

FAPRI 2006

WORLD OUTLOOK

Presentation



IOWA STATE UNIVERSITY

FAPRI

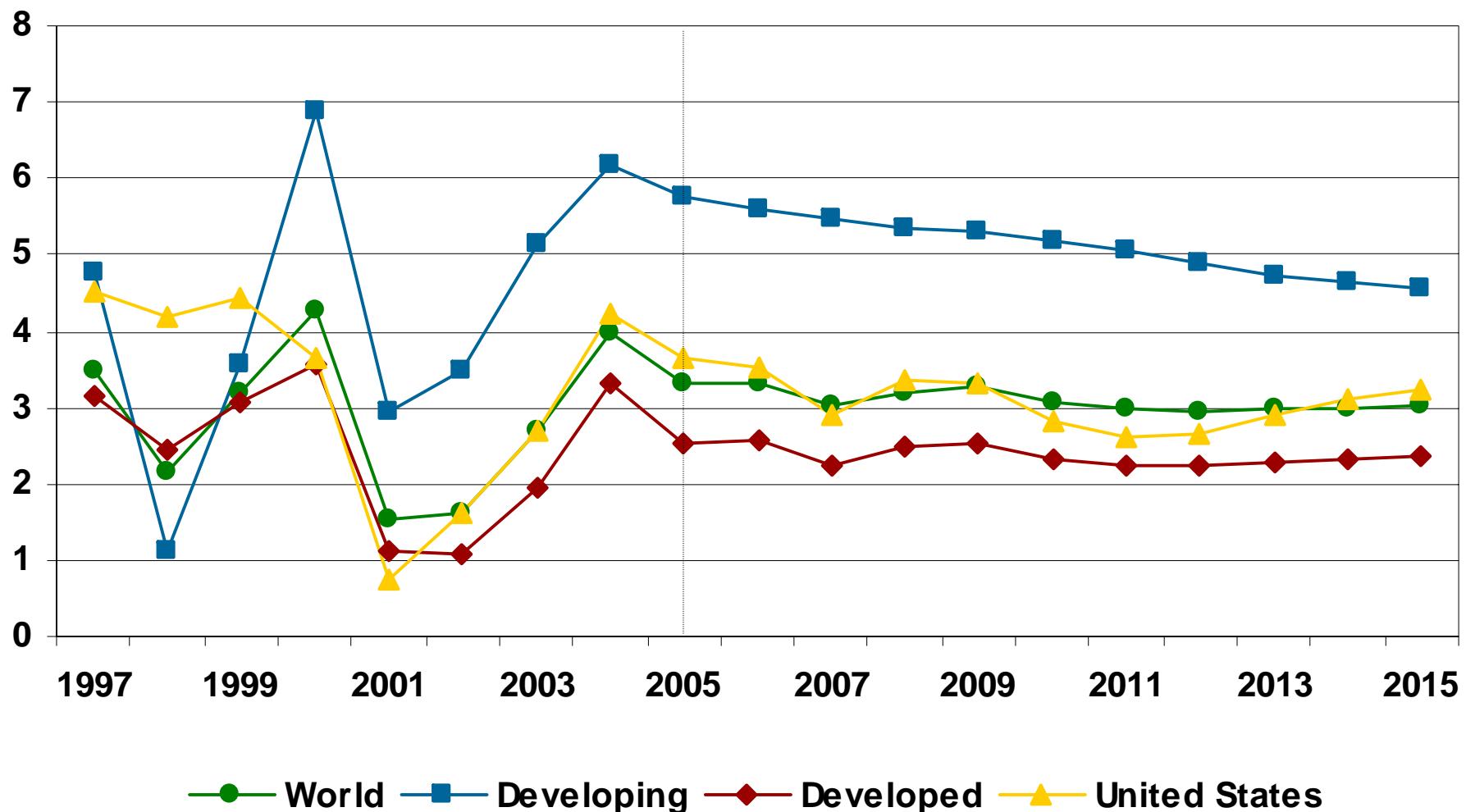
Food and Agricultural
Policy Research Institute

Global Macroeconomic Overview

- 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



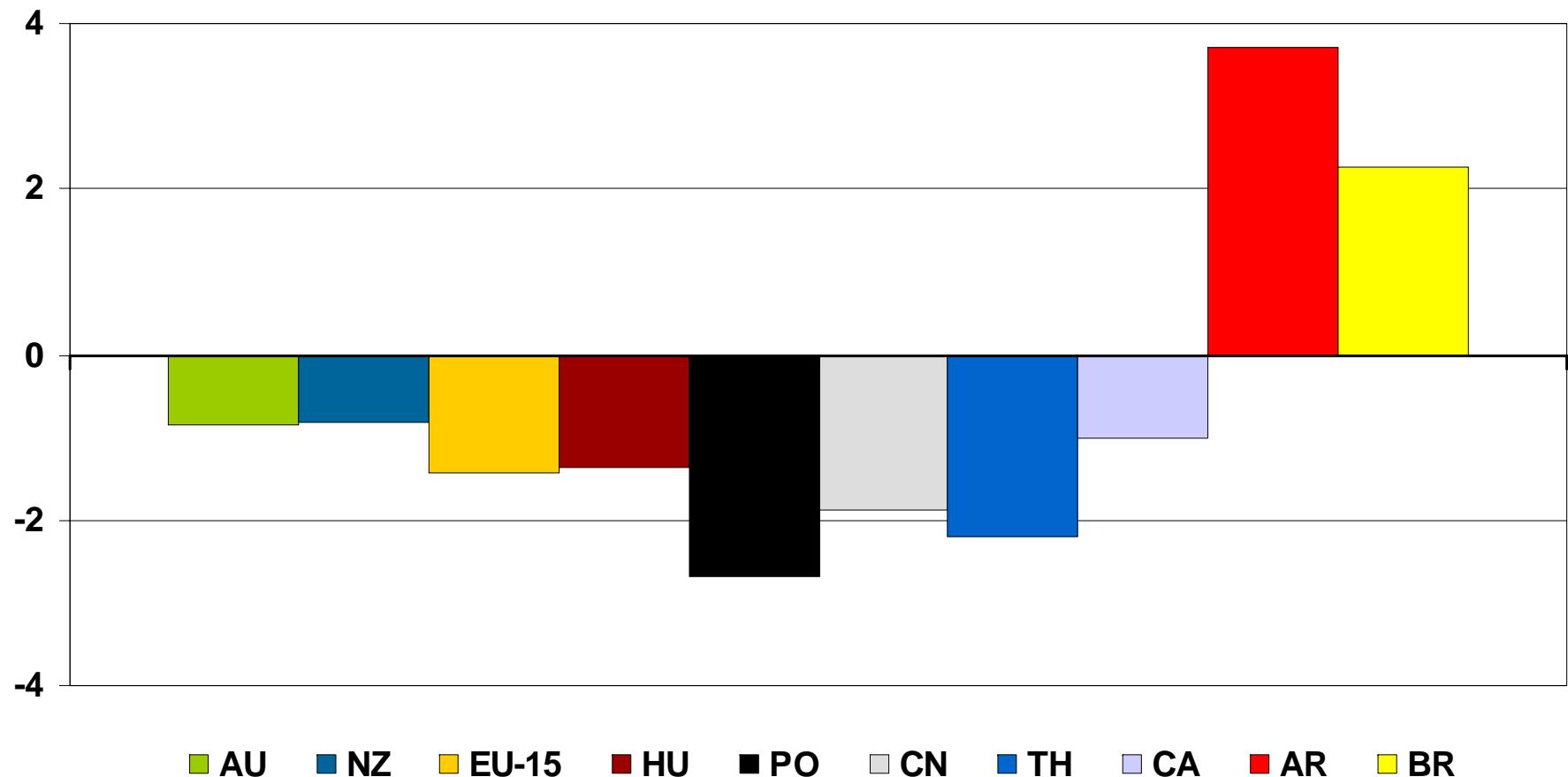
—●— World —■— Developing —◆— Developed —▲— United States

Global Macroeconomic Overview

- 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

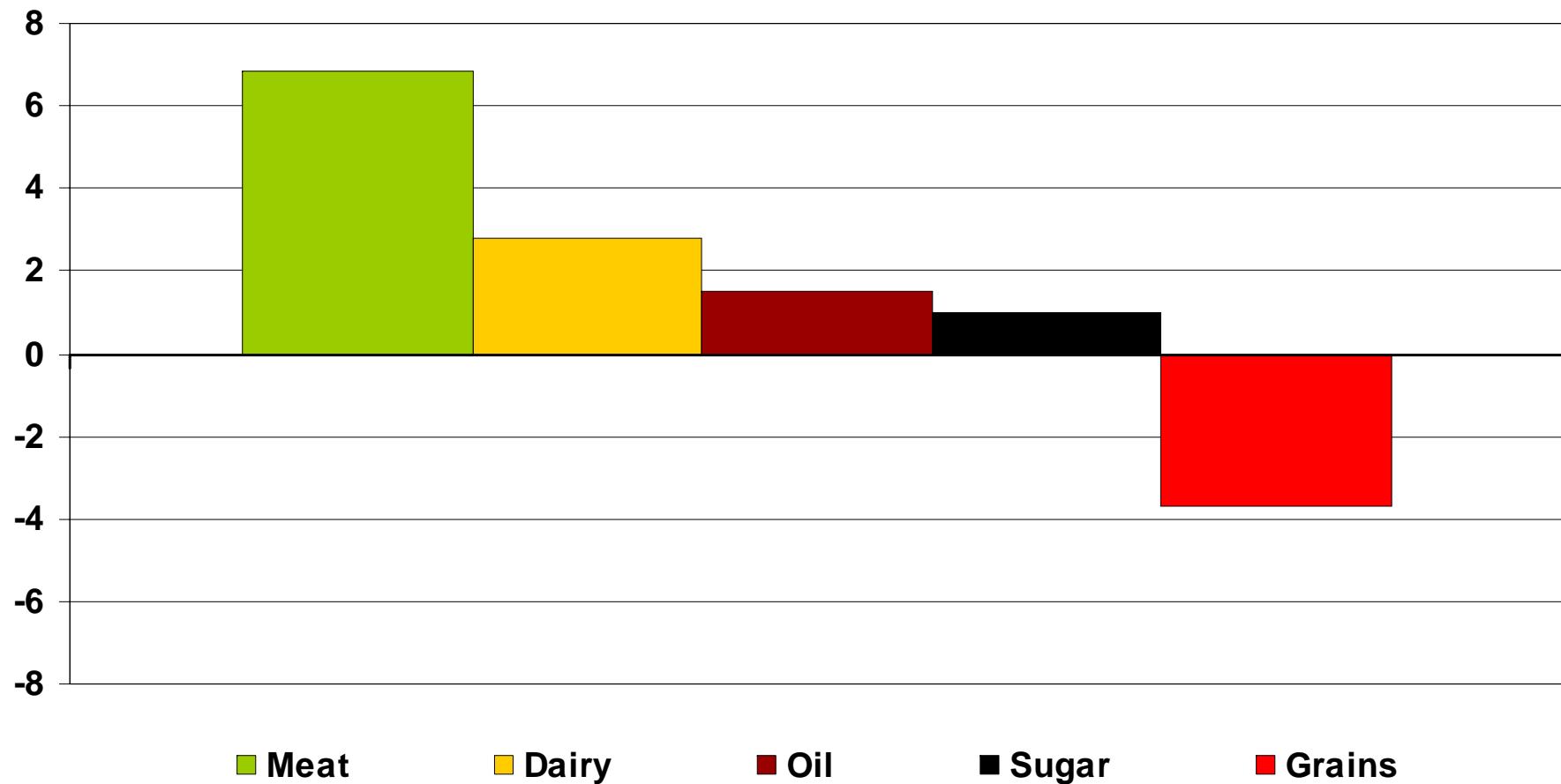
- EU CAP Reform and Enlargement.
 - EU Sugar Reforms
- Full implementation of the URAA commitments for developed and developing countries.
- Recovery from BSE and AI shocks. Limited impact of FMD in Brazil.
- Rising interest in renewable fuels.
 - Mandatory 2% blend of biodiesel in 2008.
 - EU's Renewable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

Meat Outlook Overview

- 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 ???.
- 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.

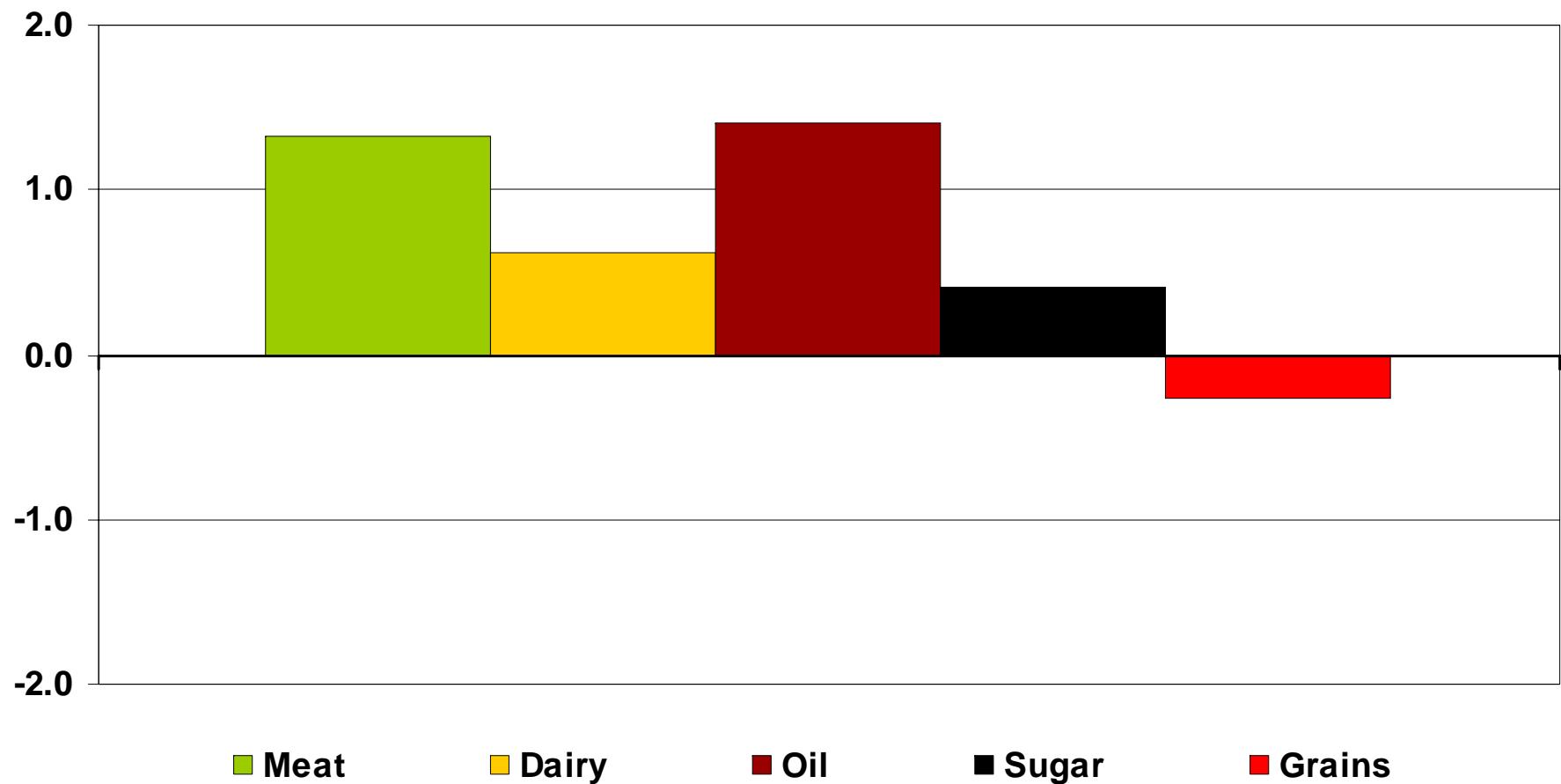
Change in Average Per Capita Consumption

