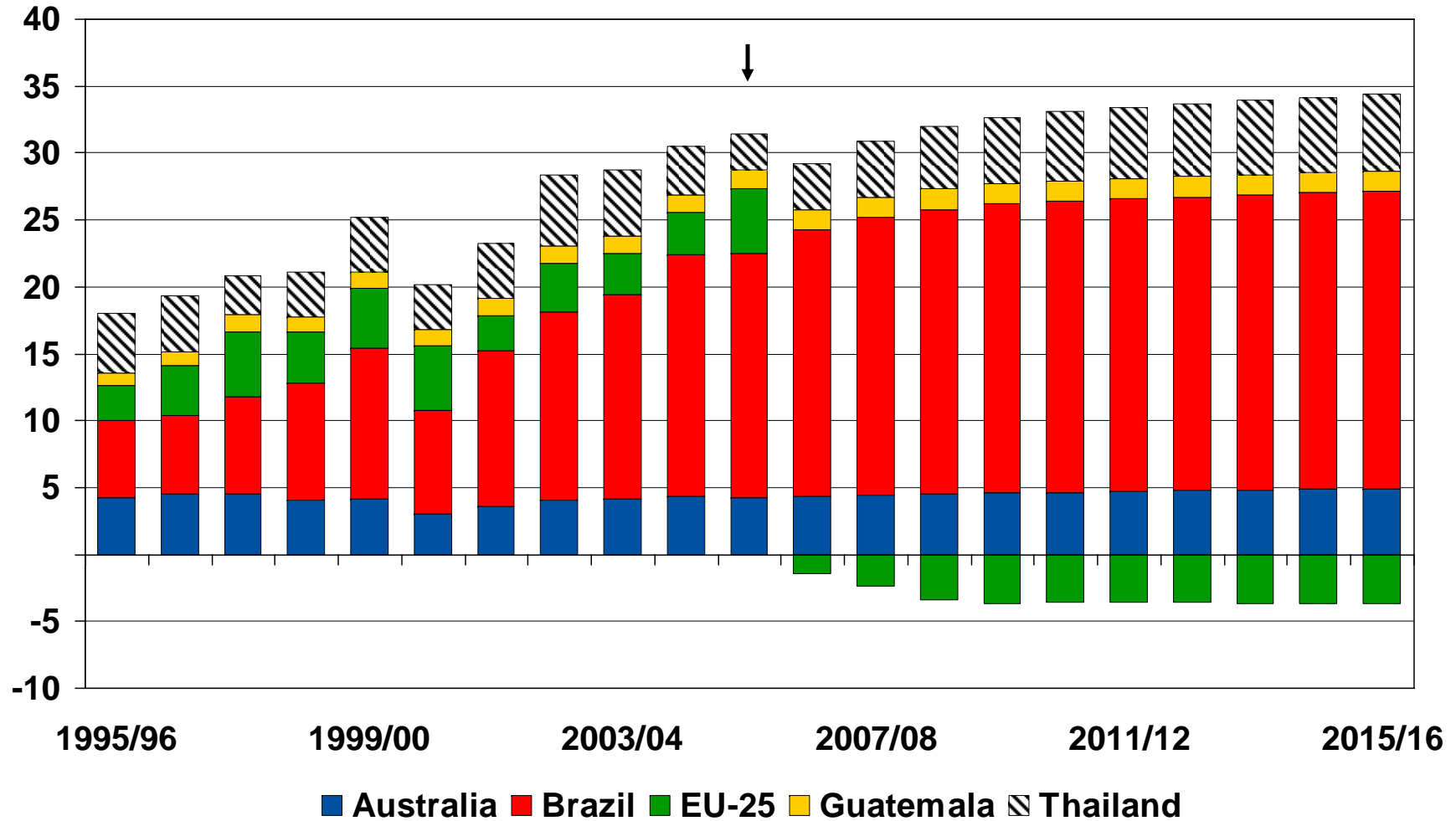
# World Meat Trade and U.S. Market Share





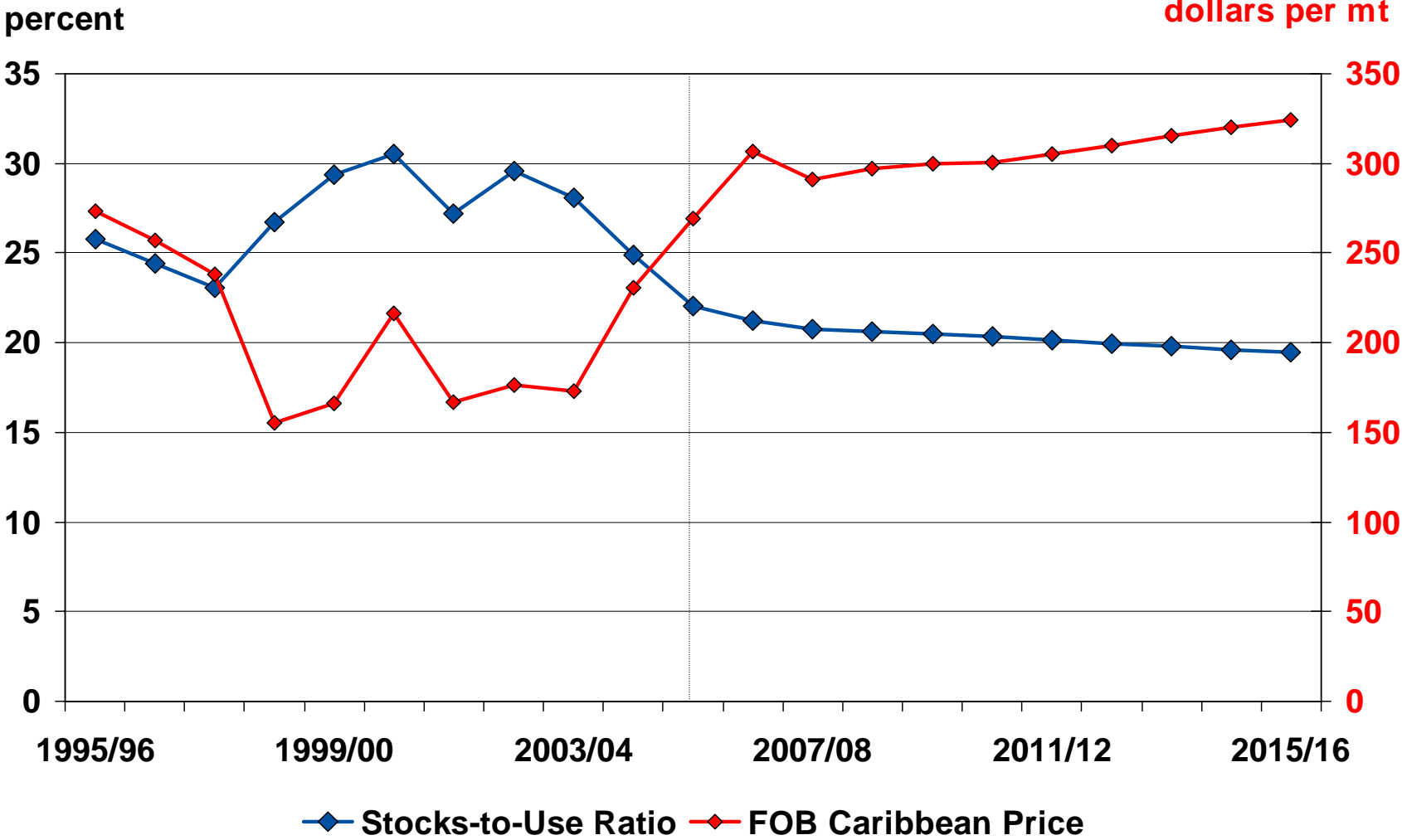
# Major Sugar Exporters

million mt

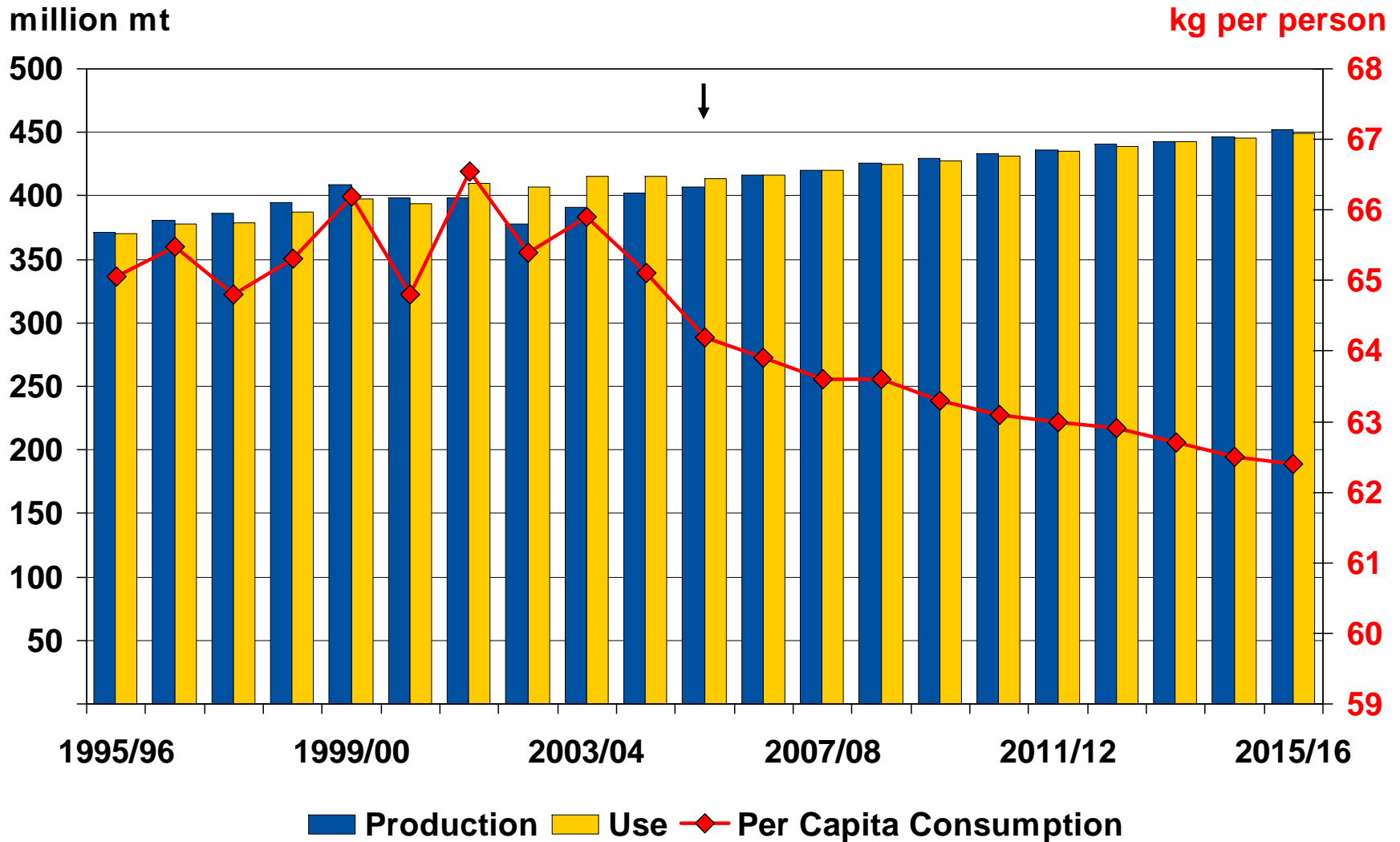




# Sugar Stock-to-Use Ratio and Price



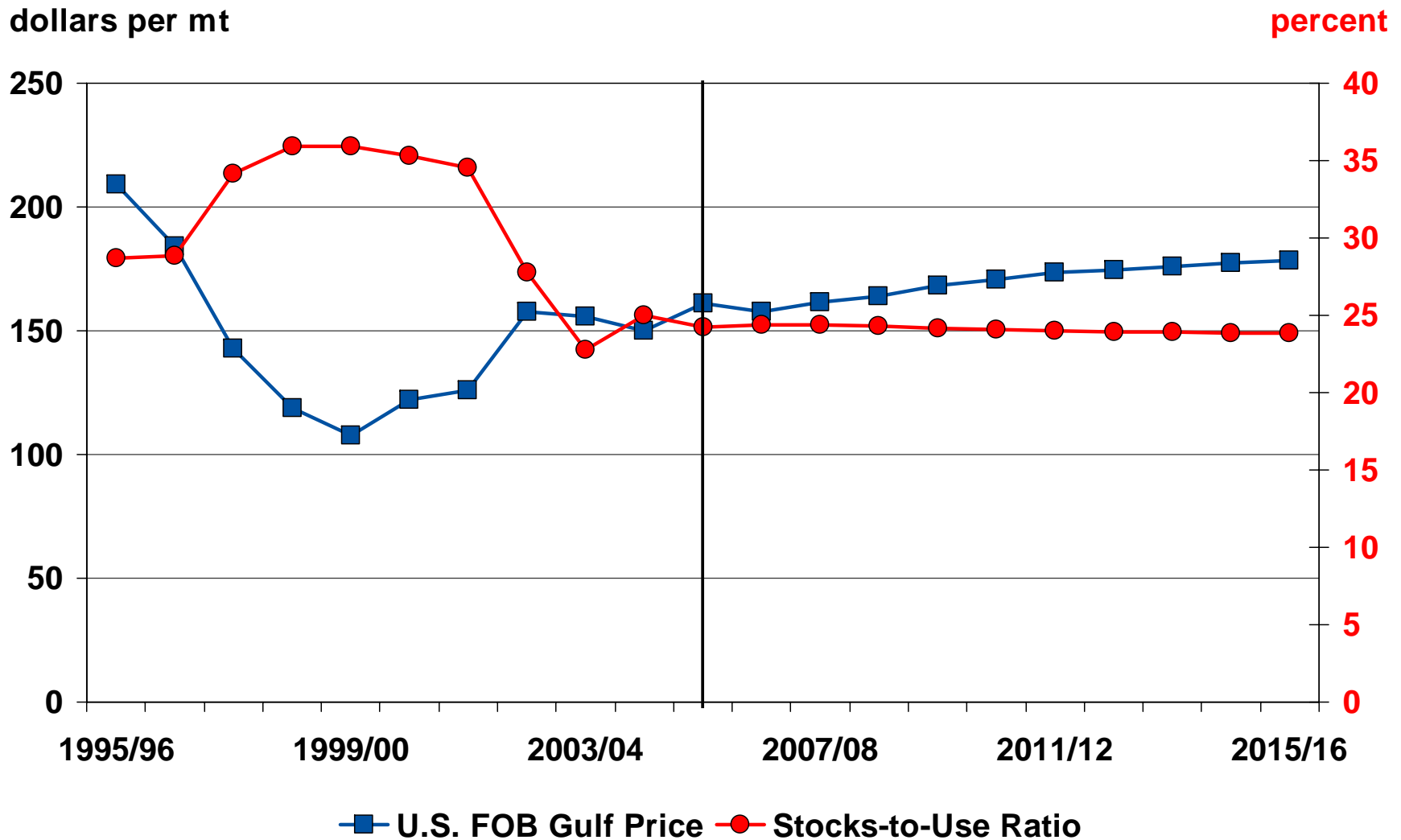
# World Rice Production, Use, and Per Capita Consumption



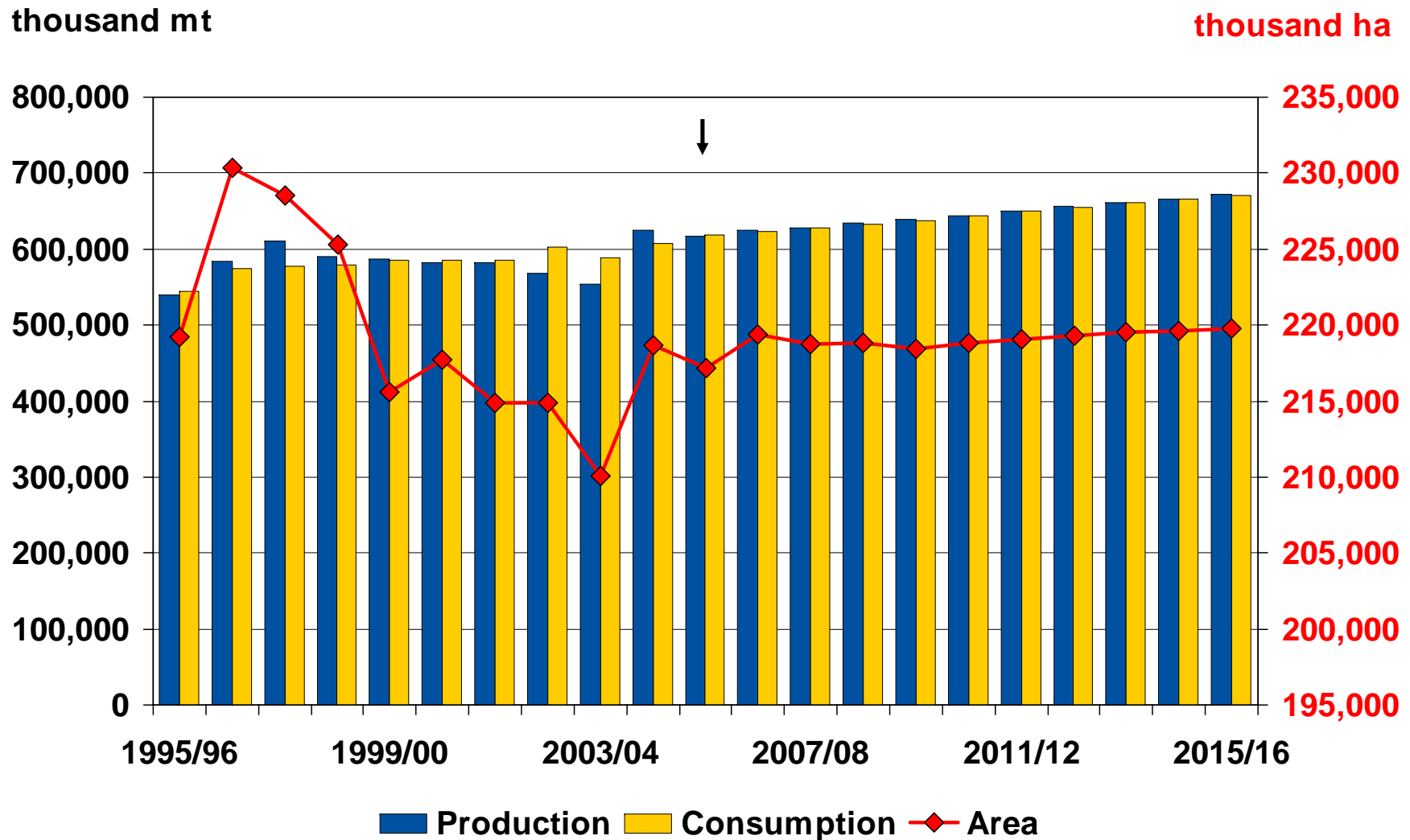
## EU-15 CAP Reform and Enlargement

Policy	2004	2005	2006	2007	2008
Decoupling			(percent)		
Livestock and Dairy	0	23	47	70	70
Crops	0	33	67	100	100
Modulation	0	3	4	5	5
Set-aside					
EU15	5	10	10	10	10
EU NMS	0	0	0	10	10
Top-up Payments	20	27	22	17	7
			(euro per ha)		
Durum Aid	313	291	285	285	285
Dairy Quota			(mmt)		
EU15	119	119	119	120	120
EU NMS	18	18	18	19	19
Target/Intervention Price			(euro per 100 kg)		
Milk	31	0	0	0	0
Butter	317	294	271	253	246
NFD	200	191	180	177	175