Kg per person

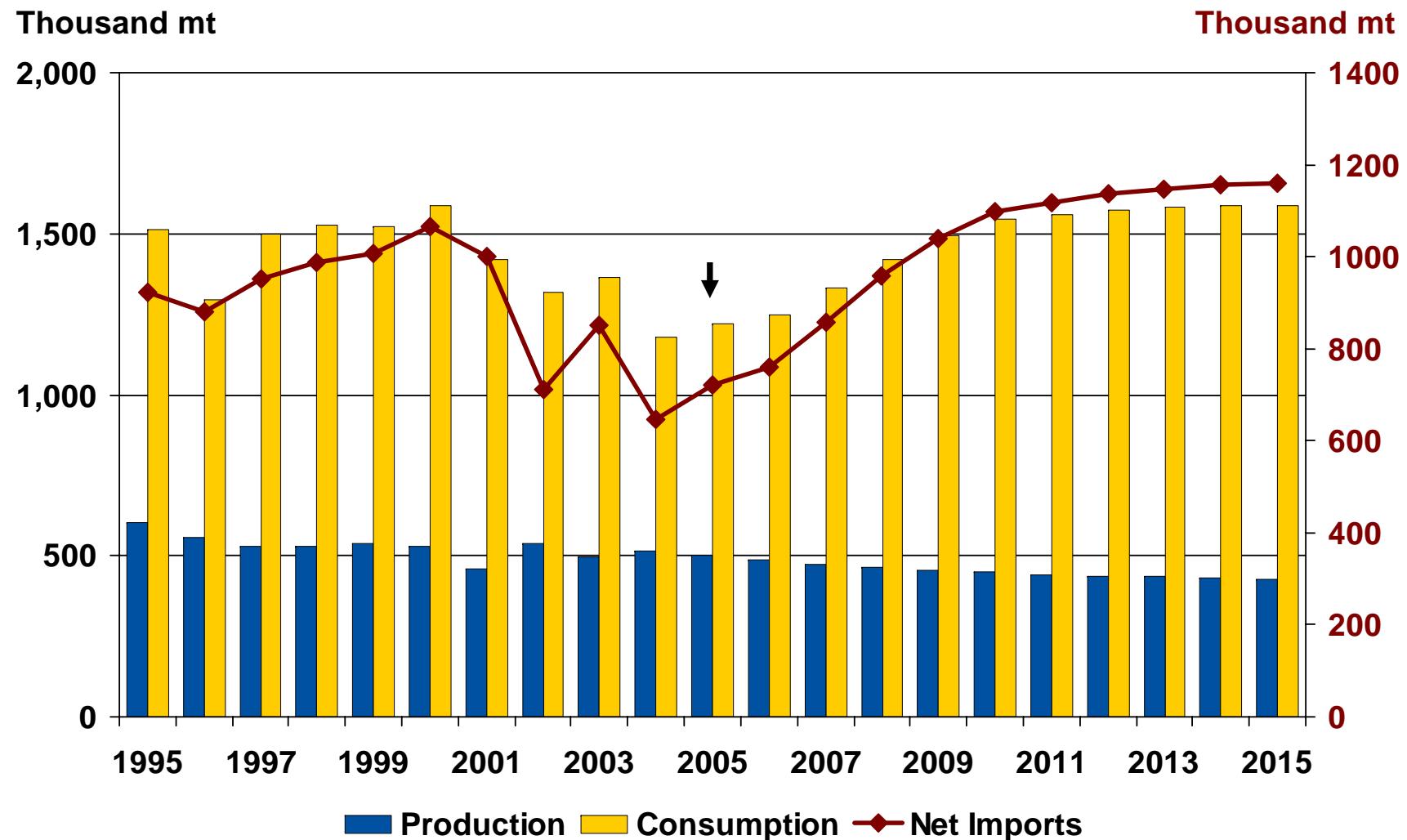


Change in Average Per Capita Consumption

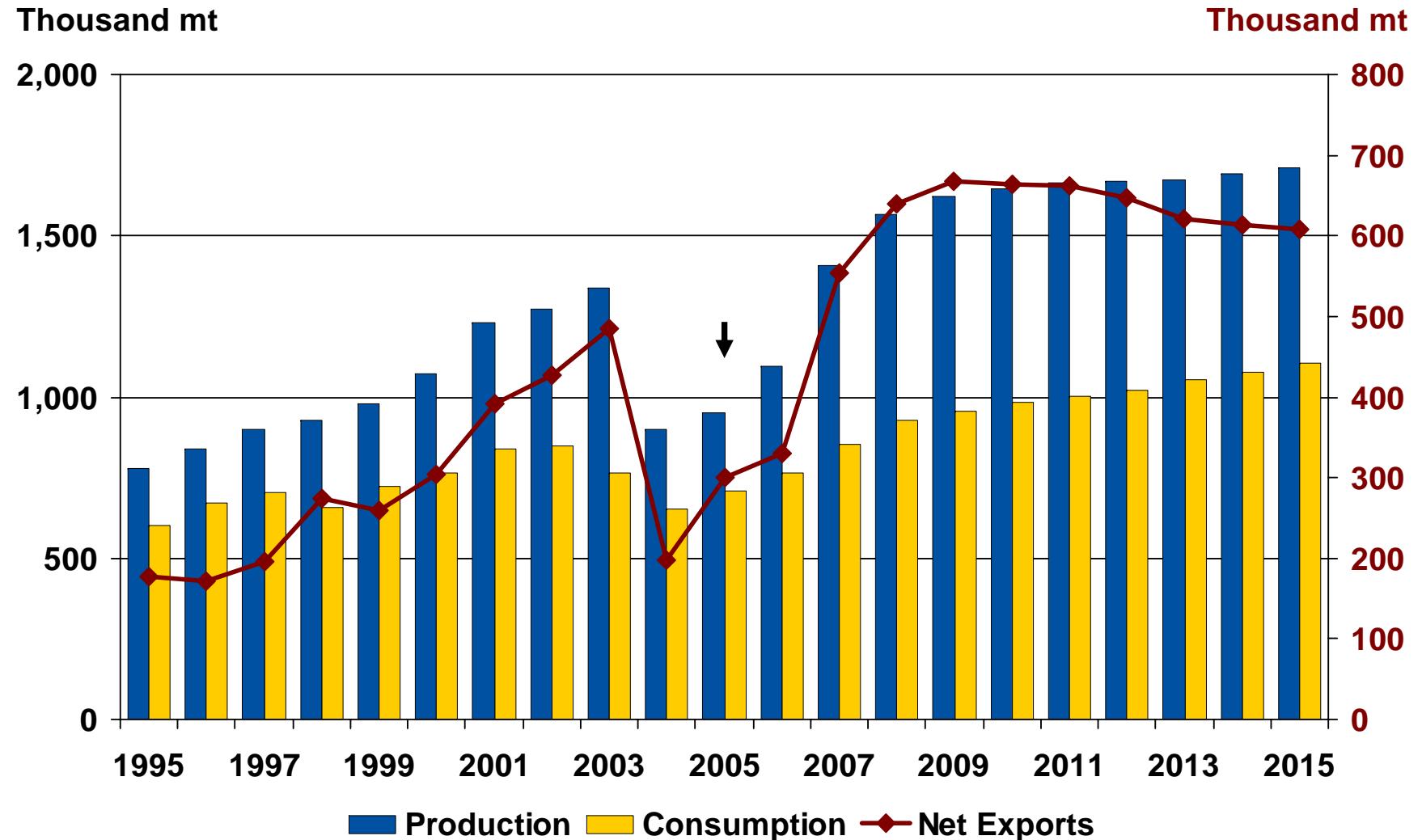
Percent



Japanese Beef Supply and Utilization

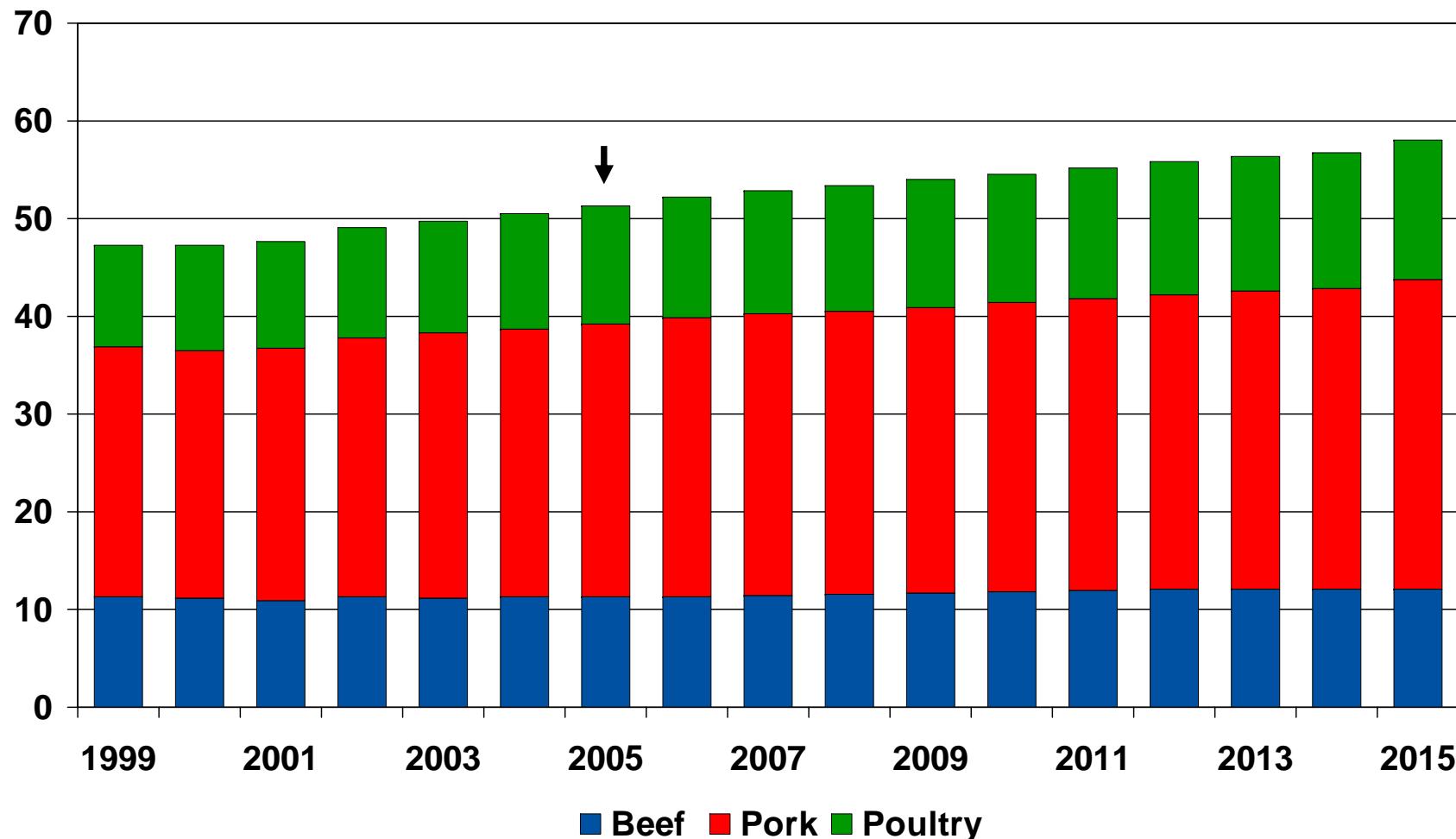


Thai Broiler Supply and Utilization



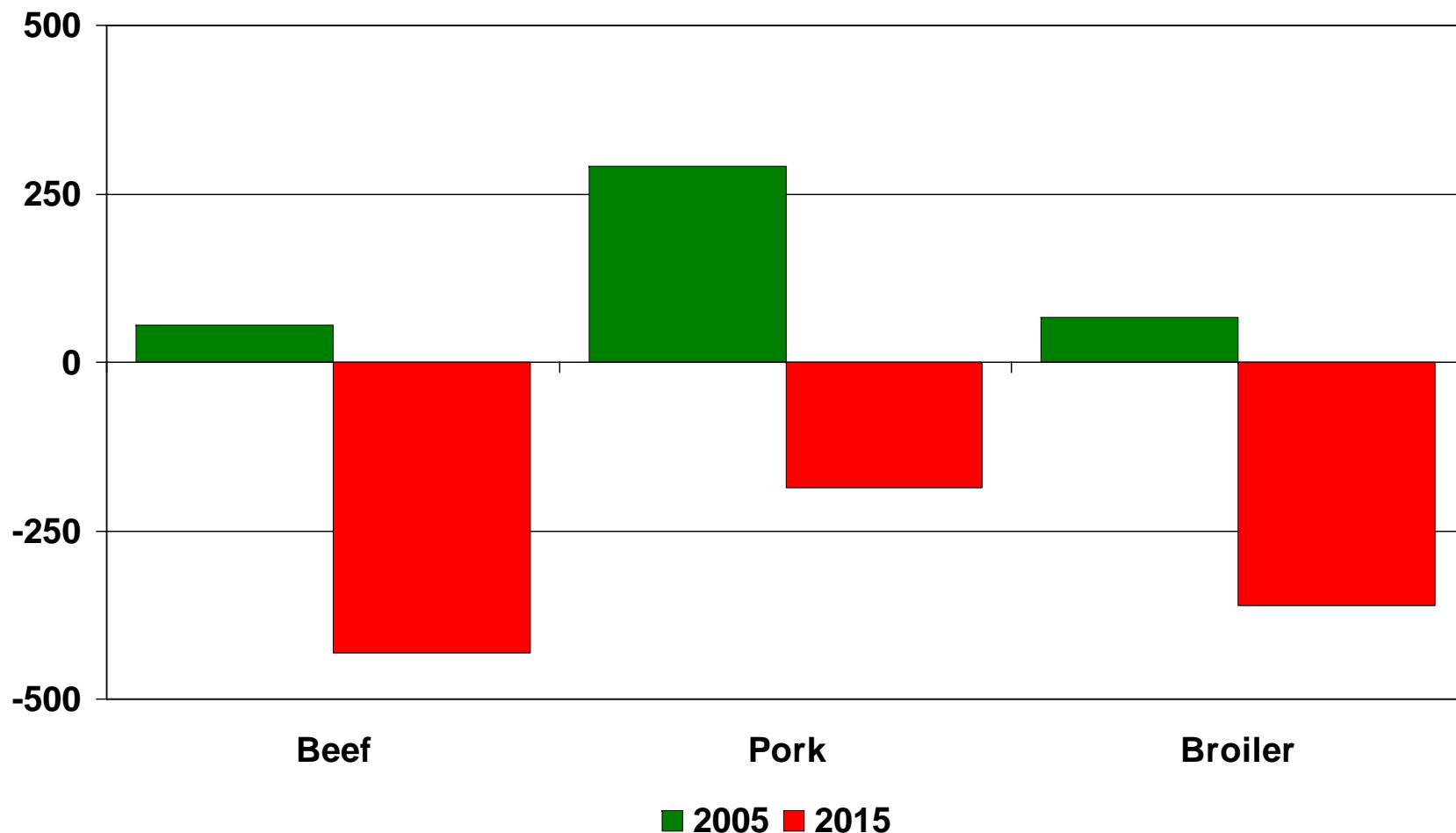
Per Capita Average Meat Consumption

kg per person

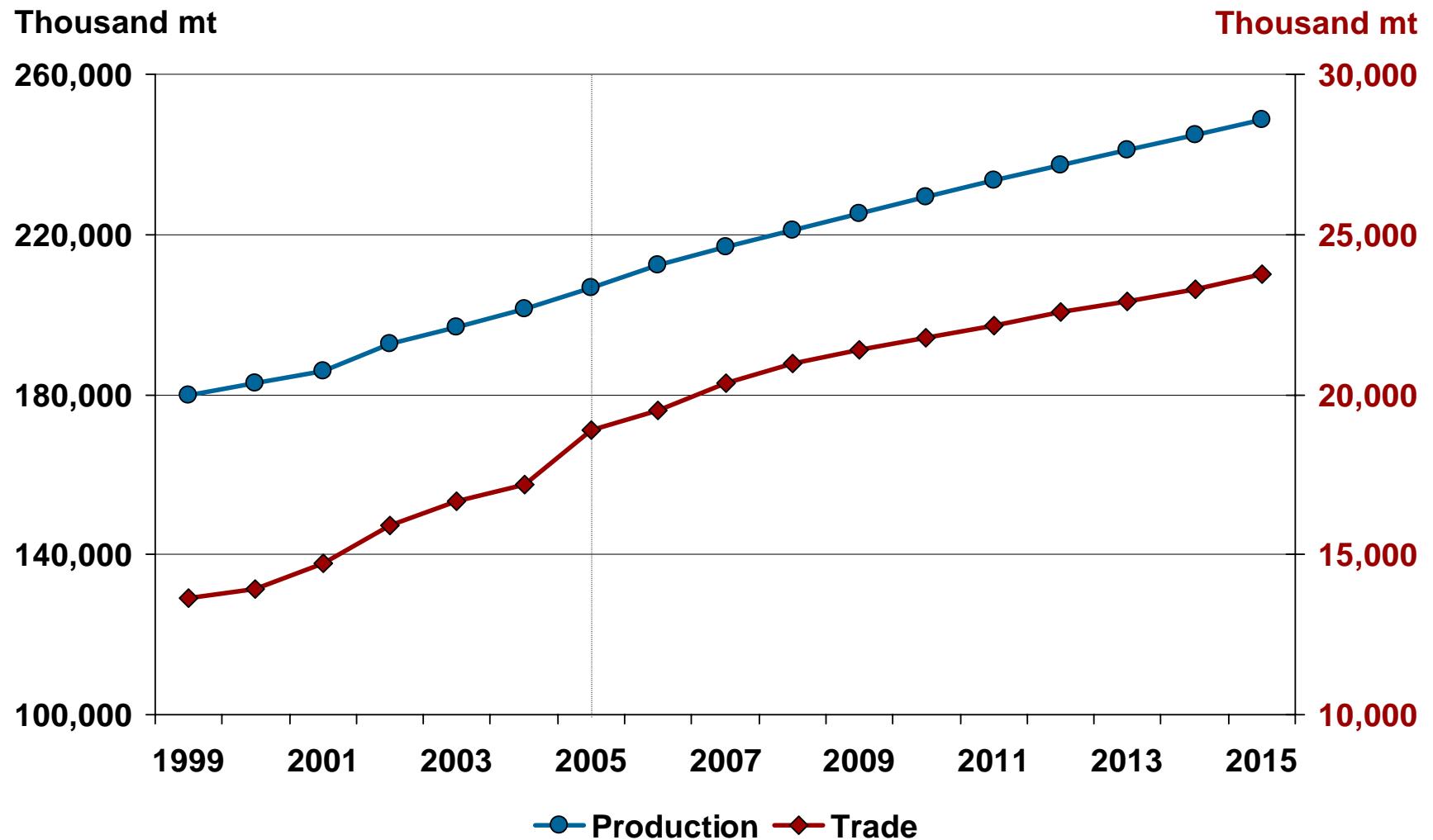


China Livestock Net Trade

Thousand mt



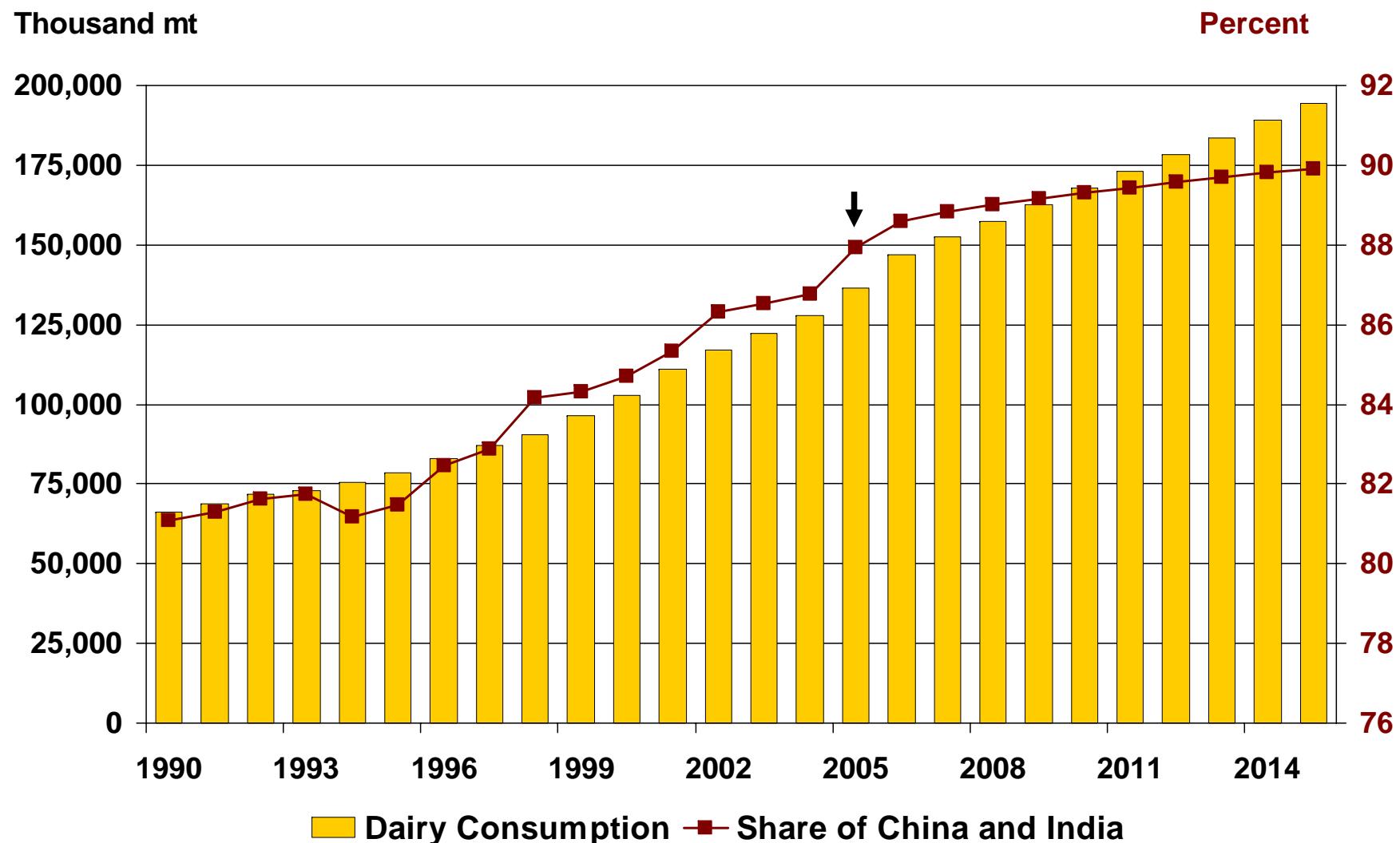
World Meat Production and Trade



Dairy Outlook Overview

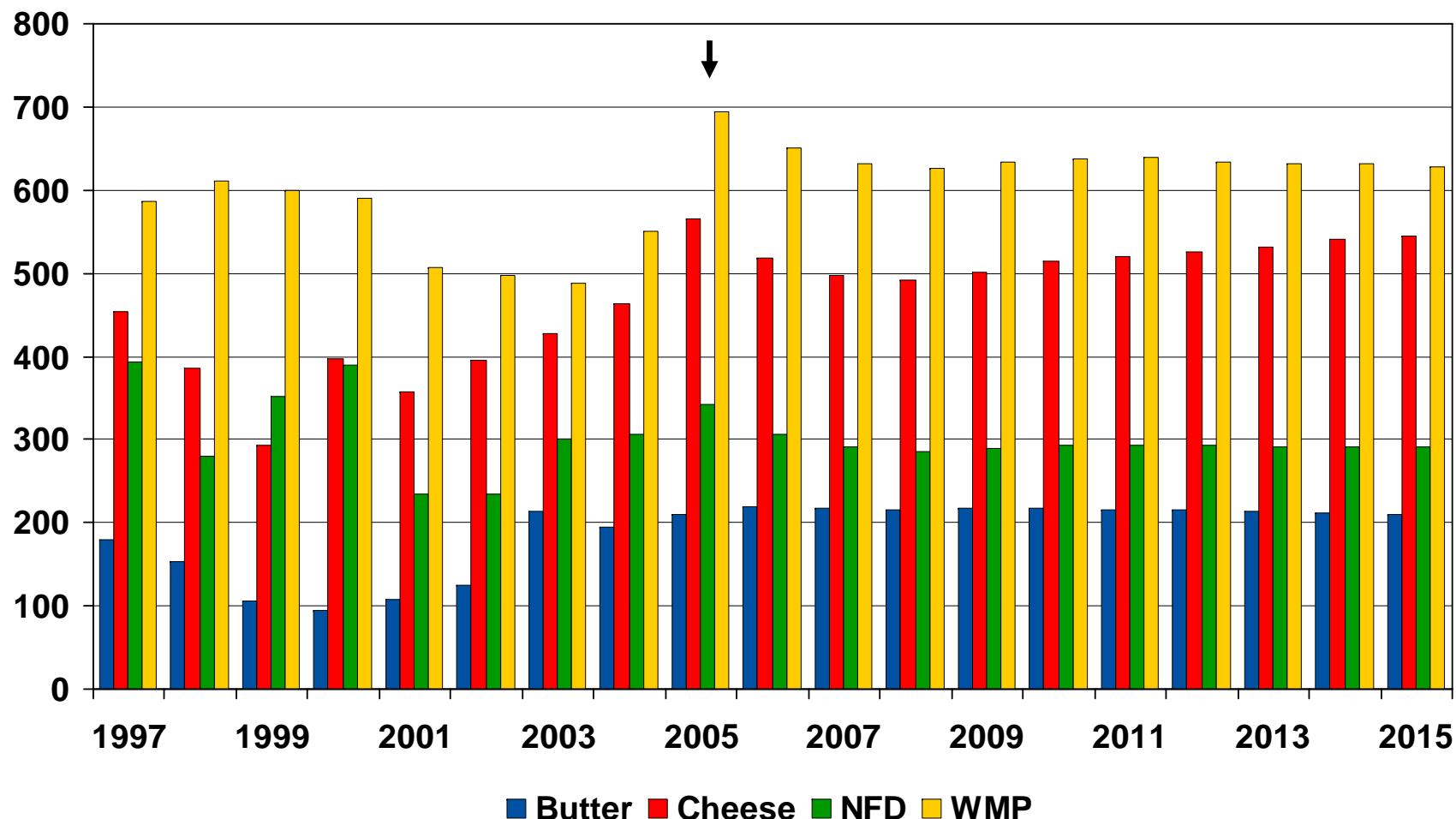
- Steady Asian import, declining EU exports and currency appreciation in major exporter raise prices of milk products.
- EU milk production is restricted by marketing milk quota averaging at 142 million mt.
- China expands milk production meet growing demand with 3.8% growth in dairy cows and 3% growth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

Asian Dairy Consumption



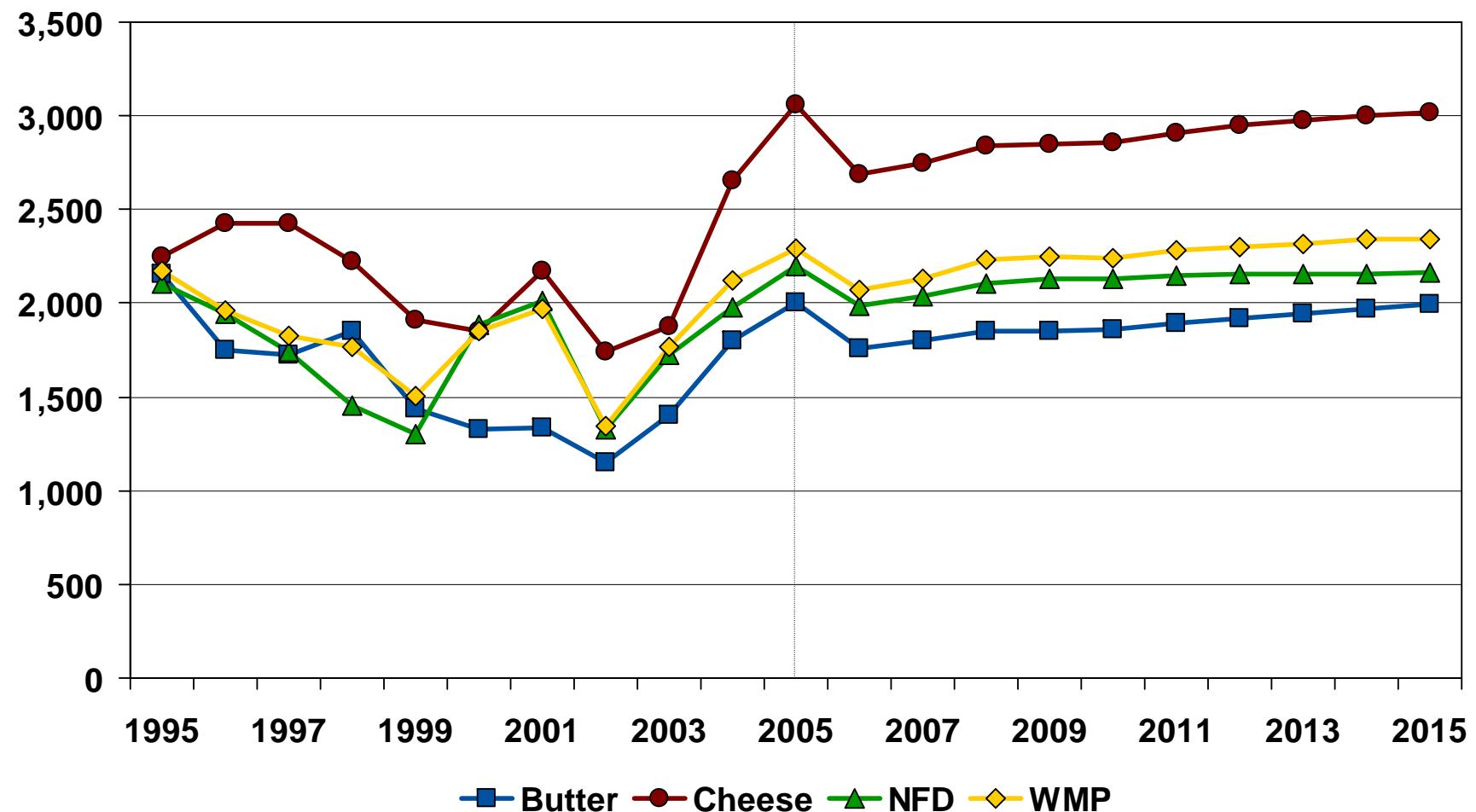
EU Dairy Product Net Trade

Thousand mt



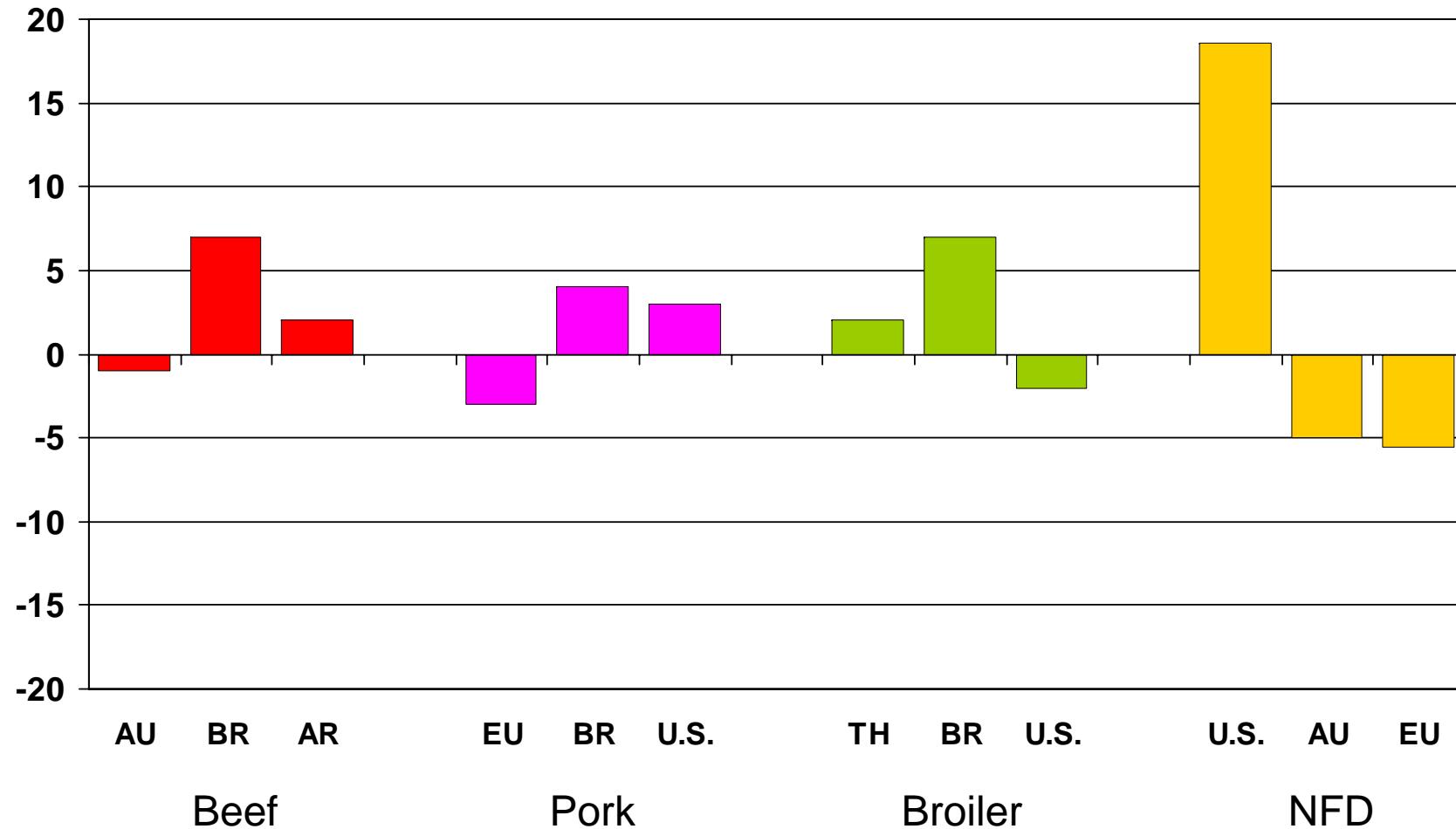
FOB Northern European Dairy Product Prices

Dollars per mt

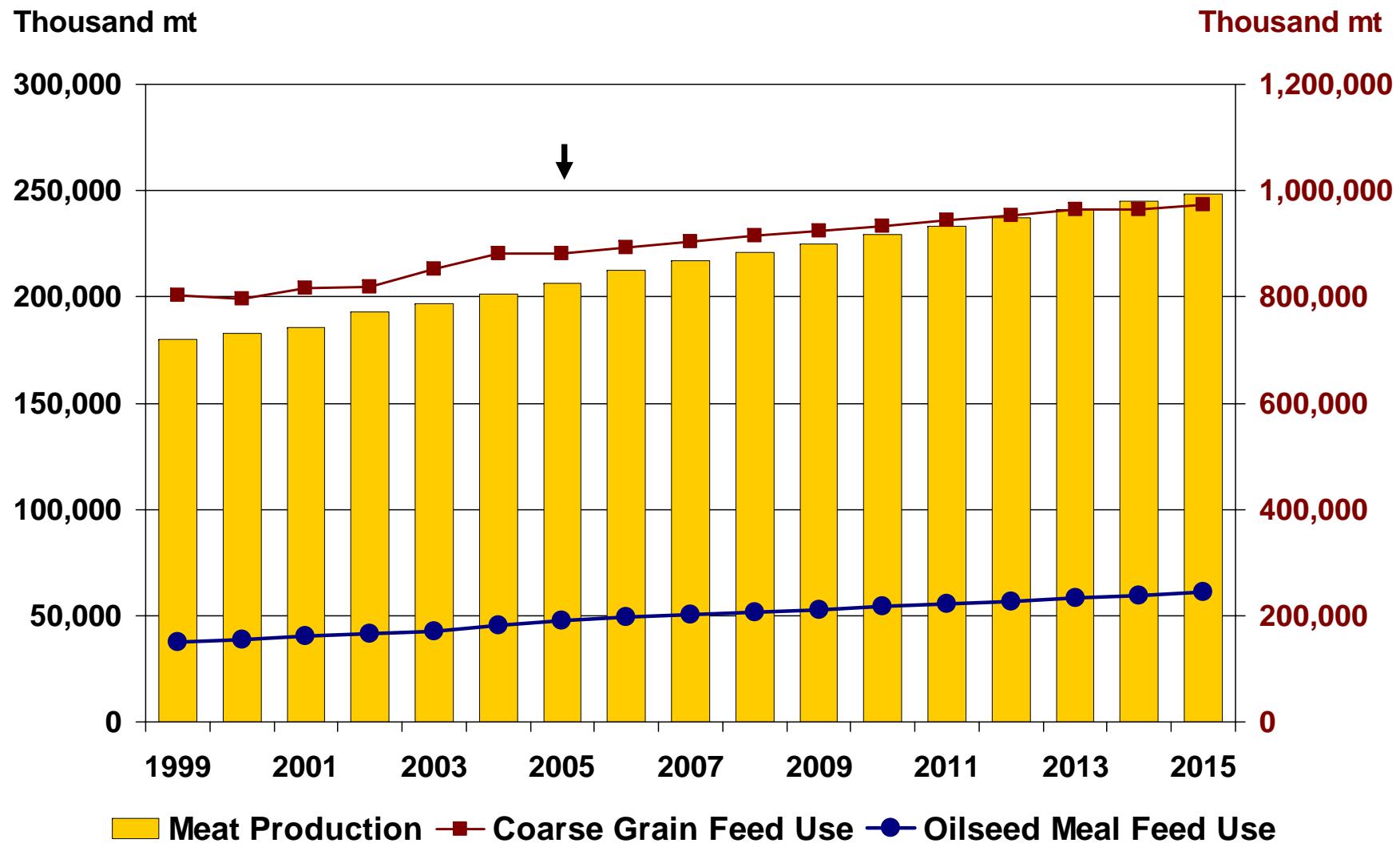


Livestock and Dairy Market Share Change

Percentage point



Meat Production and Feed Use



World Feed Grain Outlook Overview

- 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

Thousand mt

50,000

40,000

30,000

20,000

10,000

0

-10,000

-20,000

1995/96

1999/00

2003/04

2007/08

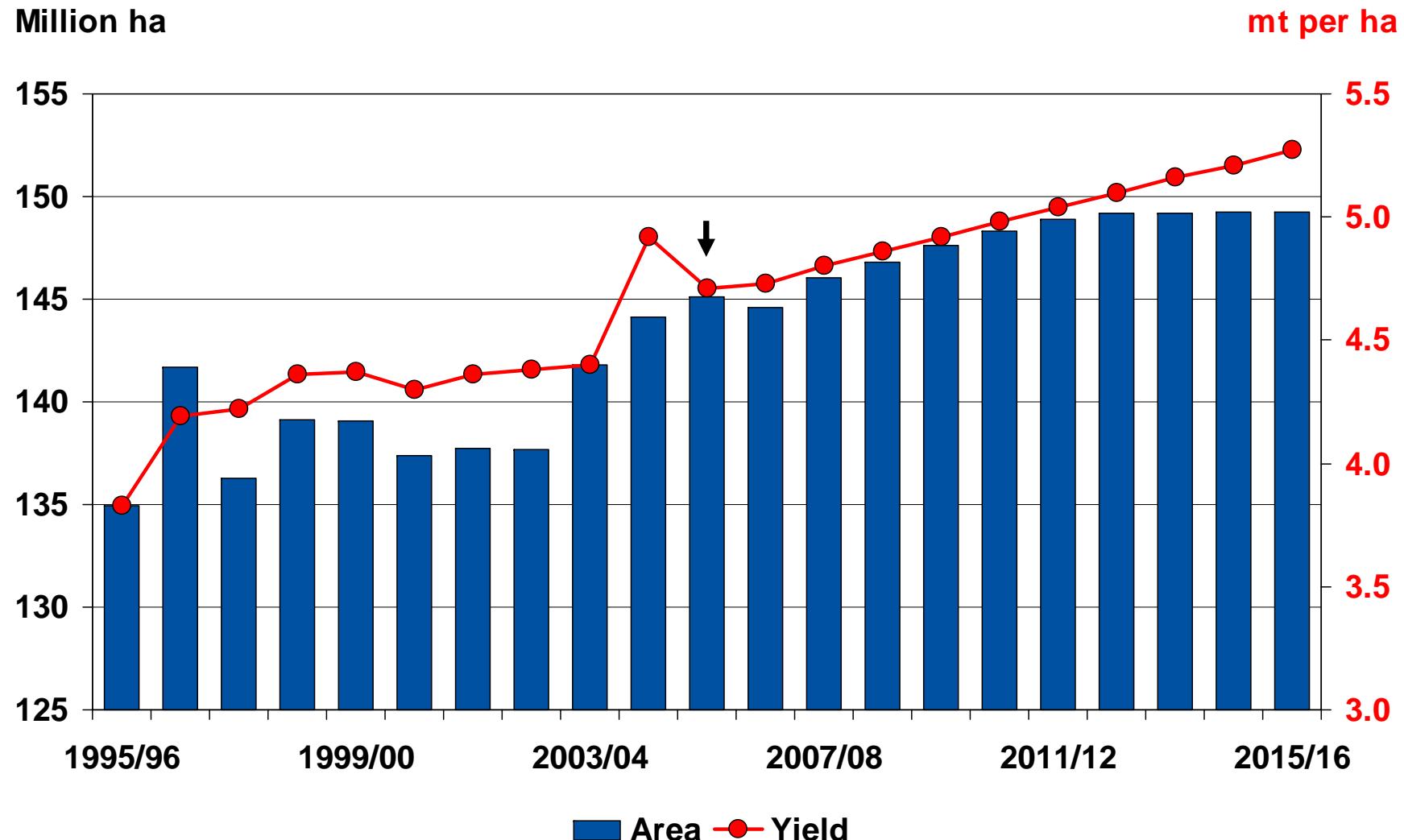
2011/12

2015/16

■ China ■ Japan ■ Mexico ■ Taiwan

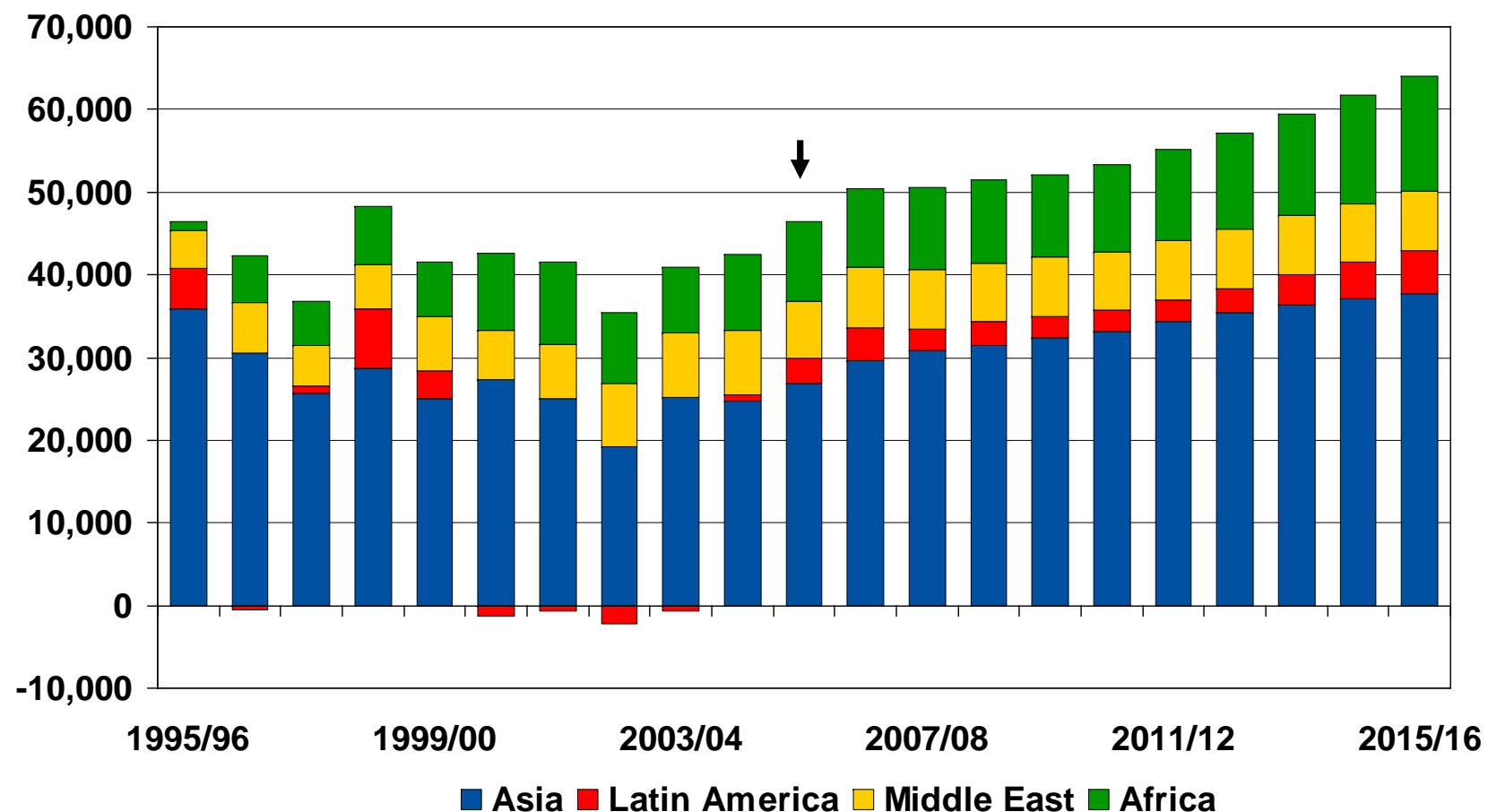
Coarse Grain = Corn, Barley, and Sorghum

World Corn Area and Yield



Corn Net Imports by Major Regions

Thousand mt



Corn Production by Major Competitors

Thousand mt

50,000

40,000

30,000

20,000

10,000

1995/96

1999/00

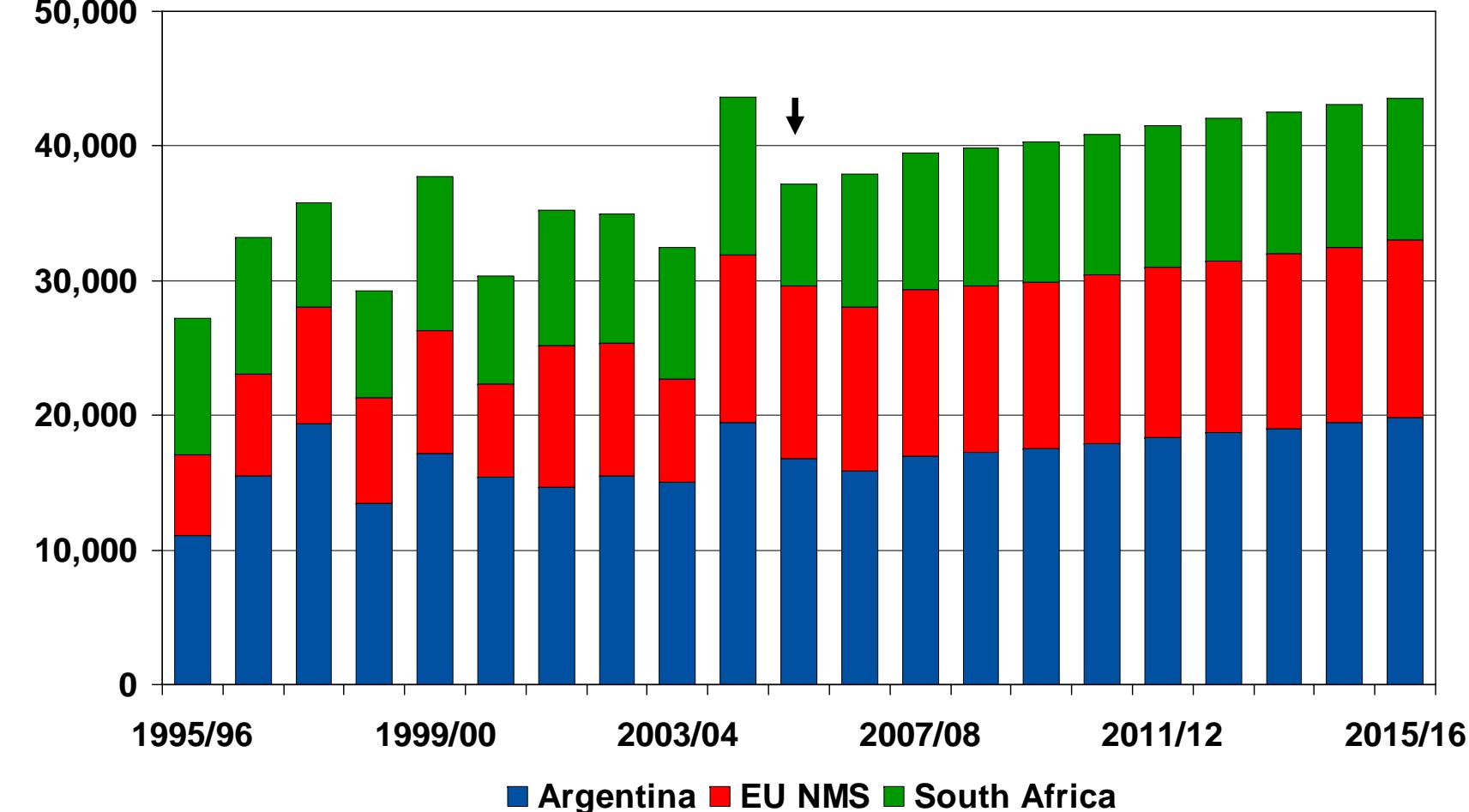
2003/04

2007/08

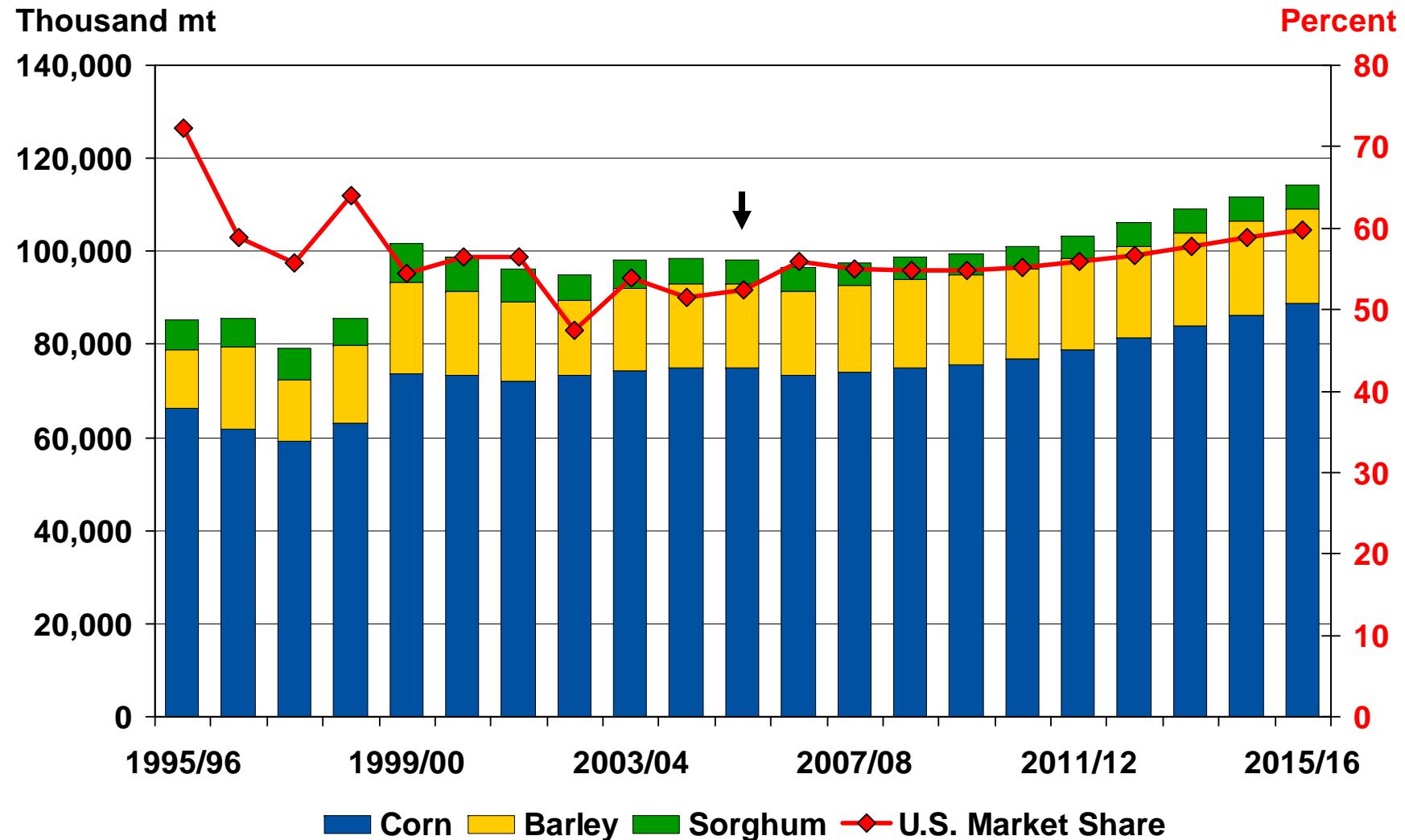
2011/12

2015/16

■ Argentina ■ EU NMS ■ South Africa



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

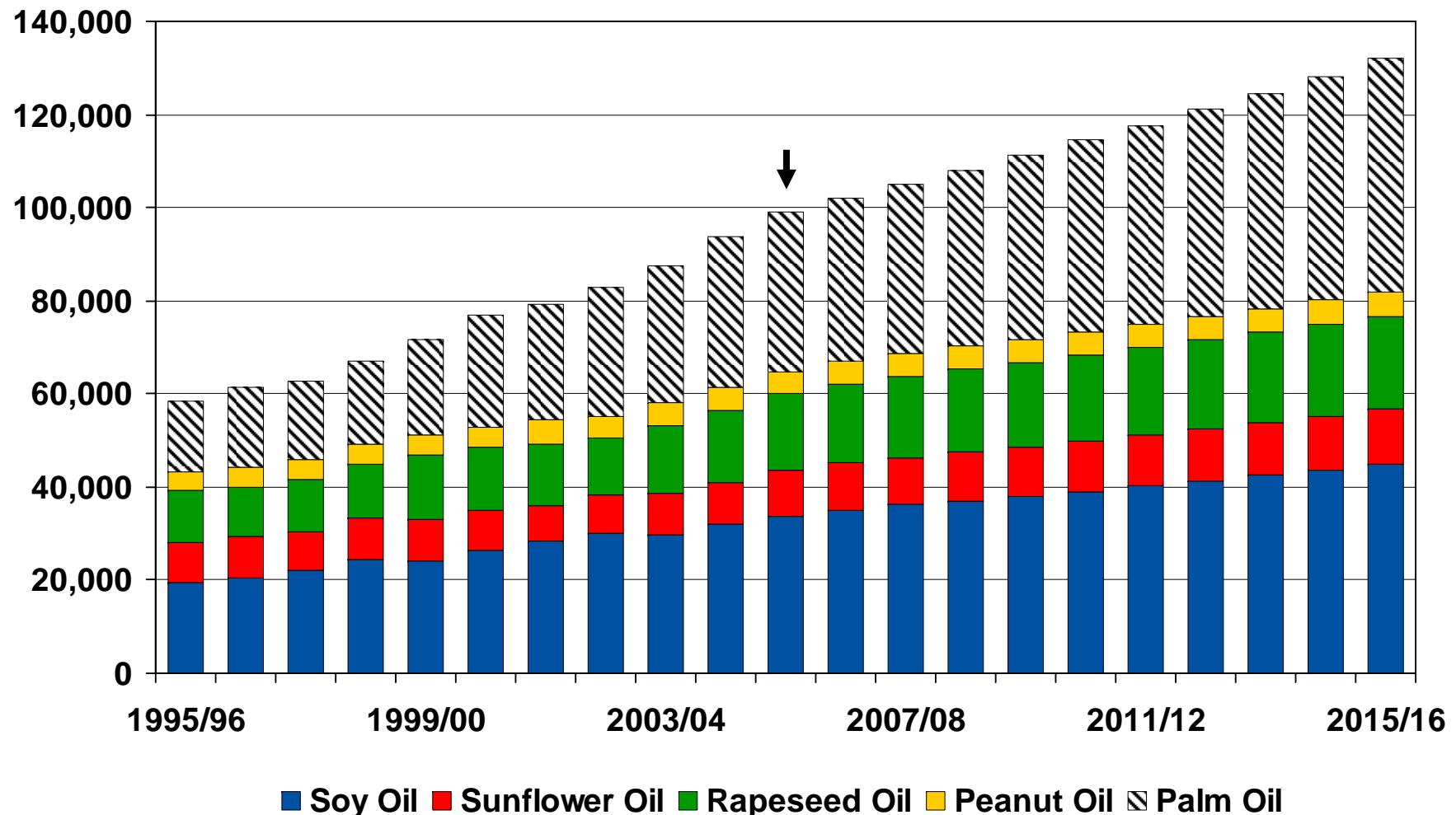


Oilseed Outlook Overview

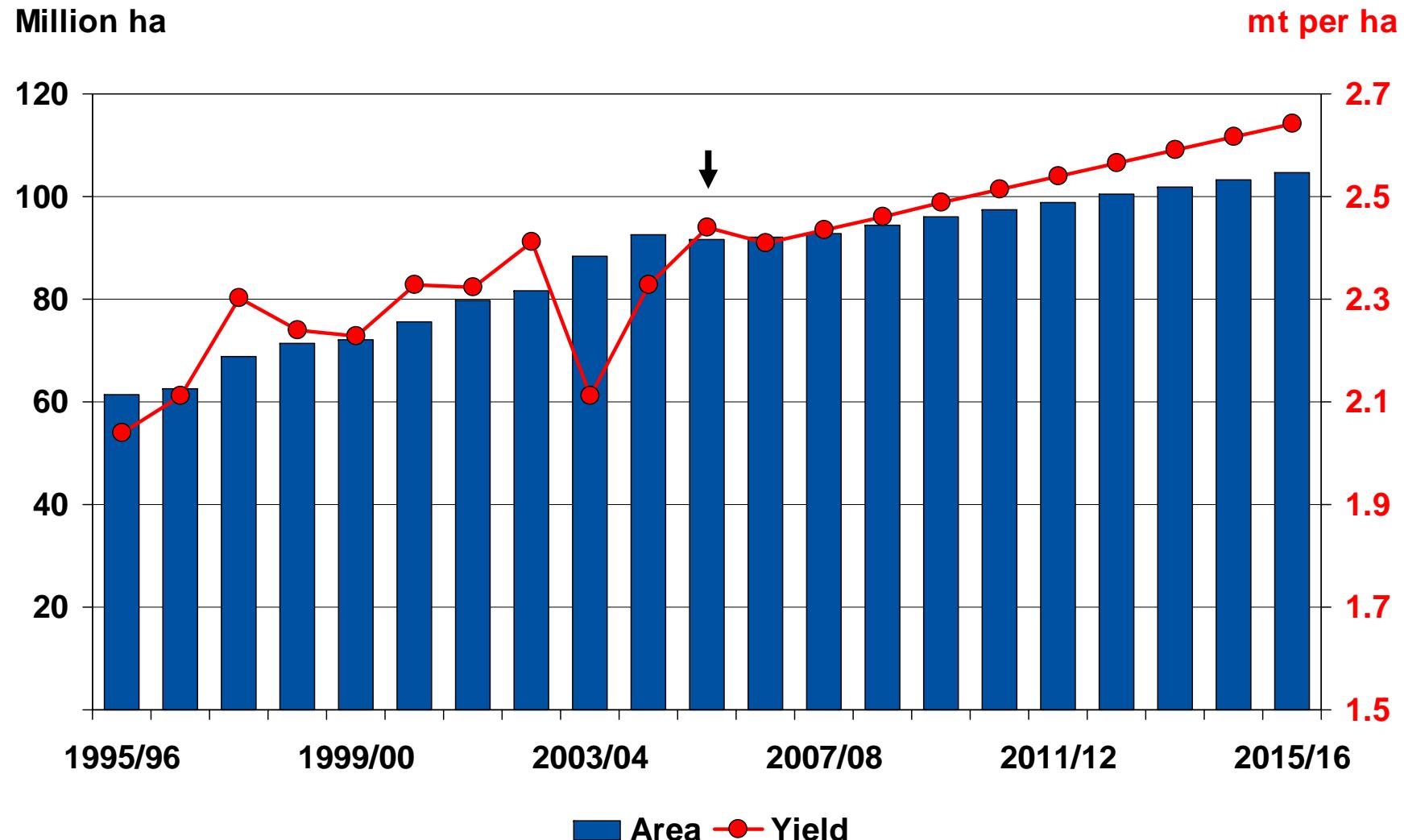
- Oilseed sector grows with strong demand for both oil and meal products driven by population and income growth, and expansion of the livestock sector.
- Both growth in area and improvement in yield contribute to increase in production.
- About 76% of increase in area is due to soybean area expansion 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

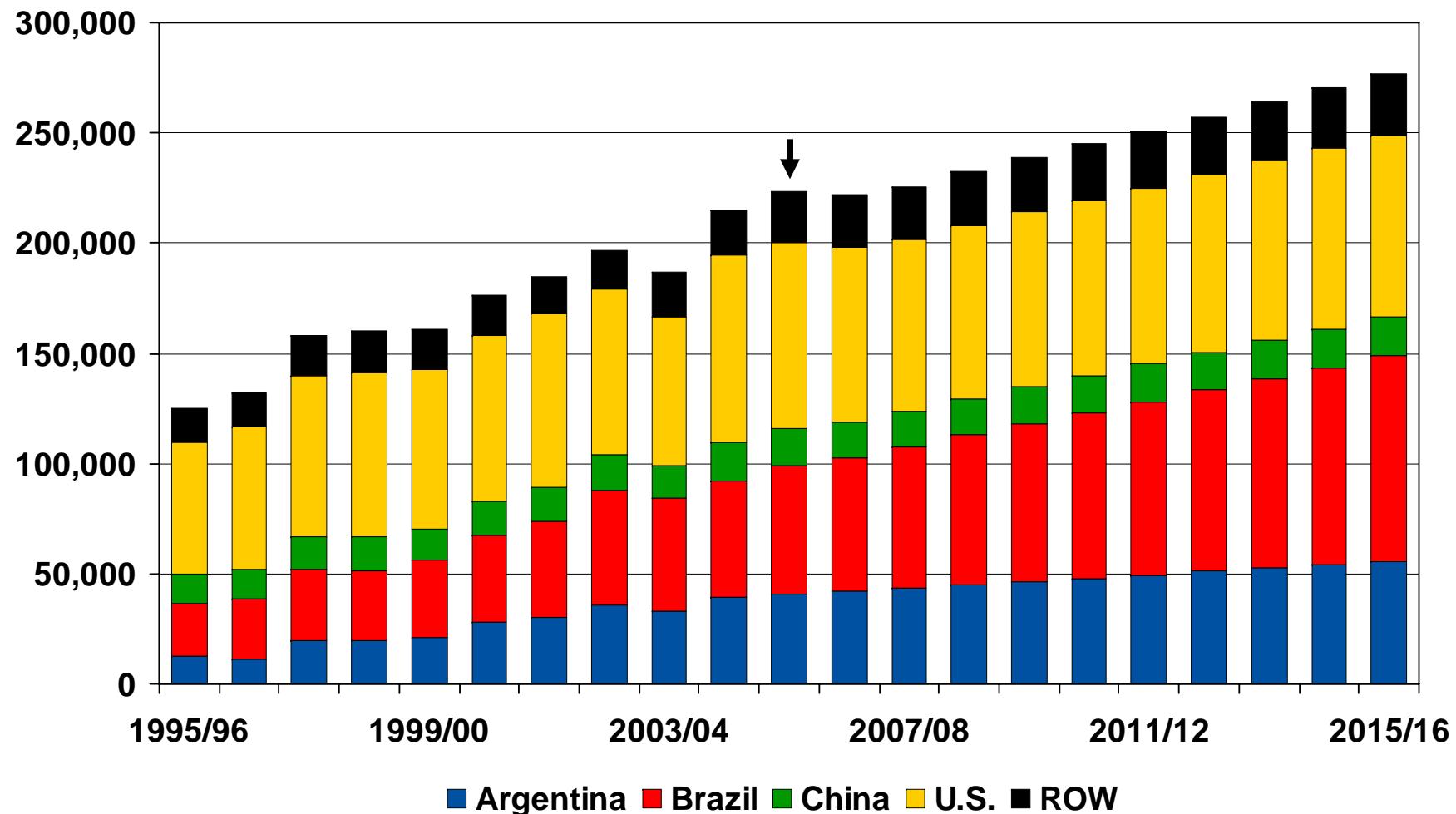


World Soybean Area and Yield



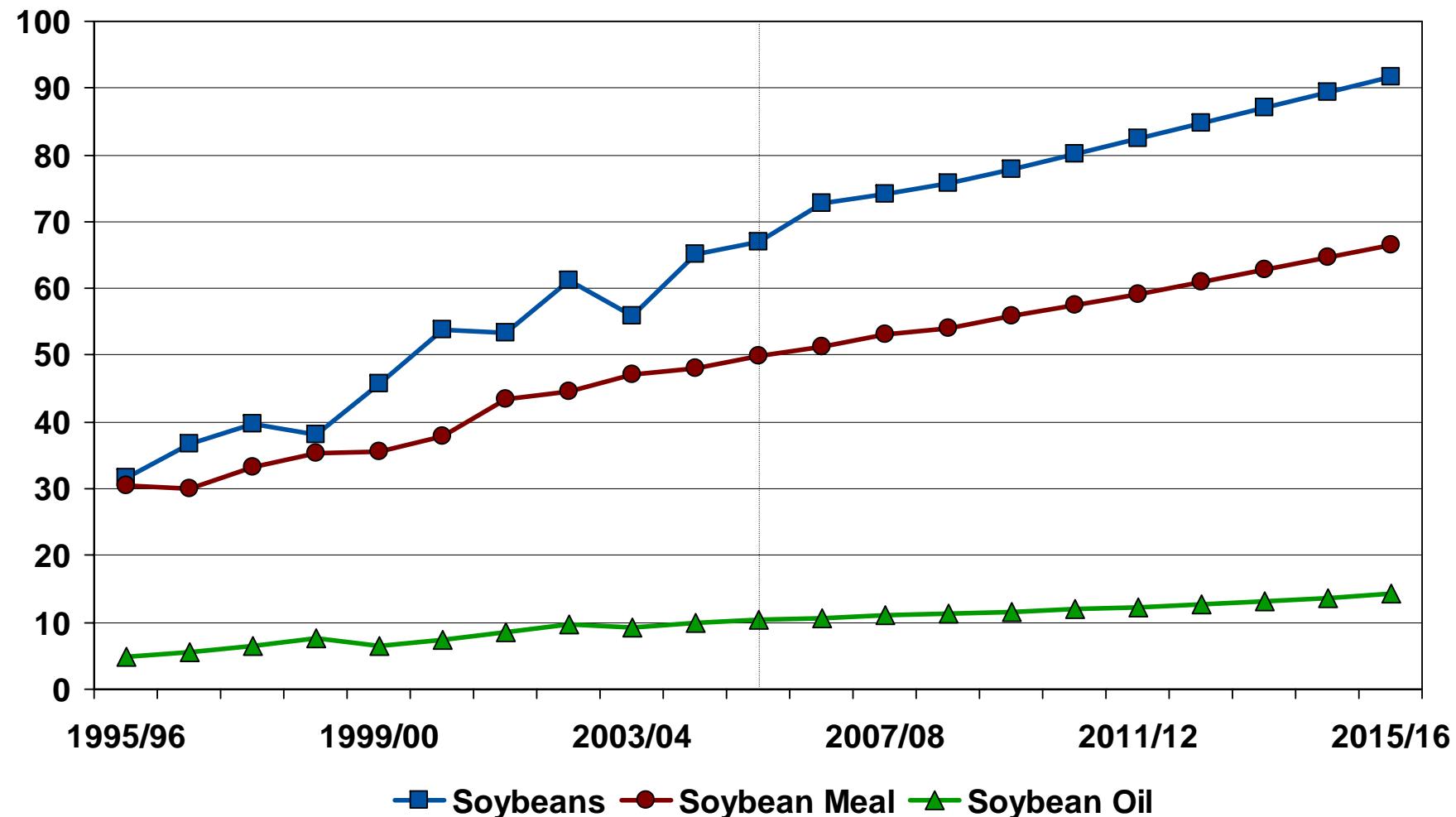
World Soybean Production

Thousand mt



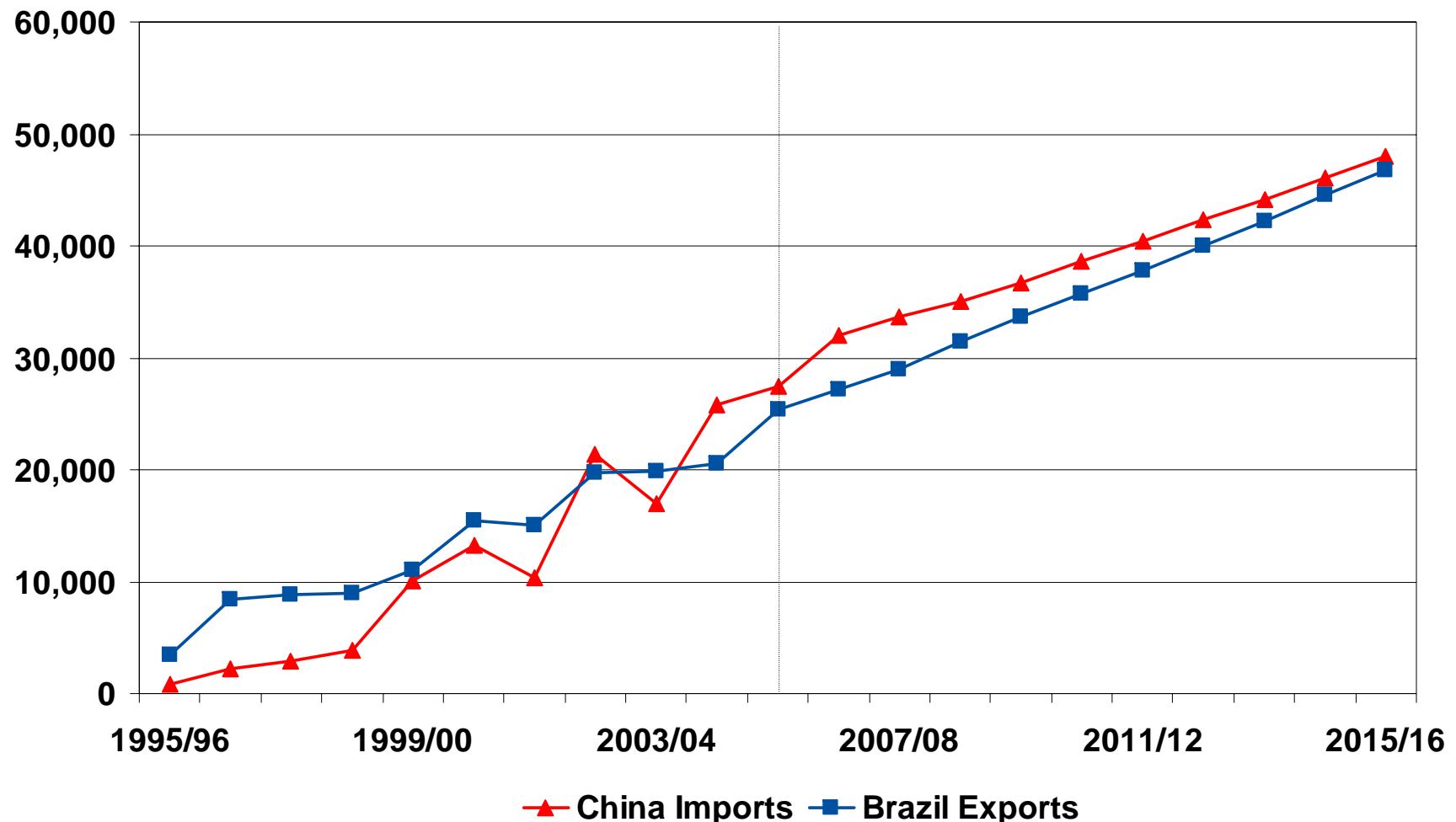
World Soybean and Products Trade

Thousand mt



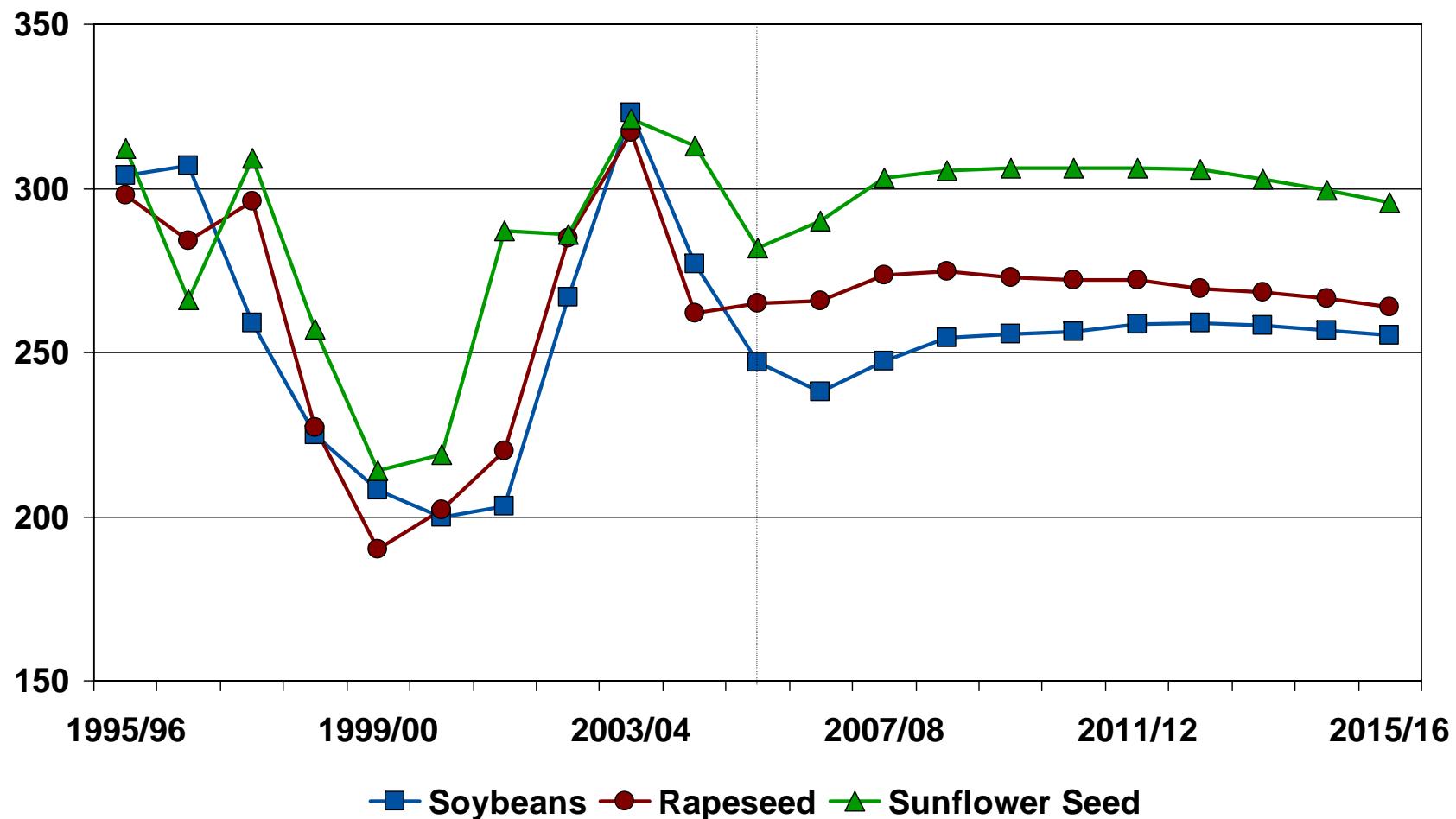
Brazilian and Chinese Soybean Trade

Thousand mt



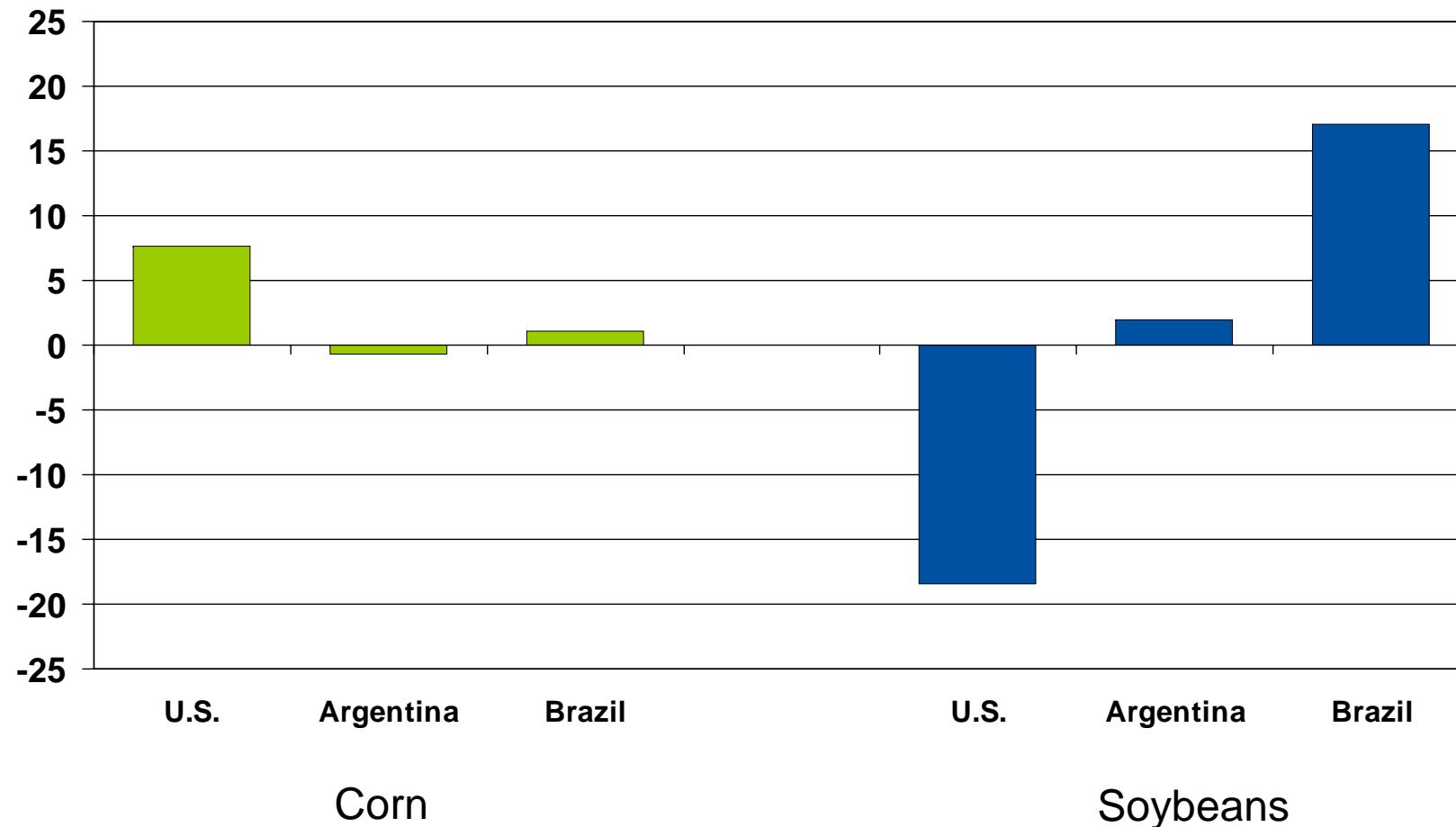
World Oilseed Prices

Dollars per mt



Crops Market Share Change

Percentage Point

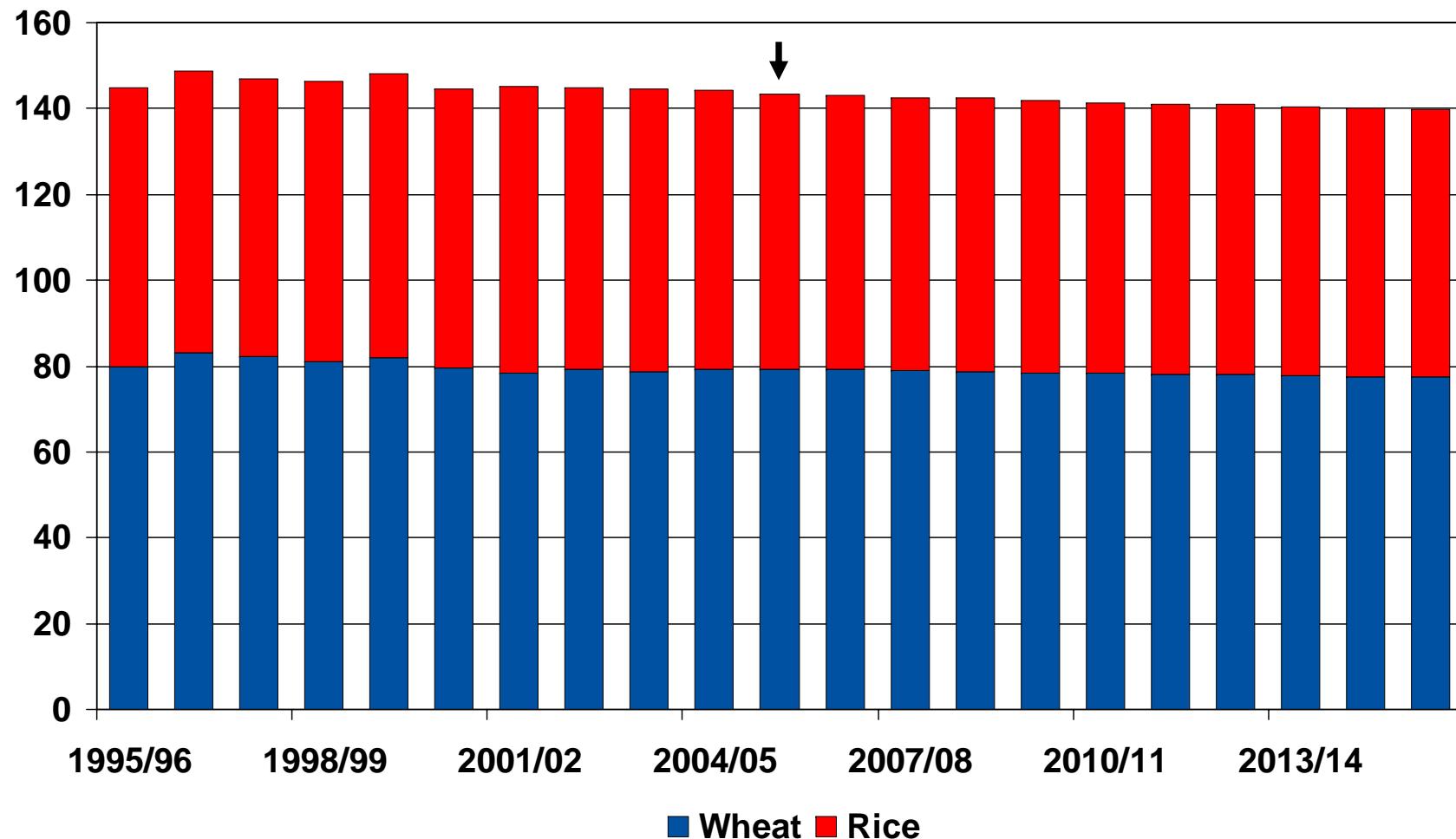


World Food Grain Outlook Overview

- 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.