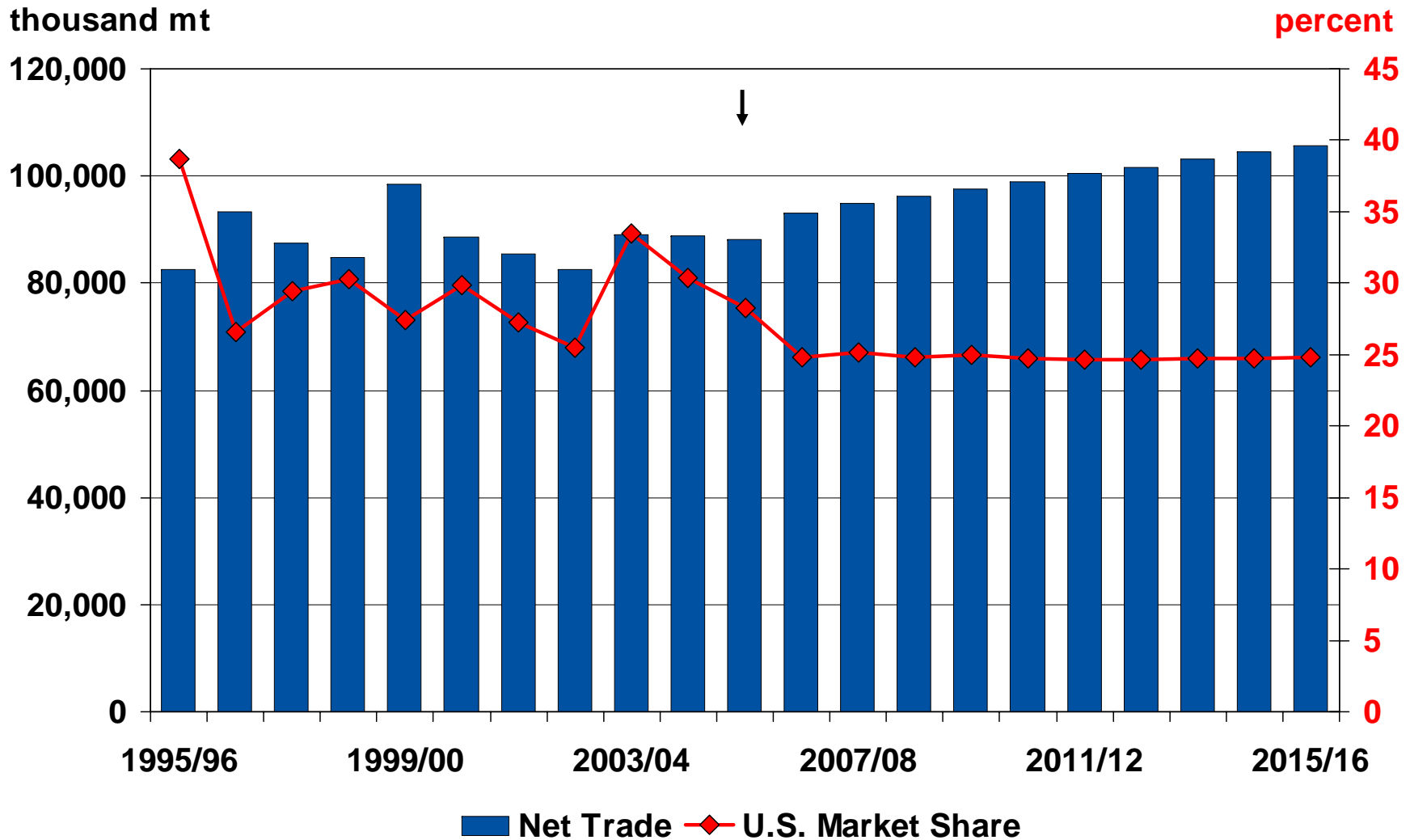
# World Wheat Stocks-to-Use Ratio vs. Price



# World Wheat Area, Production, and Consumption

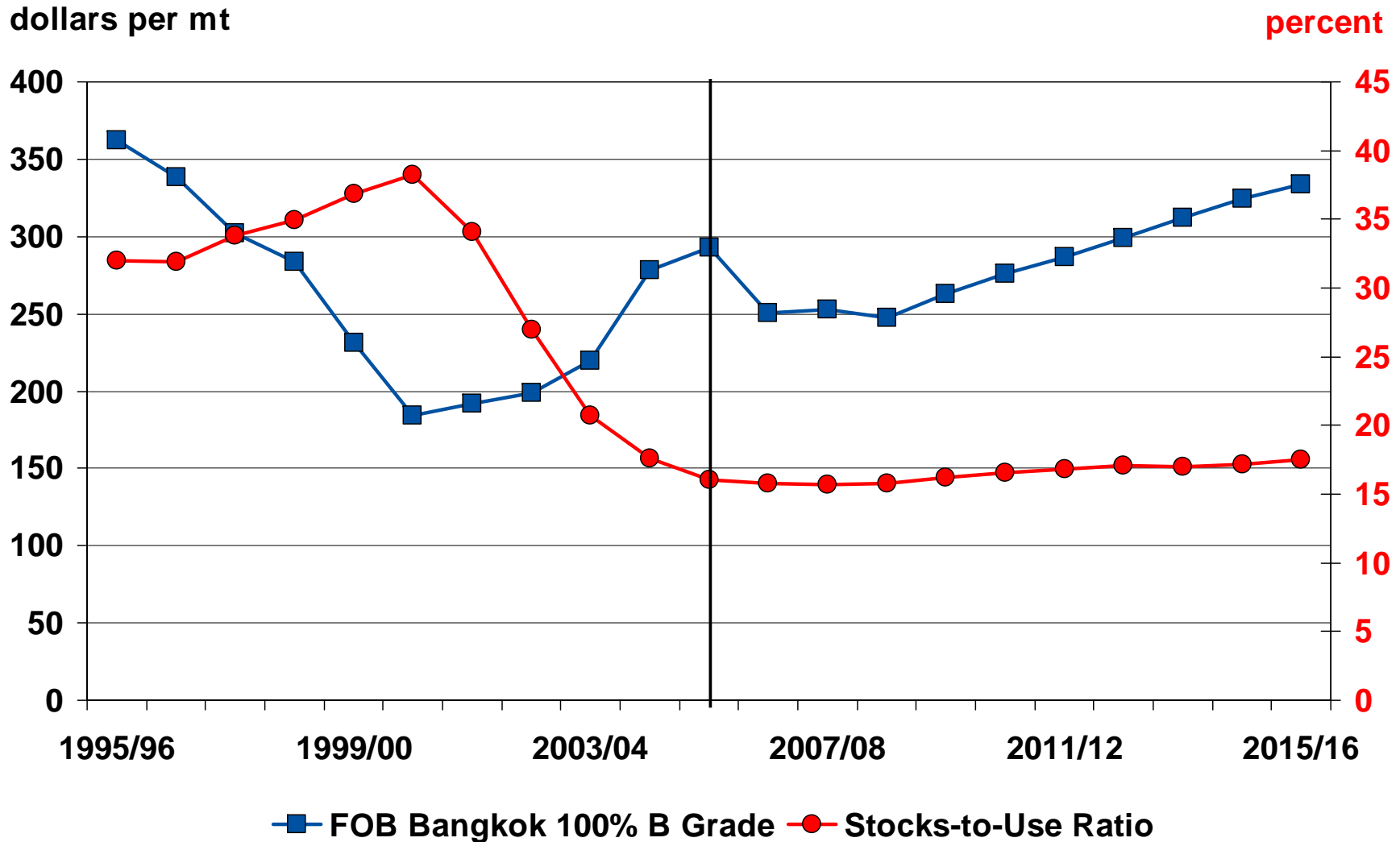


# World Wheat Trade and U.S. Market Share



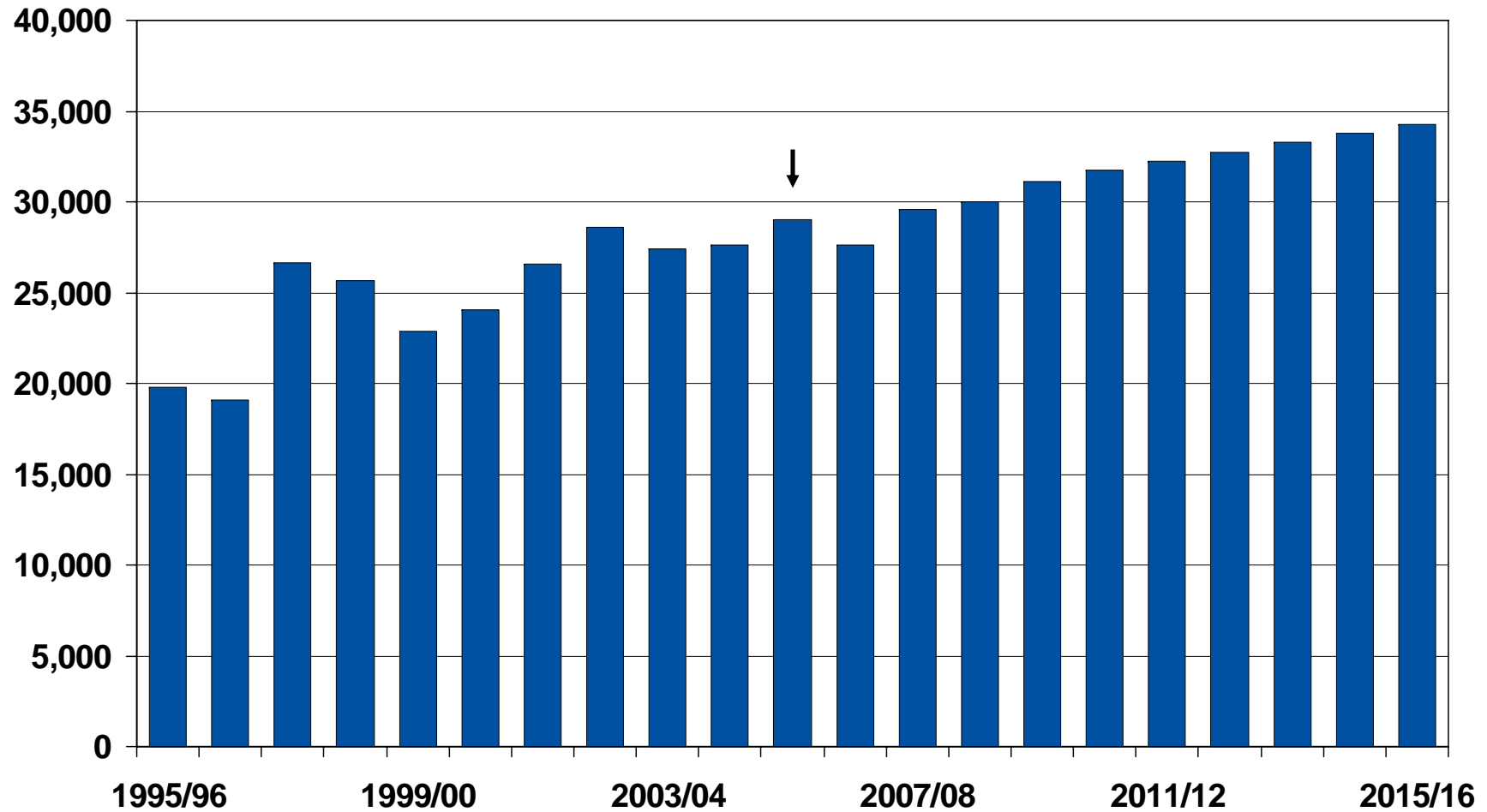


# World Rice Stocks-to-Use Ratio vs. Price

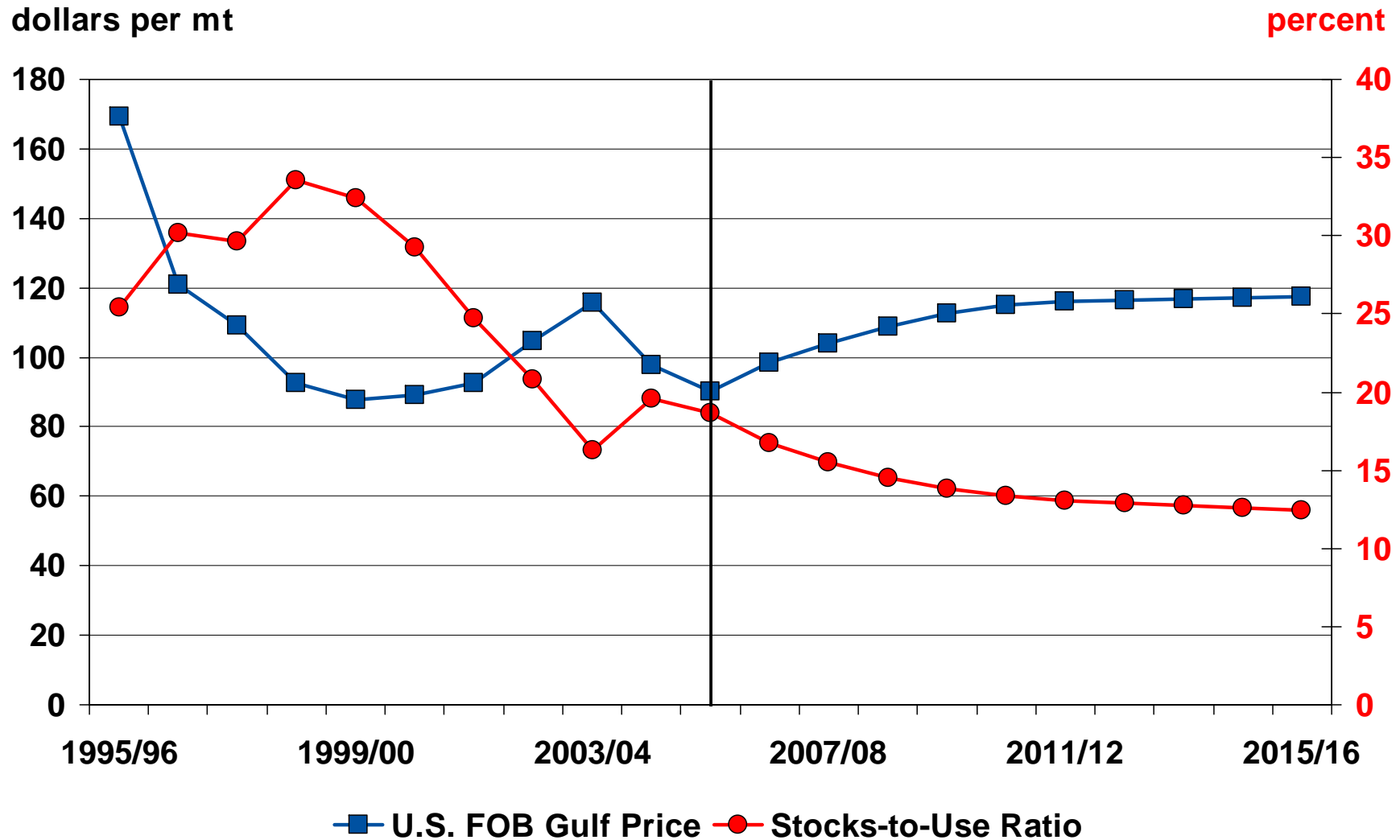


# World Rice Trade

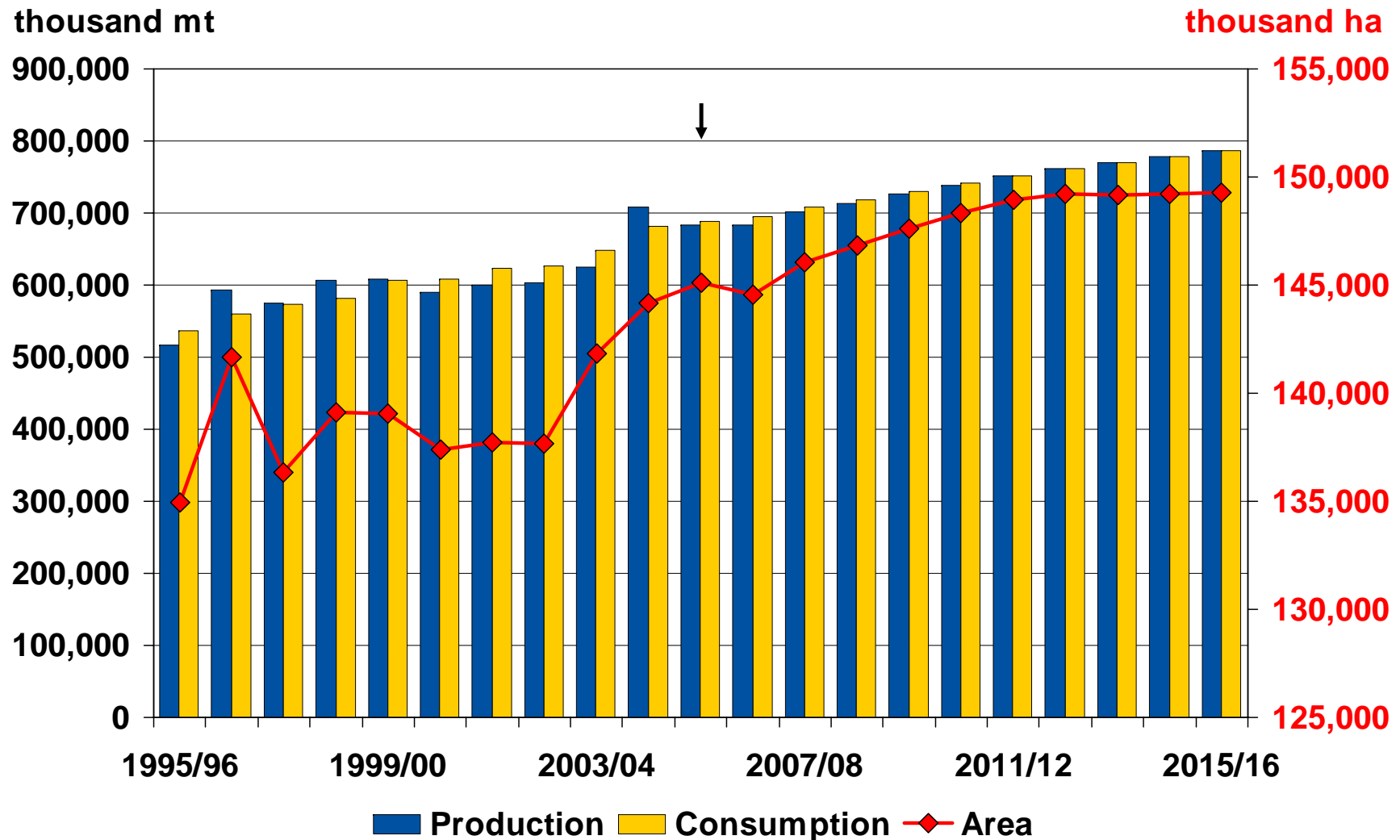
thousand mt



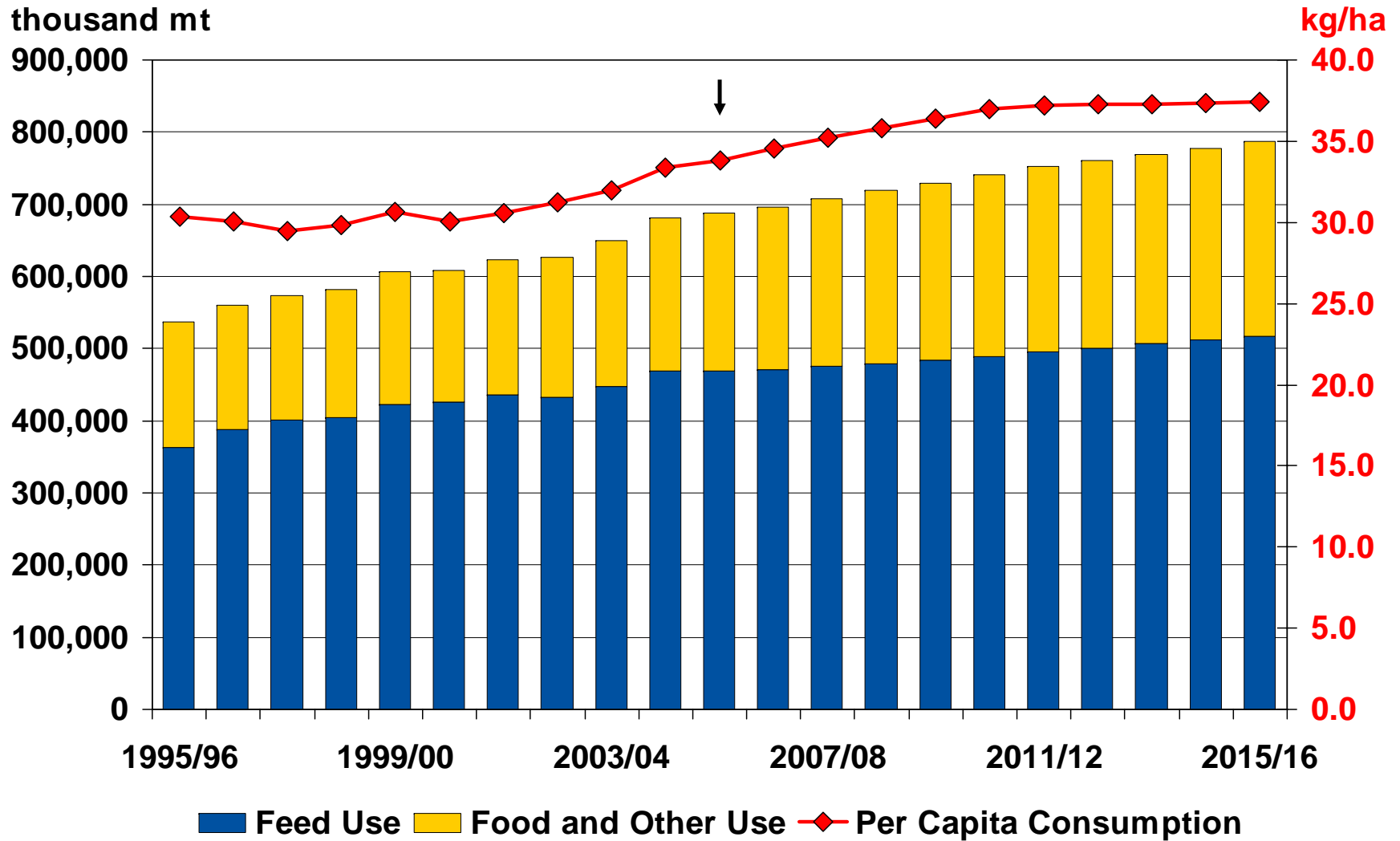
# World Corn Stocks-to-Use Ratio vs. Price



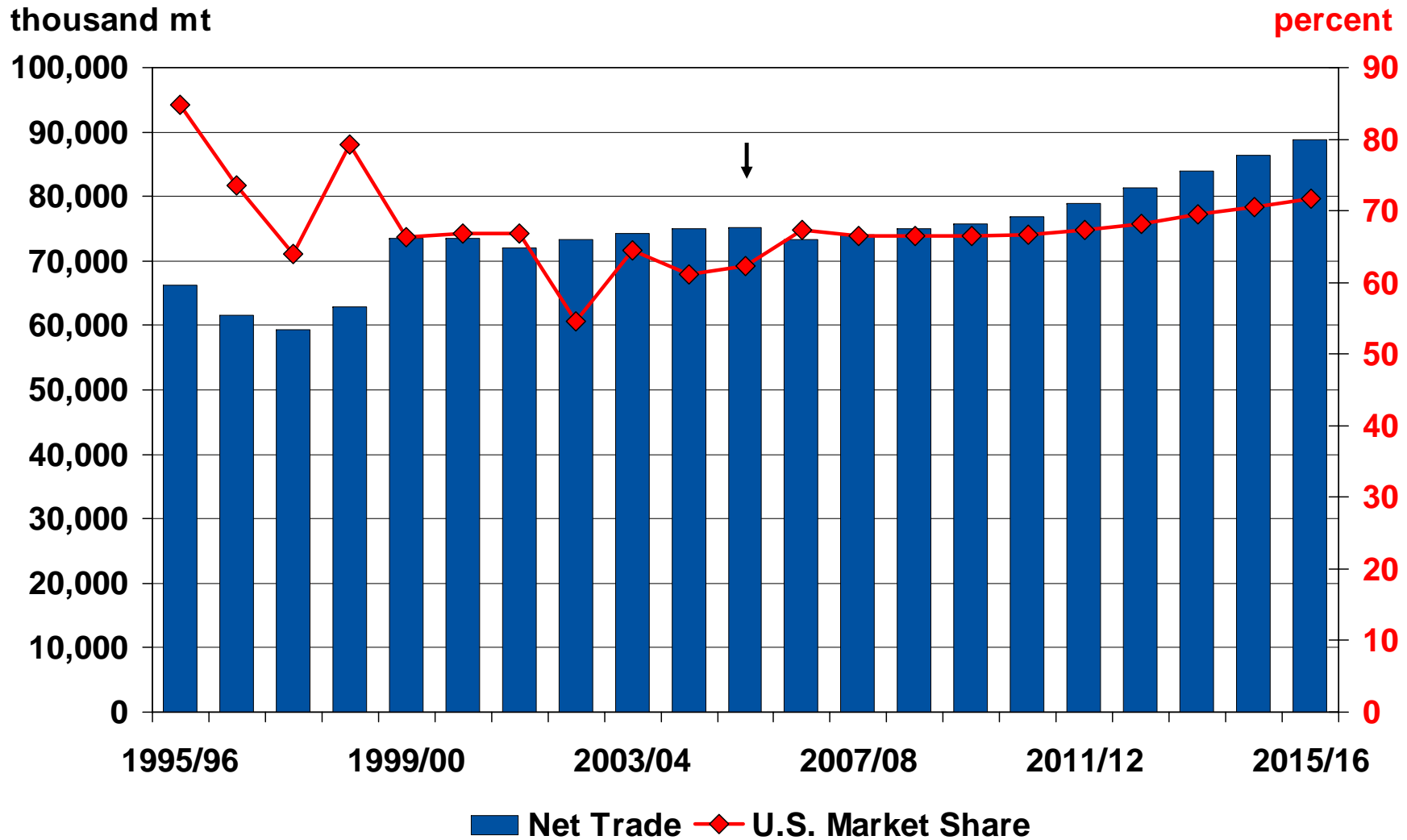
# World Corn Area, Production, and Consumption



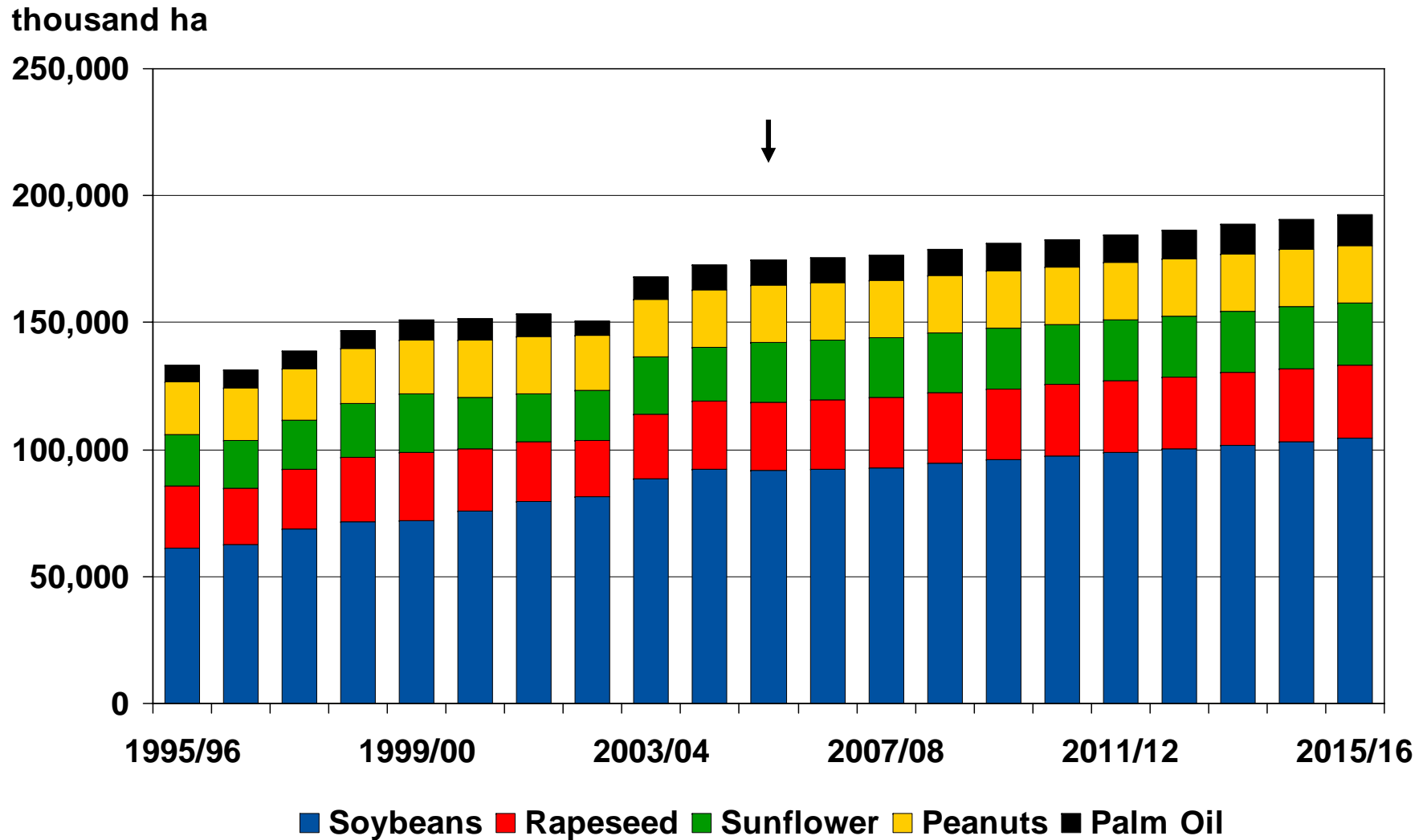
# World Corn Feed, Food Use, and Per Capita Consumption



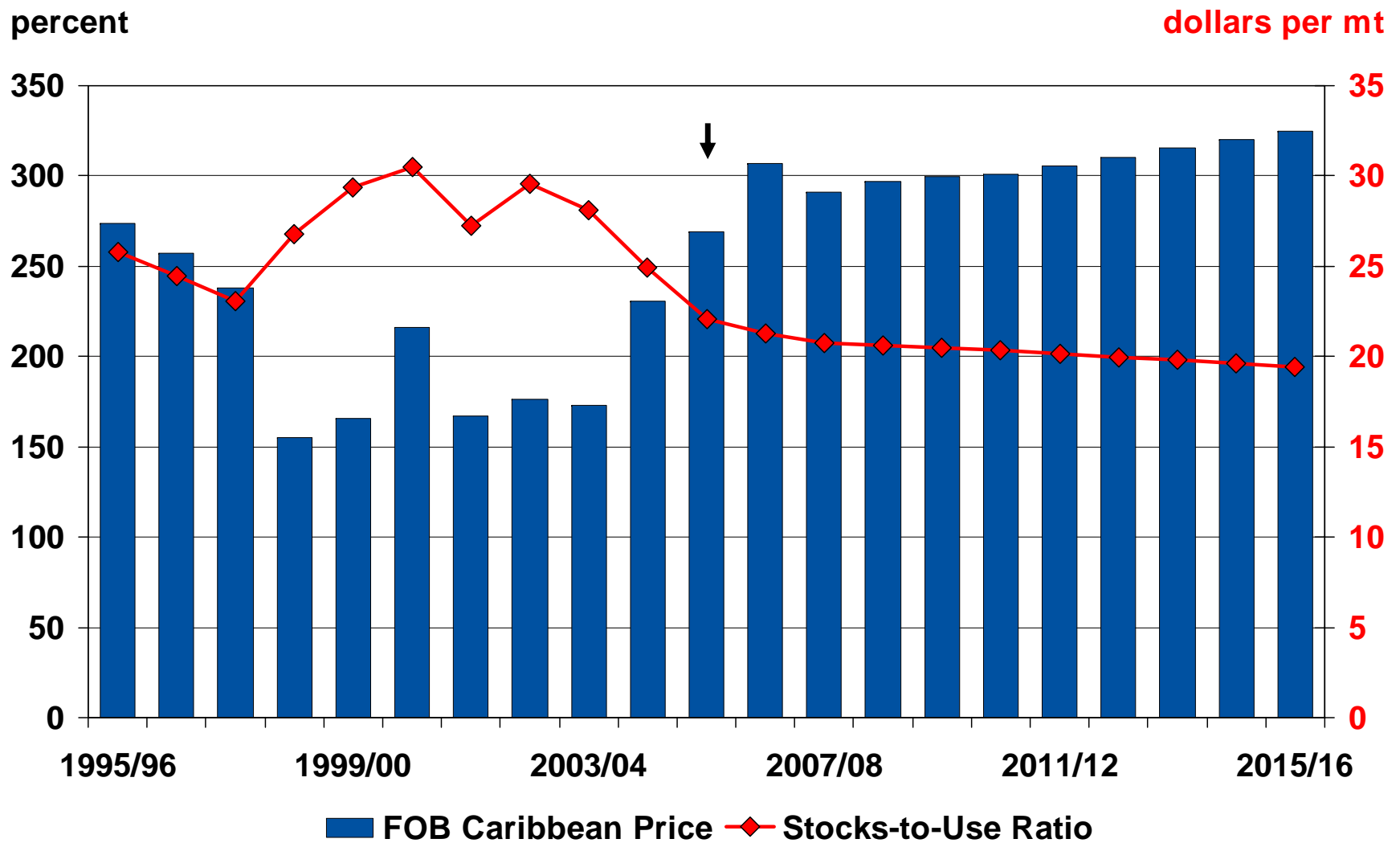
# World Corn Trade and U.S. Market Share