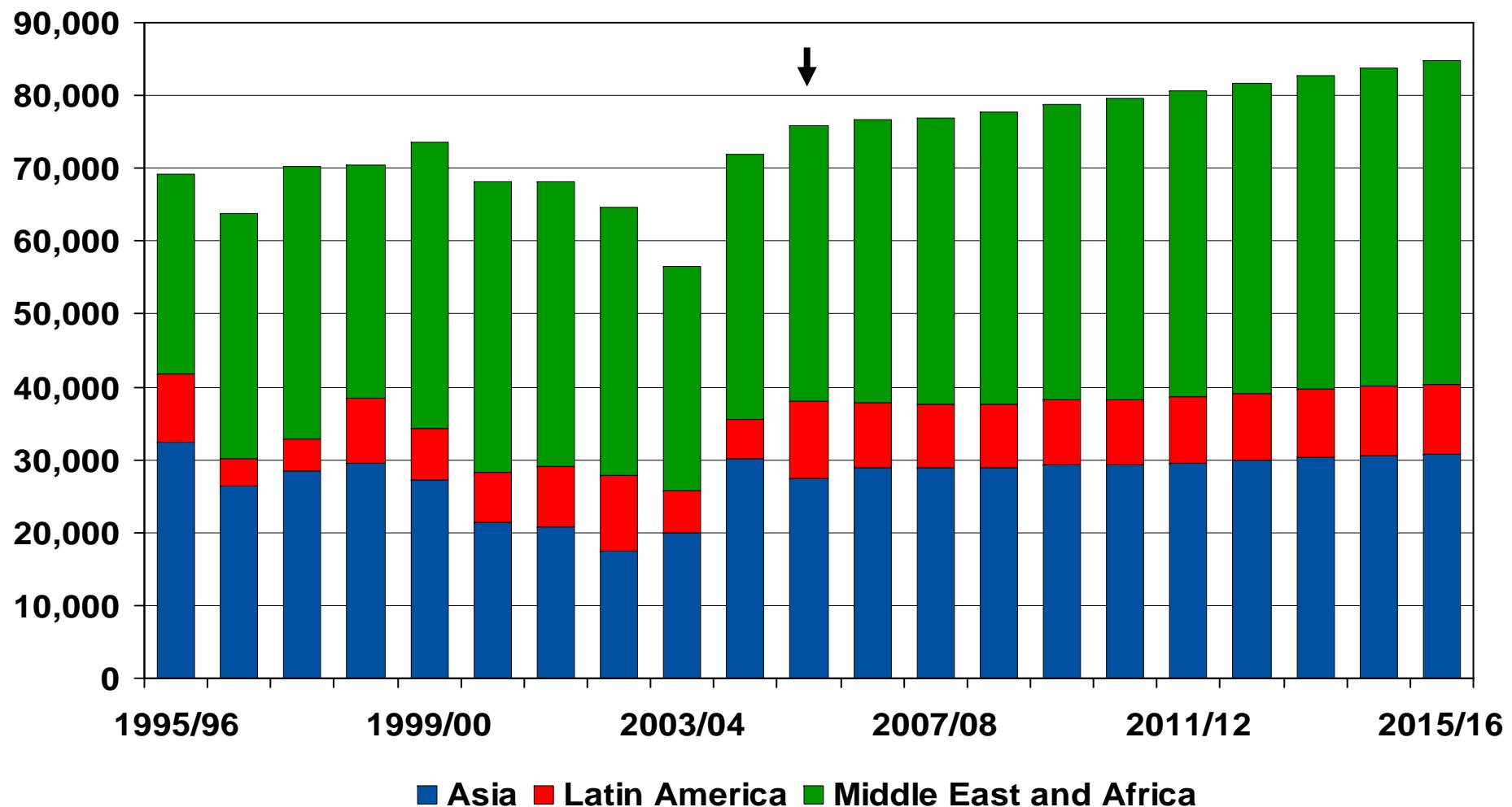
World Per Capita Food Grain Consumption

kg per person



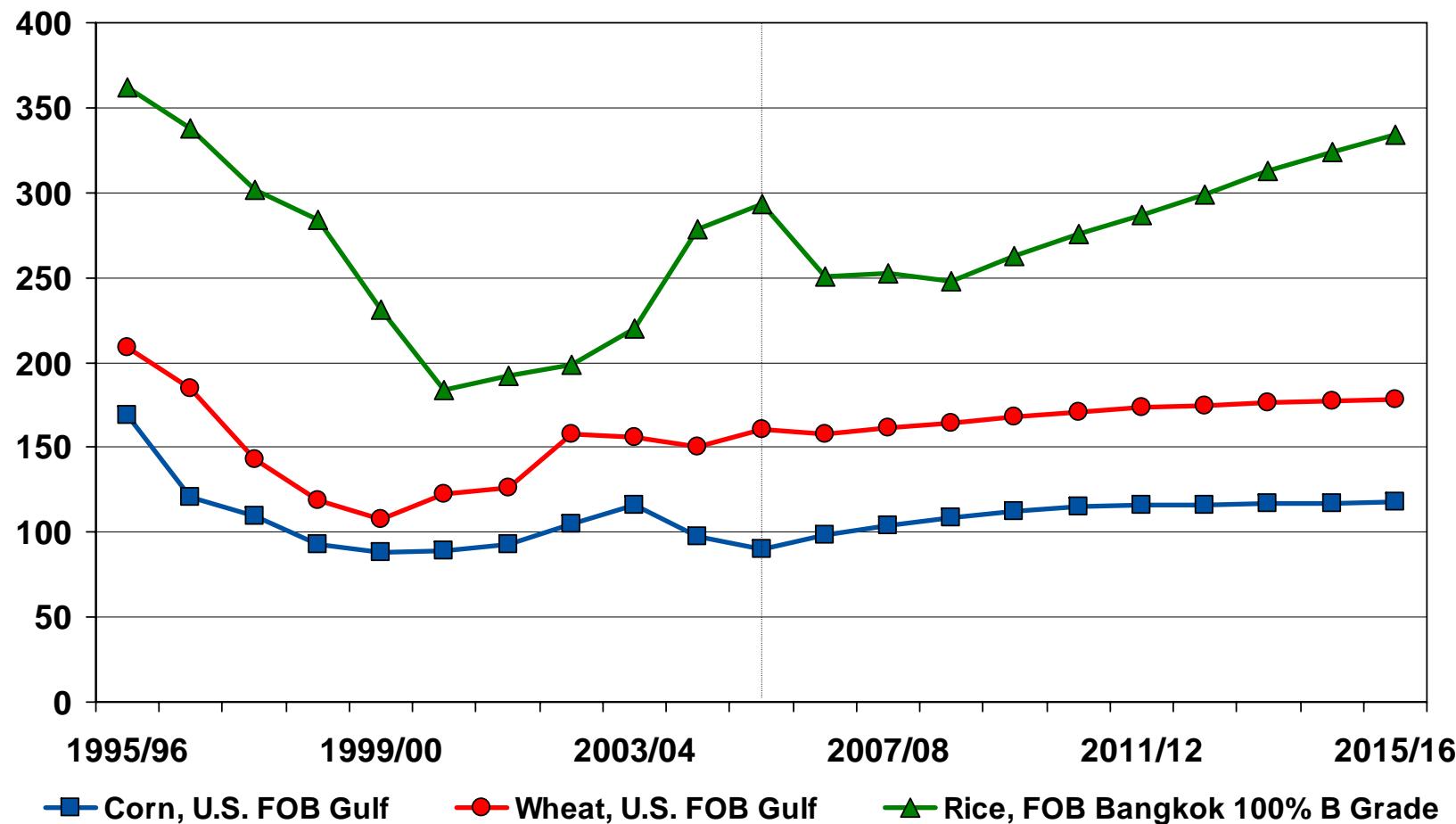
Wheat Net Imports by Major Regions

Thousand mt



World Grain Prices

Dollars per mt



World Wheat Feed and Food Use

Thousand mt

800,000

600,000

400,000

200,000

0

1995/96

1999/00

2003/04

2007/08

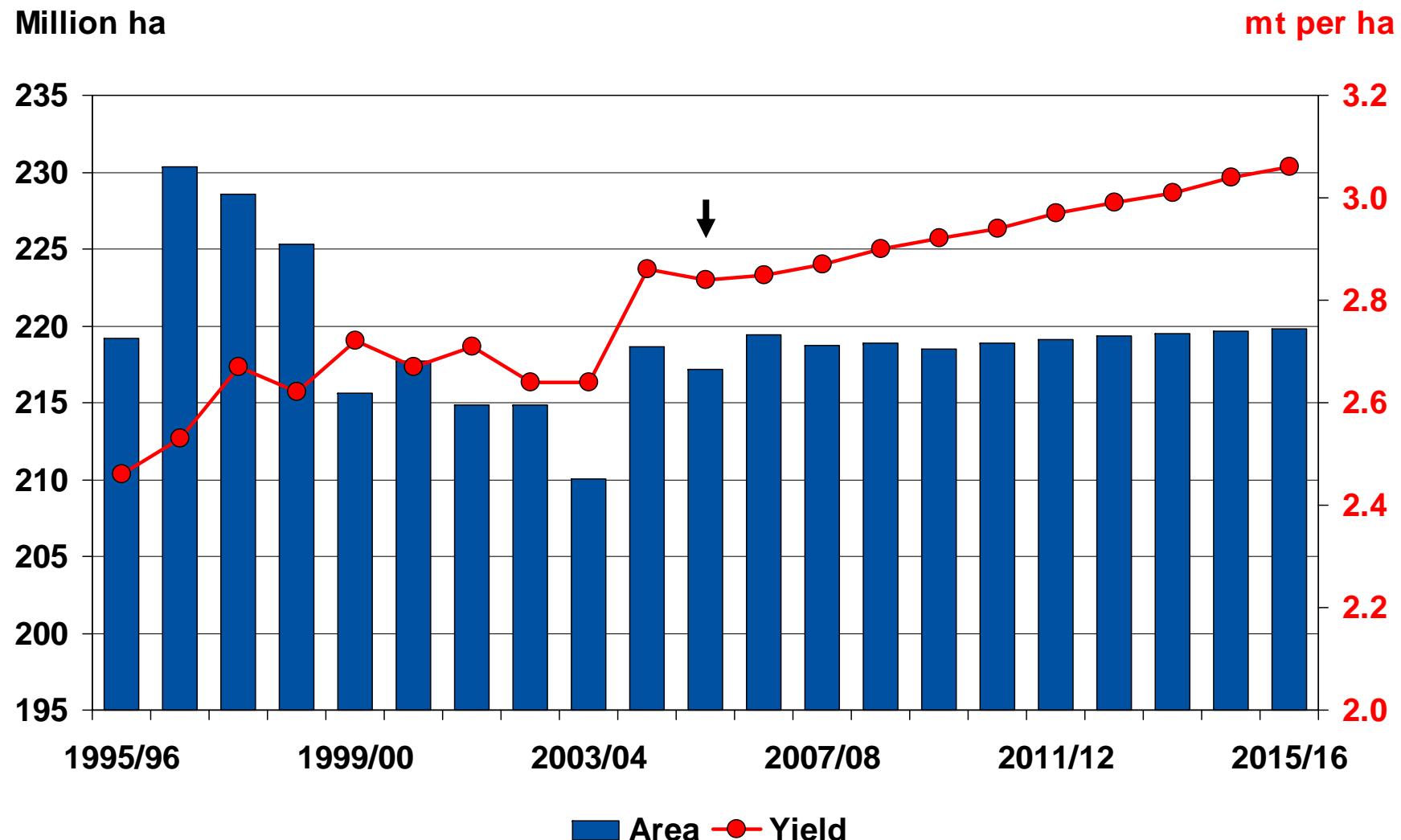
2011/12

2015/16

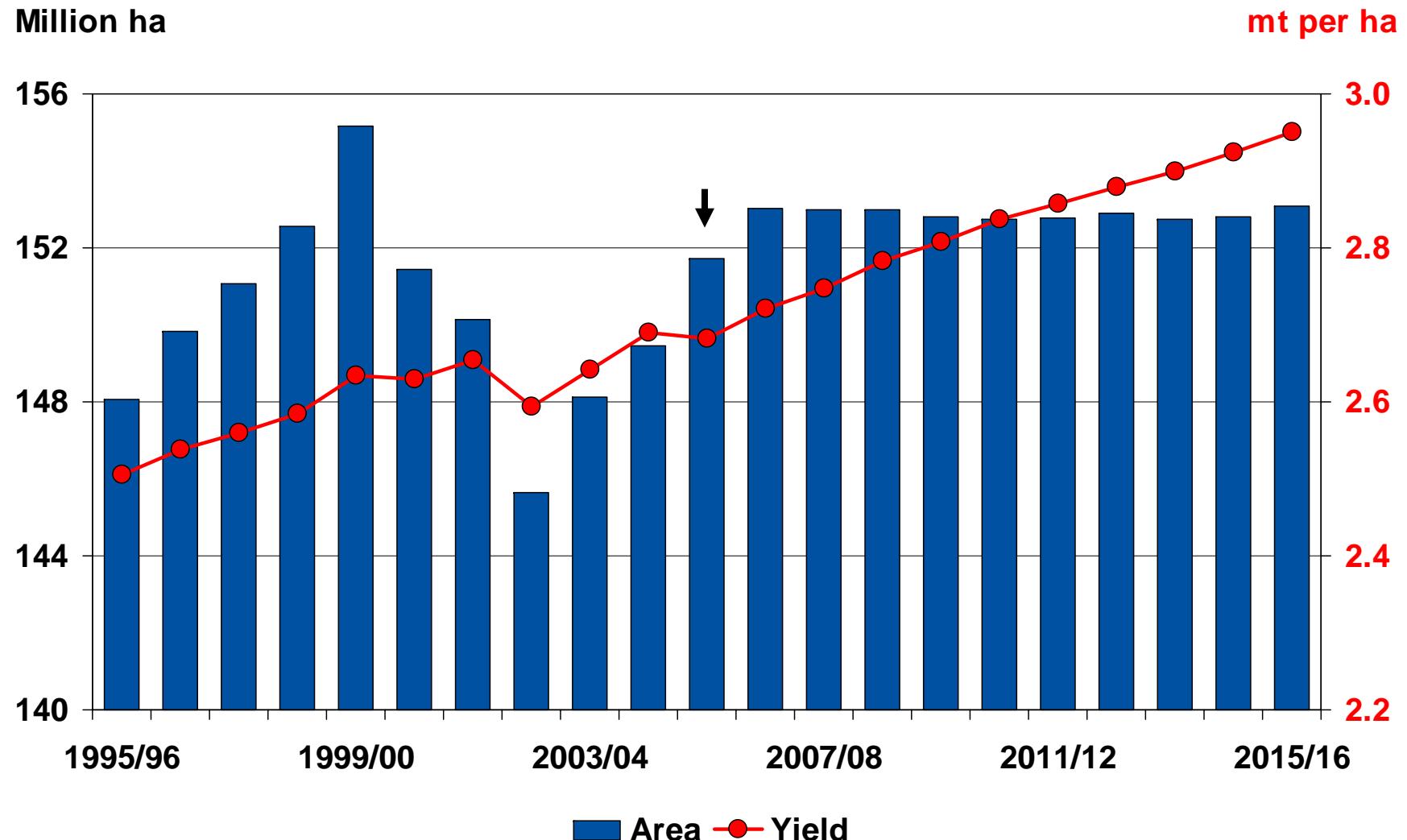
■ Feed Use ■ Food Use



World Wheat Area and Yield



World Rice Area and Milled Yield



Other Crop Outlook Overview

■ Sugar

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

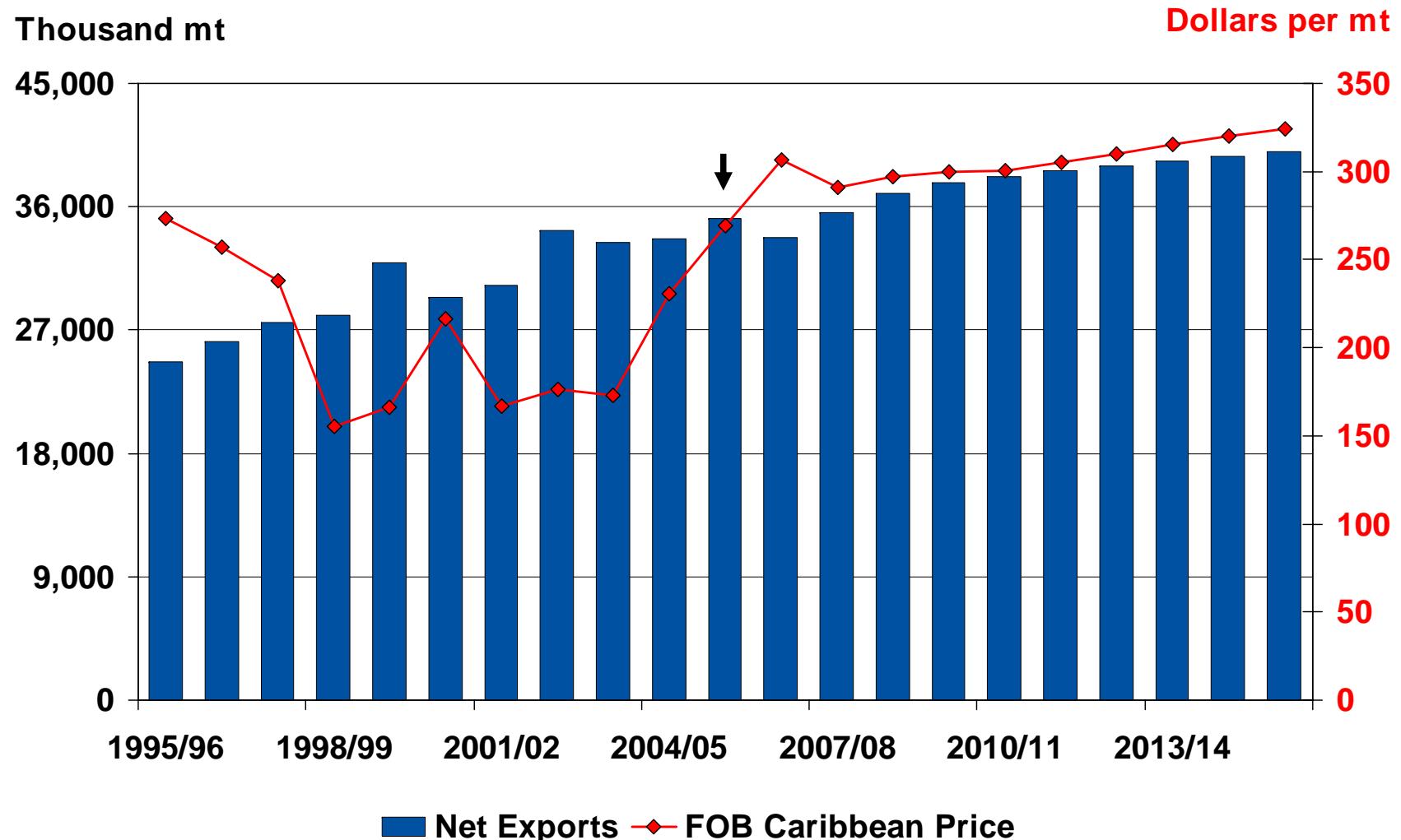
■ Ethanol

- 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.

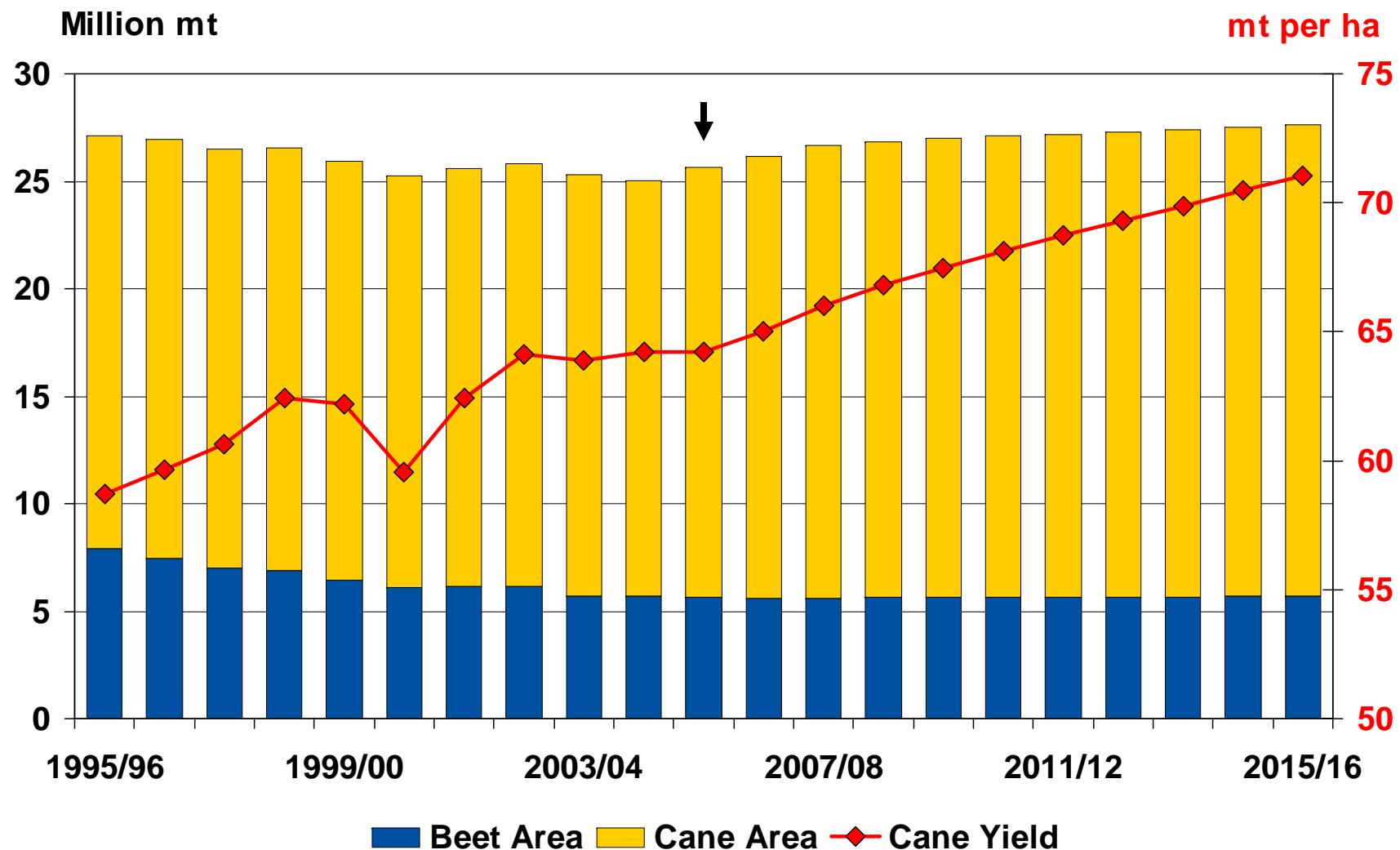
■ Cotton

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

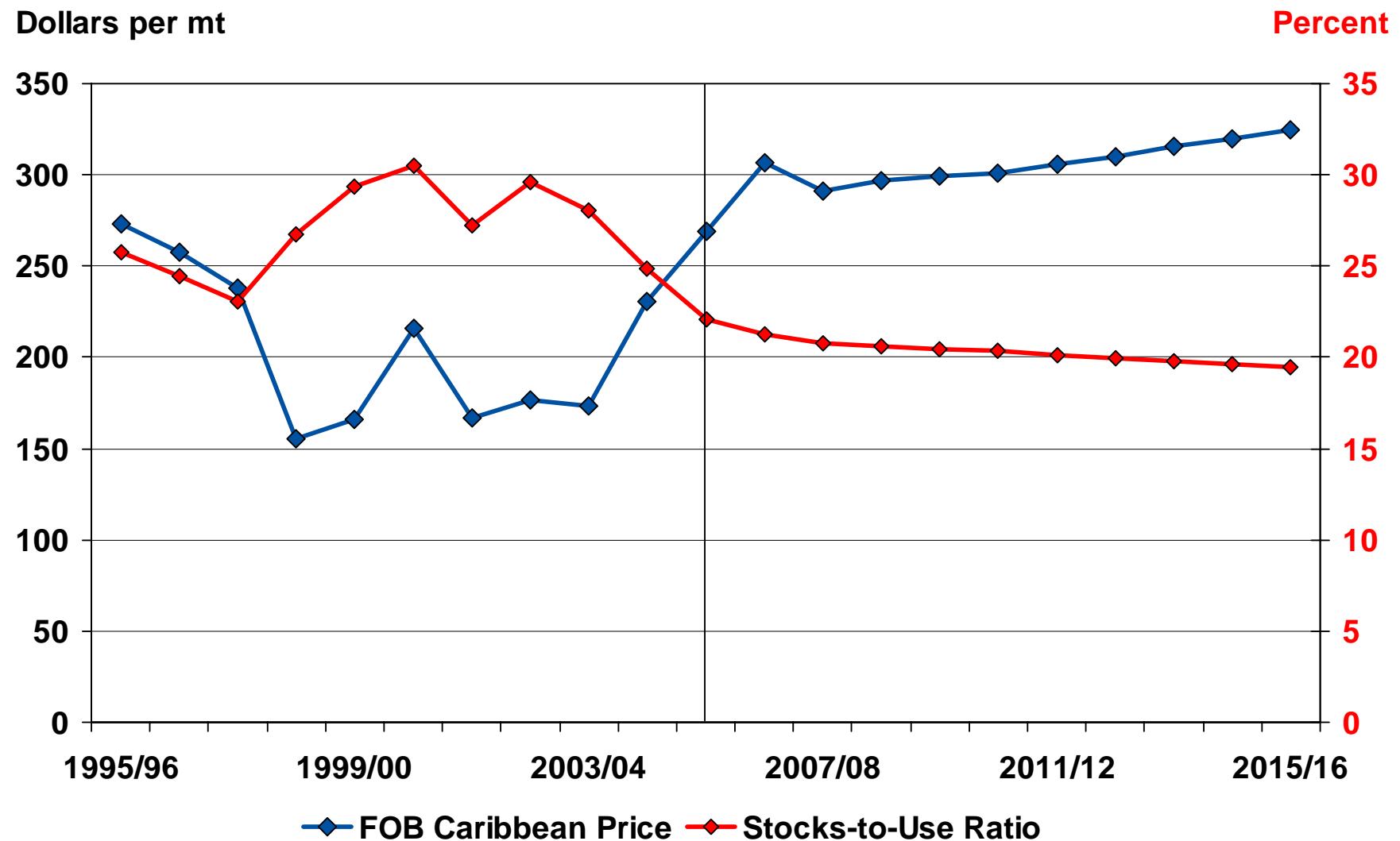
World Sugar Price and Net Trade



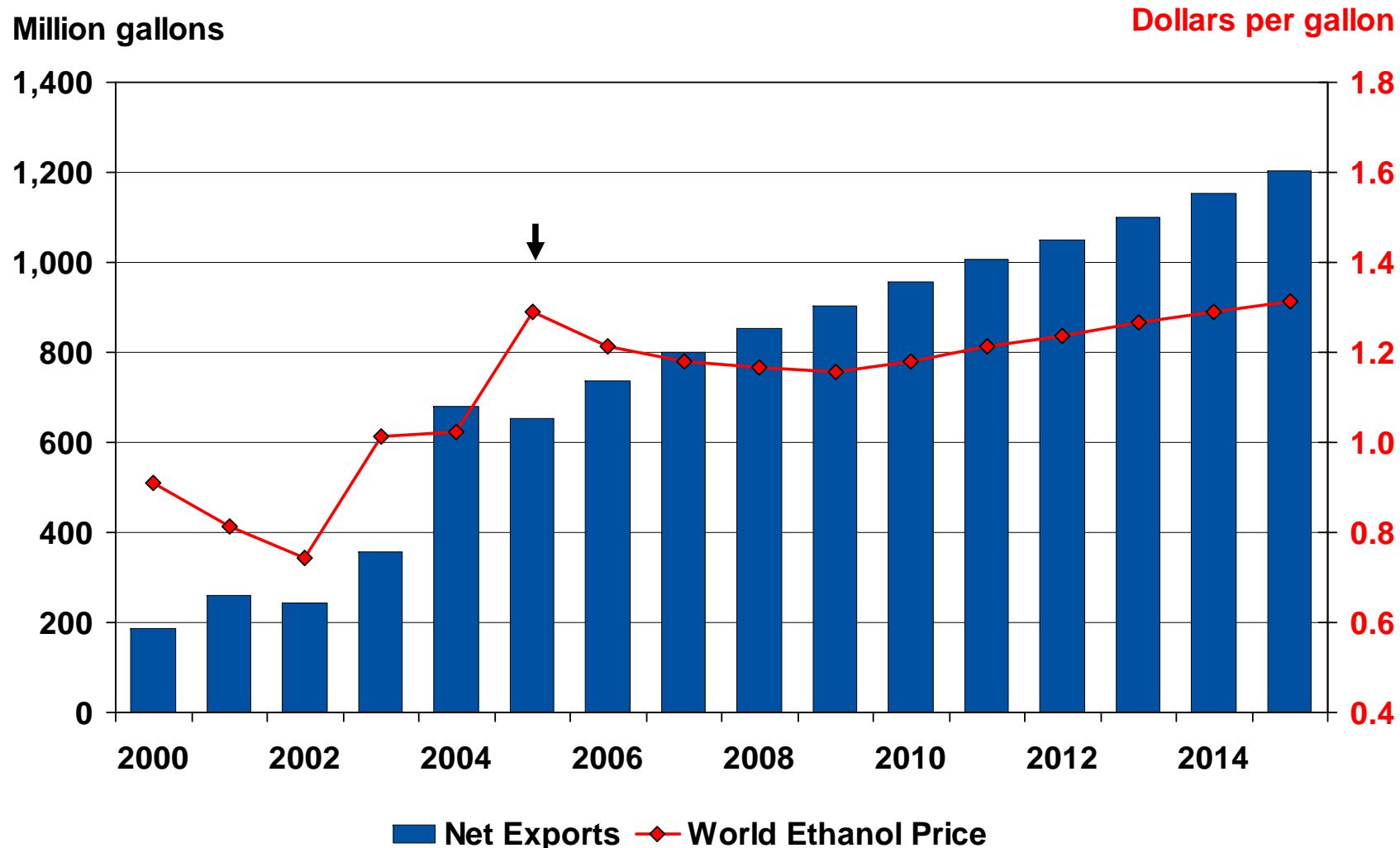
World Sugar Area and Yield



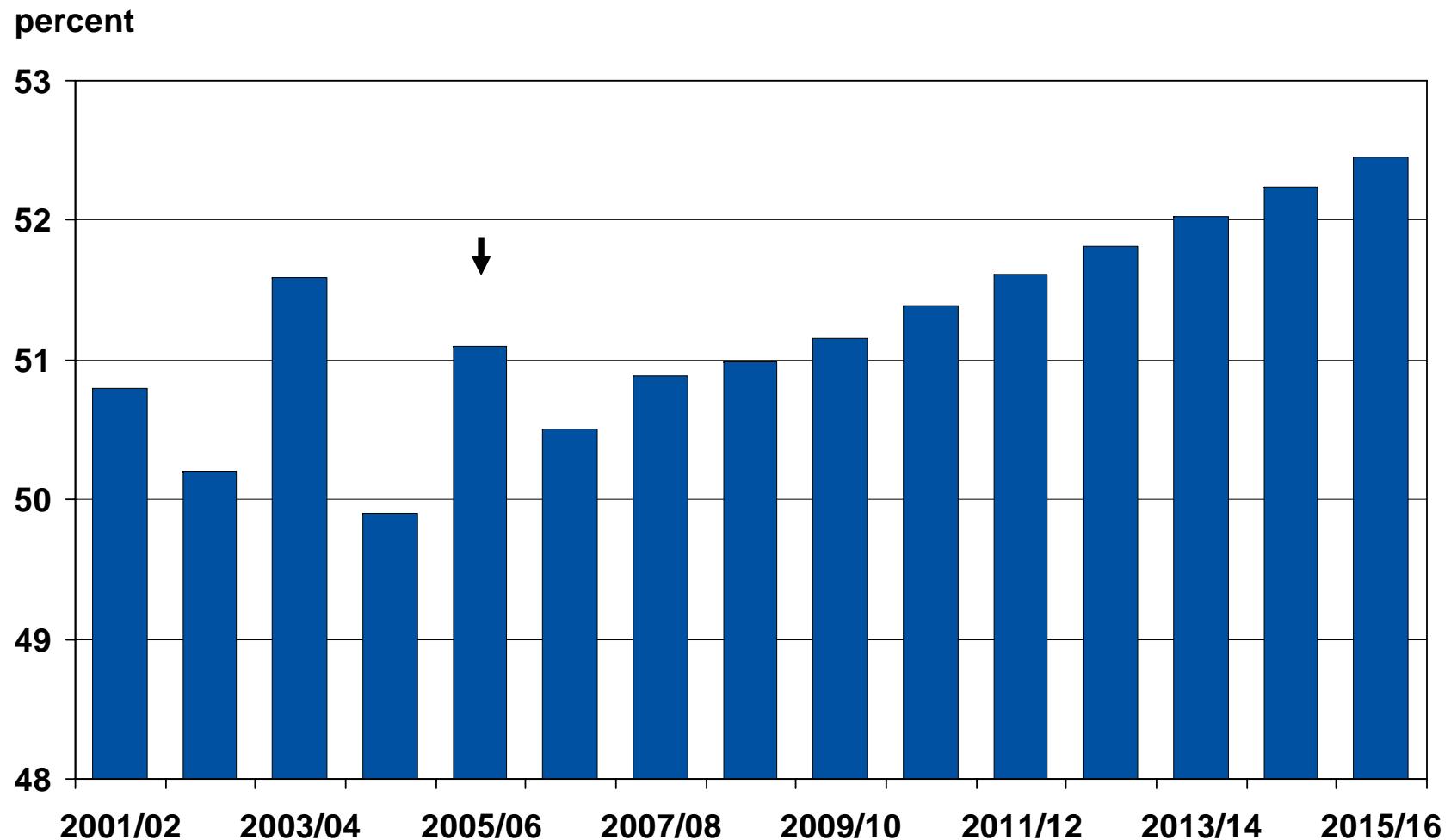
World Sugar Stocks-to-Use Ratio vs. Price



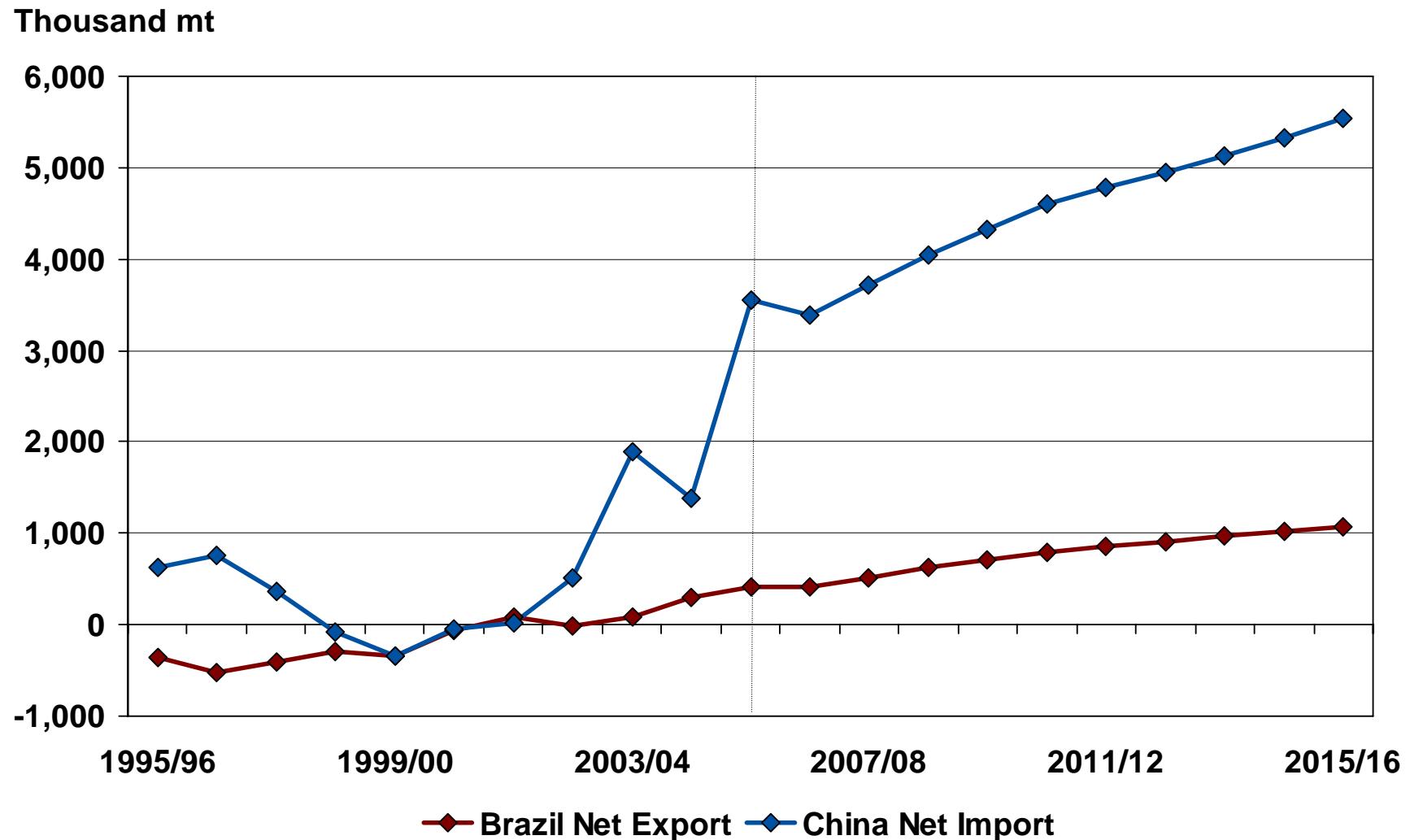
World Ethanol Price and Net Trade



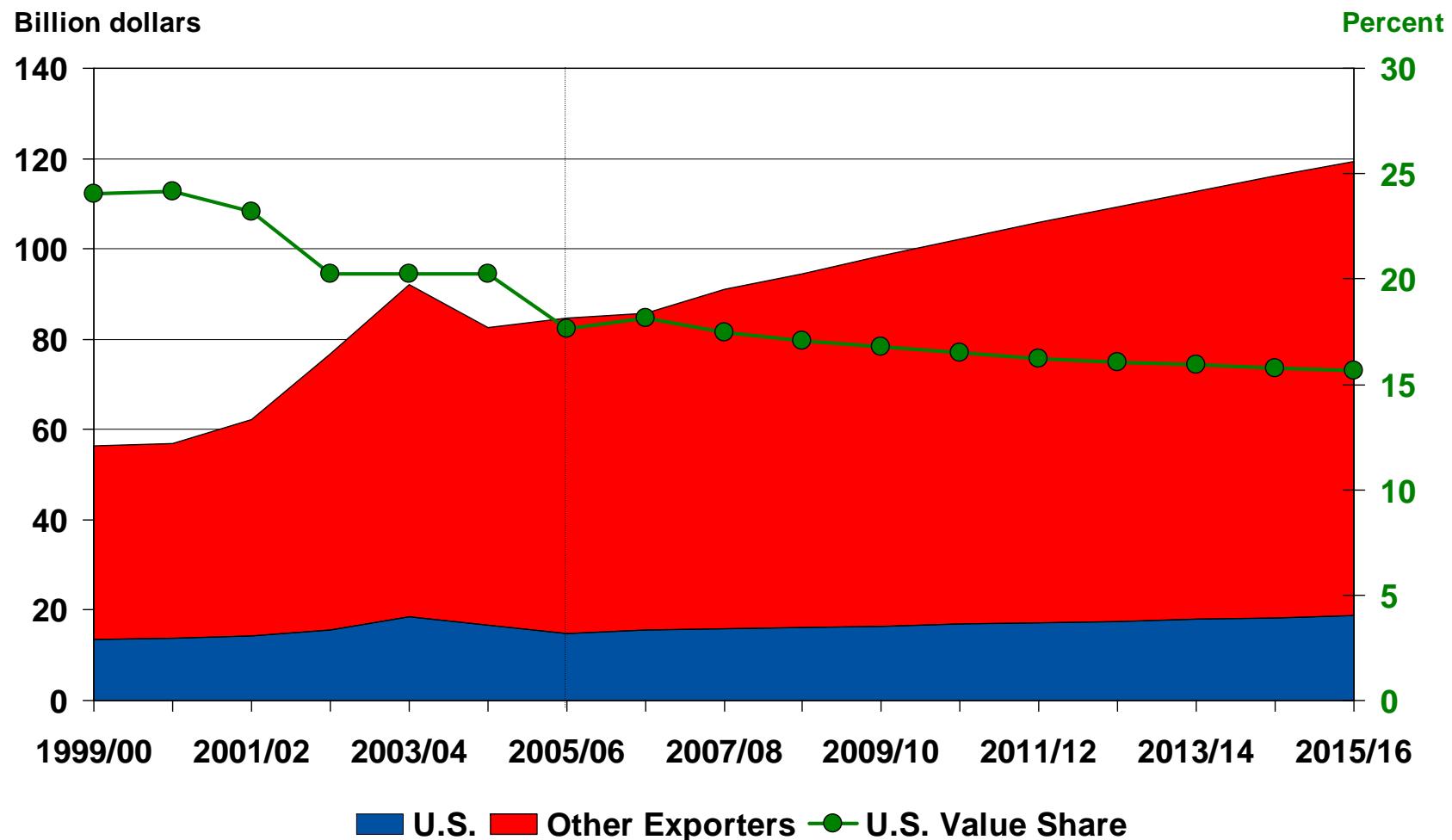
Share of Sugarcane in Ethanol Production