# World Oilseed Area

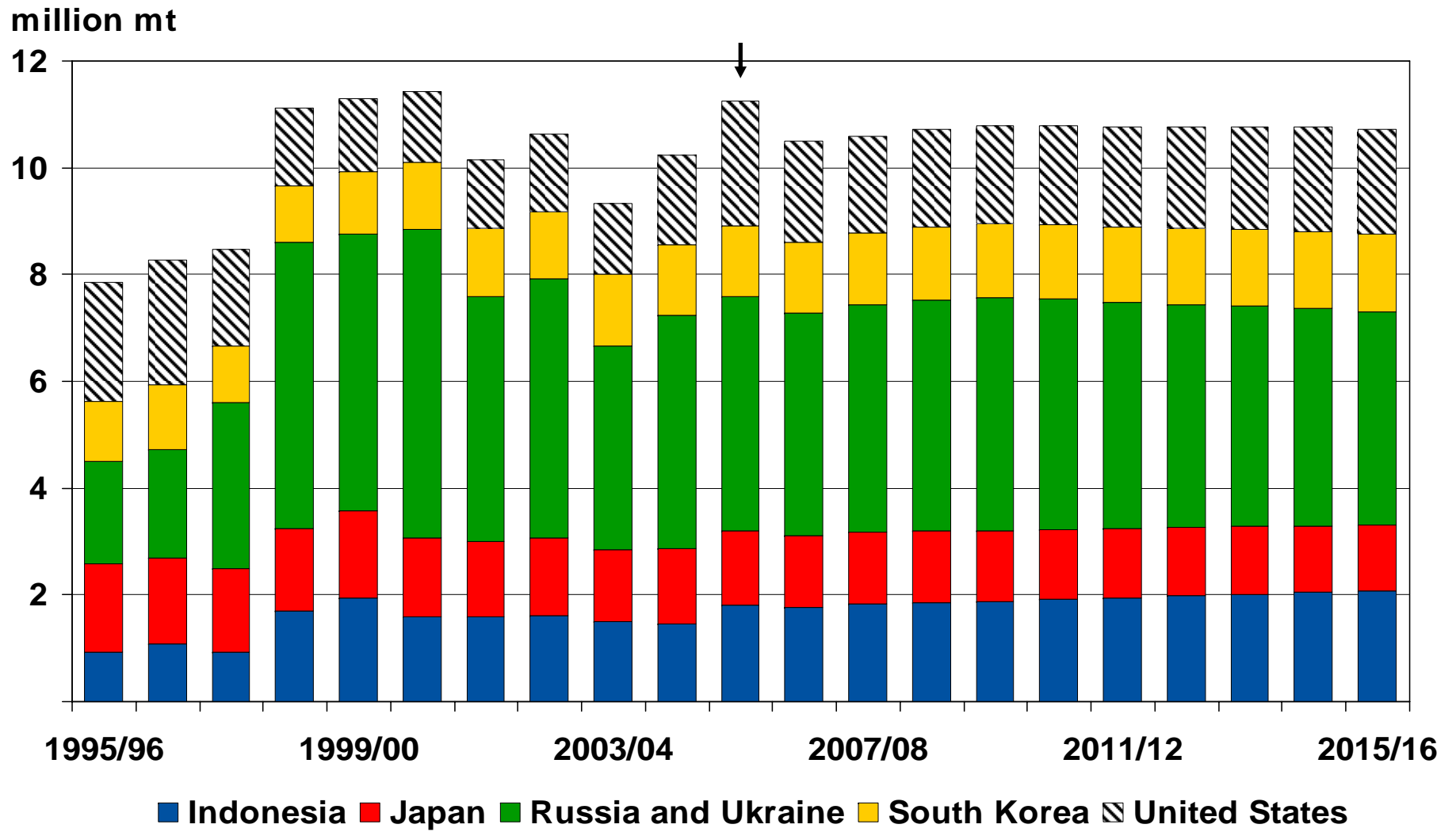


# World Sugar Stocks-to-Use Ratio vs. Price

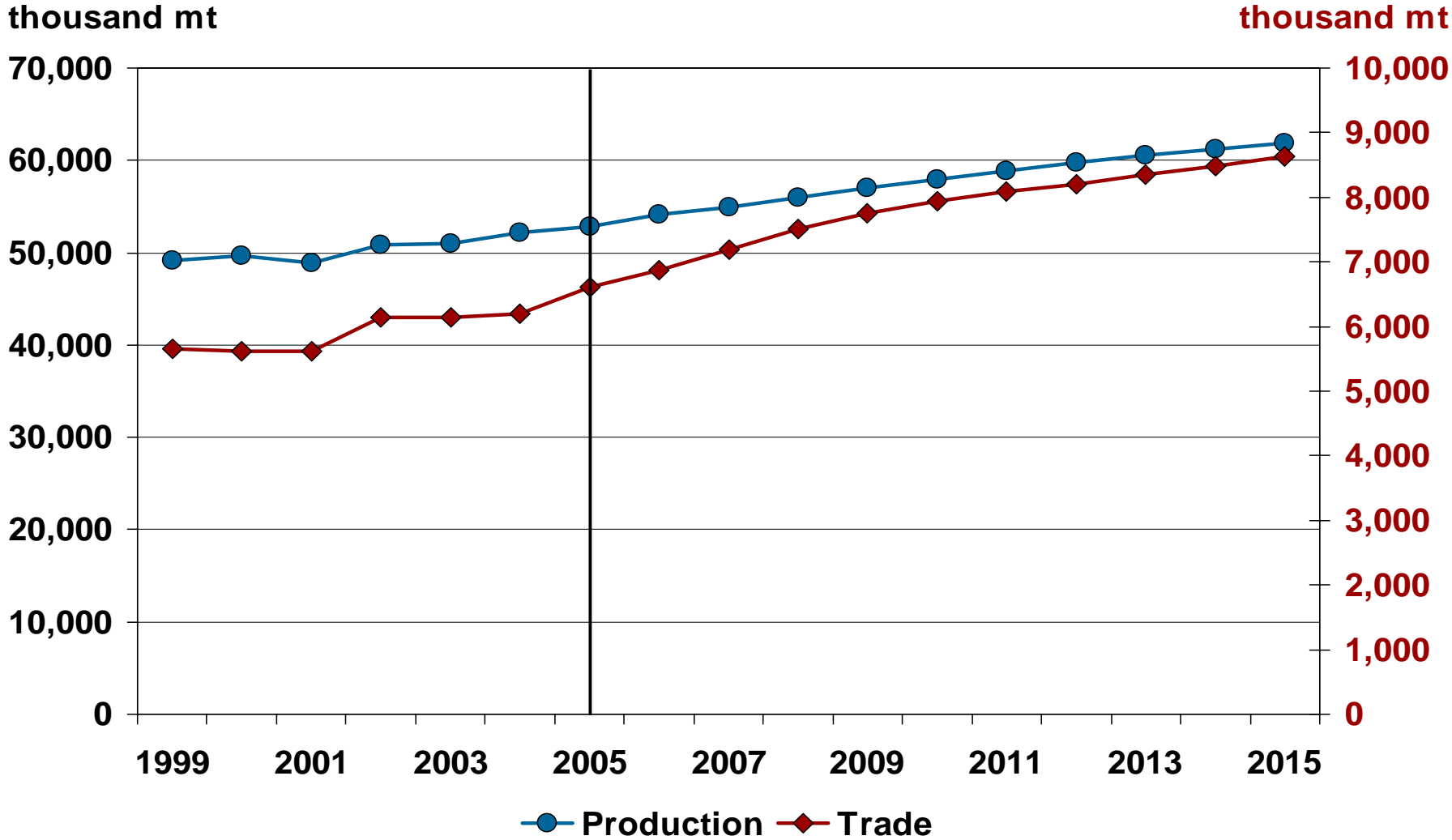




# Major Sugar Importers

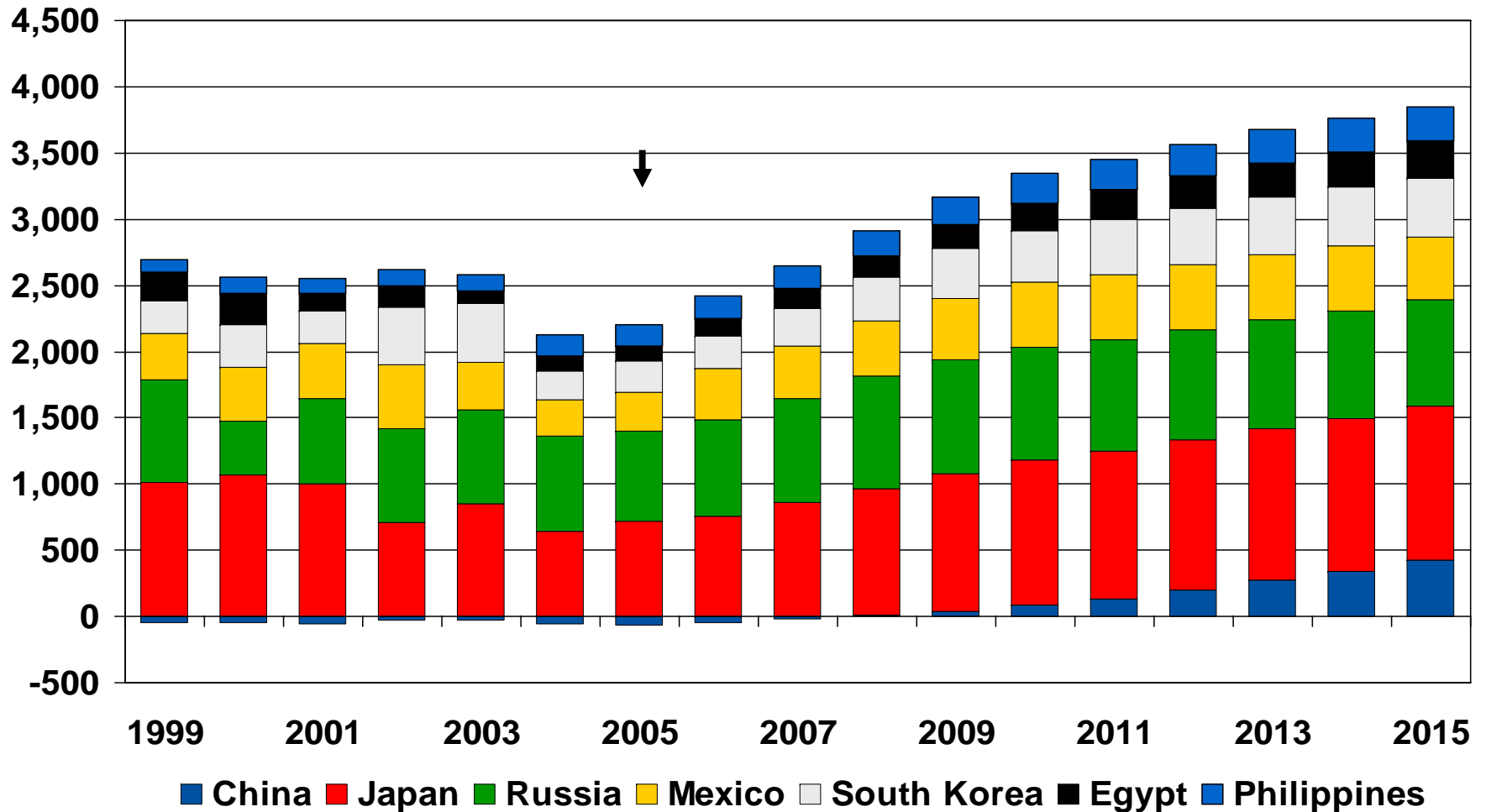


# World Beef Production and Trade

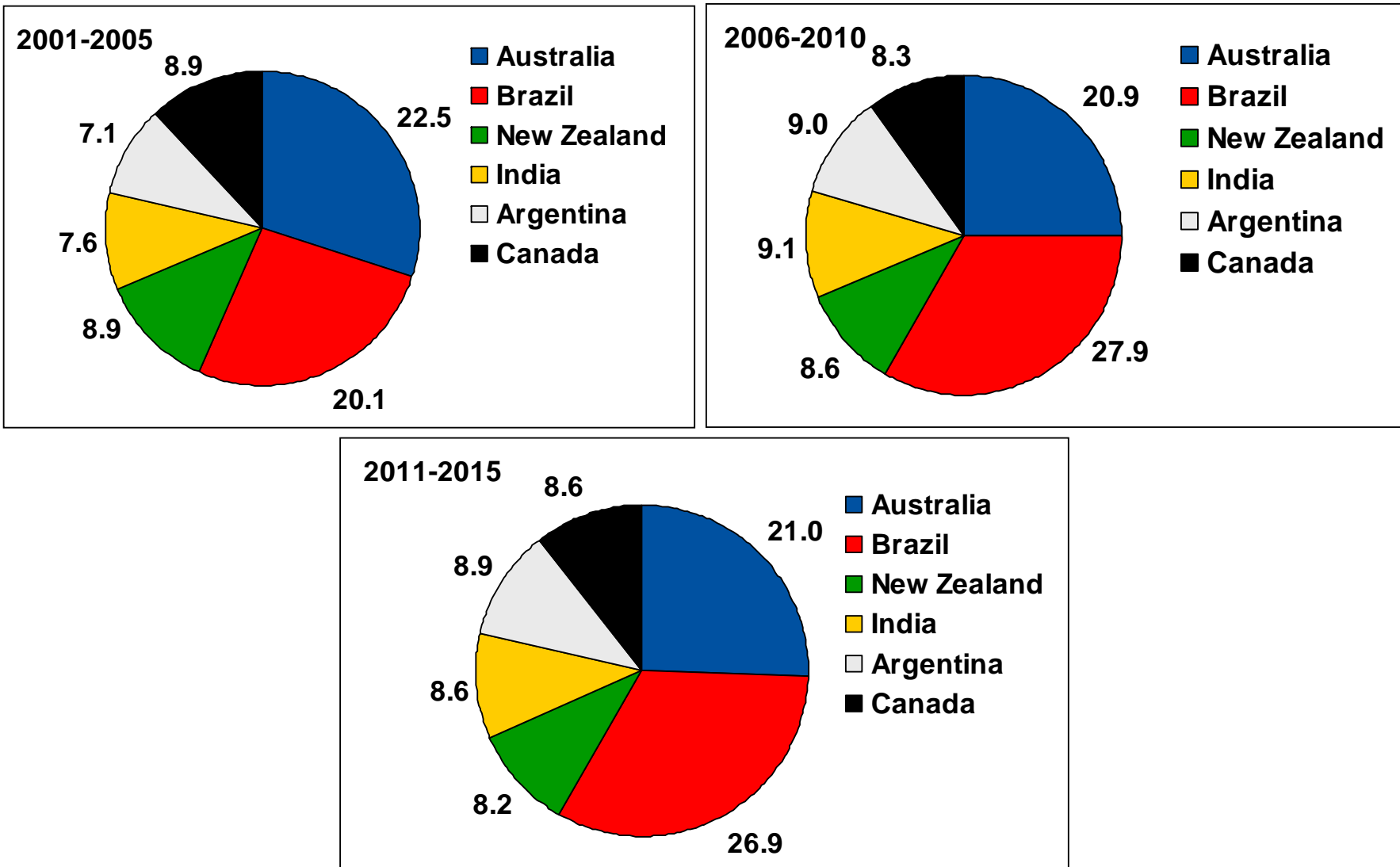


# Major Beef Importing Countries

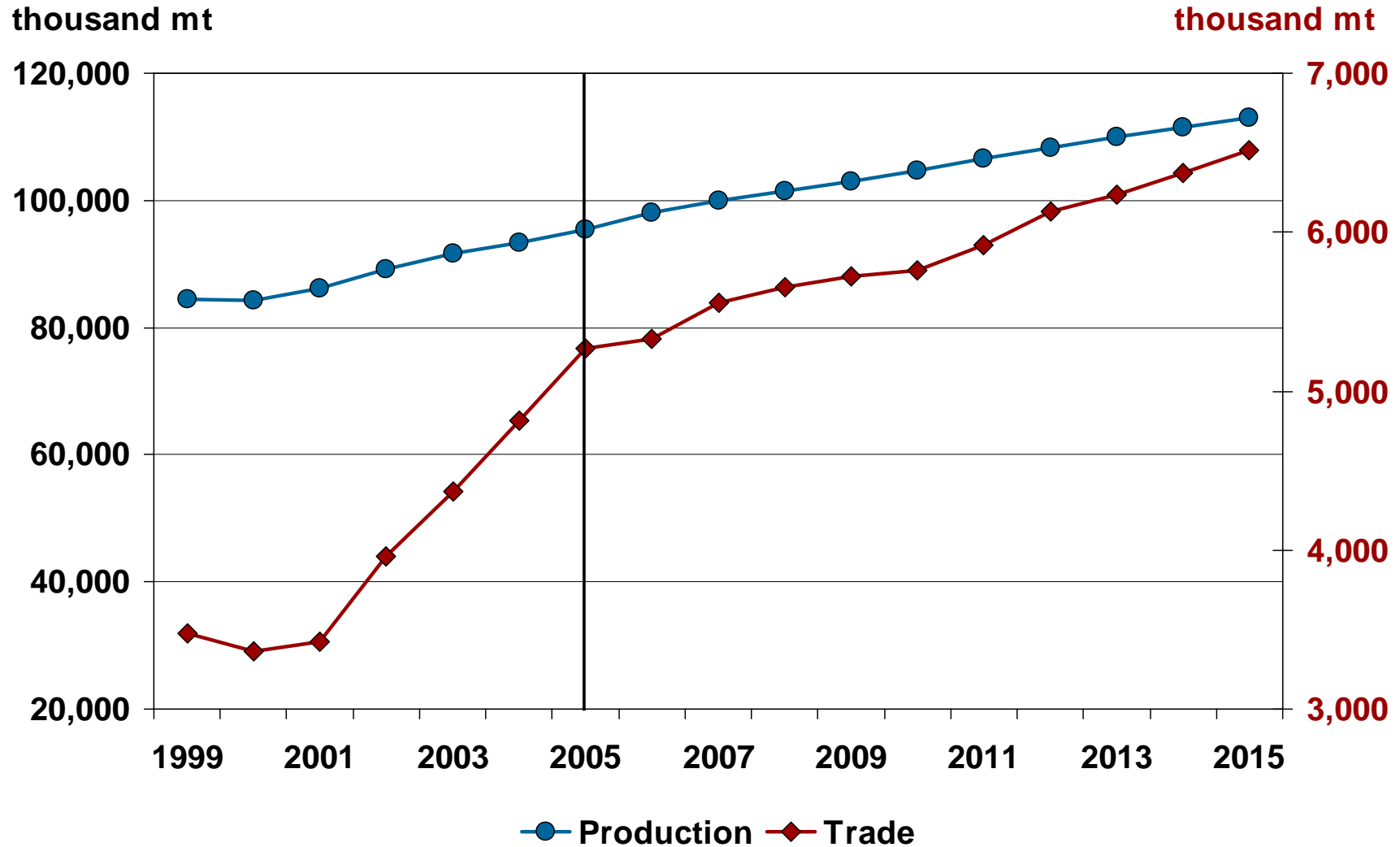
thousand mt



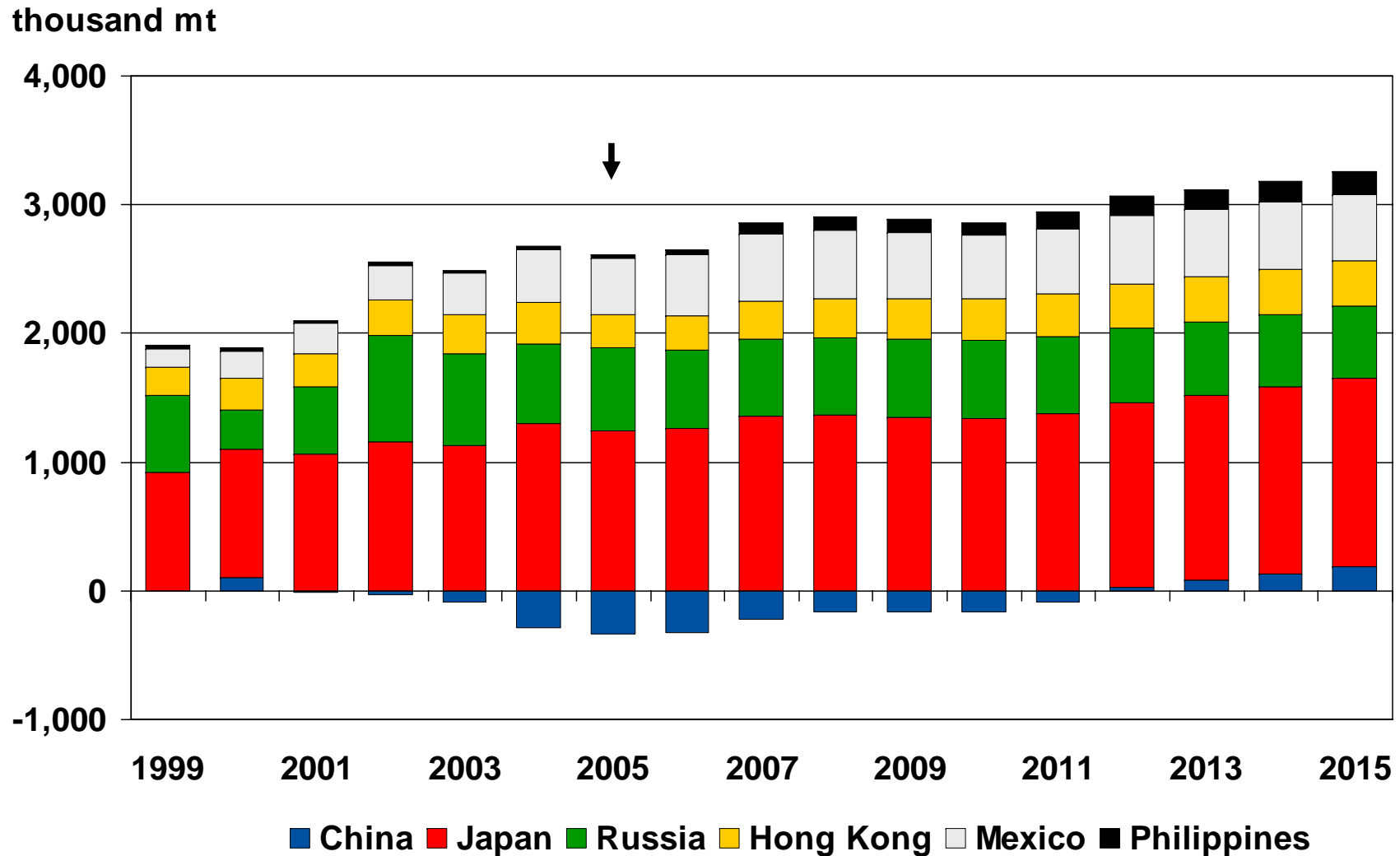
# Beef Export Market Share (percent)



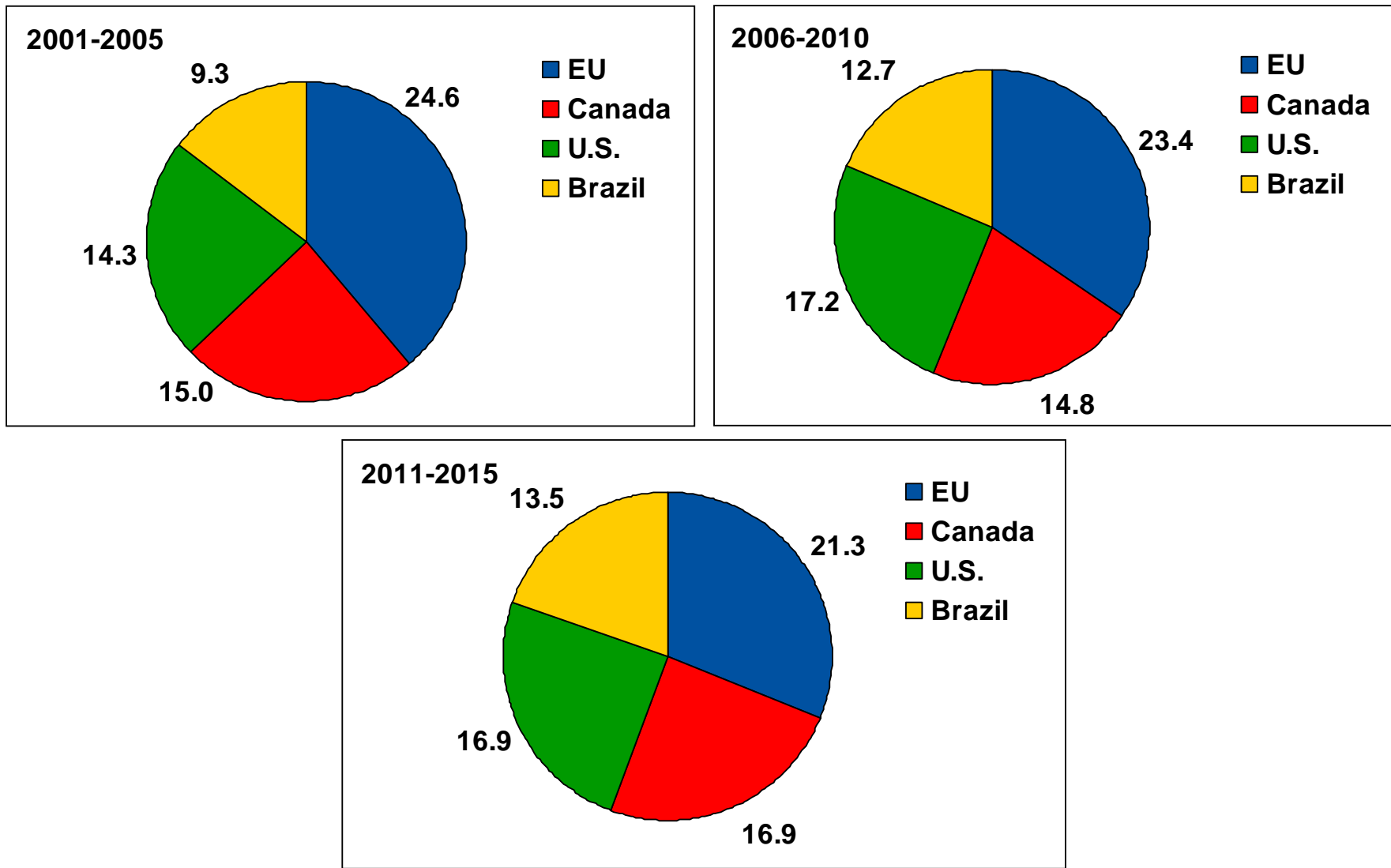
# World Pork Production and Trade



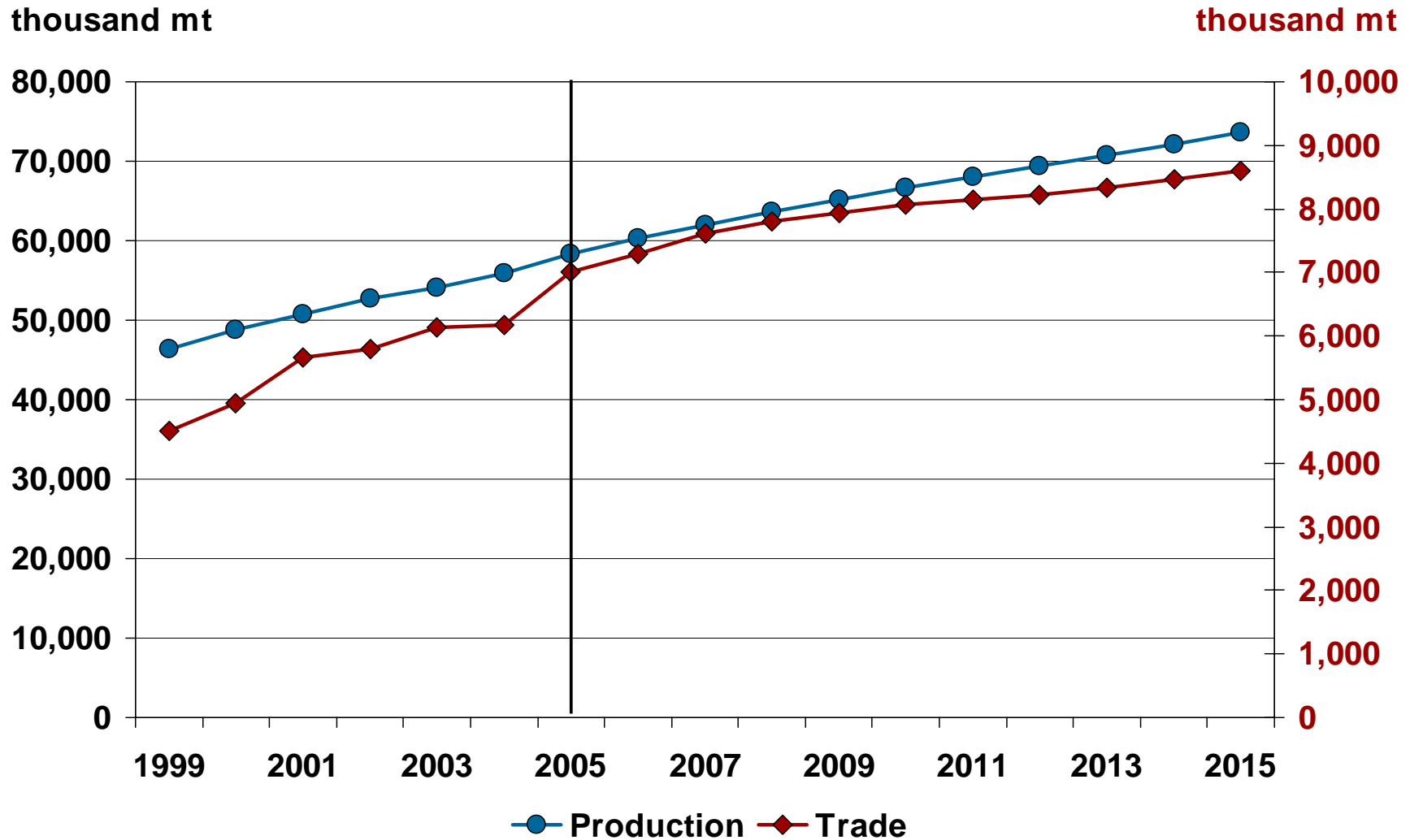
# Major Pork Importing Countries



# Pork Export Market Share

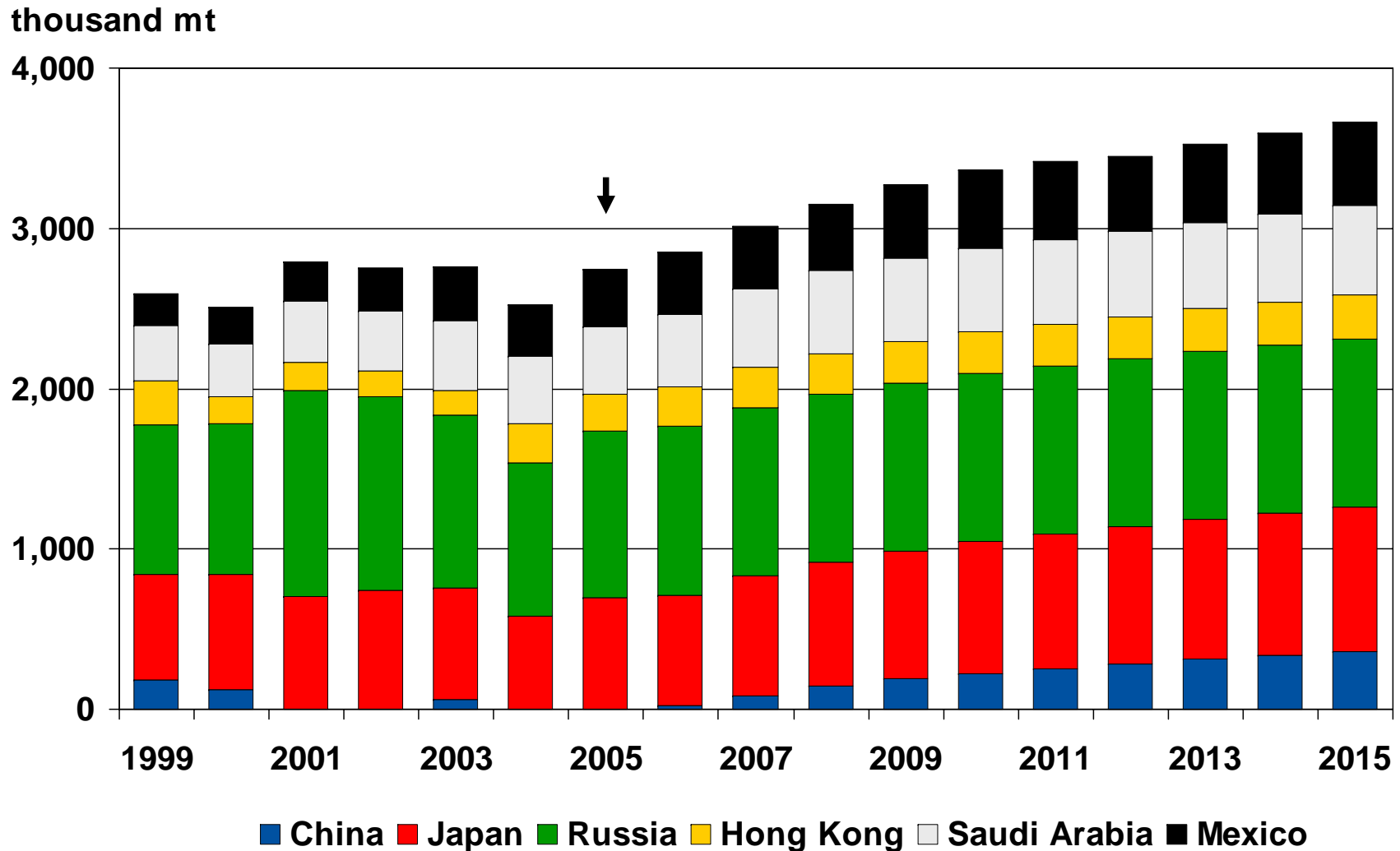


# World Broiler Production and Trade

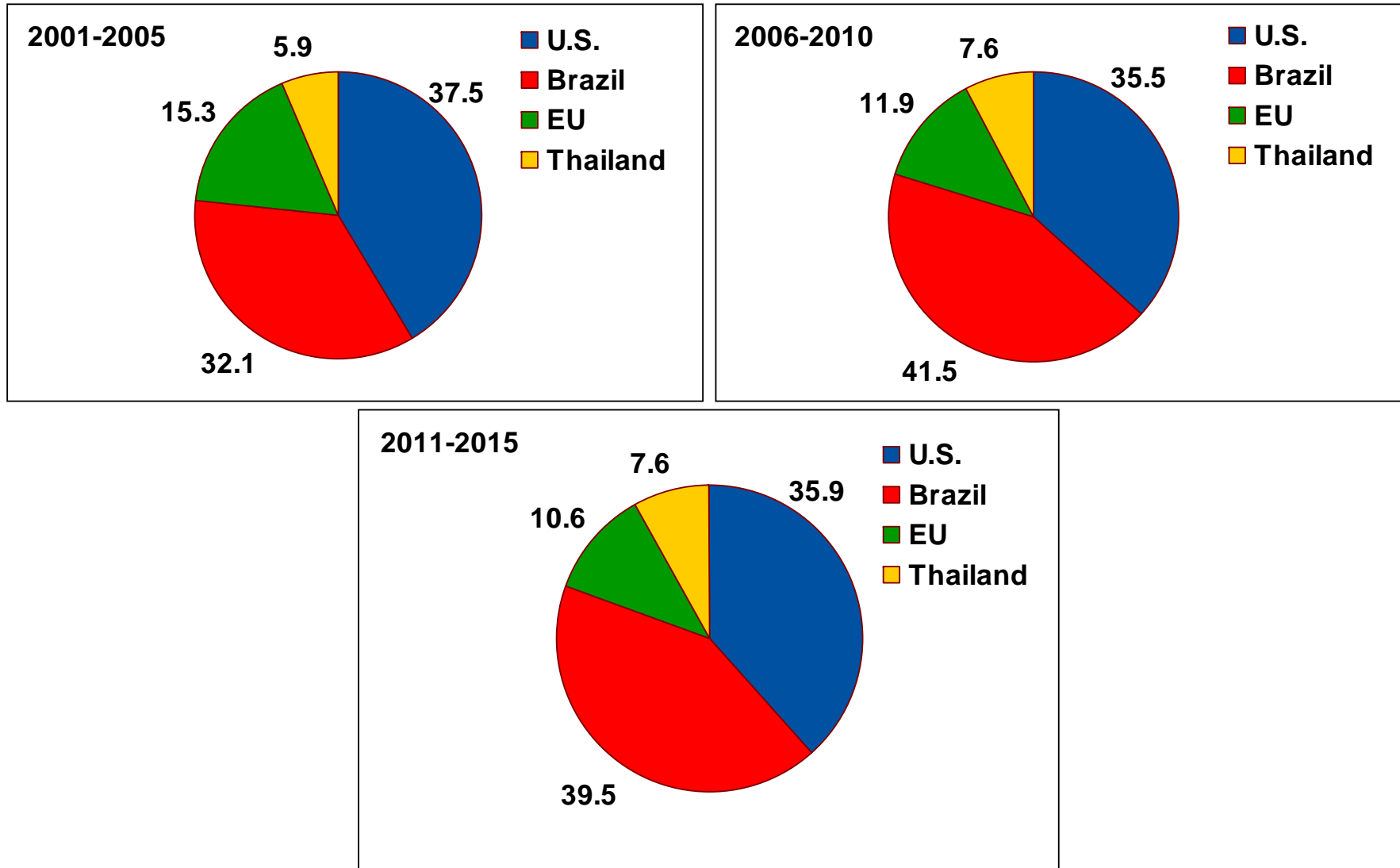




# Major Broiler Importing Countries

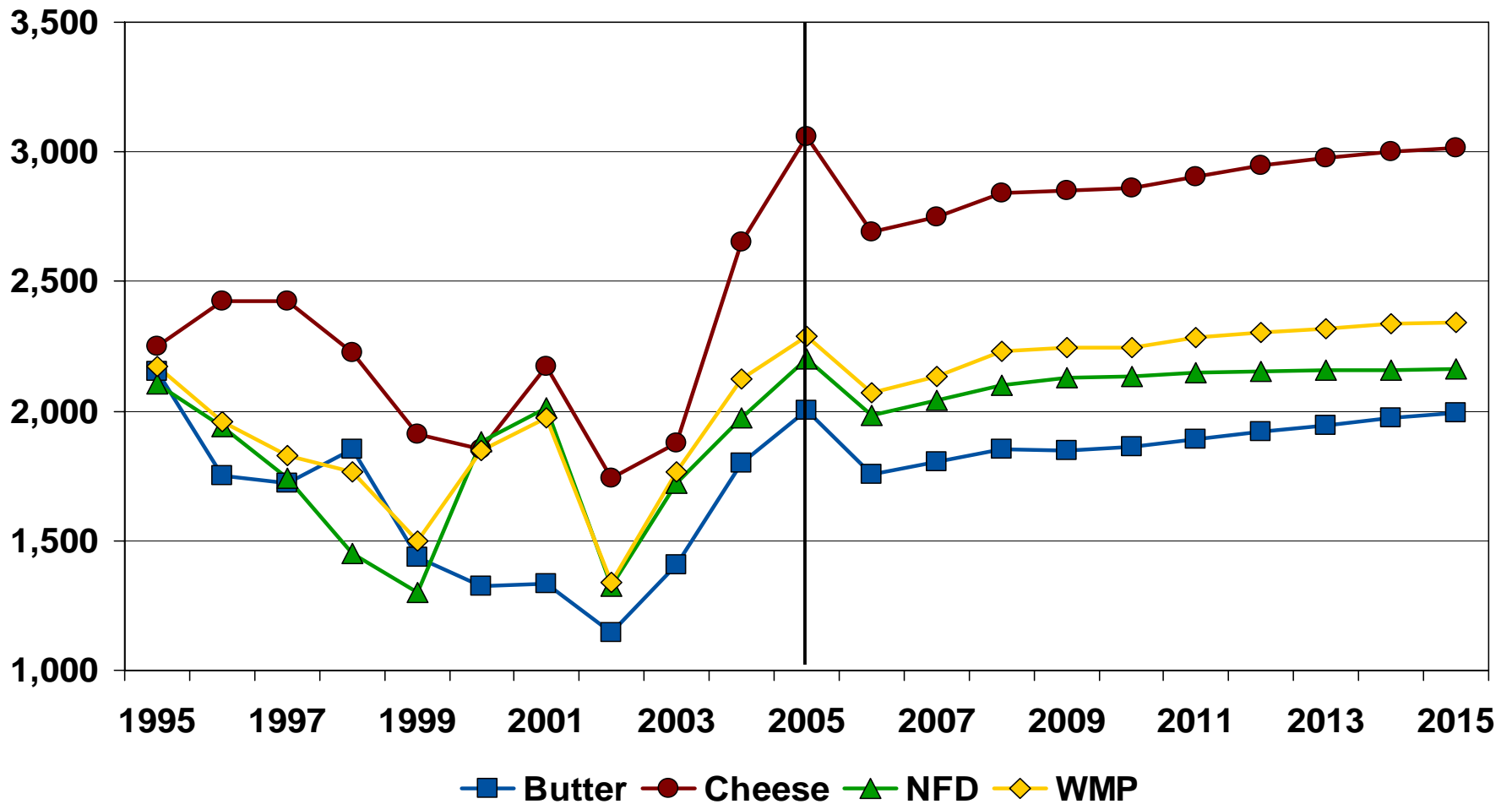


# Broiler Export Market Share



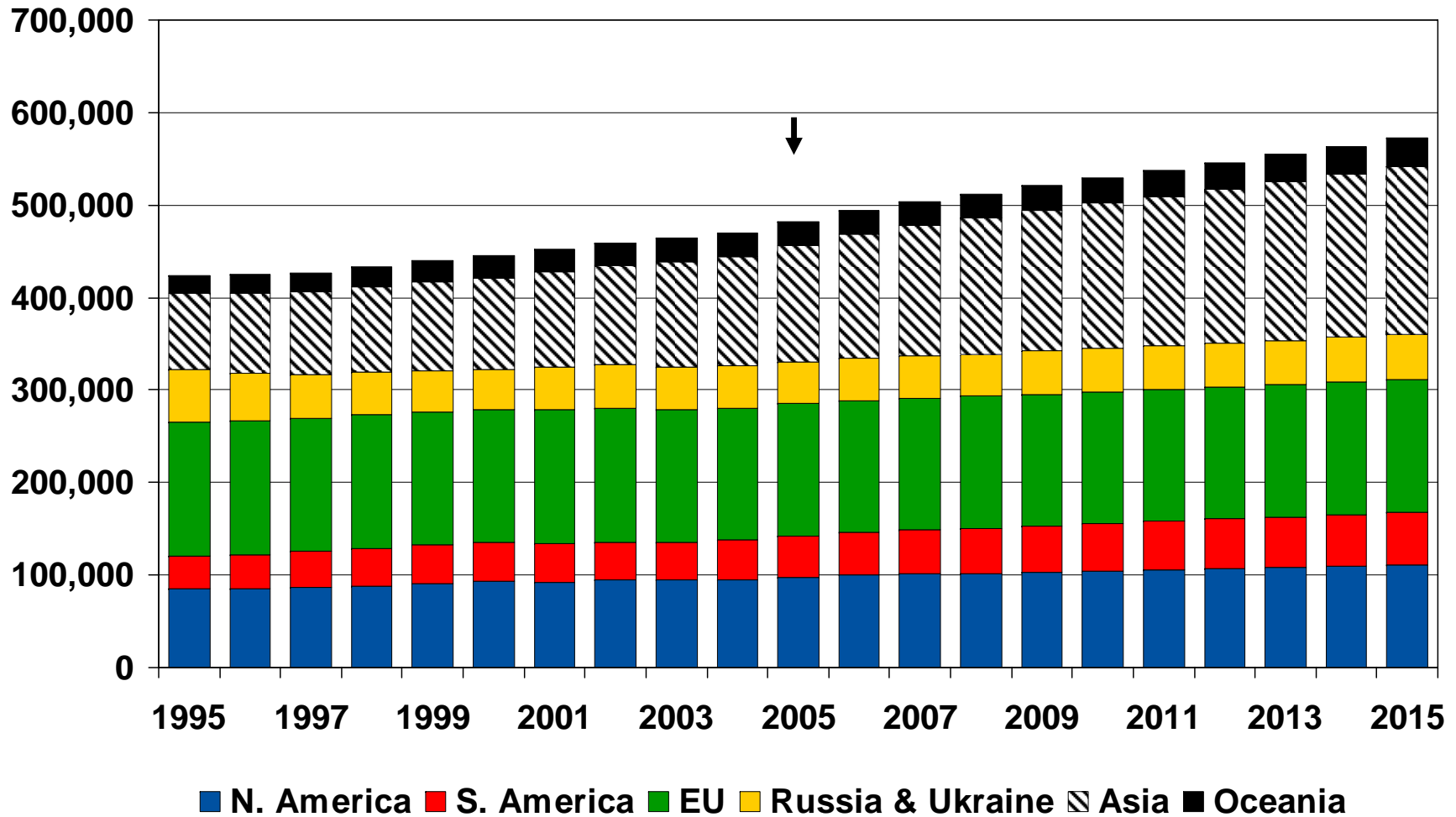
# FOB Northern European Dairy Product Prices