World Cotton Trade

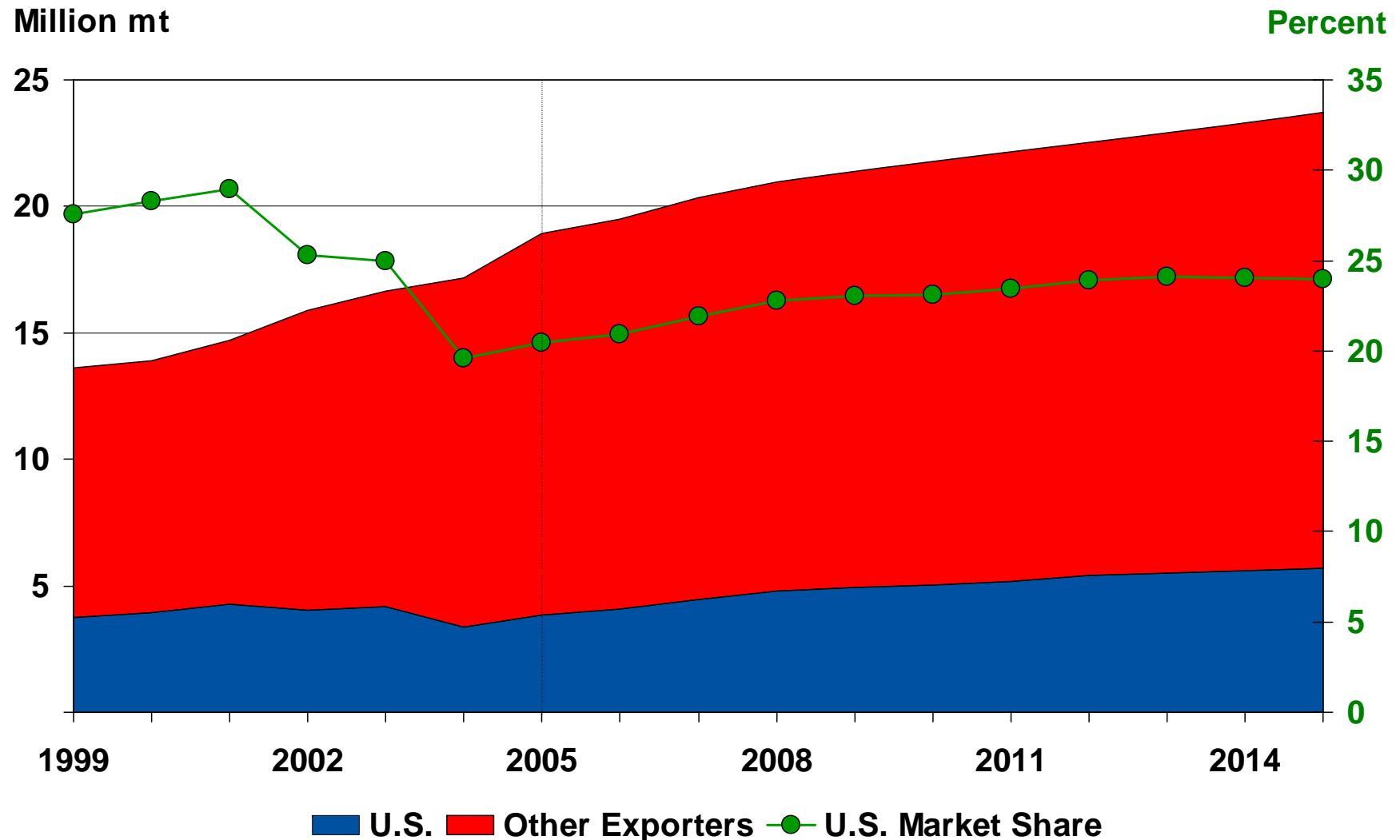


World Crop Trade and U.S. Value Share



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

World Meat Trade and U.S. Market Share





Thank You!

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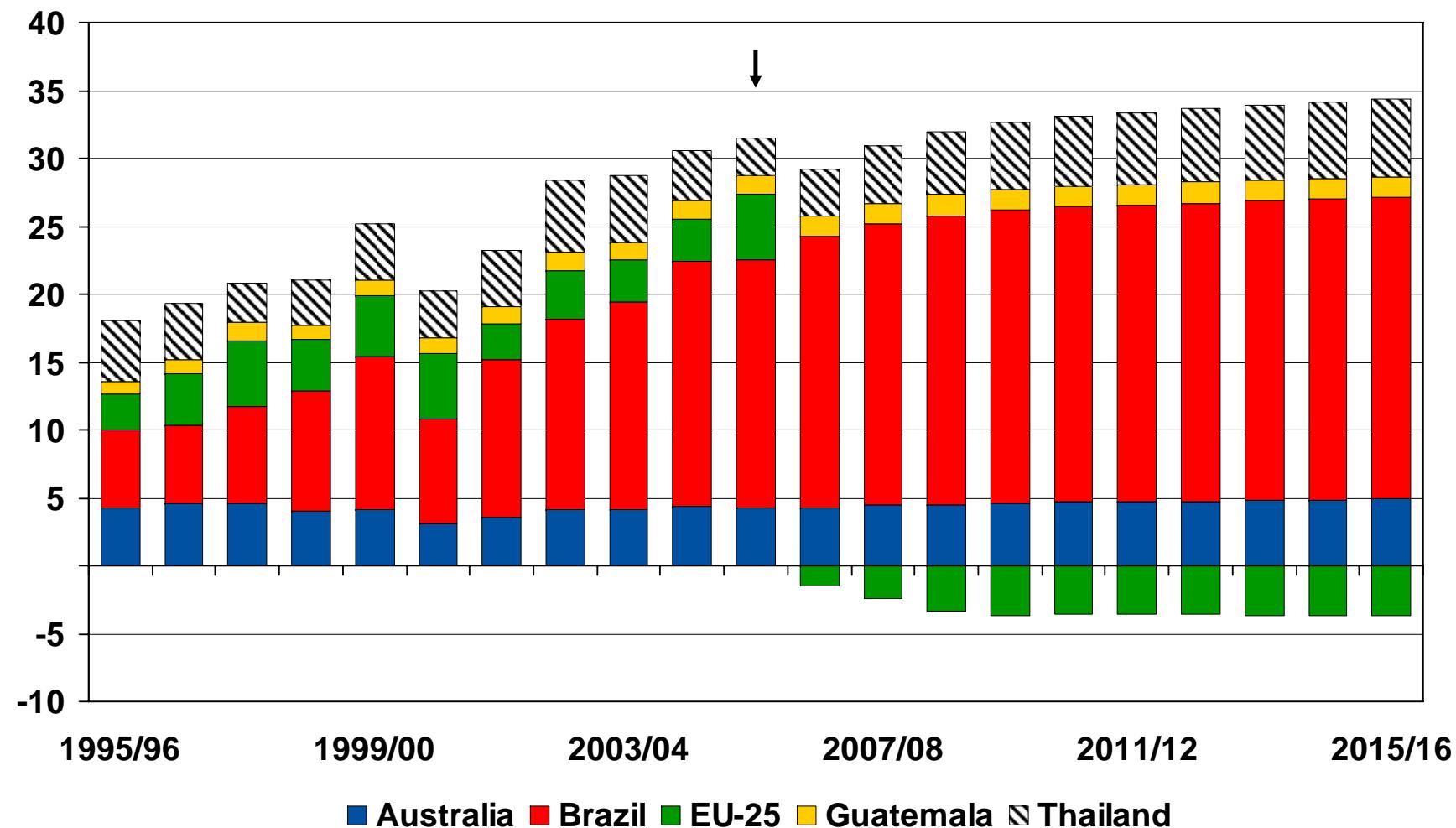


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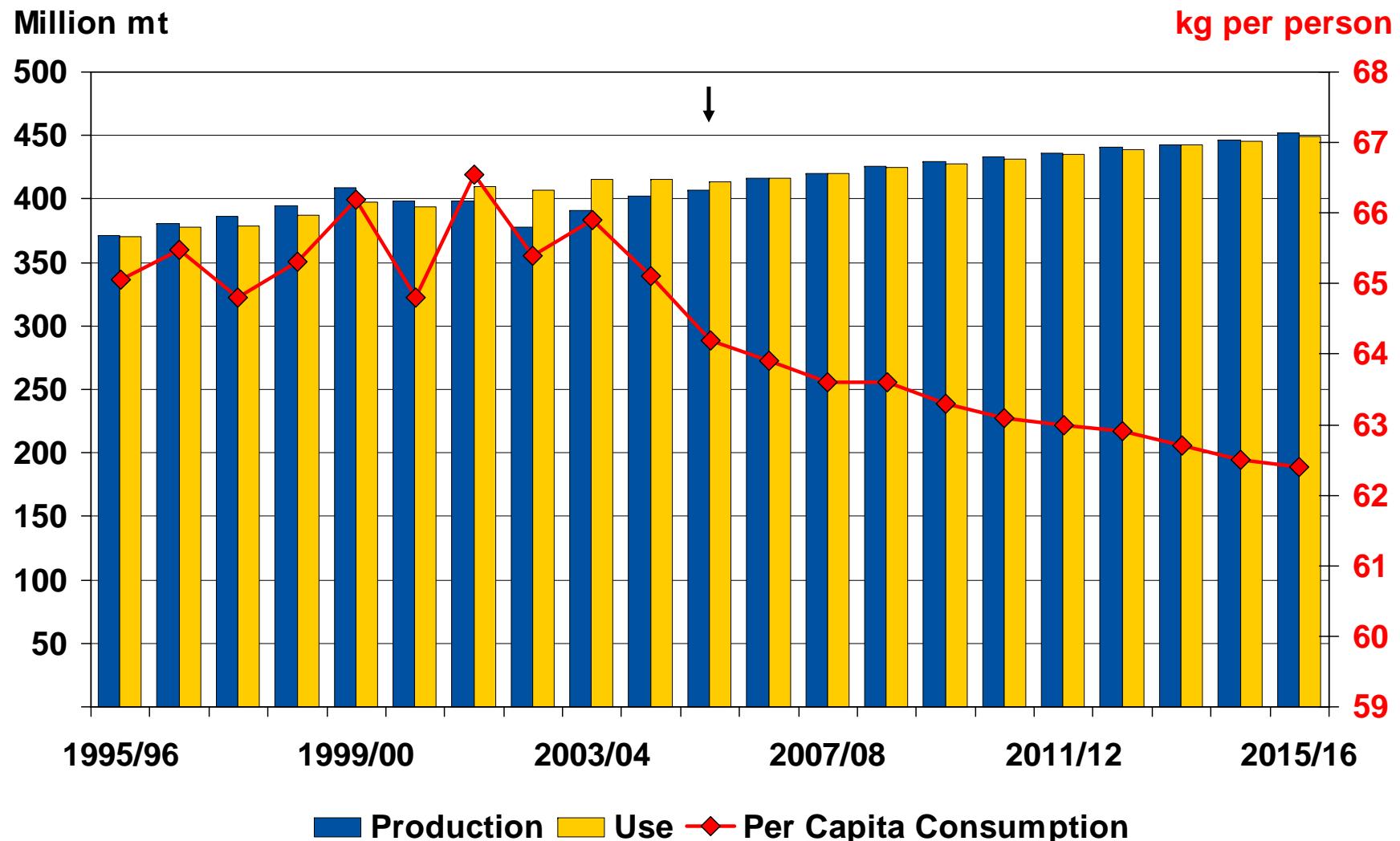
FAPRI

Major Sugar Exporters

Million mt



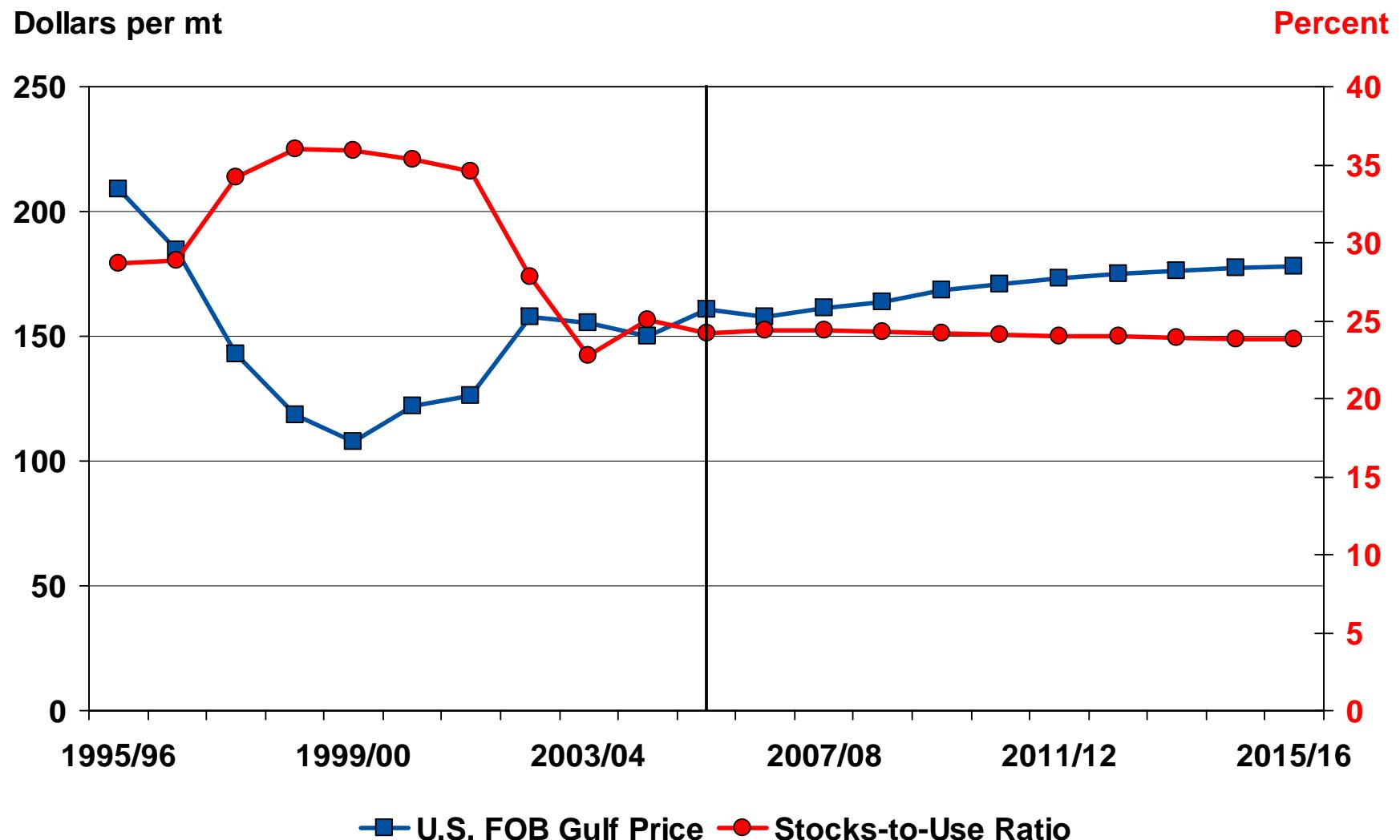
World Rice Production, Use, and Per Capita Consumption



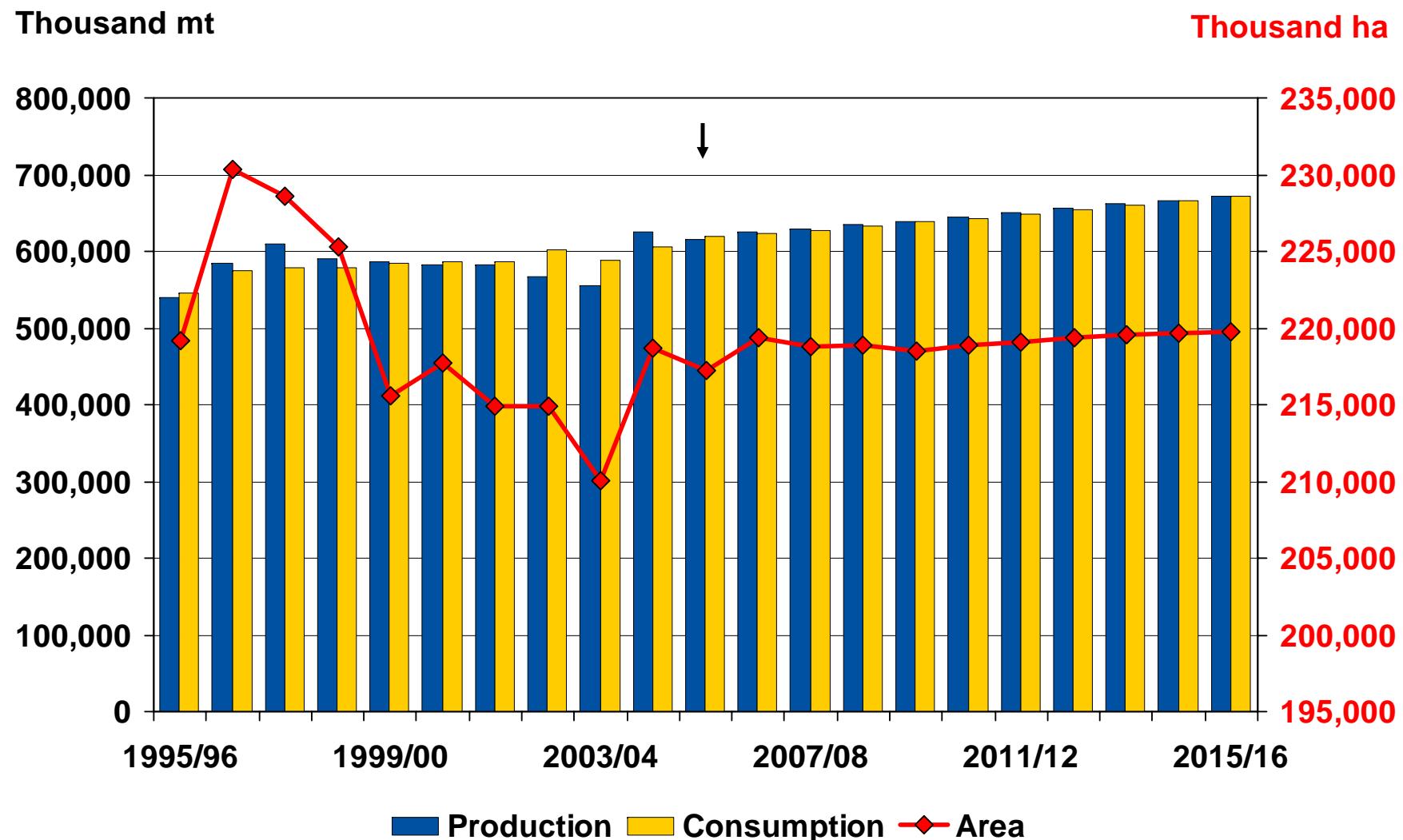
EU-15 CAP Reform and Enlargement

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

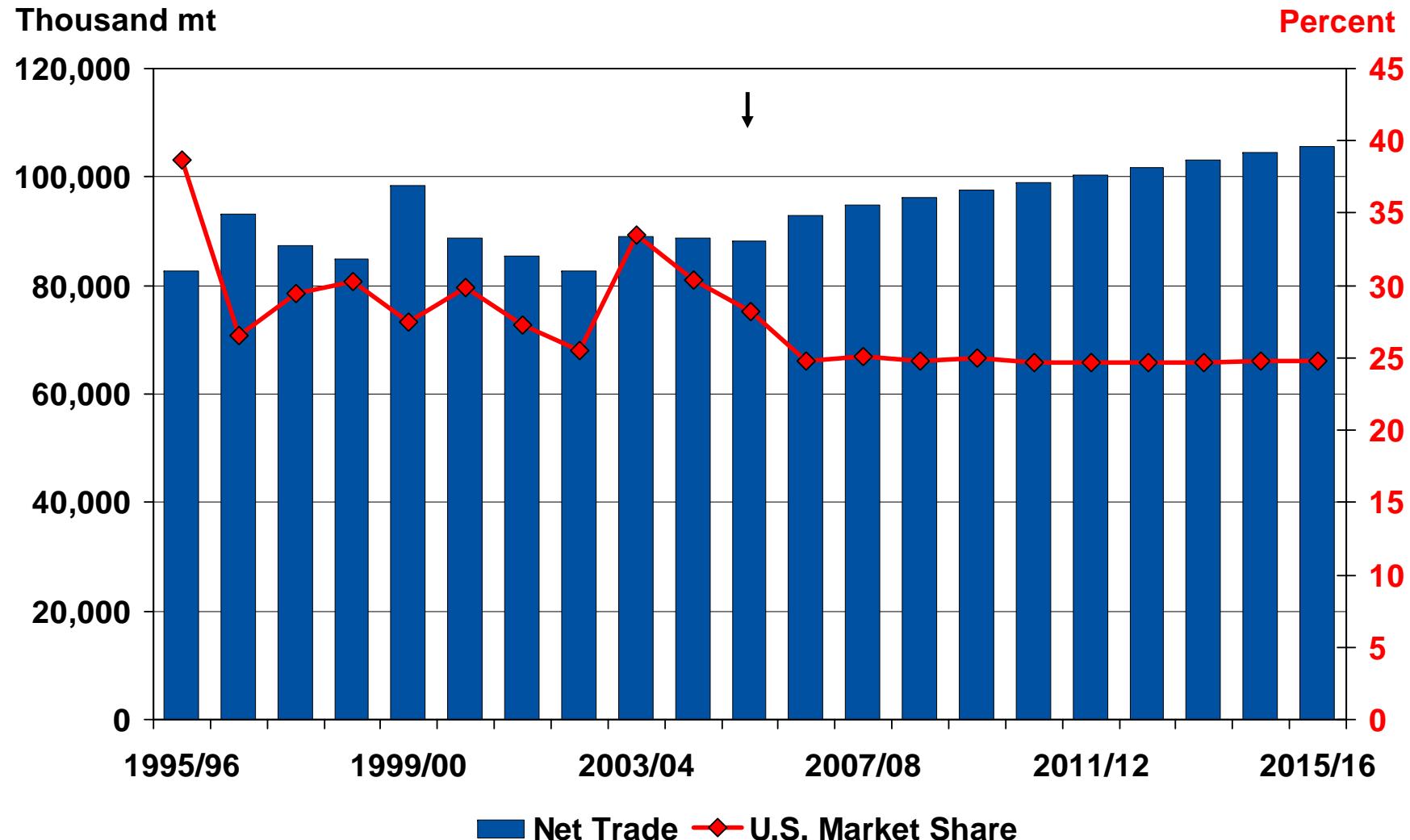
World Wheat Stocks-to-Use Ratio vs. Price



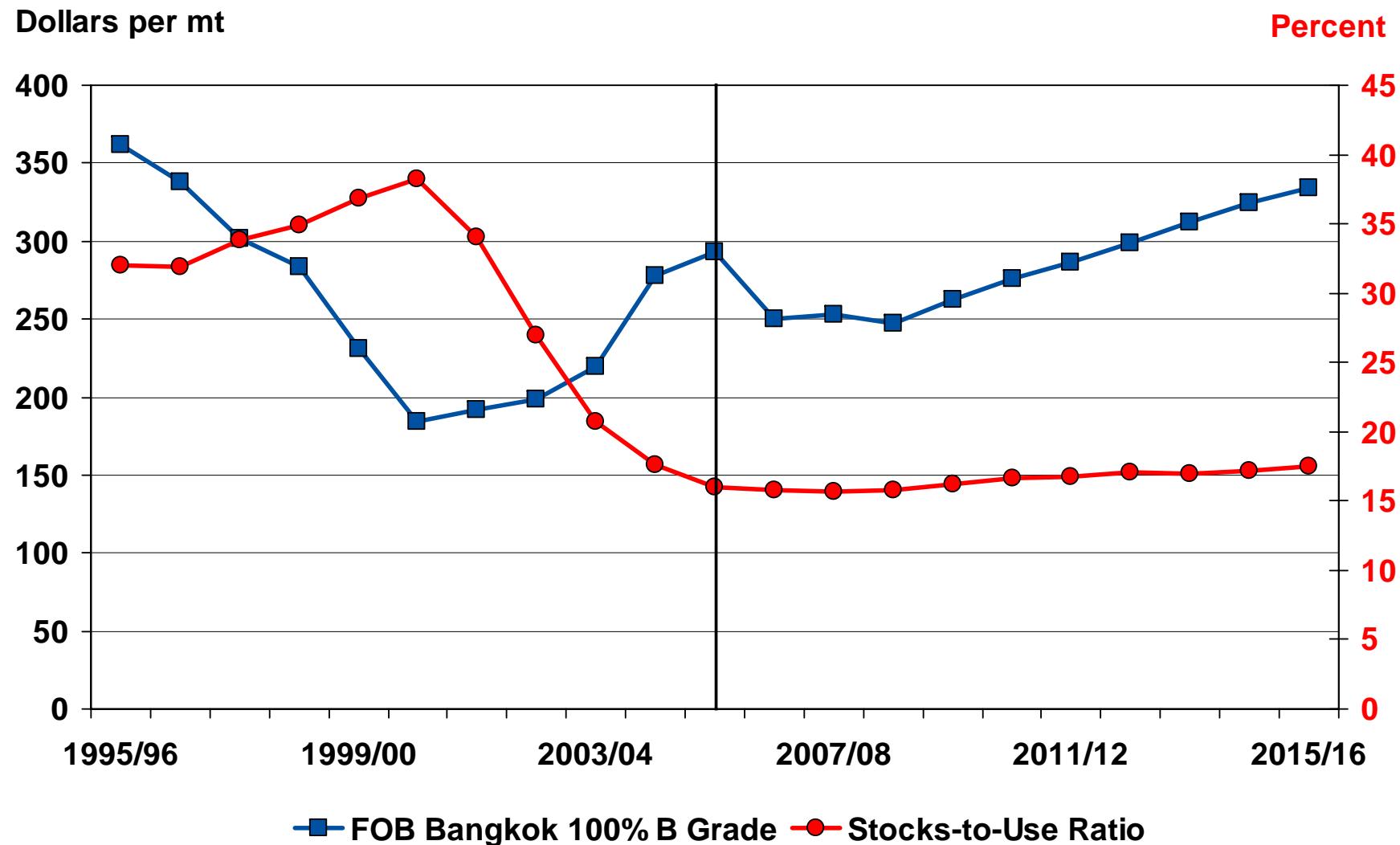
World Wheat Area, Production, and Consumption