dollars per mt



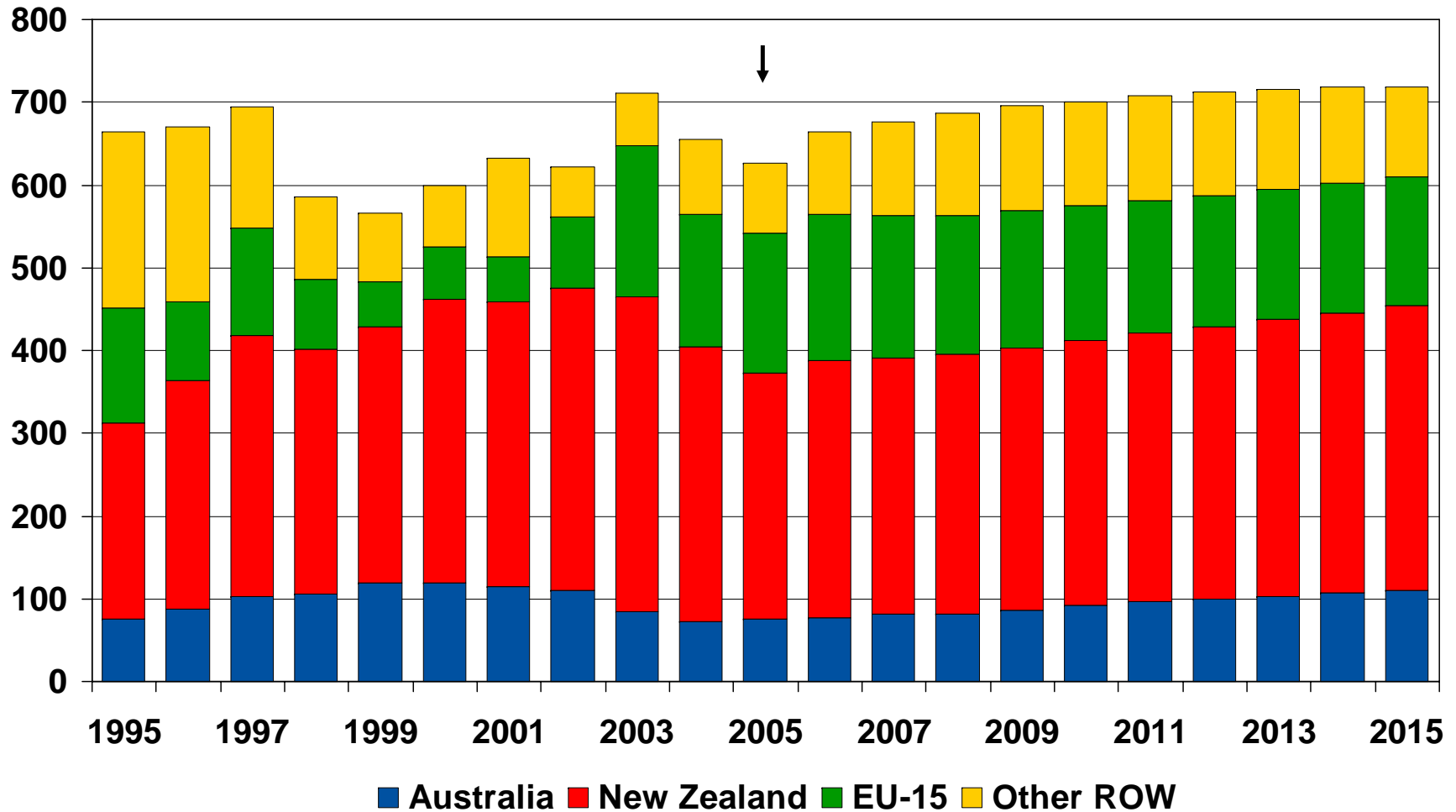
# Annual Growth in Milk Production and Total World Output

thousand mt



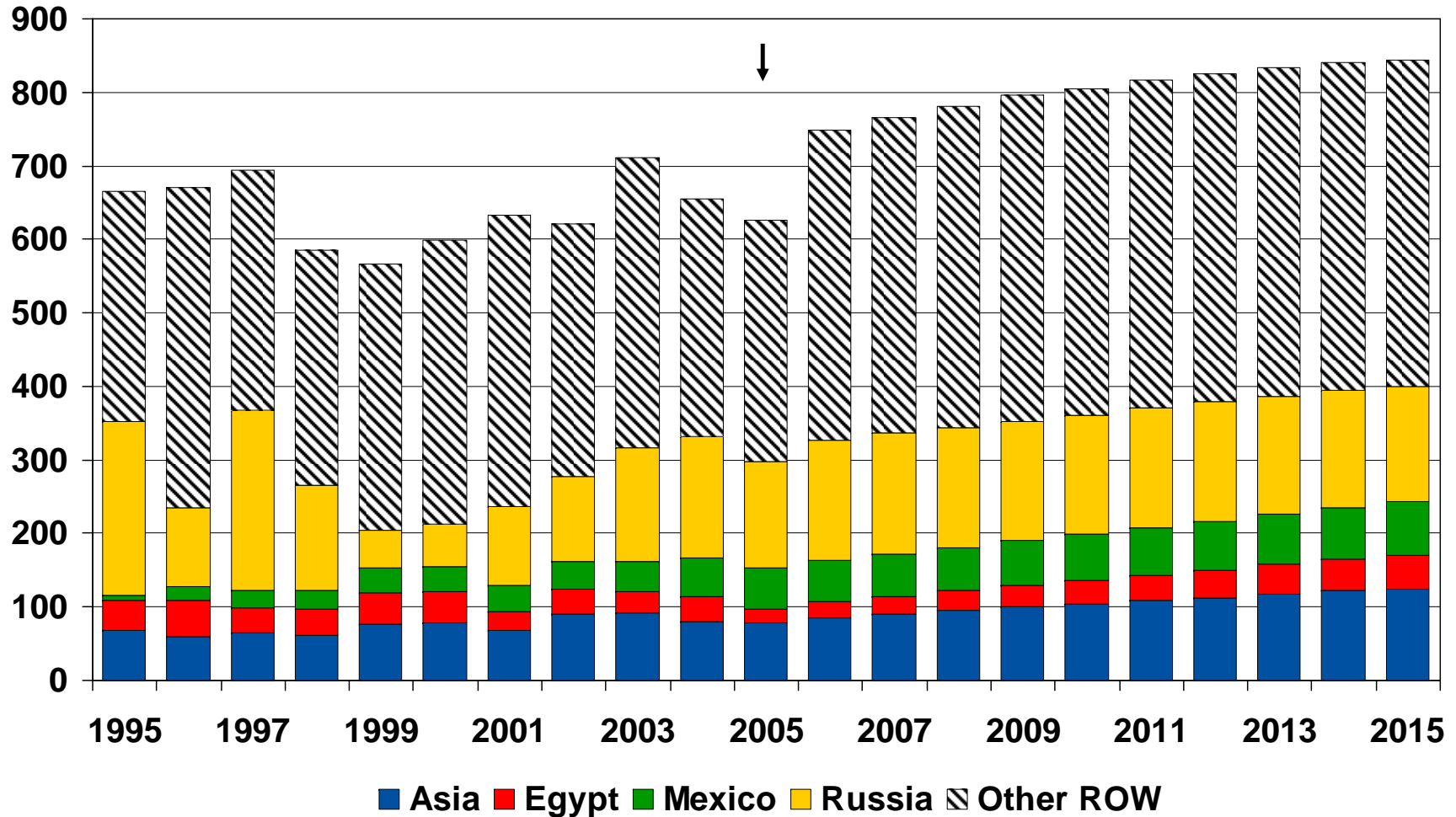
# Butter Net Exports for Selected Countries

thousand mt

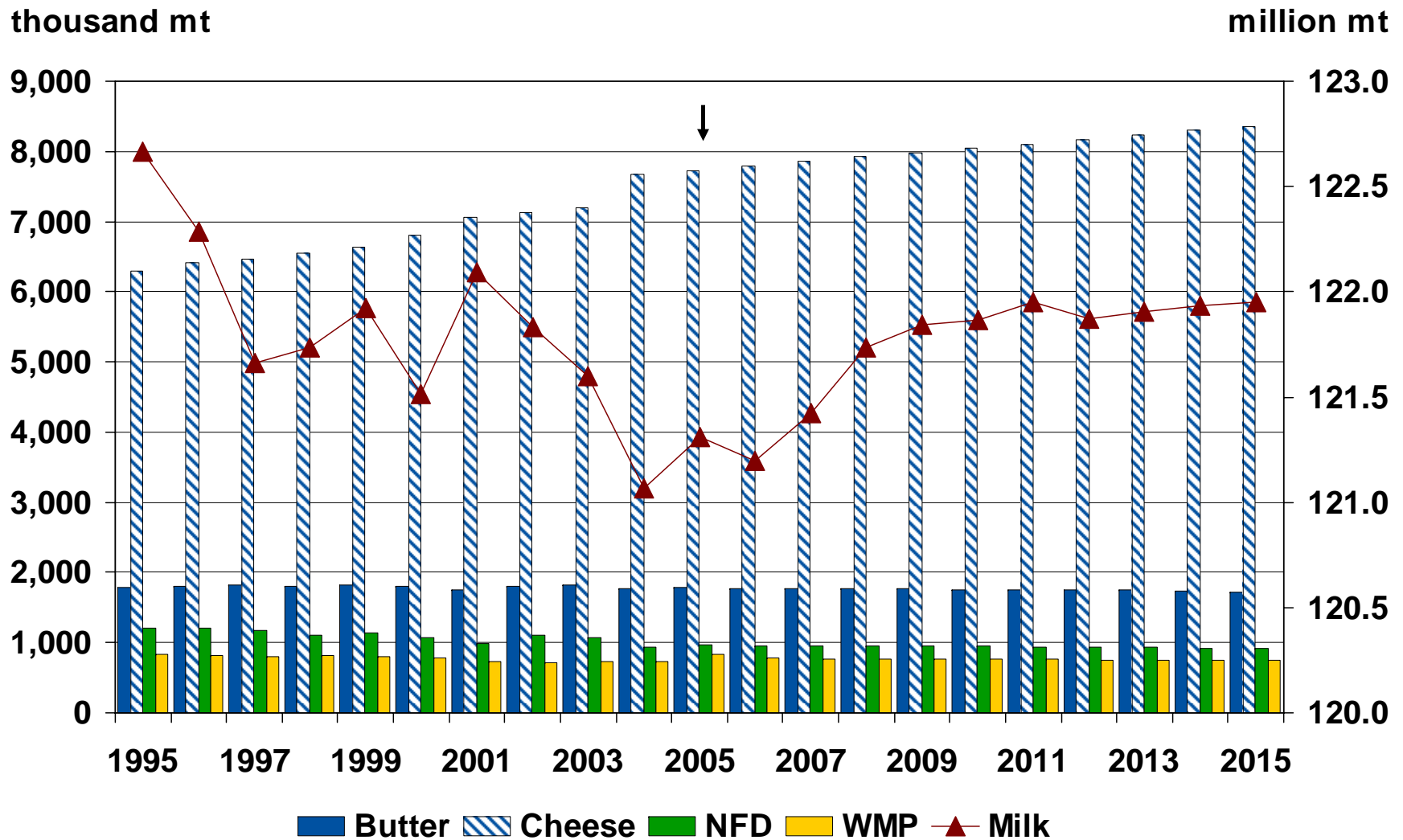


# Butter Net Imports for Selected Countries

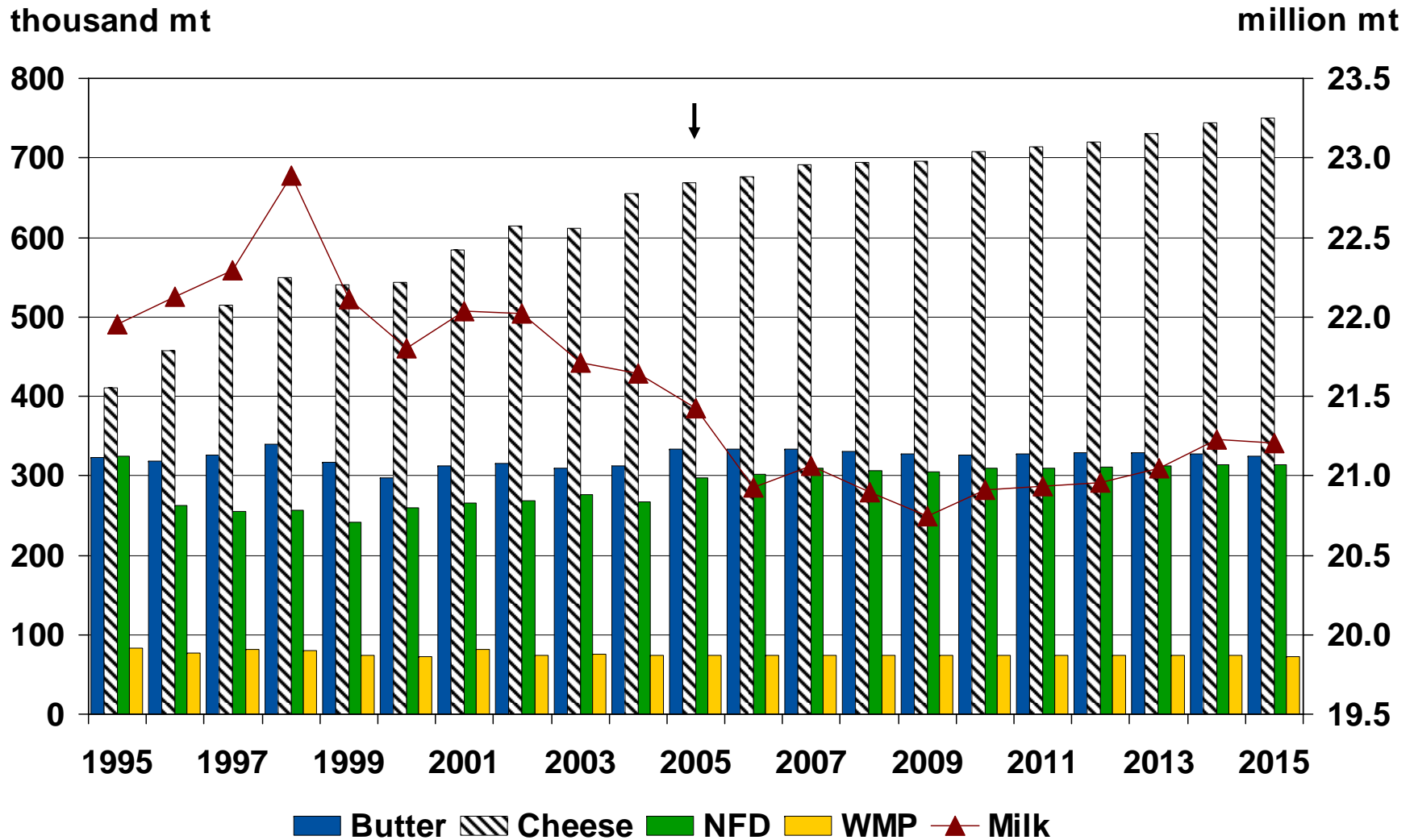
thousand mt



# EU-15 Dairy Production



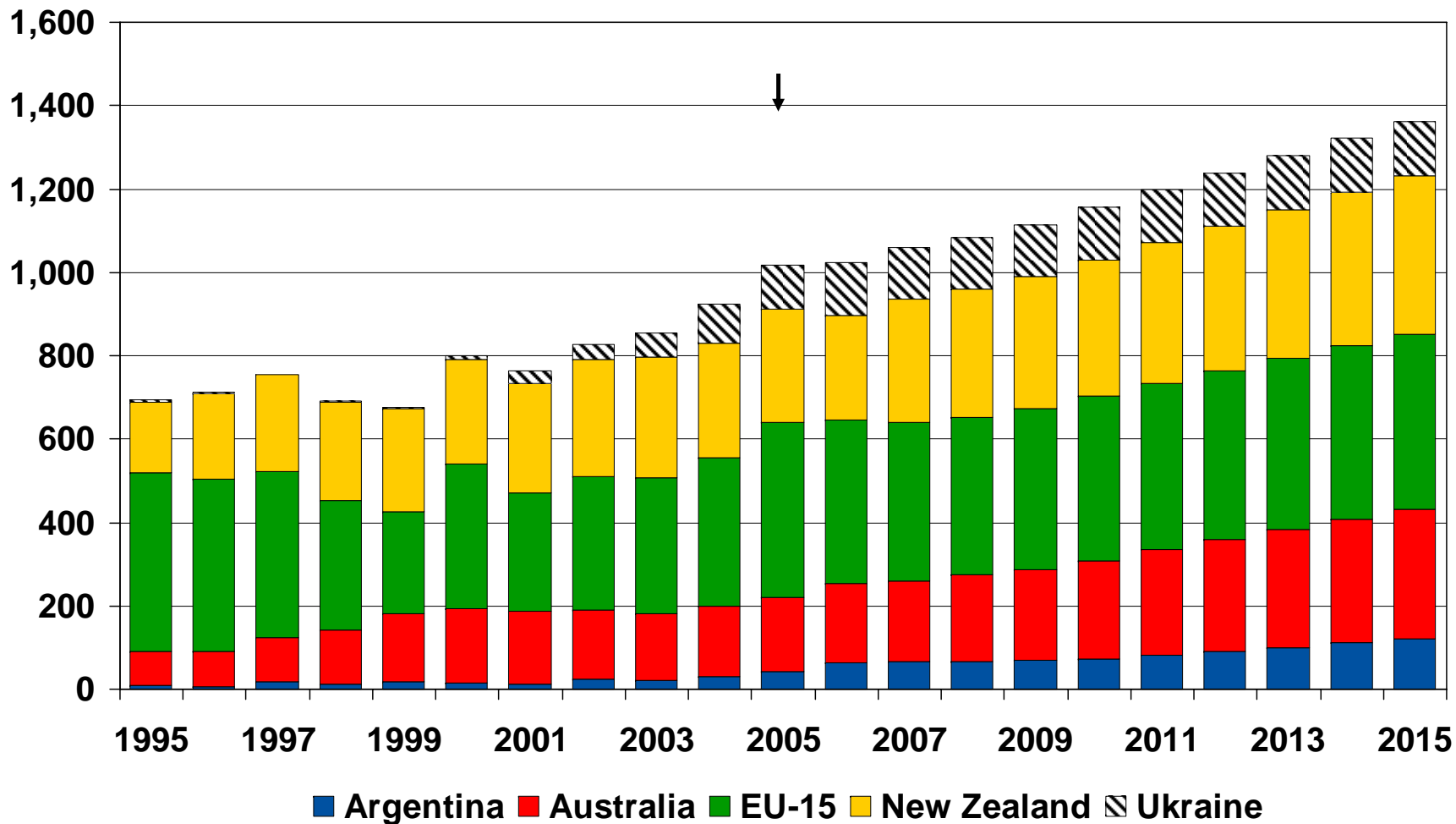
# EU NMS Dairy Production





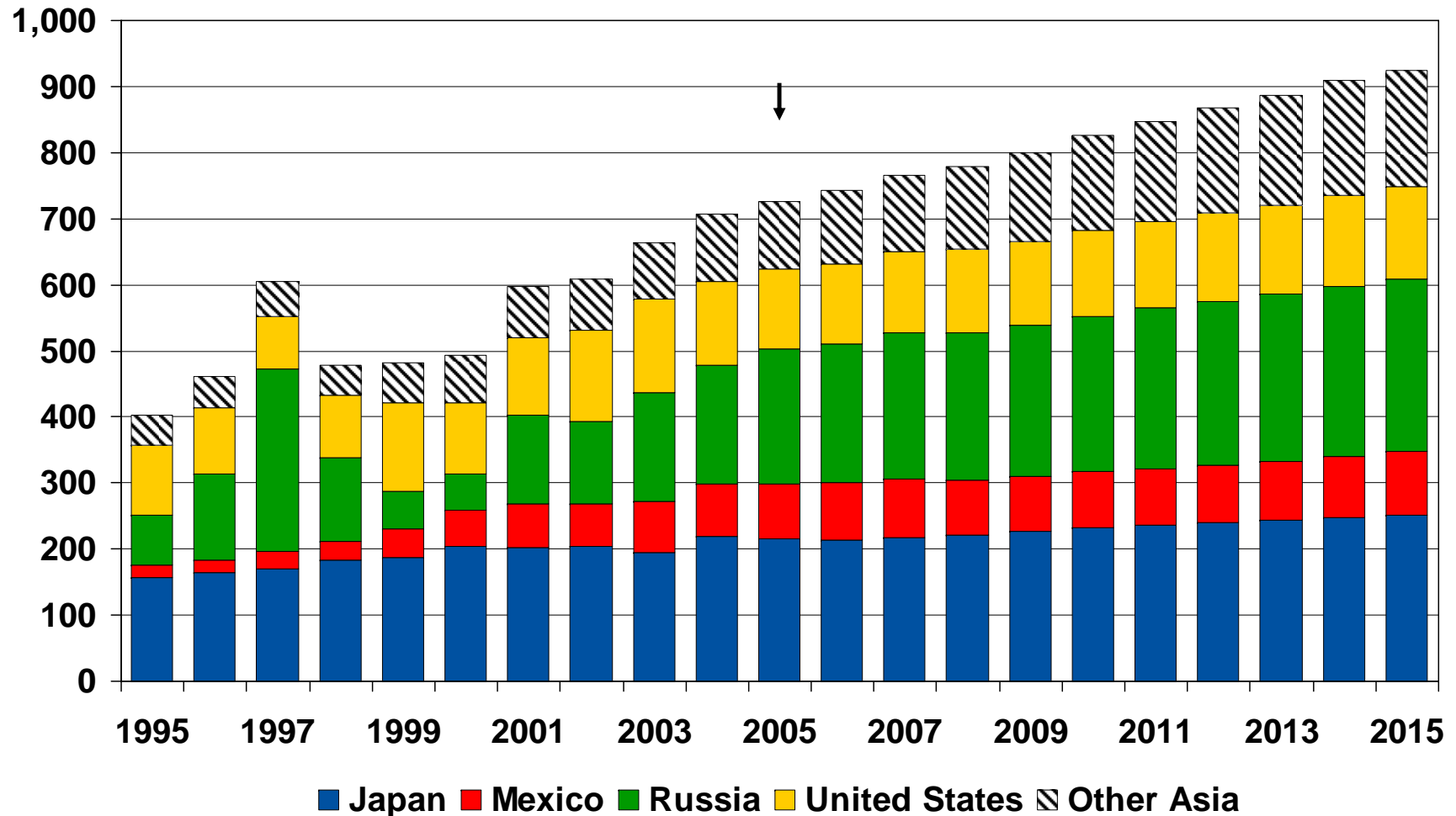
# Cheese Net Exports for Selected Countries

thousand mt



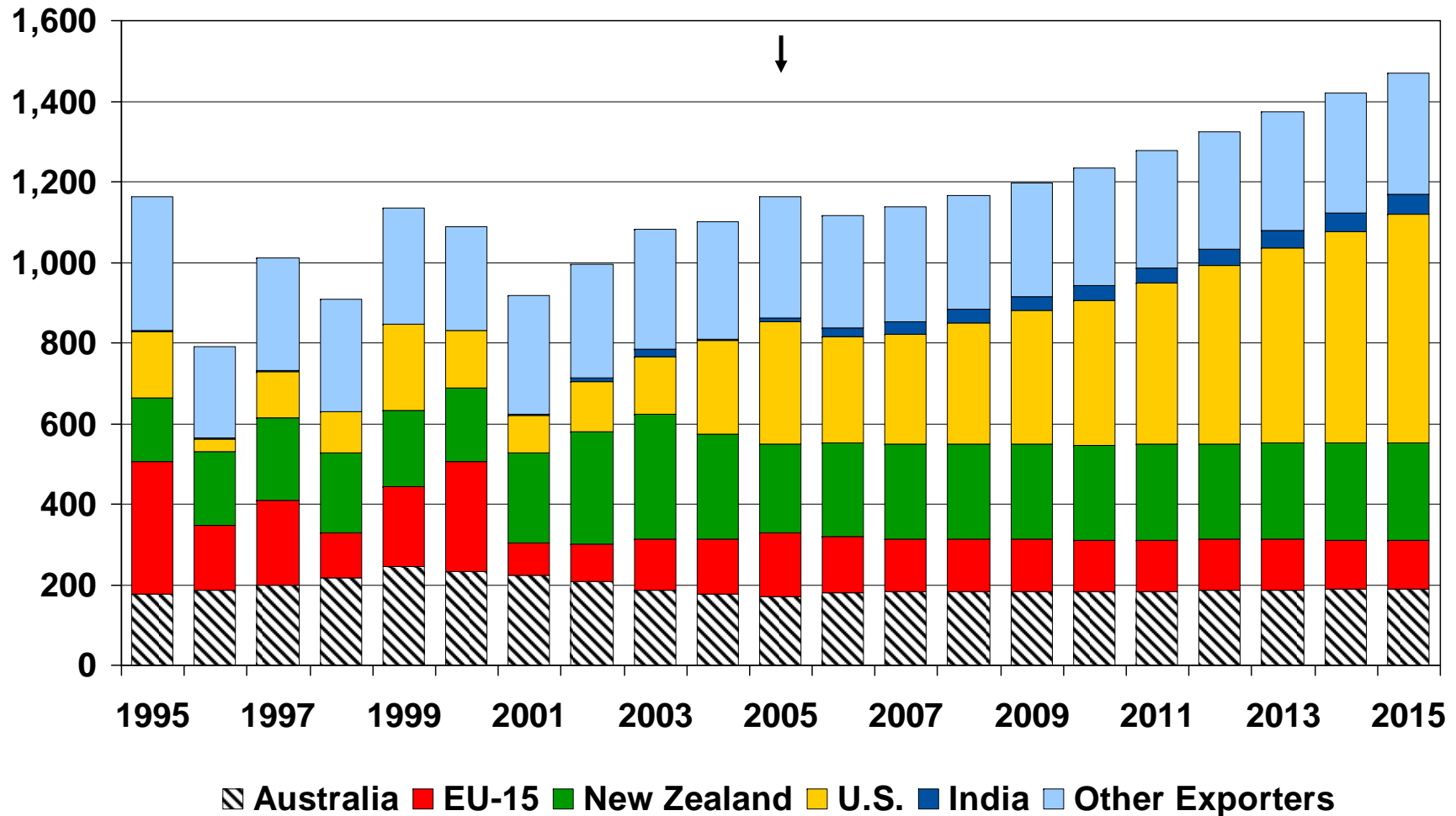
# Cheese Net Imports for Selected Countries

thousand mt



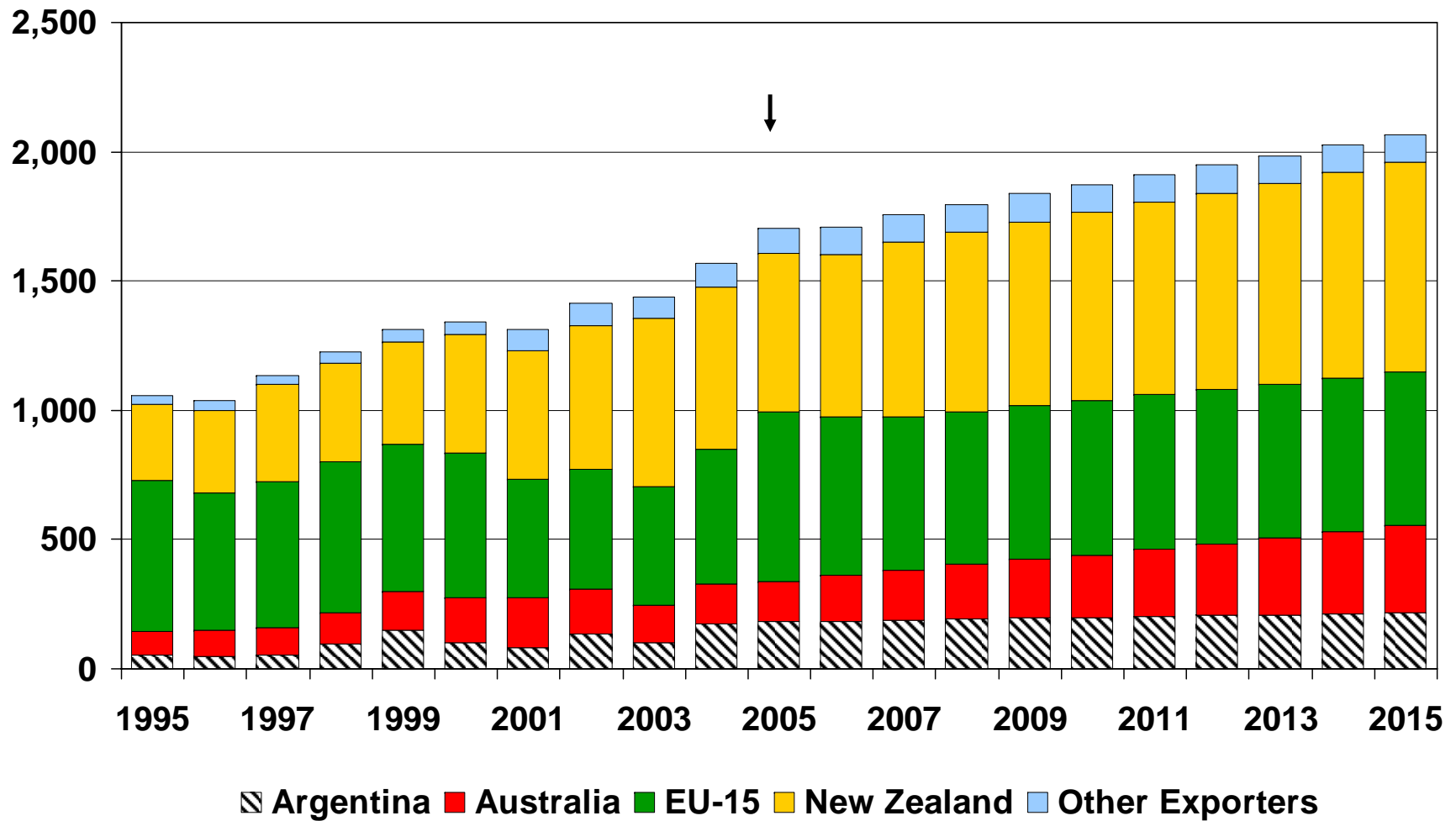
# NFD Net Exports for Selected Countries