World Wheat Trade and U.S. Market Share

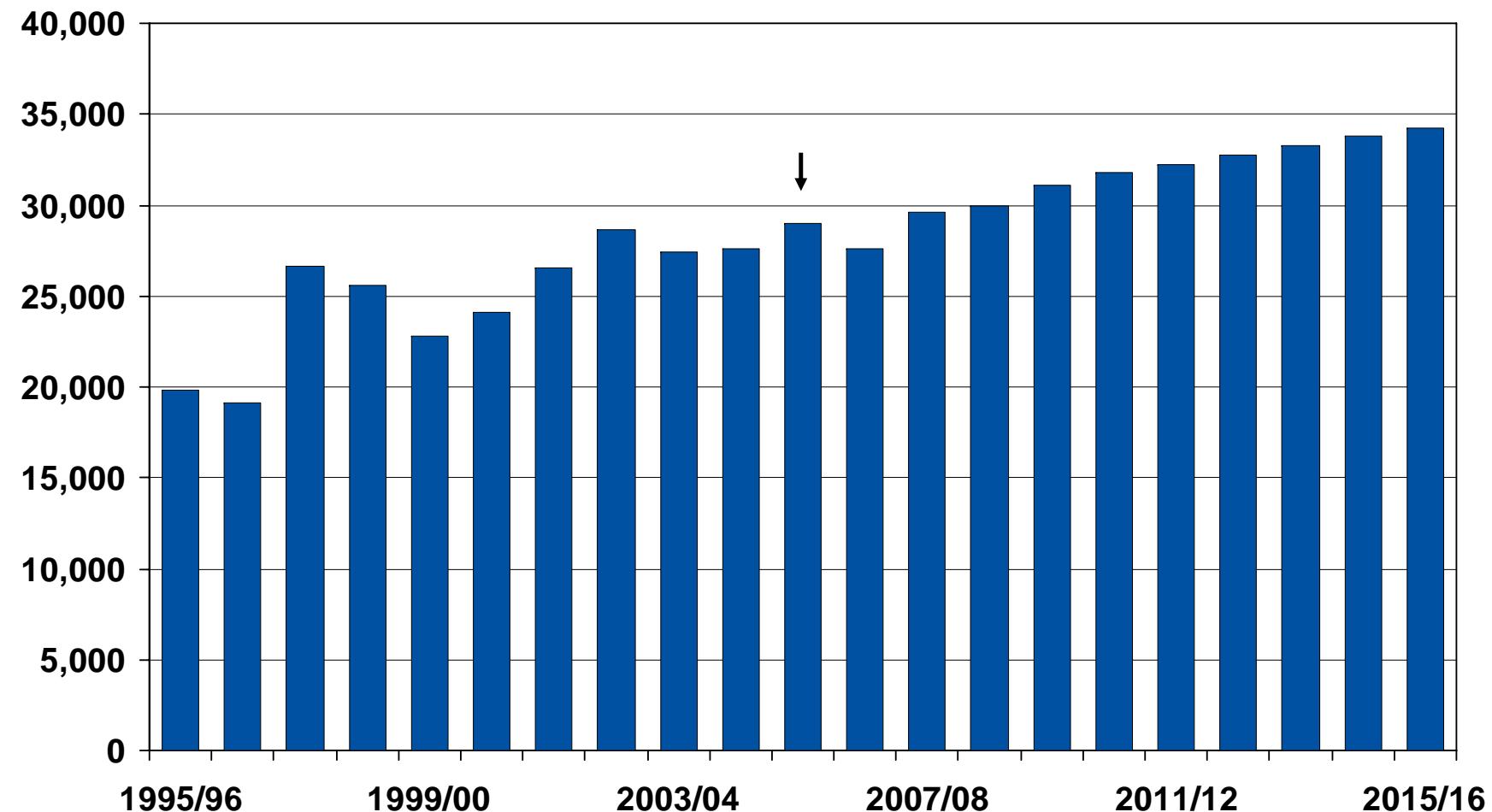


World Rice Stocks-to-Use Ratio vs. Price

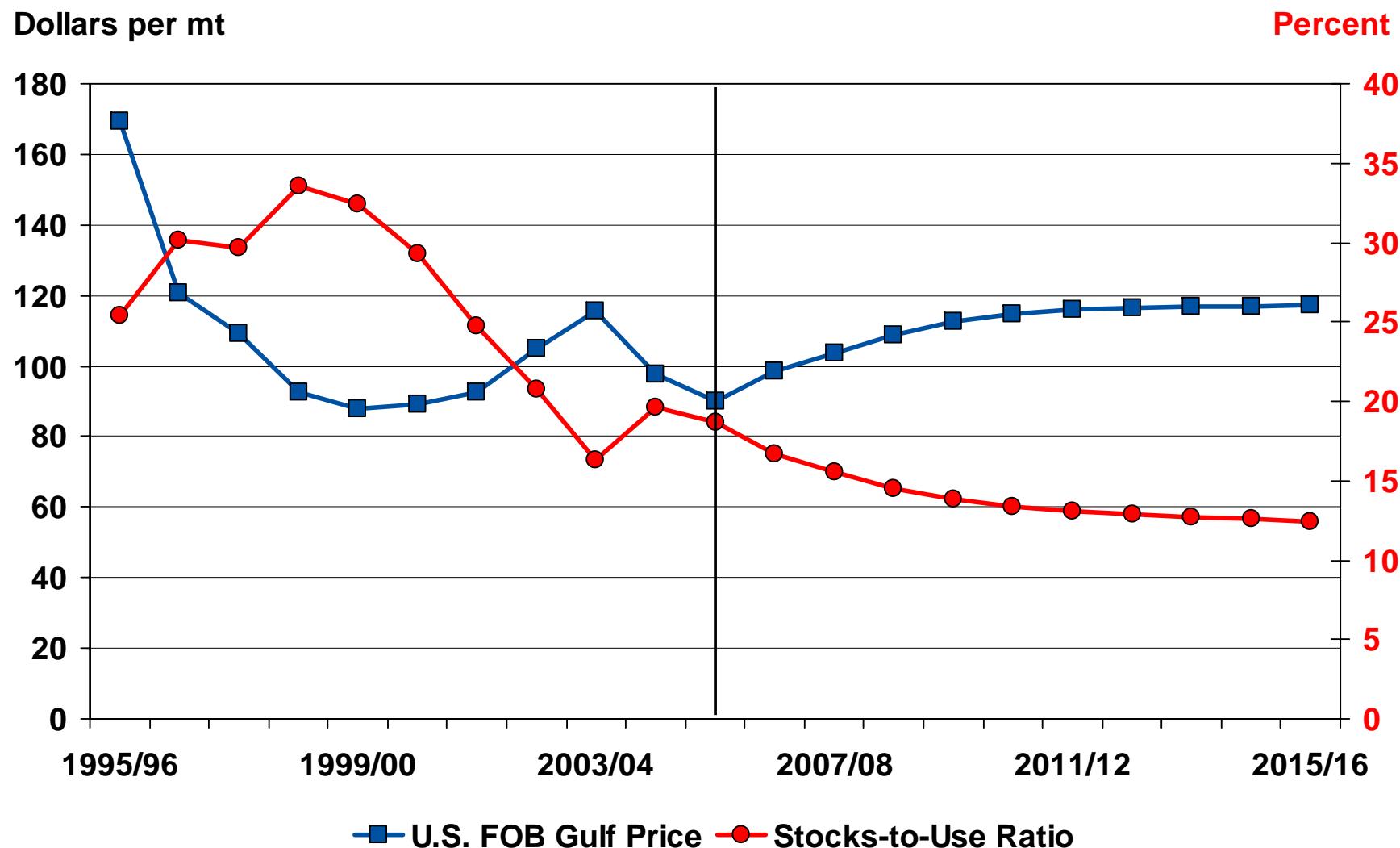


World Rice Trade

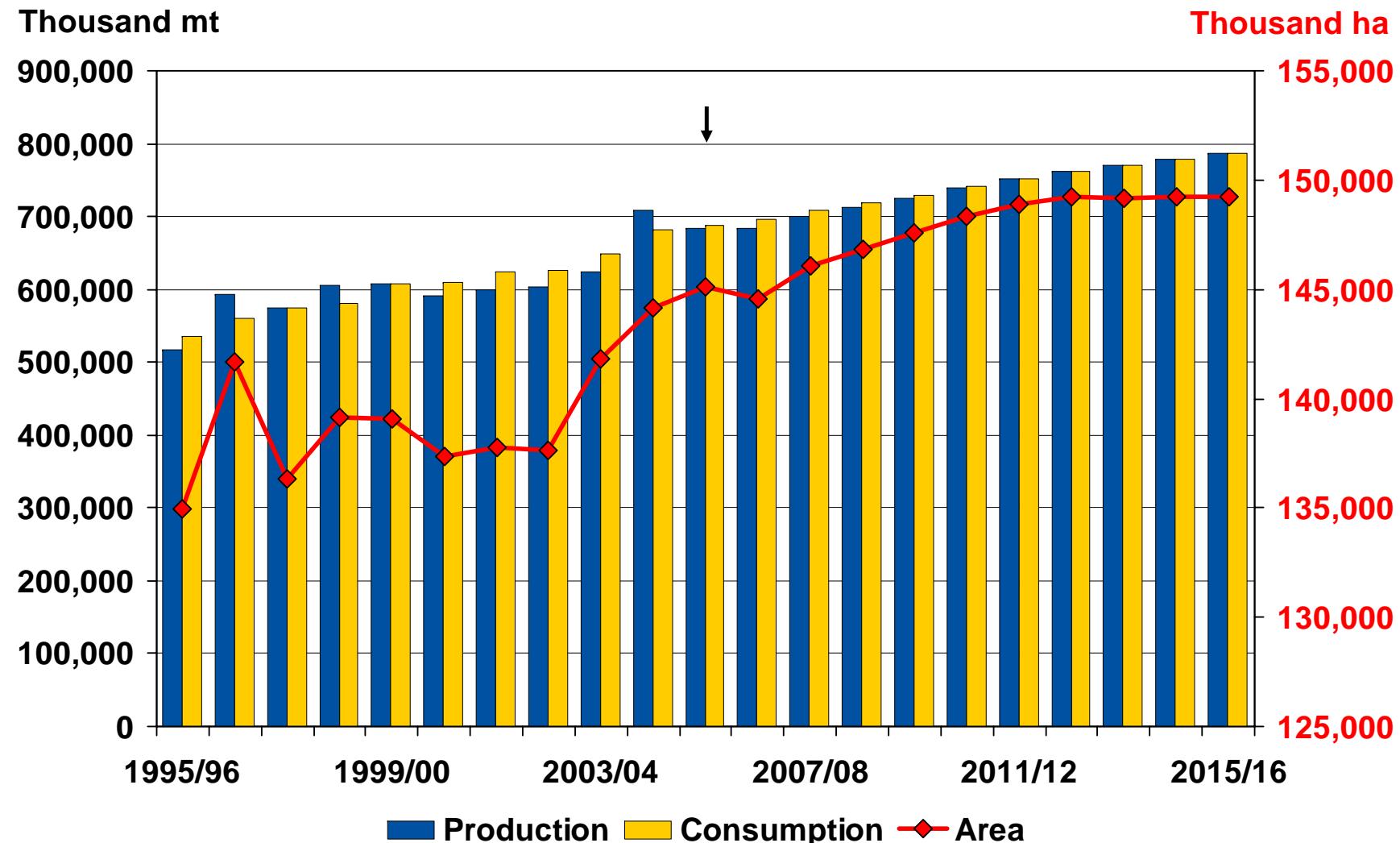
Thousand mt



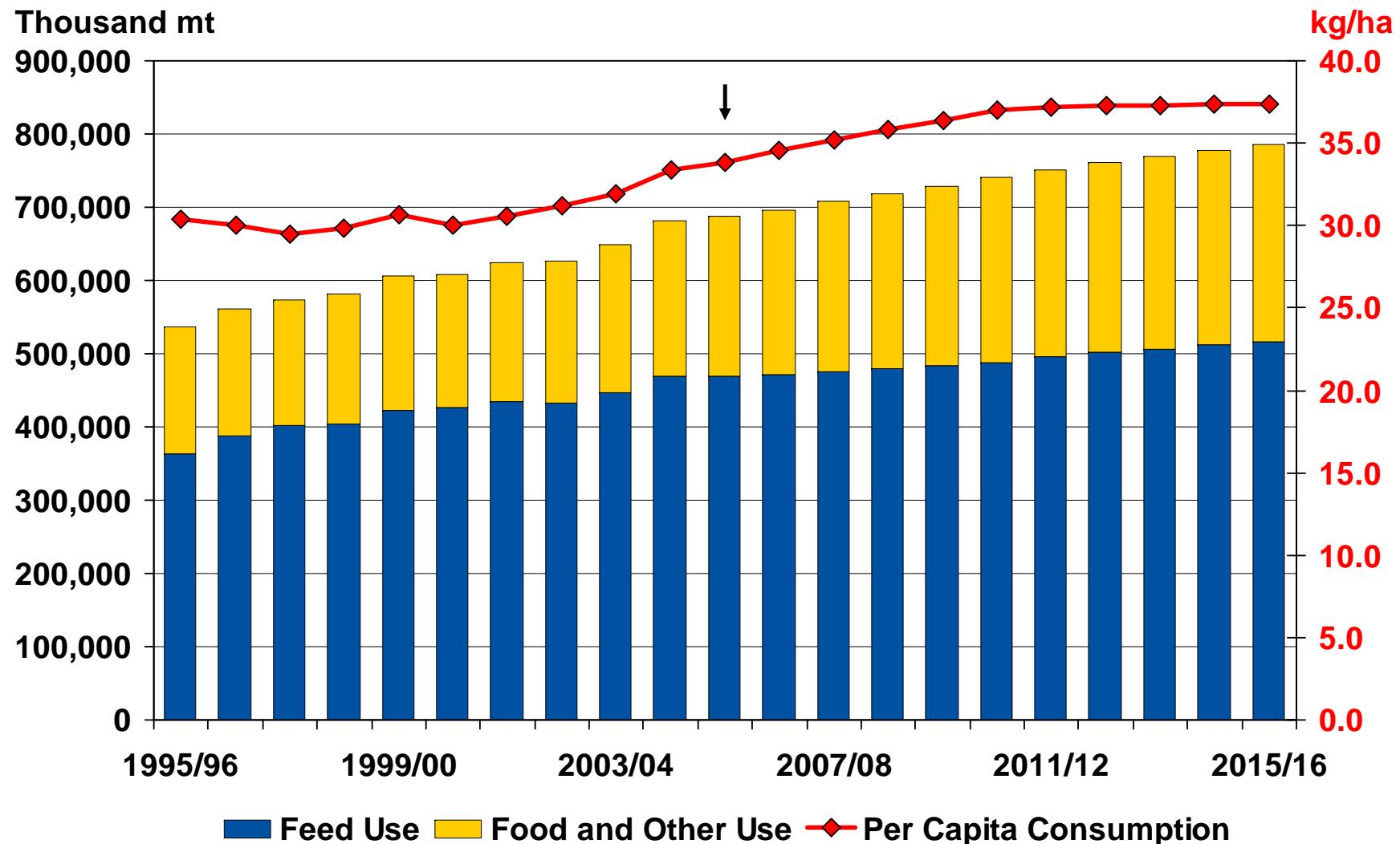
World Corn Stocks-to-Use Ratio vs. Price



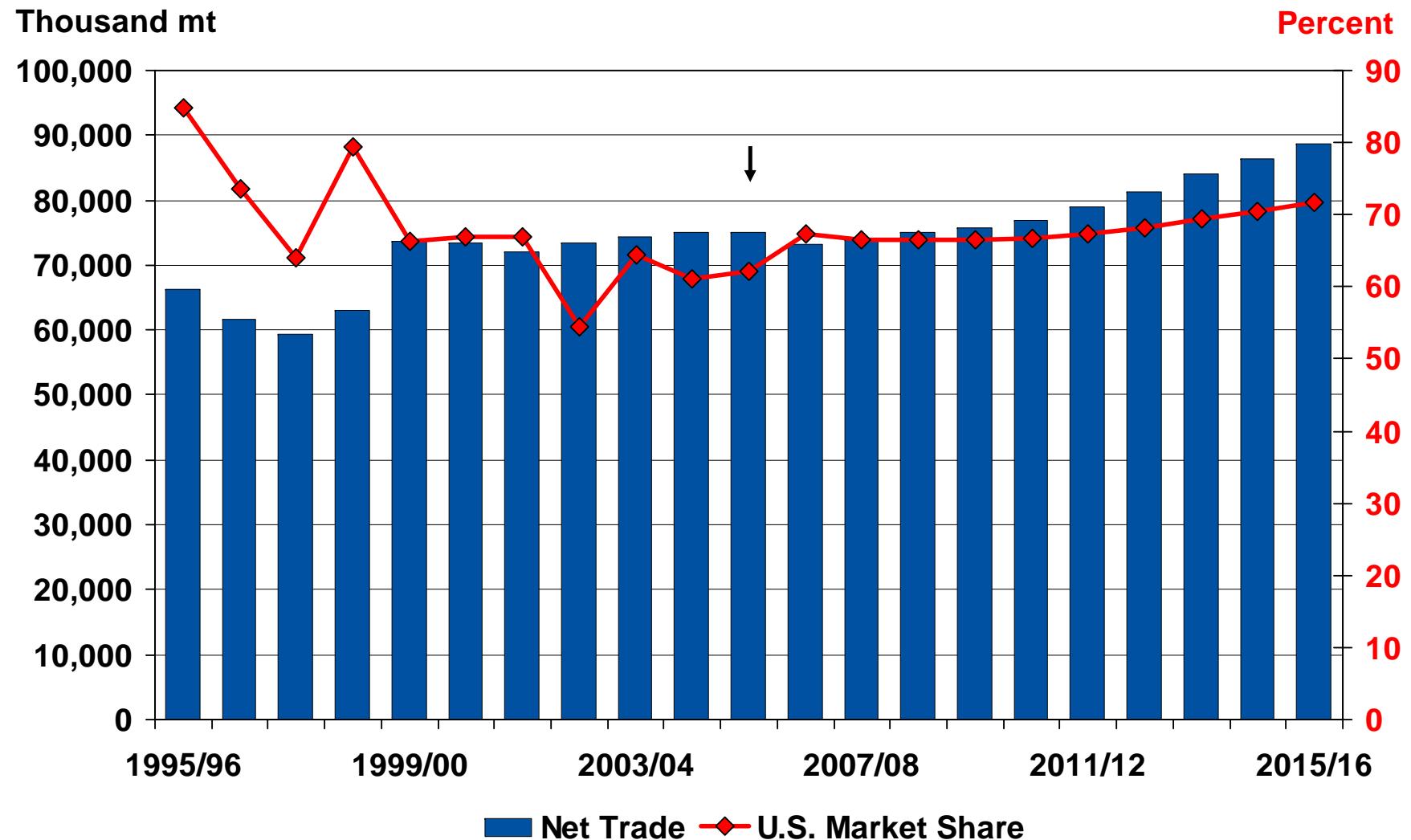
World Corn Area, Production, and Consumption



World Corn Feed, Food Use, and Per Capita Consumption

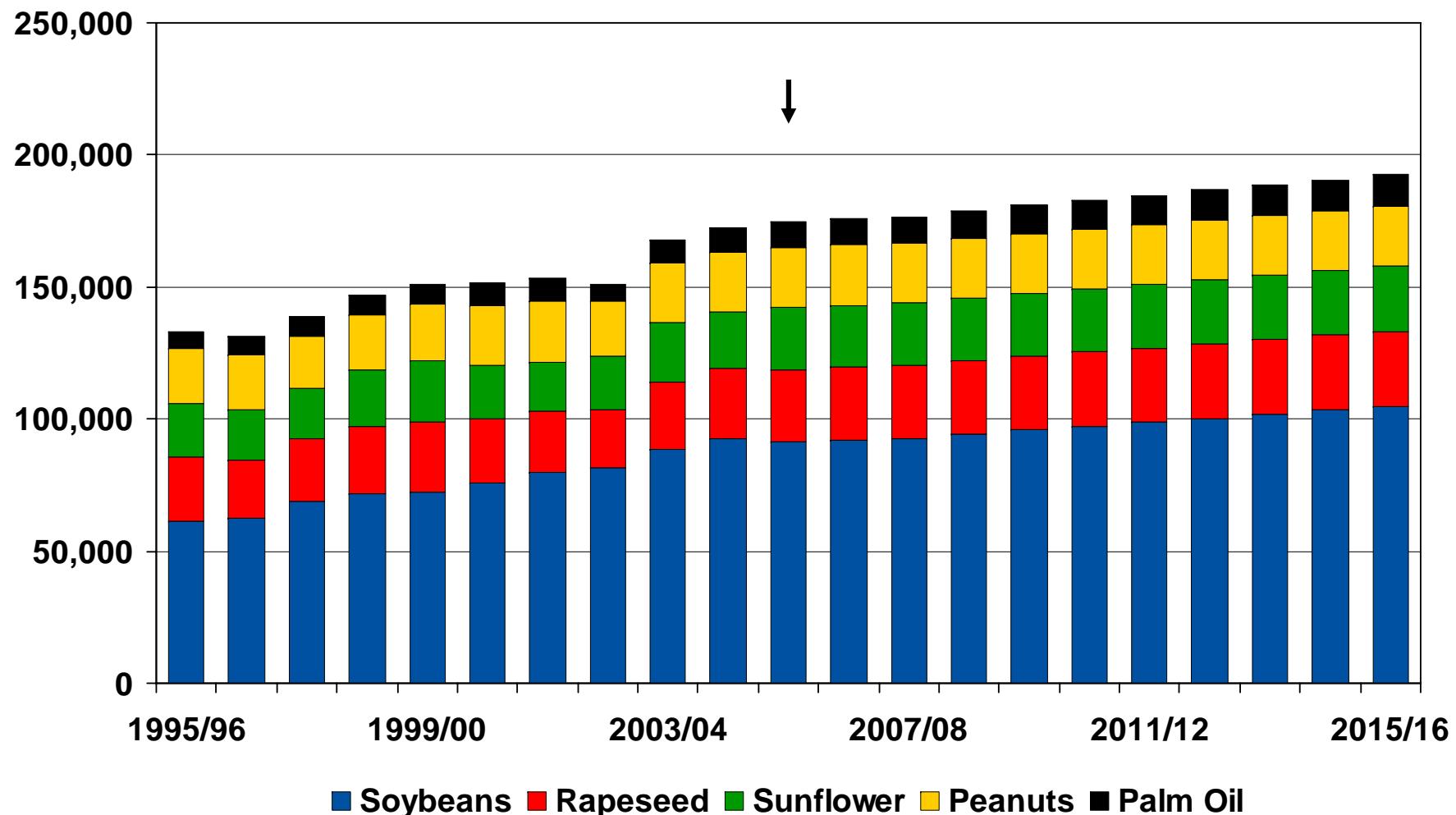


World Corn Trade and U.S. Market Share

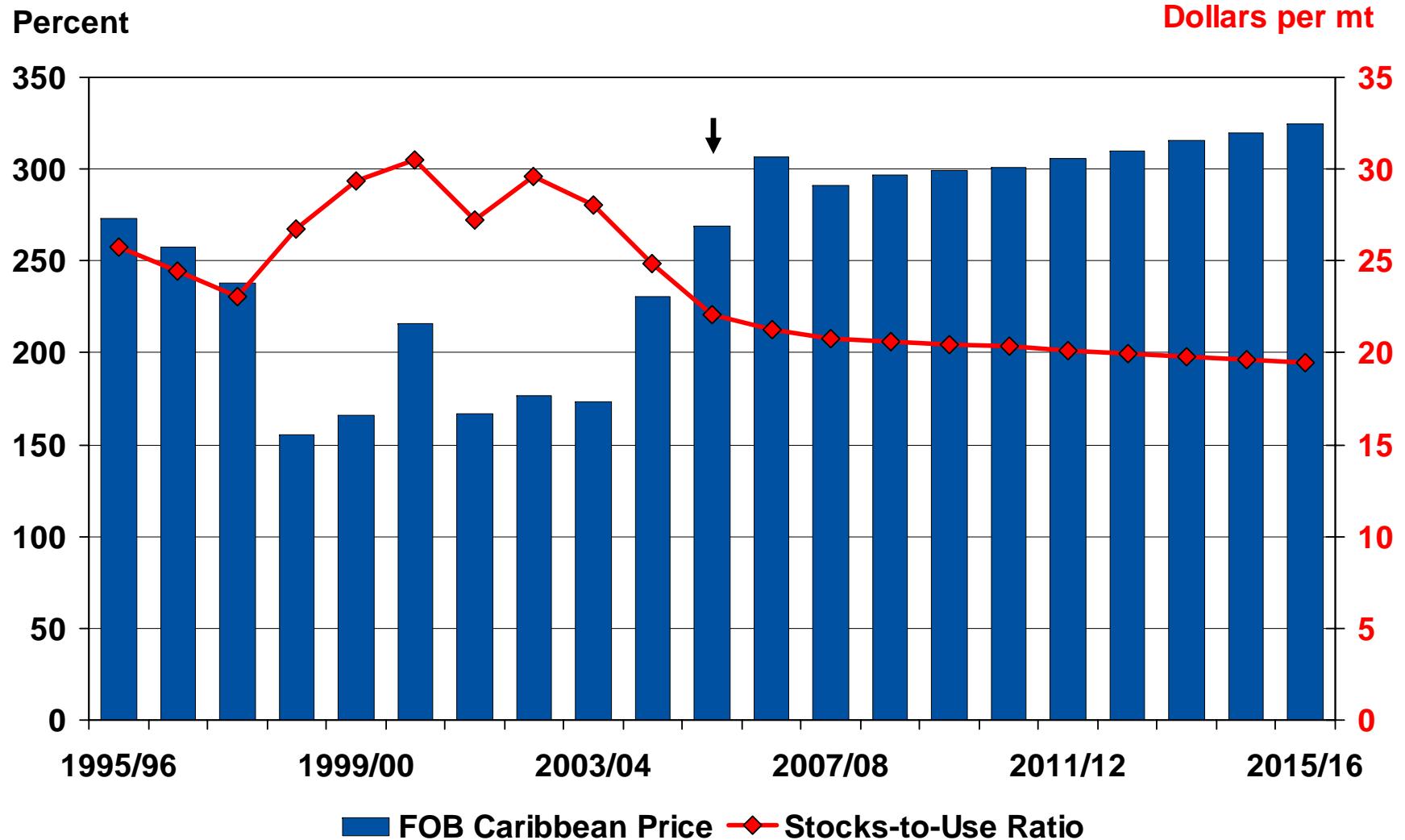


World Oilseed Area

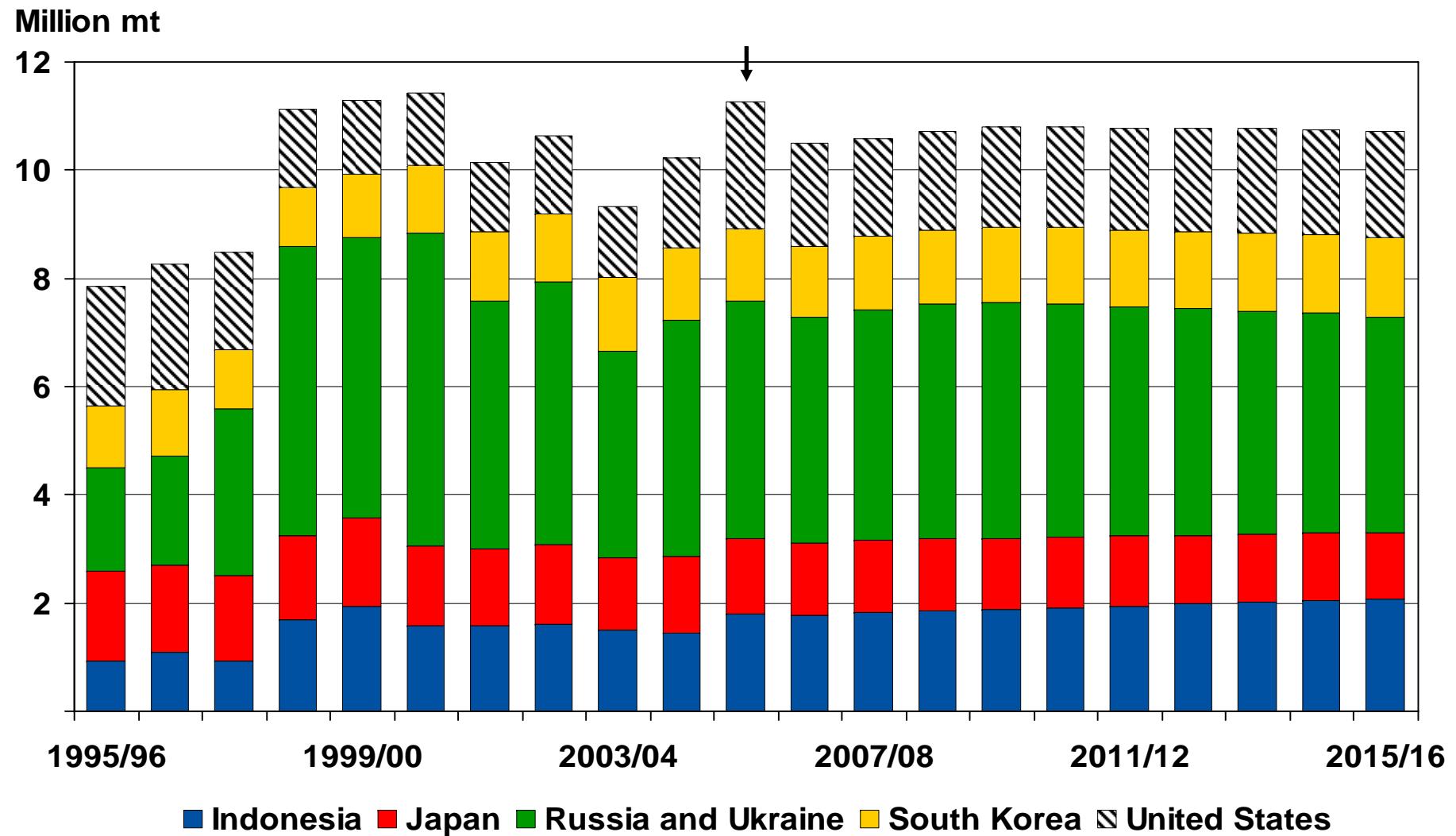
Thousand ha



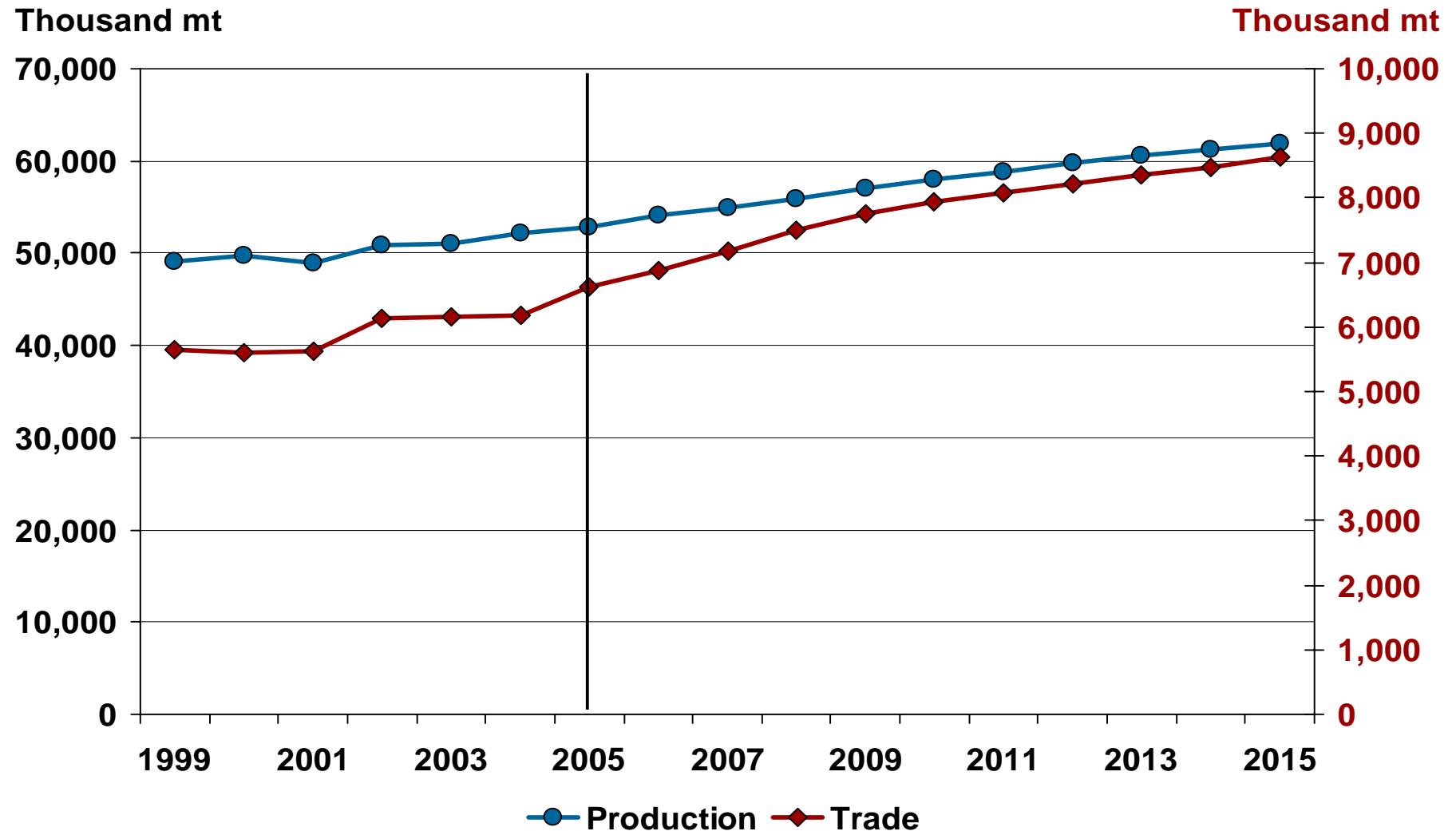
World Sugar Stocks-to-Use Ratio vs. Price



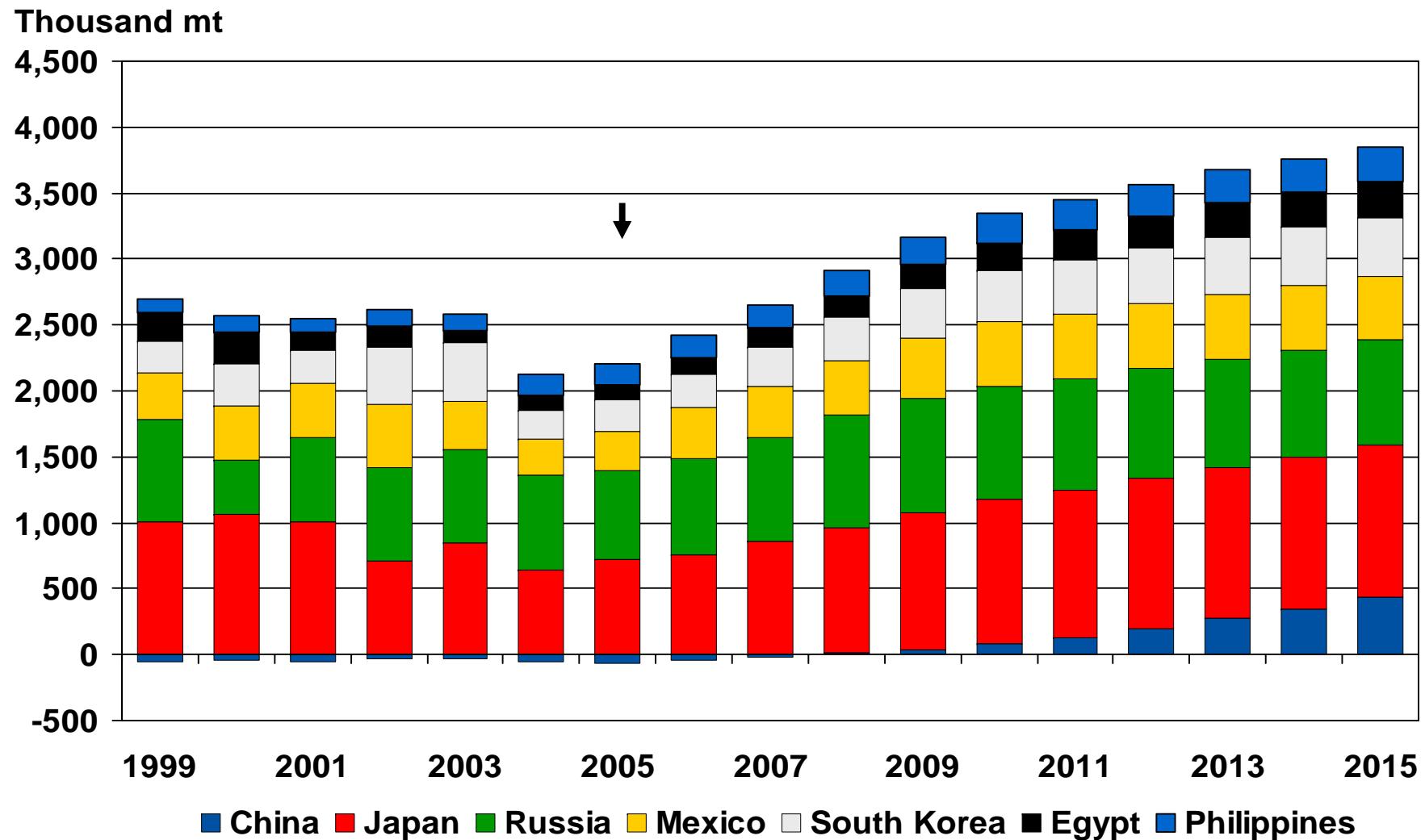
Major Sugar Importers



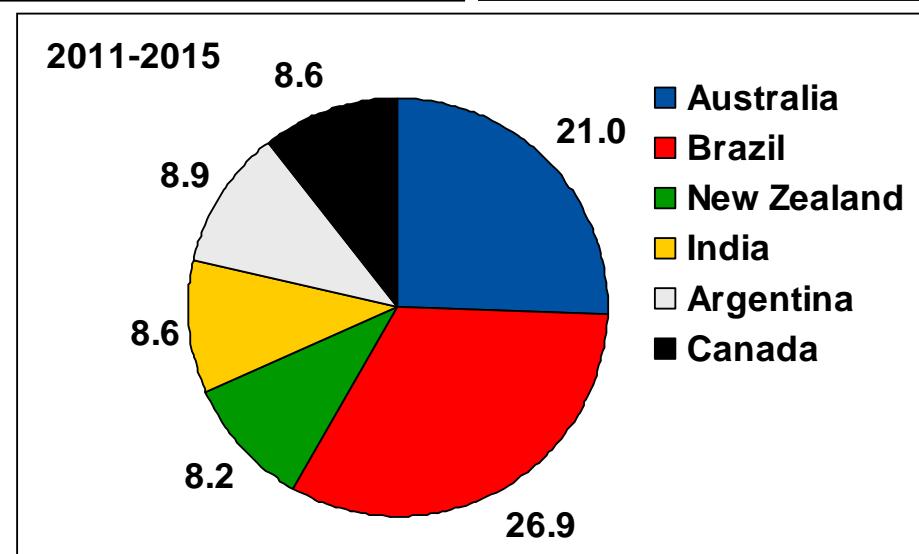
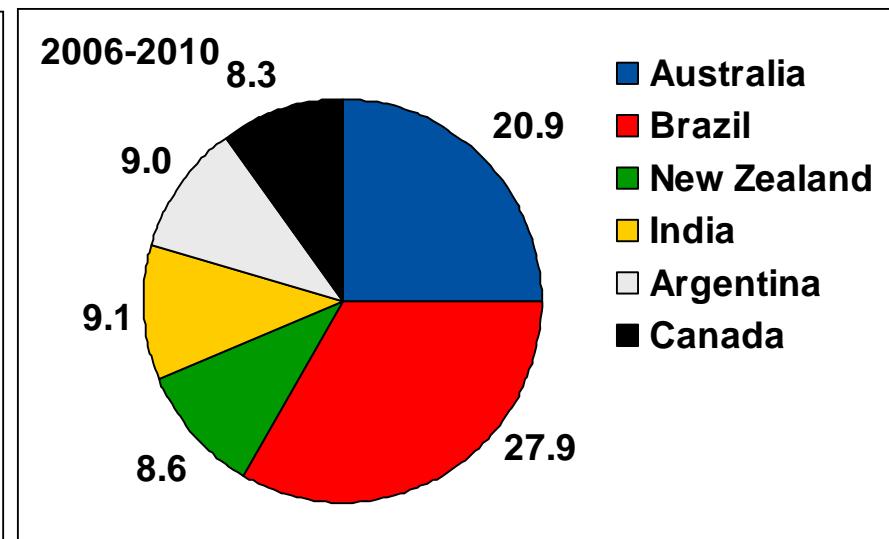
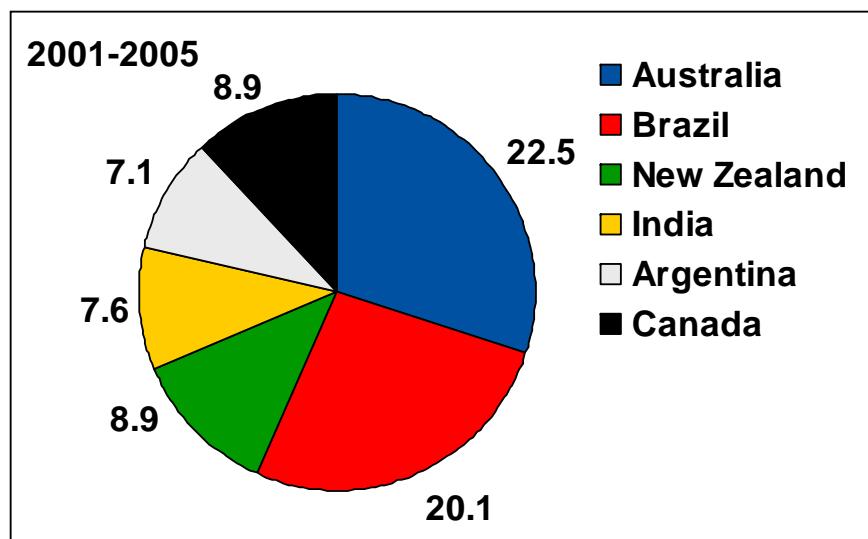
World Beef Production and Trade