thousand mt



# WMP Net Exports for Selected Countries

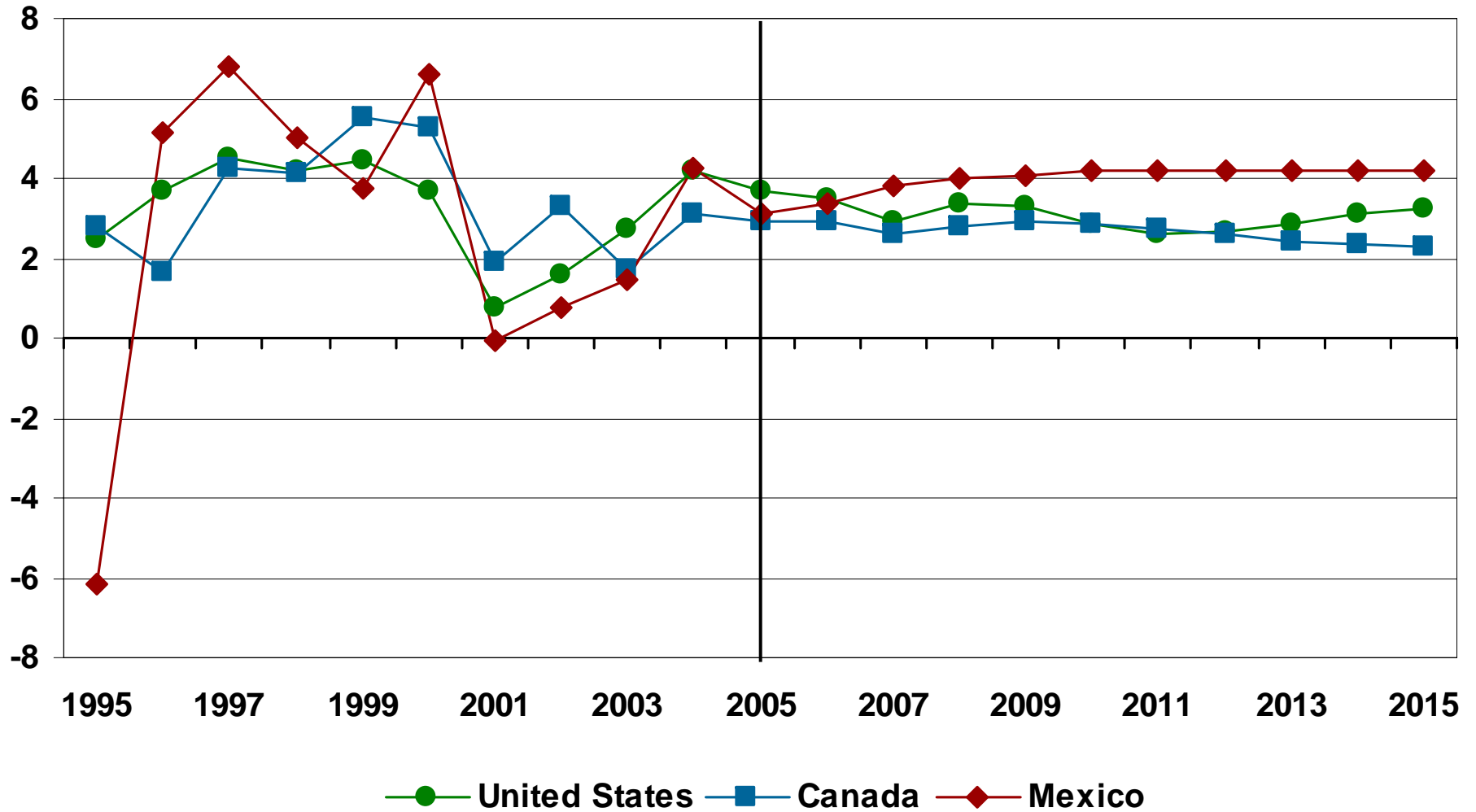
thousand mt



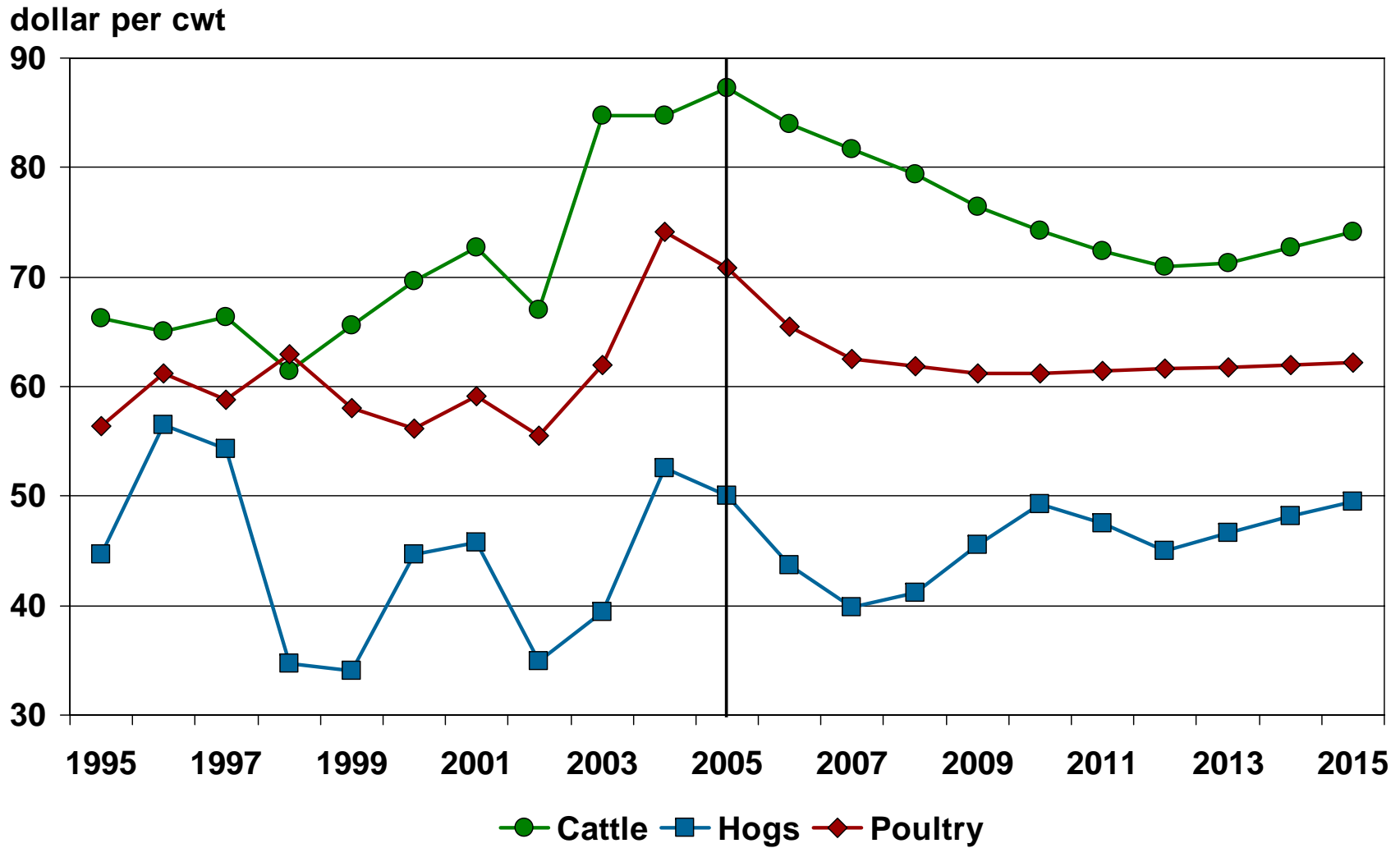


# NAFTA Real GDP Growth Rates

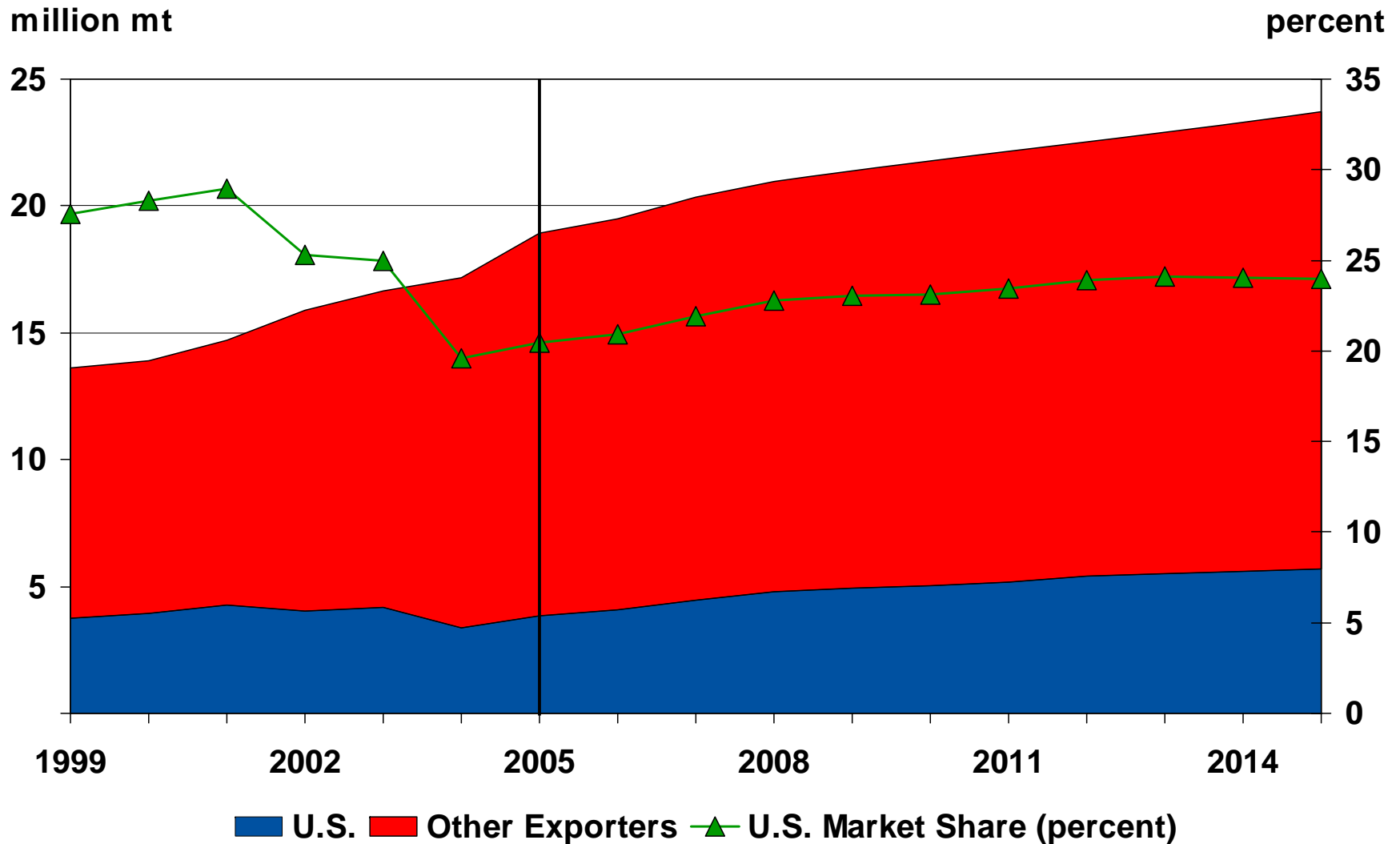
percent



# U.S. Livestock and Poultry Prices

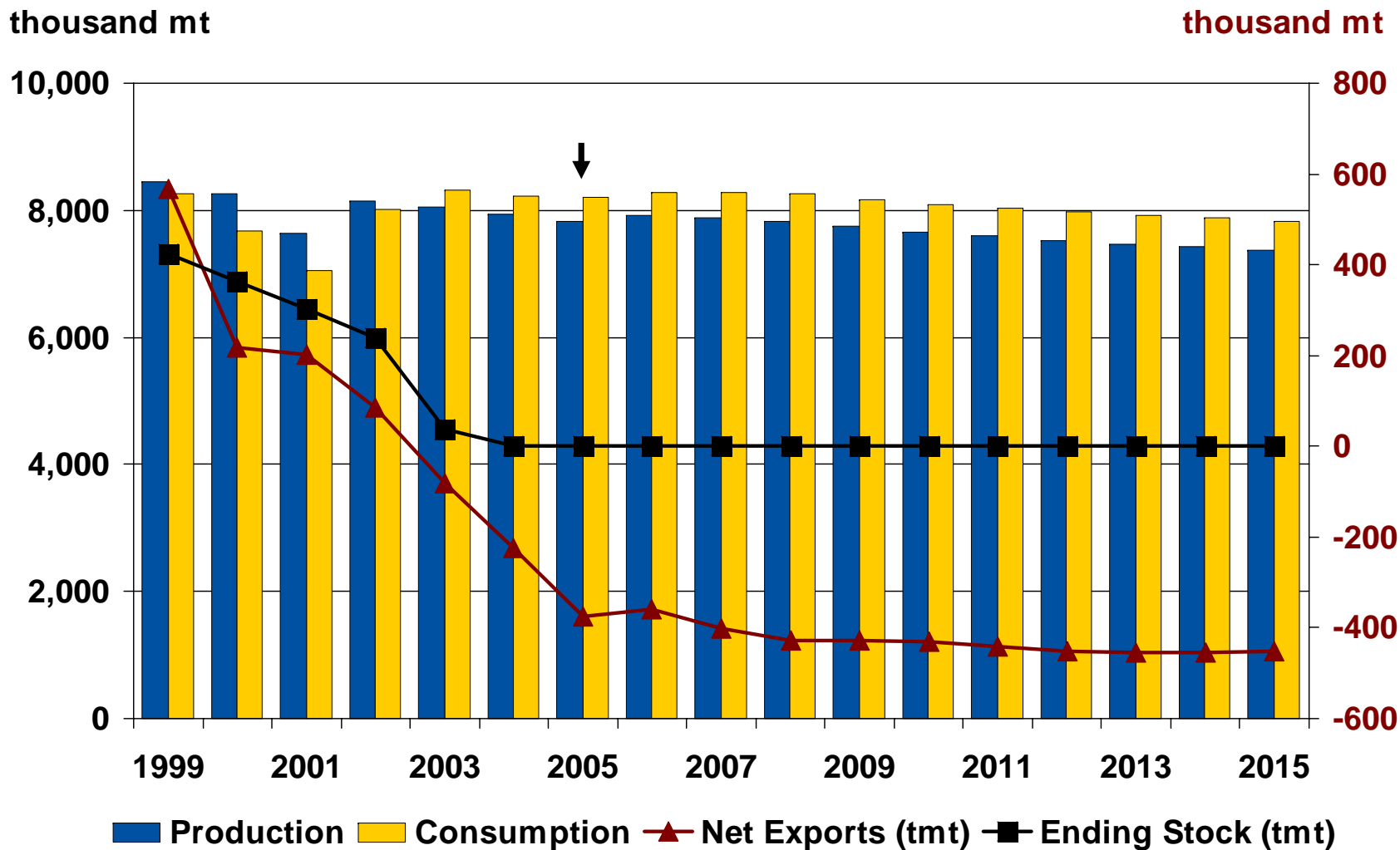


# World Meat Trade and U.S. Market Share

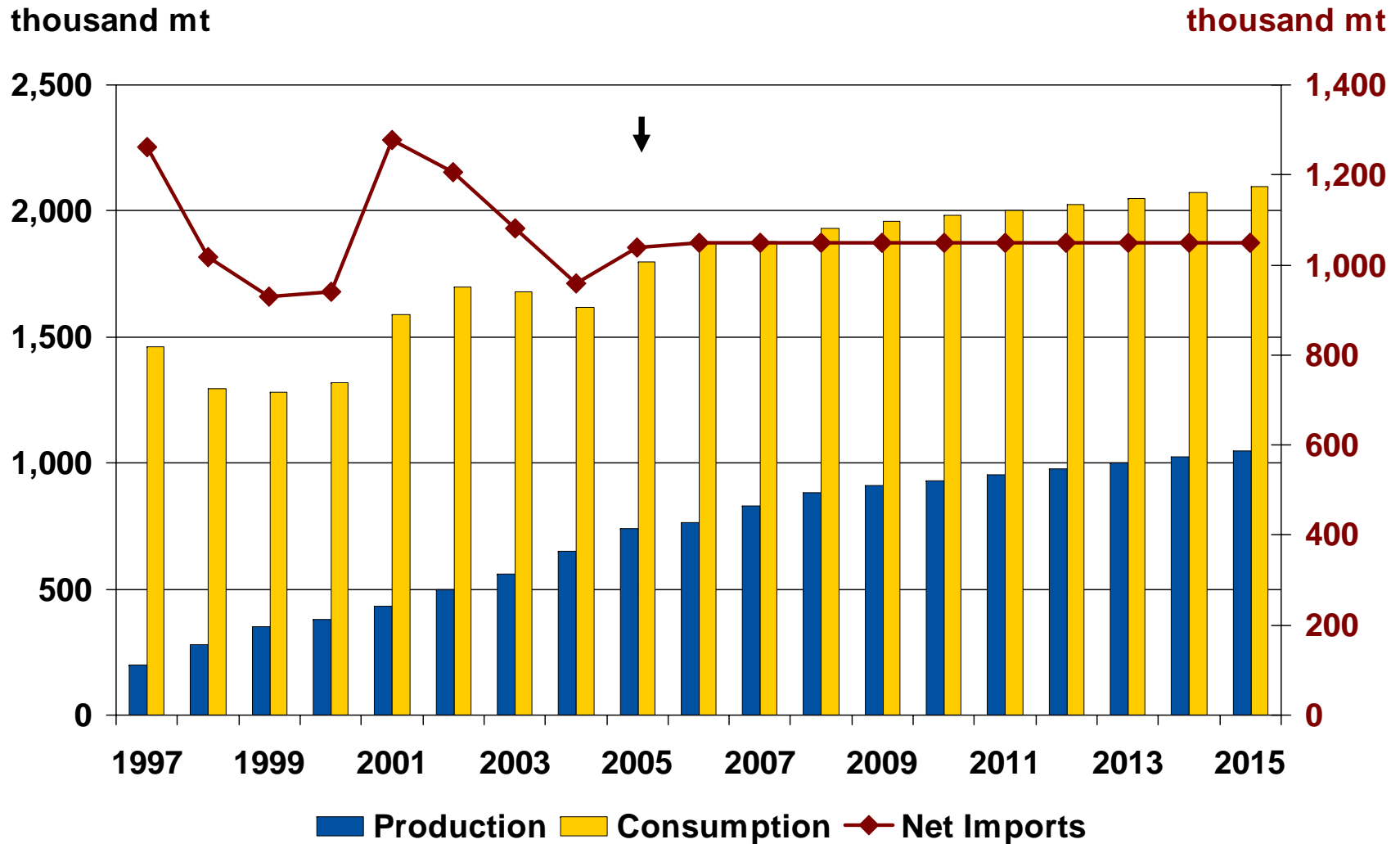




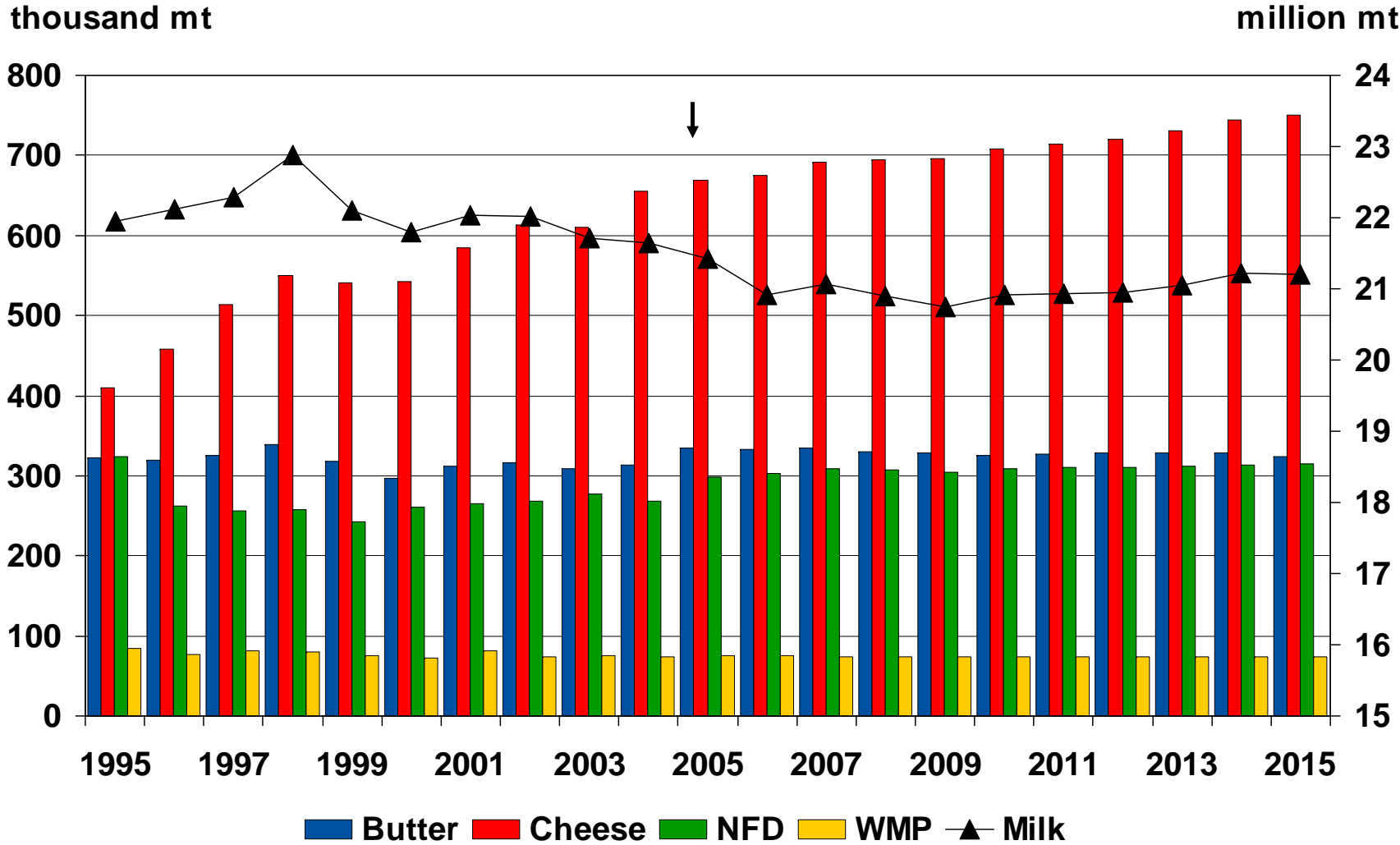
# EU-15 Beef Supply and Utilization



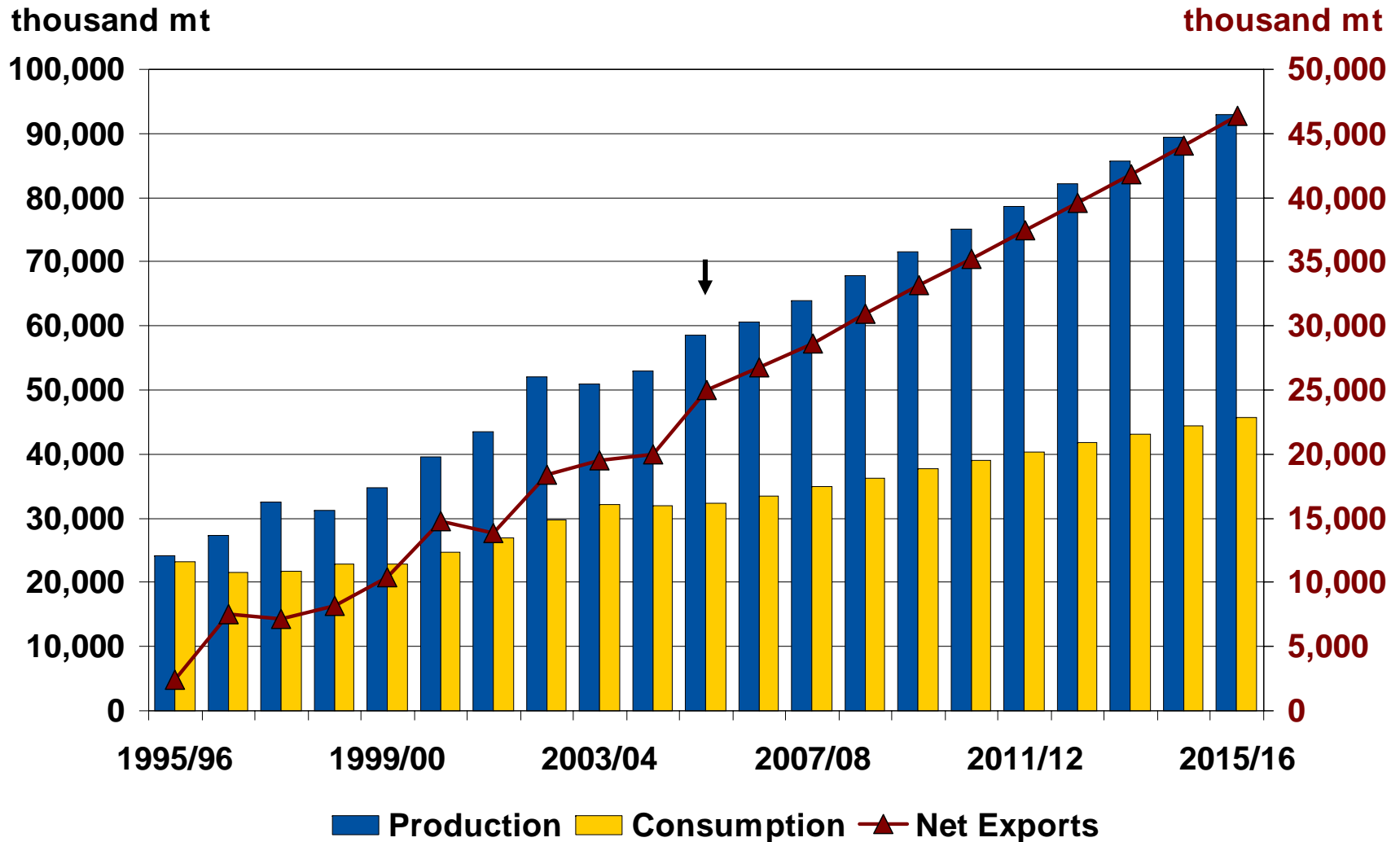
# Russian Poultry Supply and Utilization



# EU NMS Dairy Production



# Brazilian Soybean Production and Utilization



# Chinese Soybean Production and Utilization