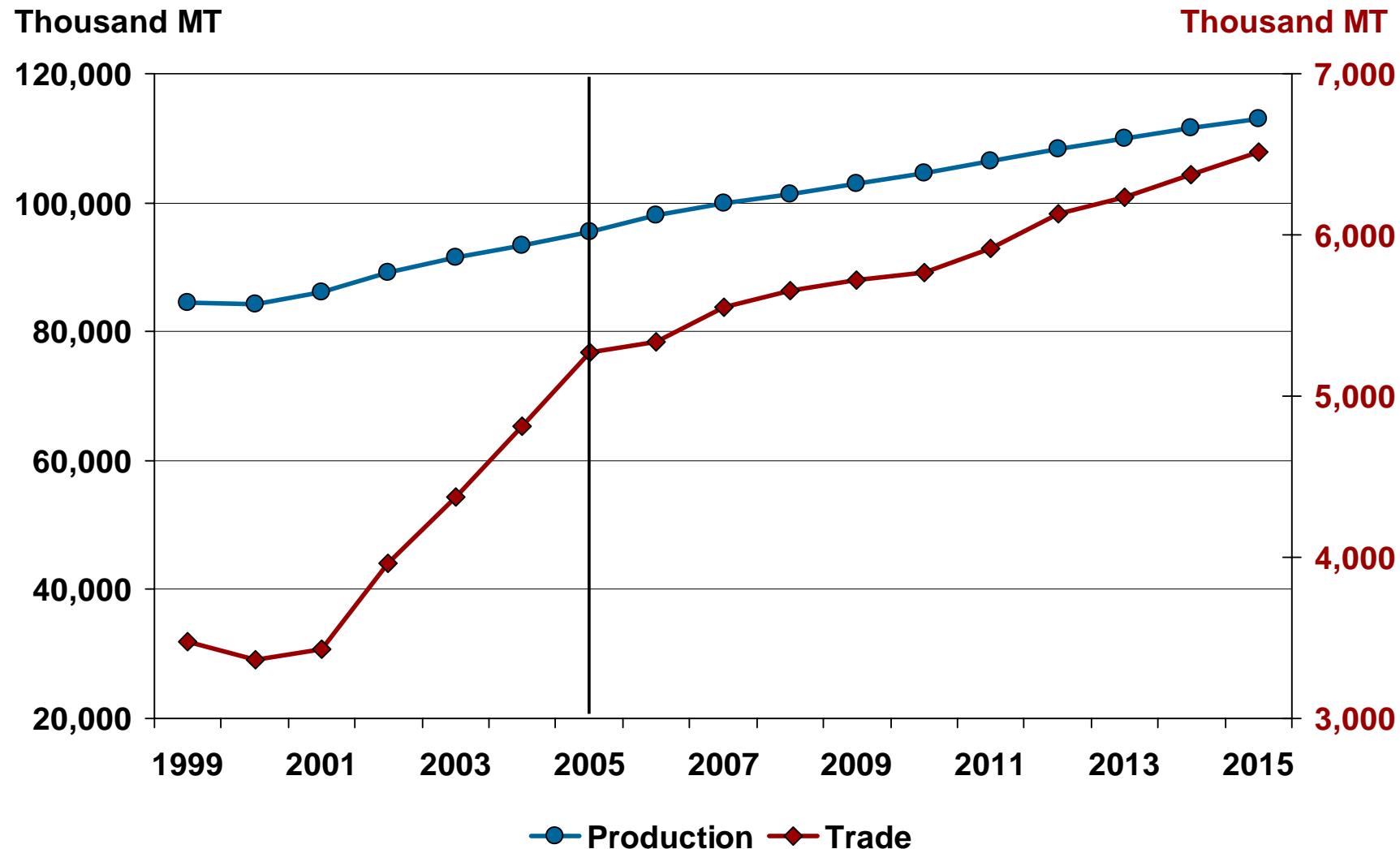
Major Beef Importing Countries



Beef Export Market Share (percent)

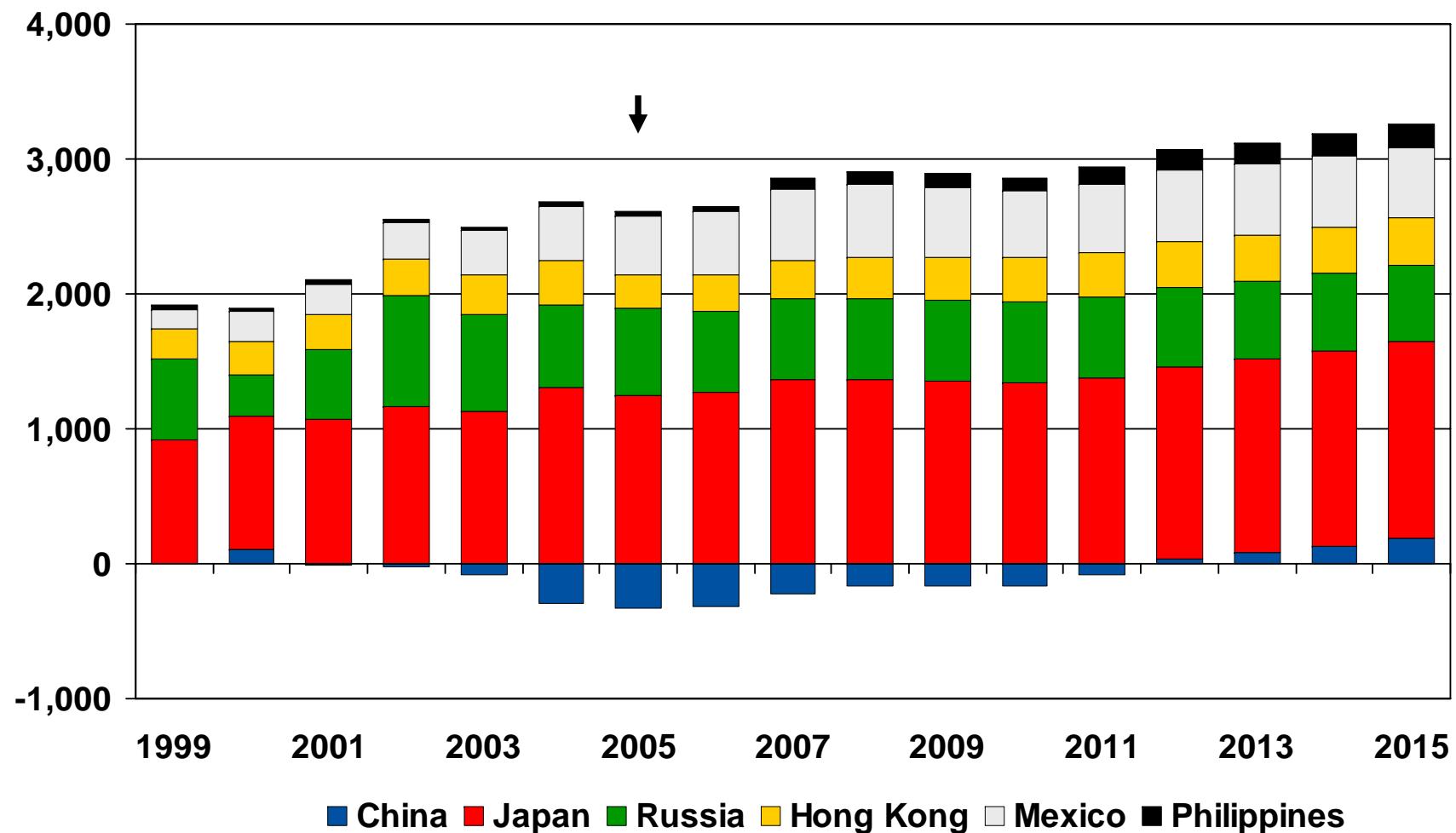


World Pork Production and Trade

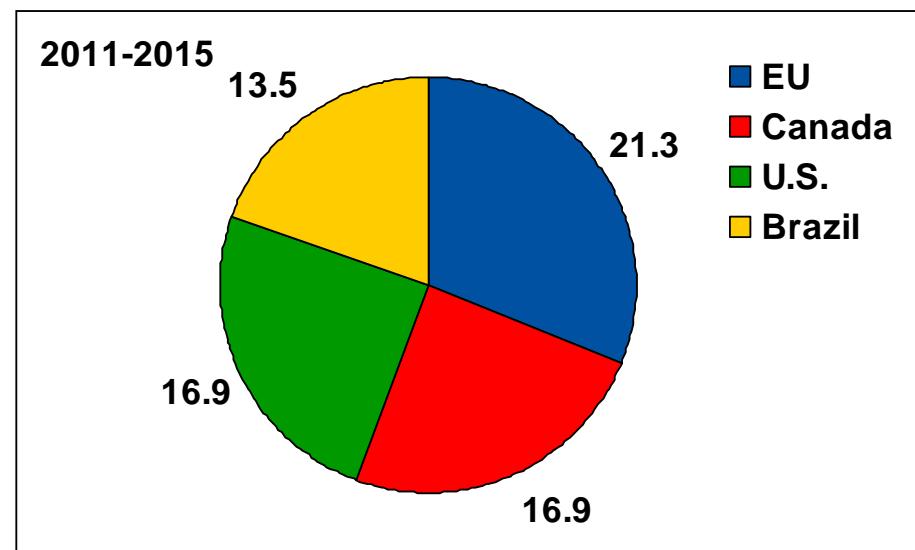
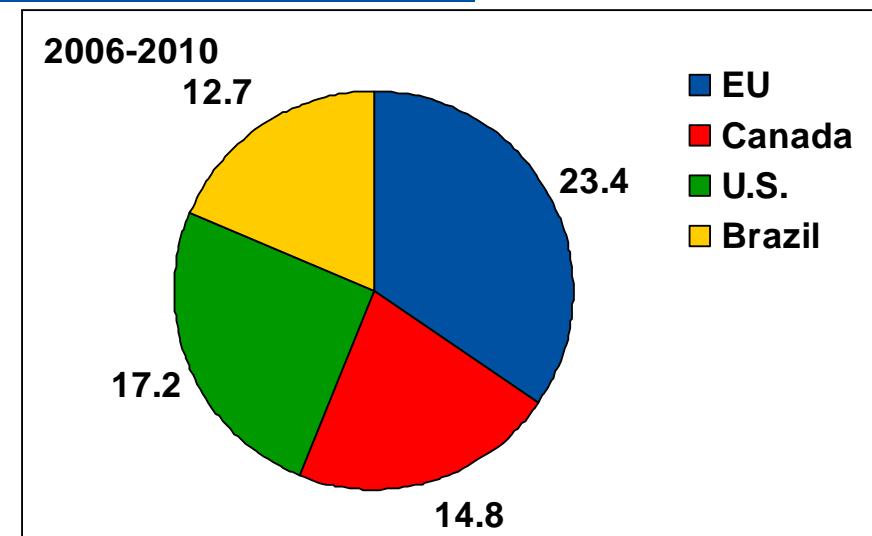
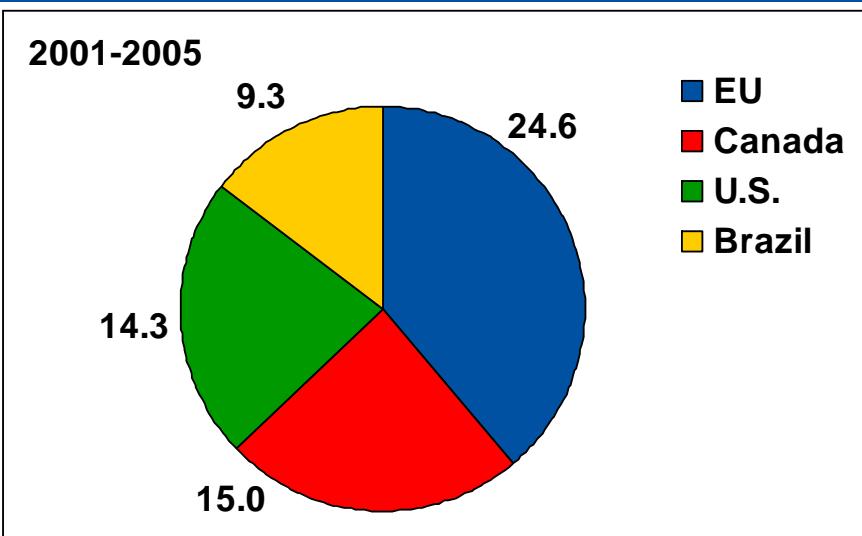


Major Pork Importing Countries

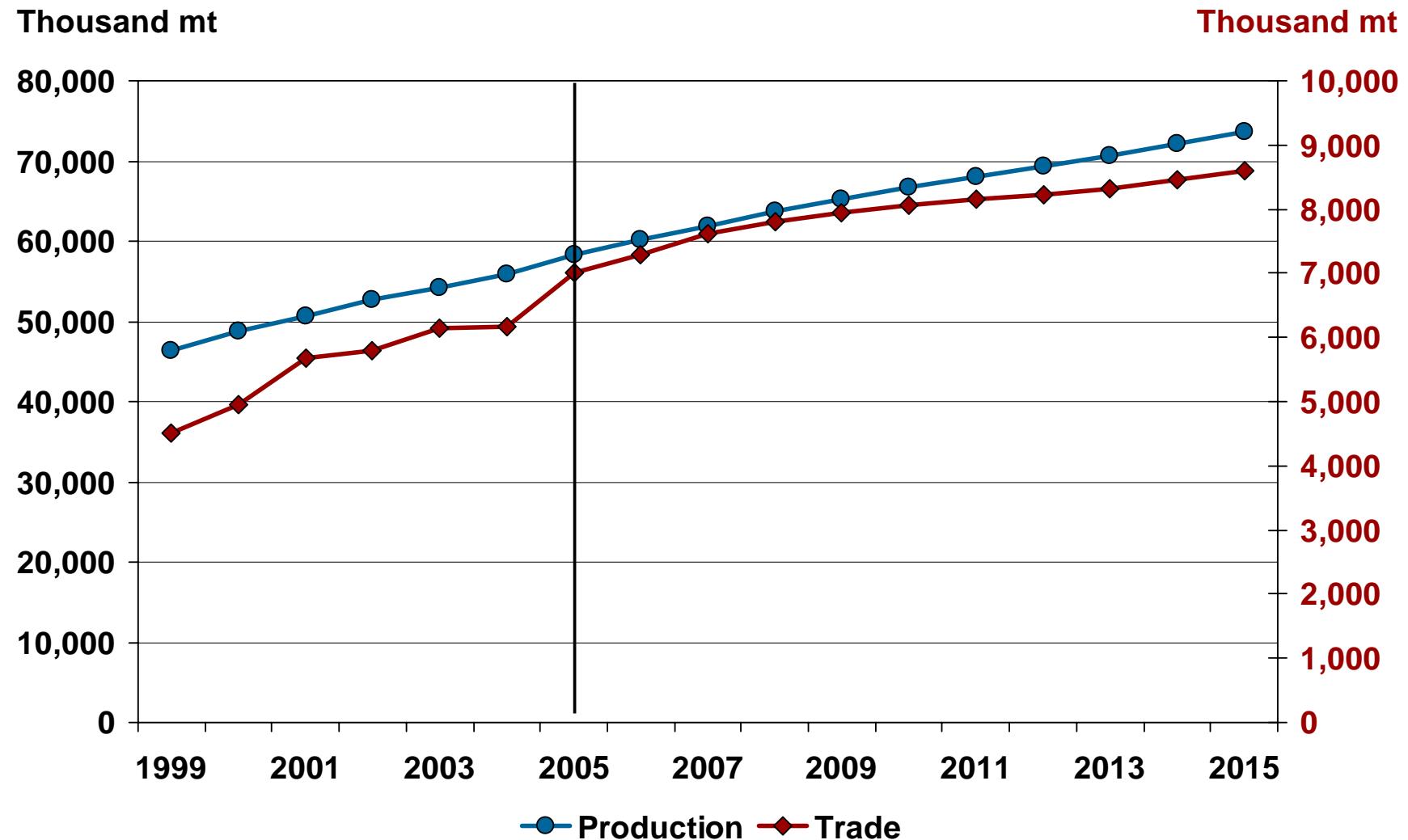
Thousand mt



Pork Export Market Share

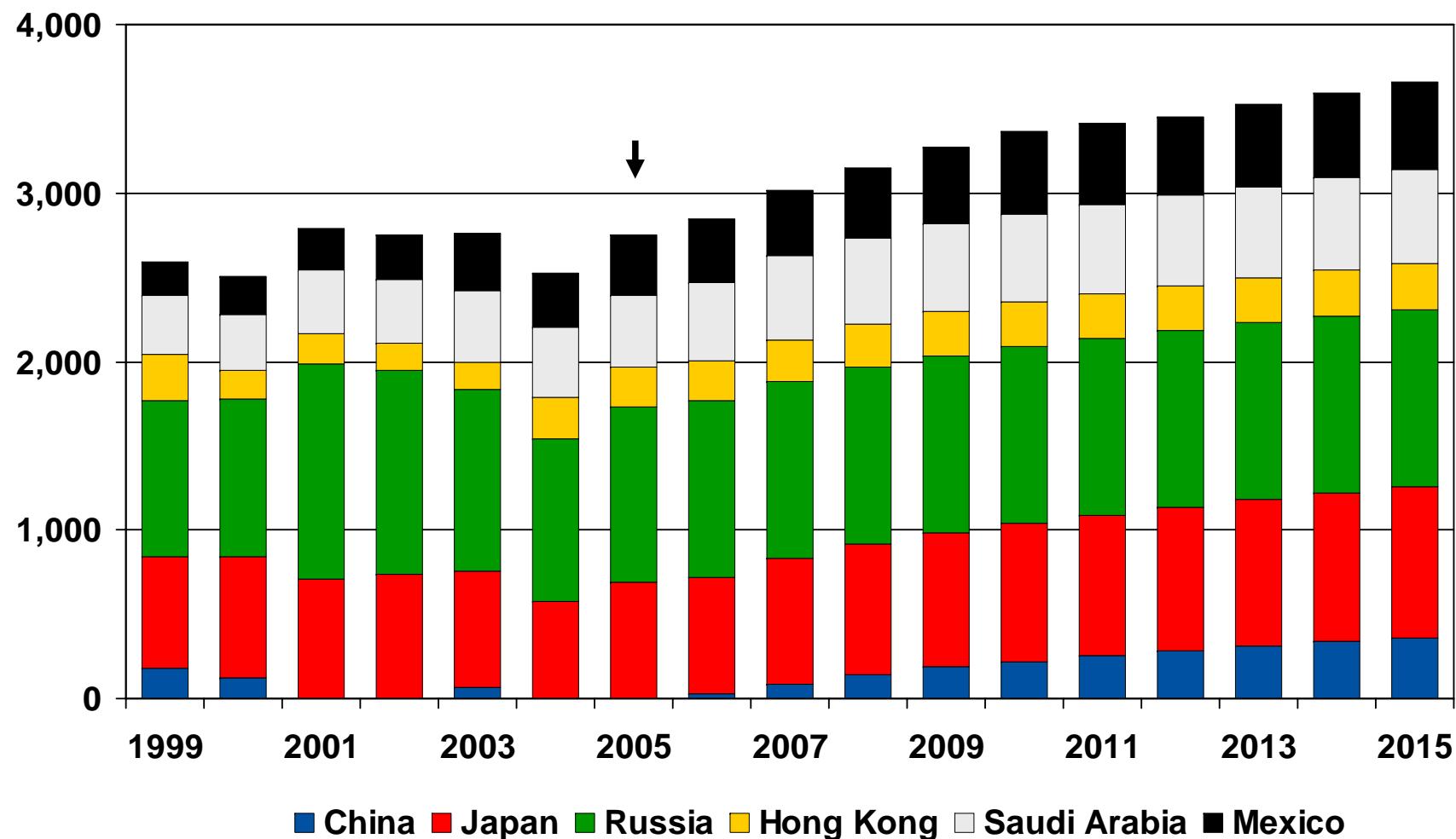


World Broiler Production and Trade

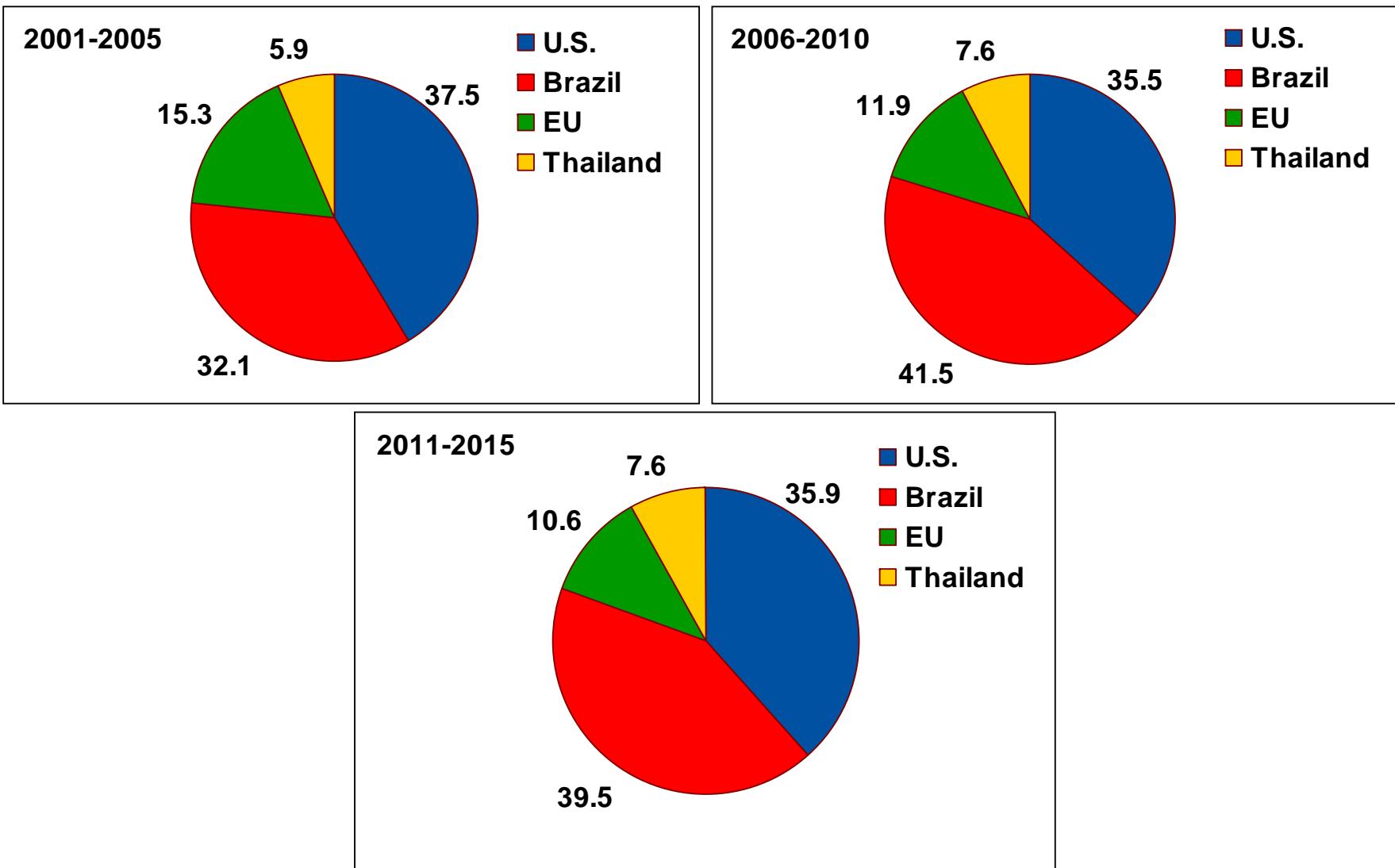


Major Broiler Importing Countries

Thousand mt

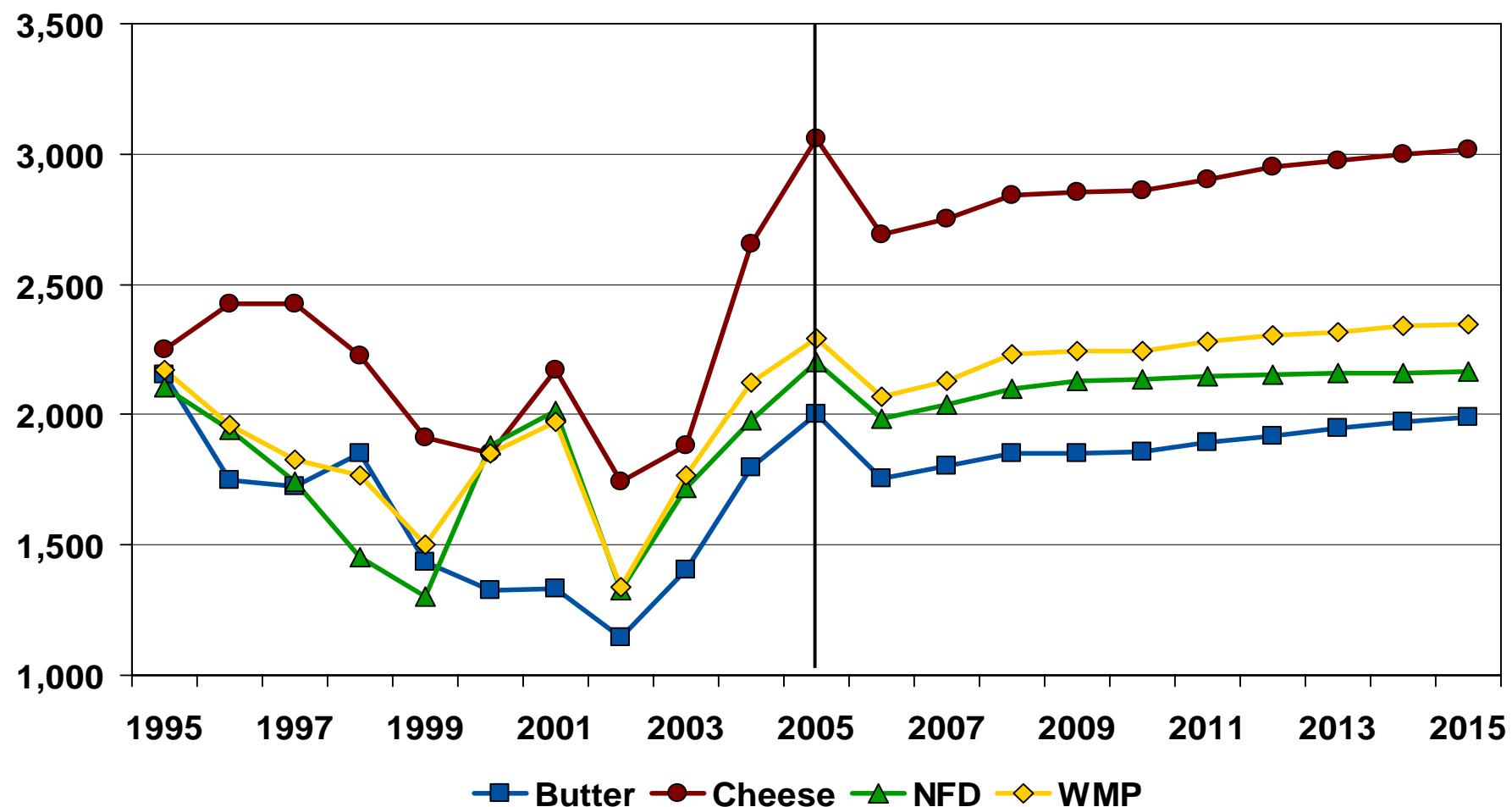


Broiler Export Market Share



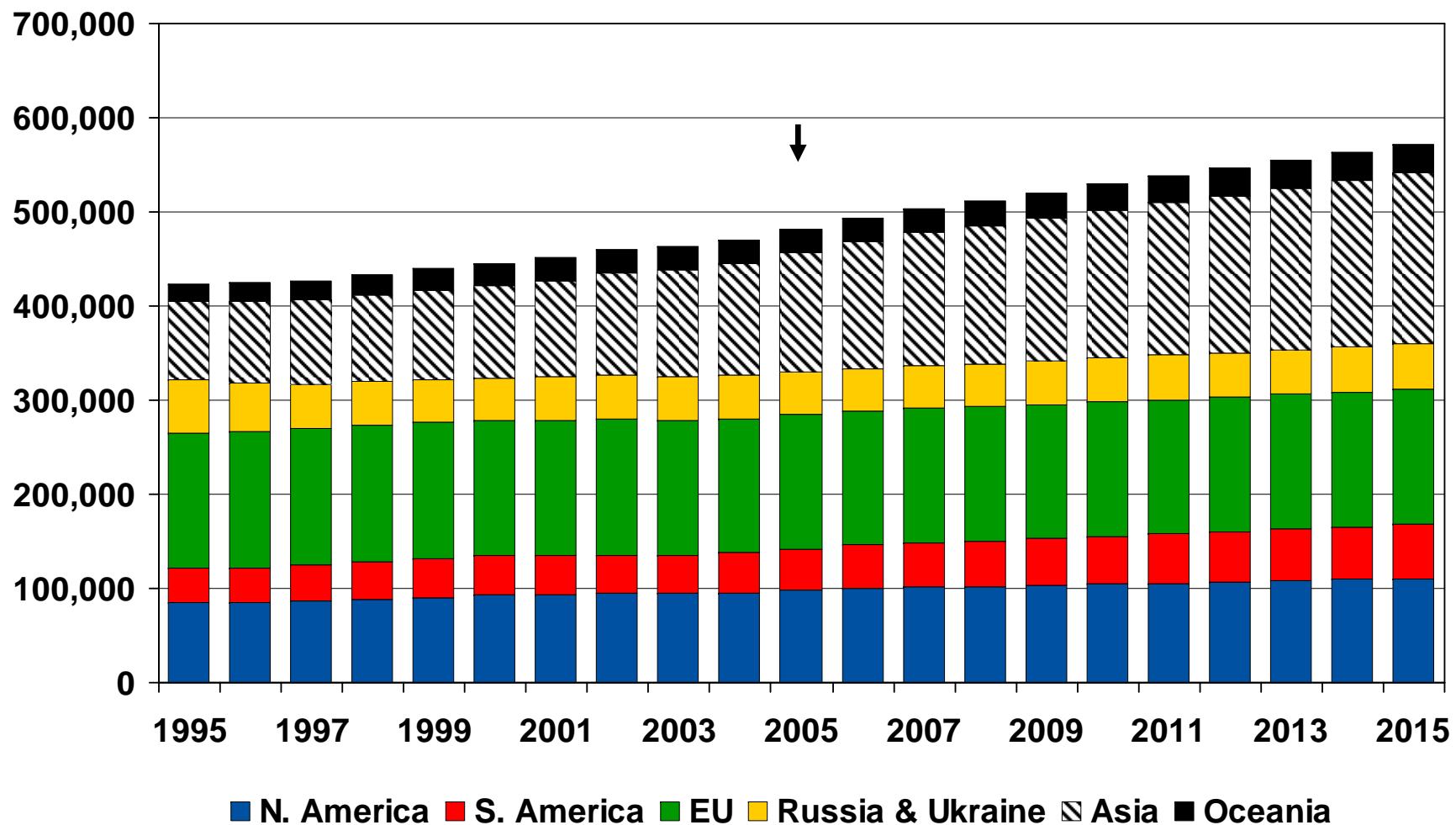
FOB Northern European Dairy Product Prices

Dollars per mt



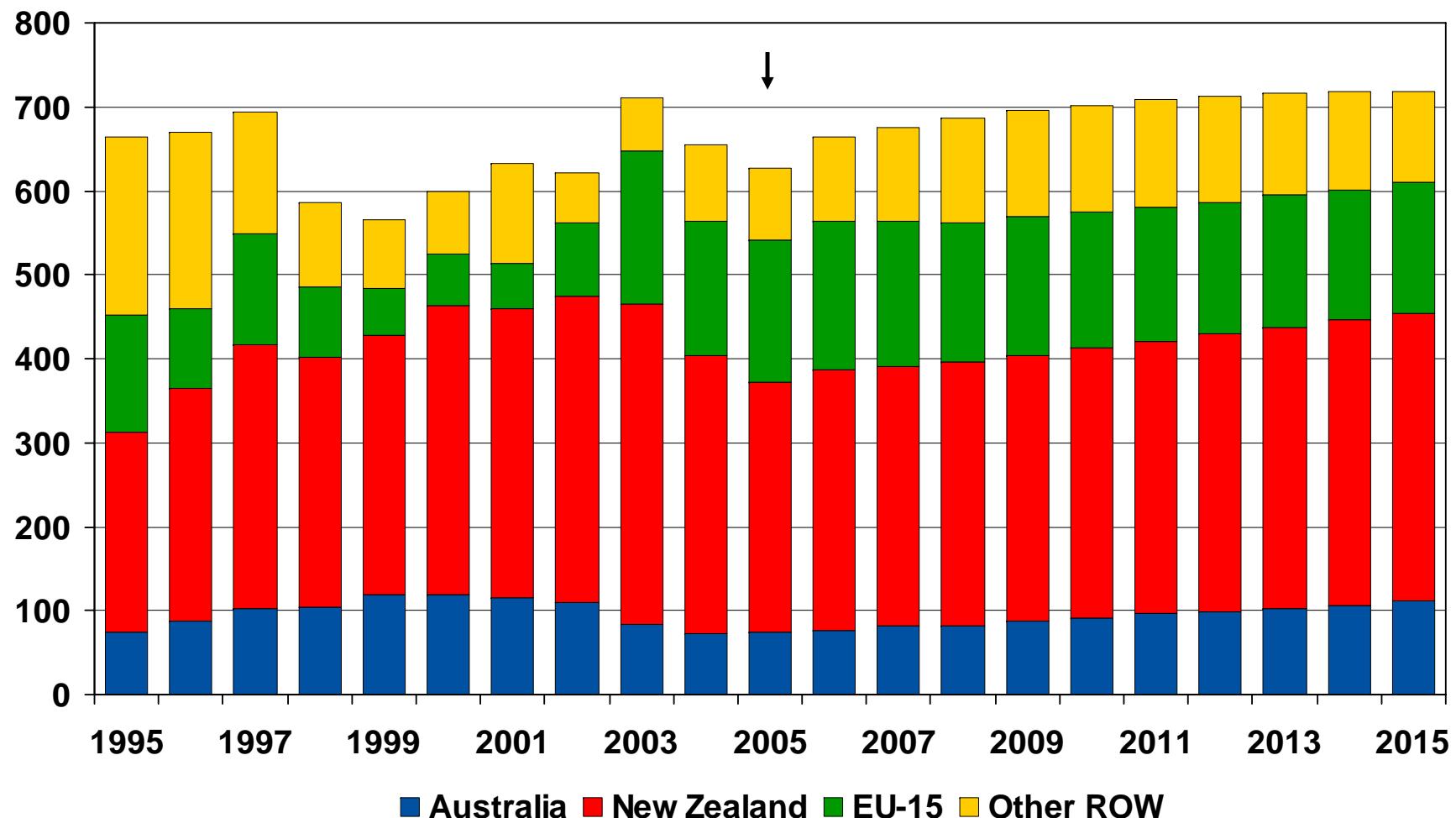
Annual Growth in Milk Production and Total World Output

Thousand mt



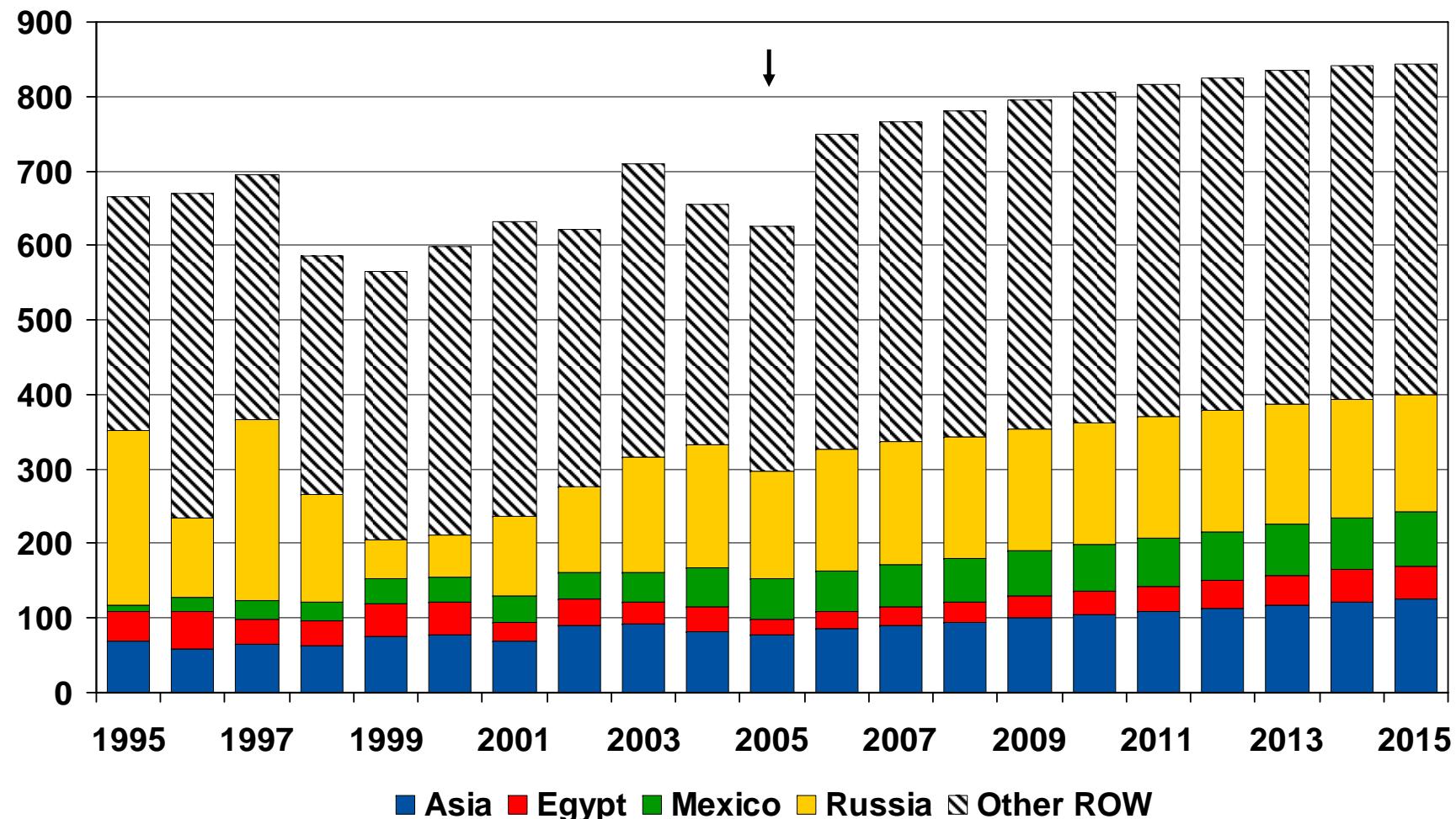
Butter Net Exports for Selected Countries

Thousand mt

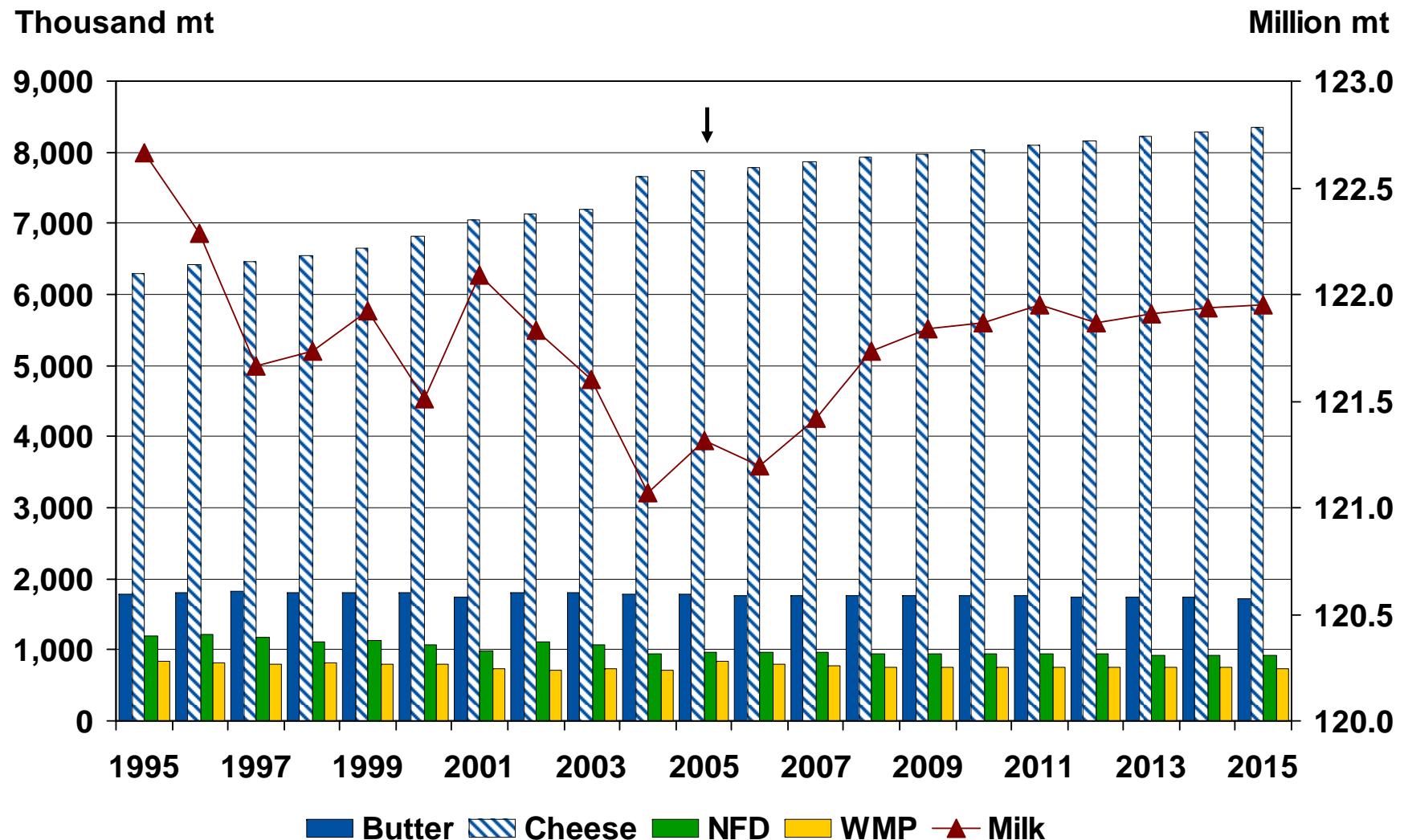


Butter Net Imports for Selected Countries

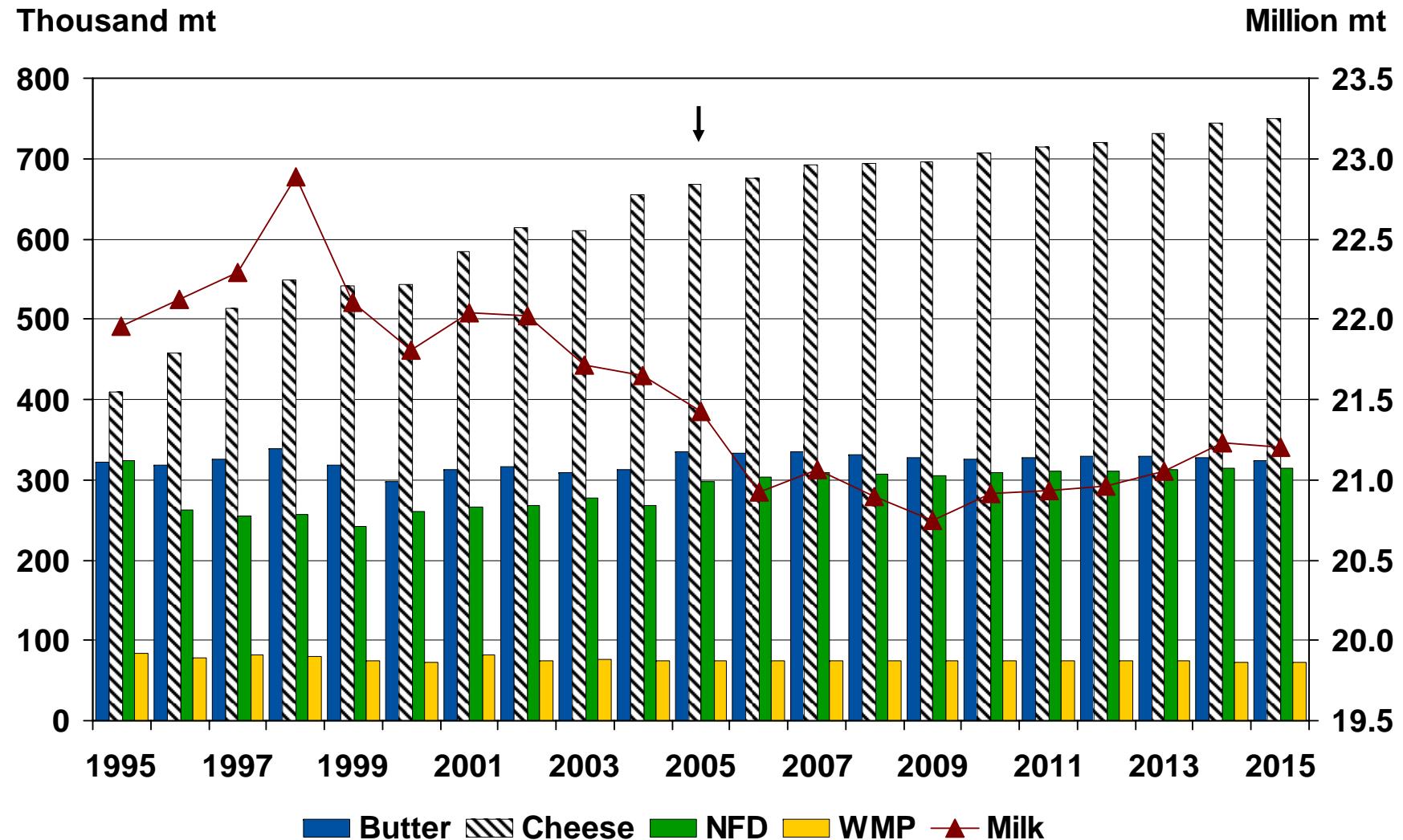
Thousand mt



EU-15 Dairy Production

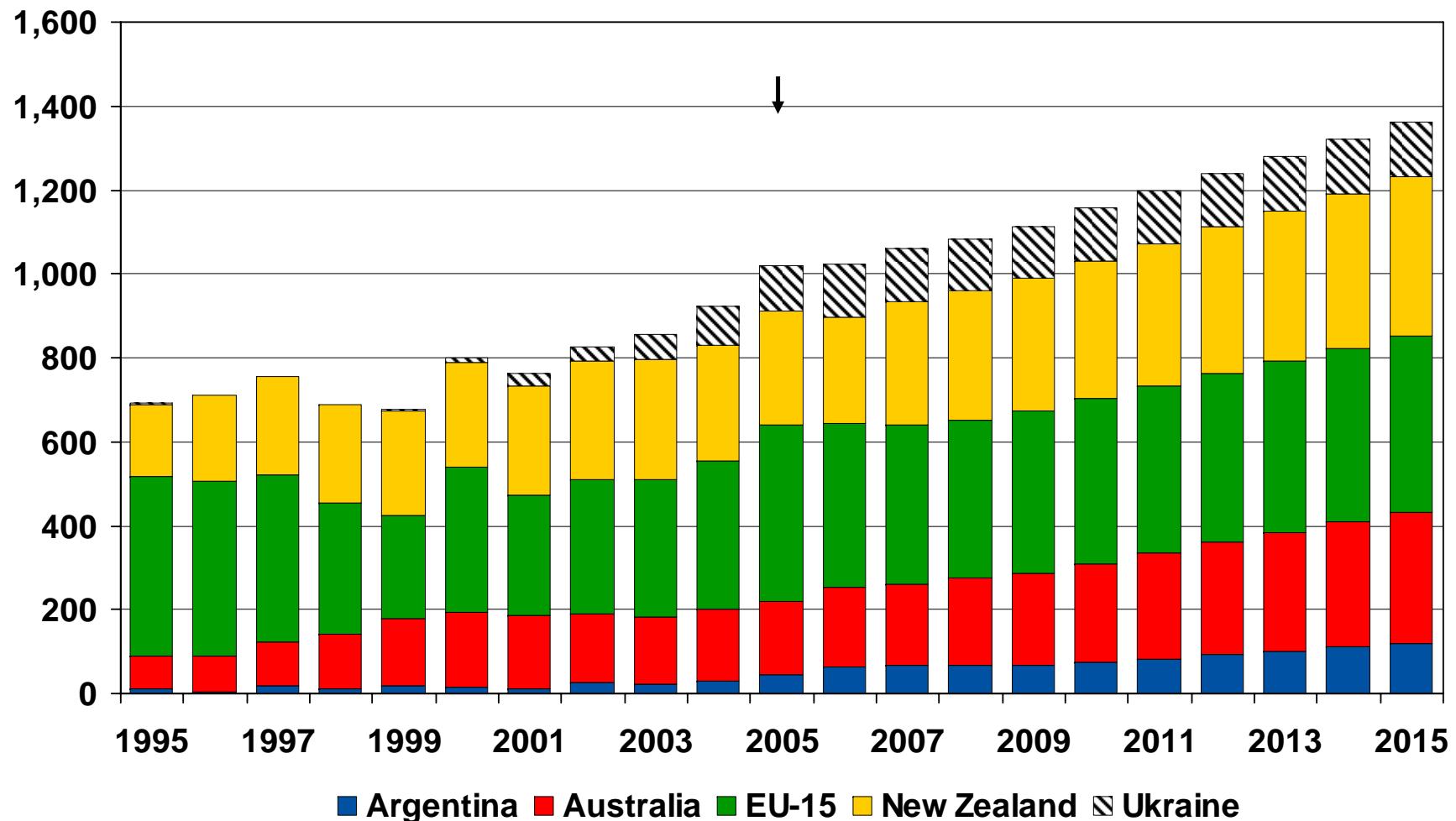


EU NMS Dairy Production



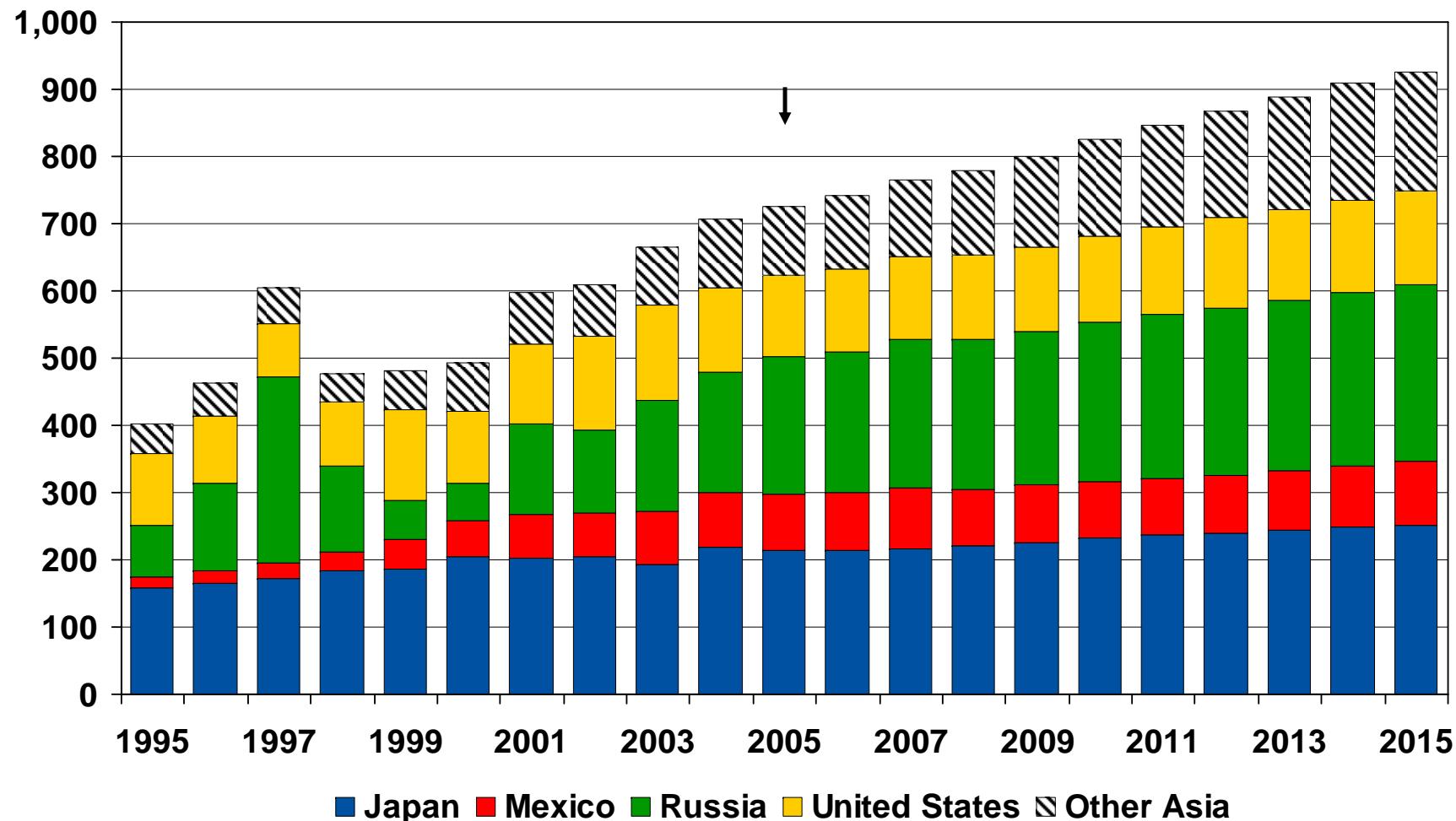
Cheese Net Exports for Selected Countries

Thousand mt



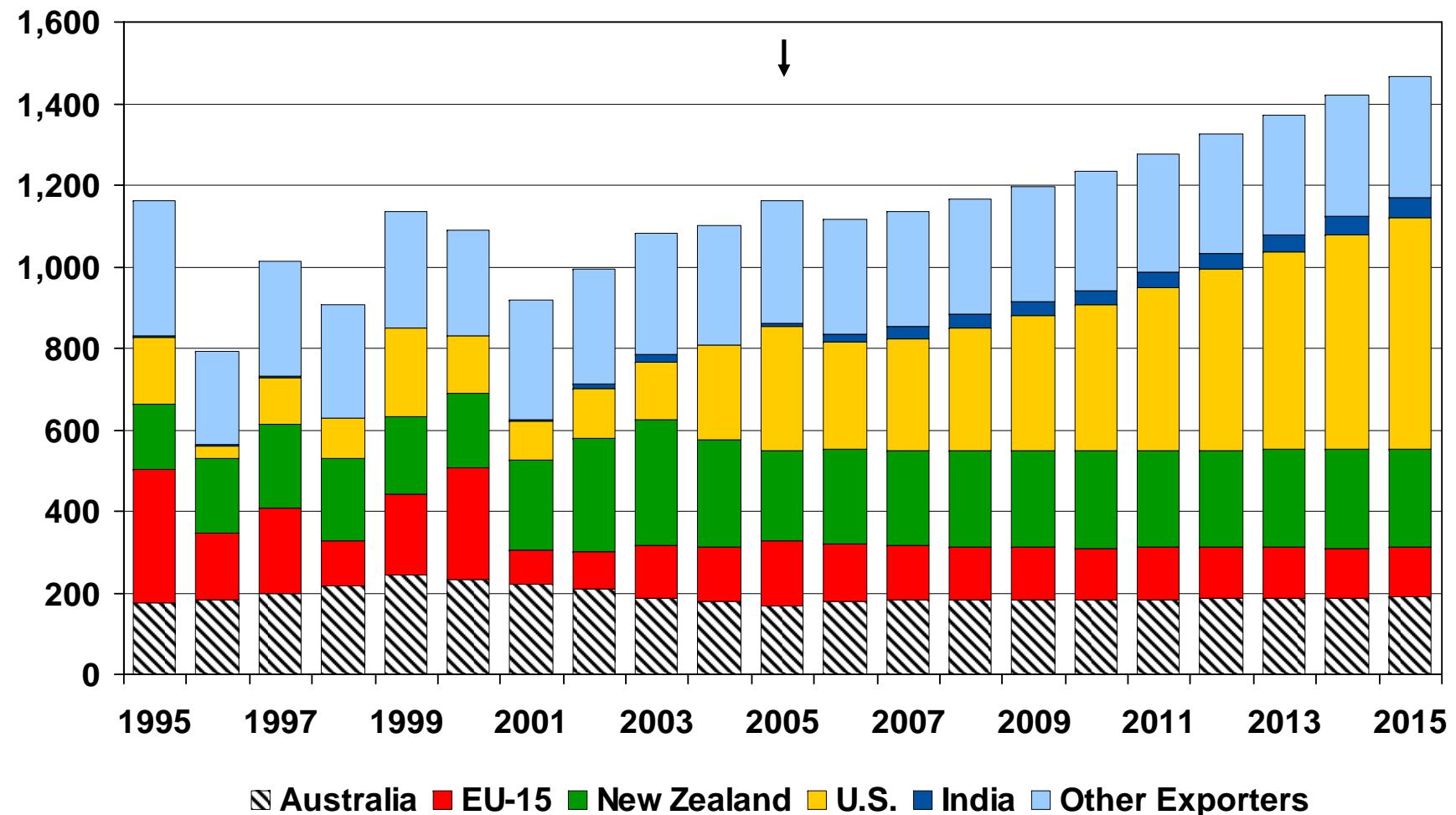
Cheese Net Imports for Selected Countries

Thousand mt



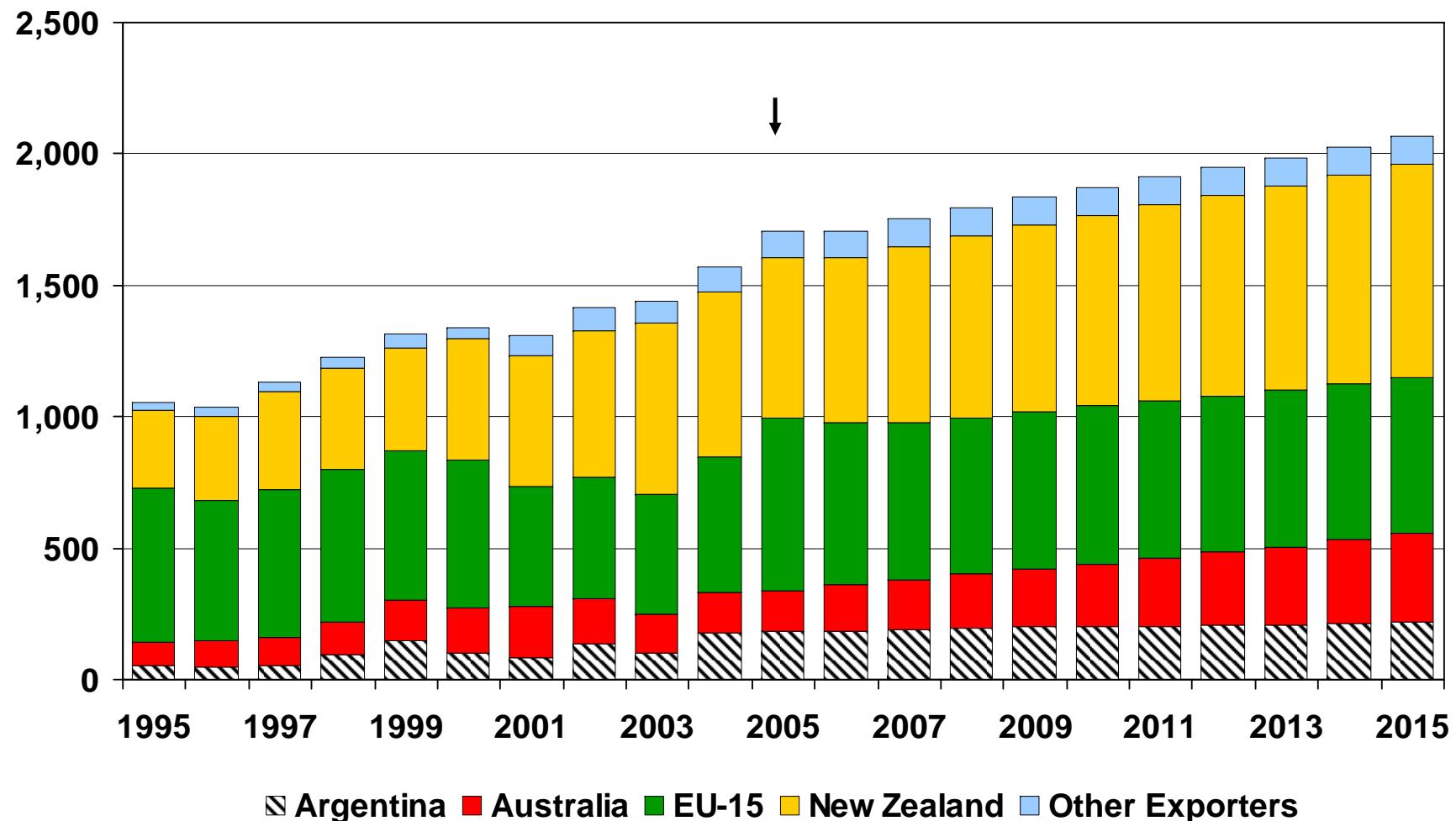
NFD Net Exports for Selected Countries

Thousand mt



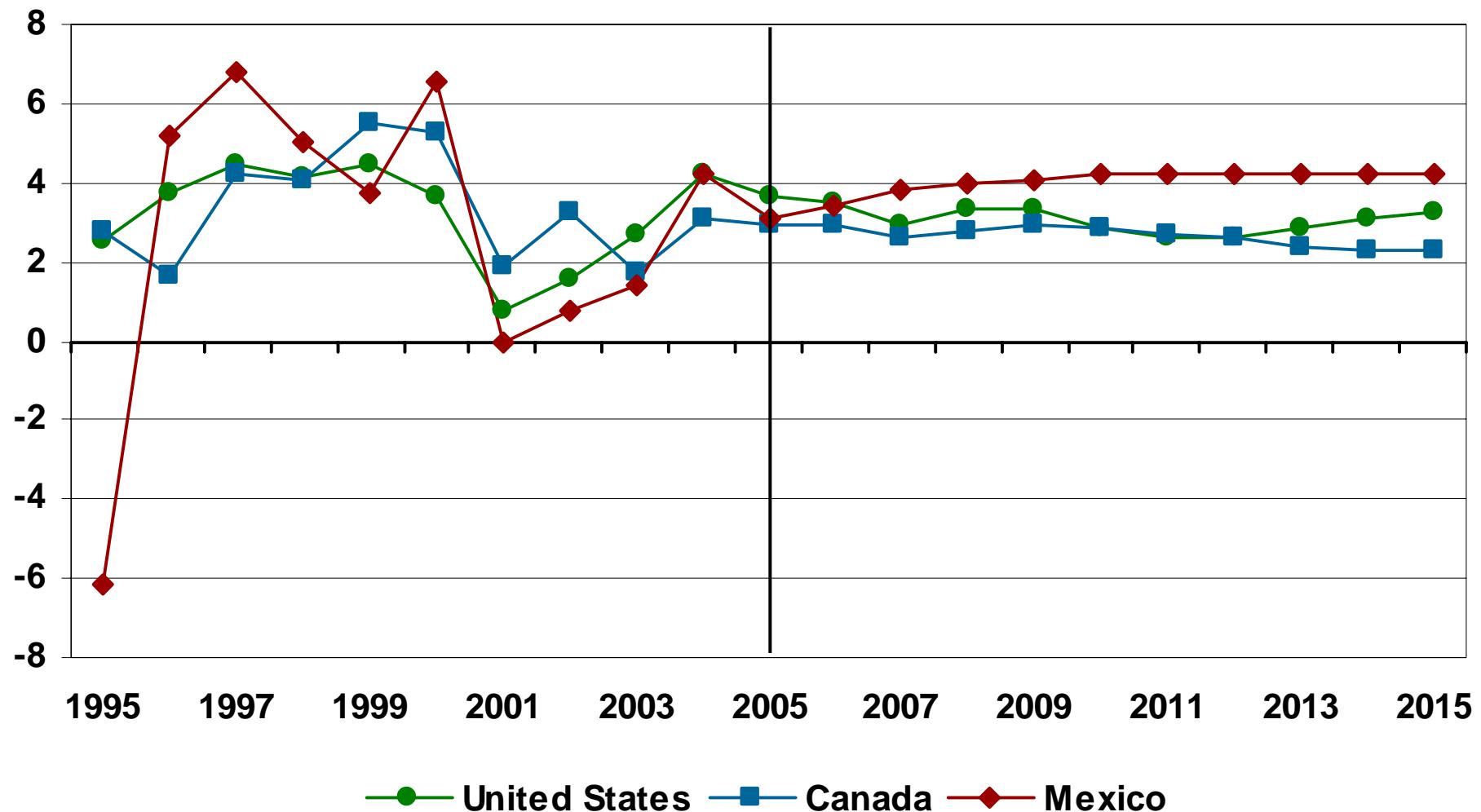
WMP Net Exports for Selected Countries

Thousand mt

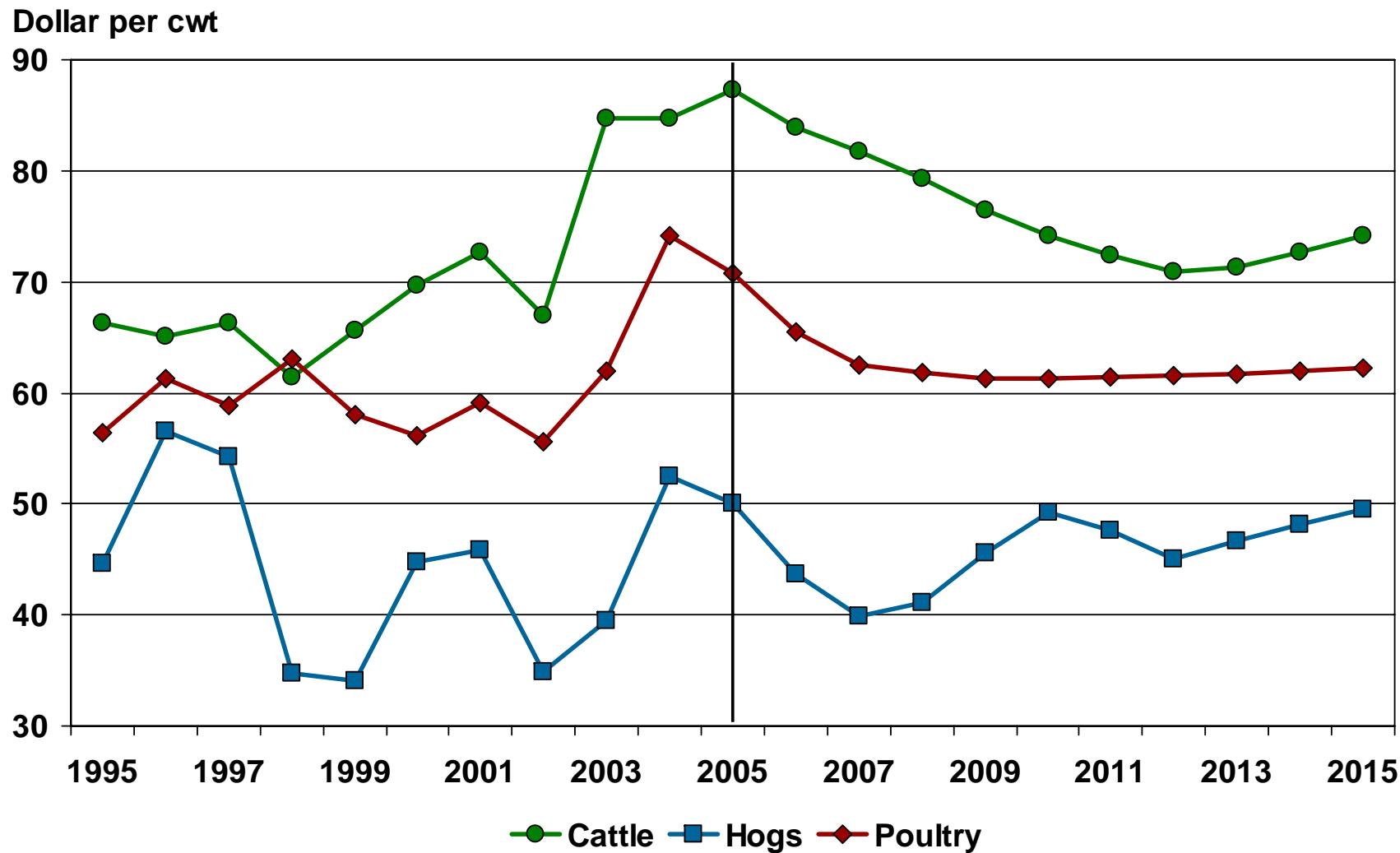


NAFTA Real GDP Growth Rates

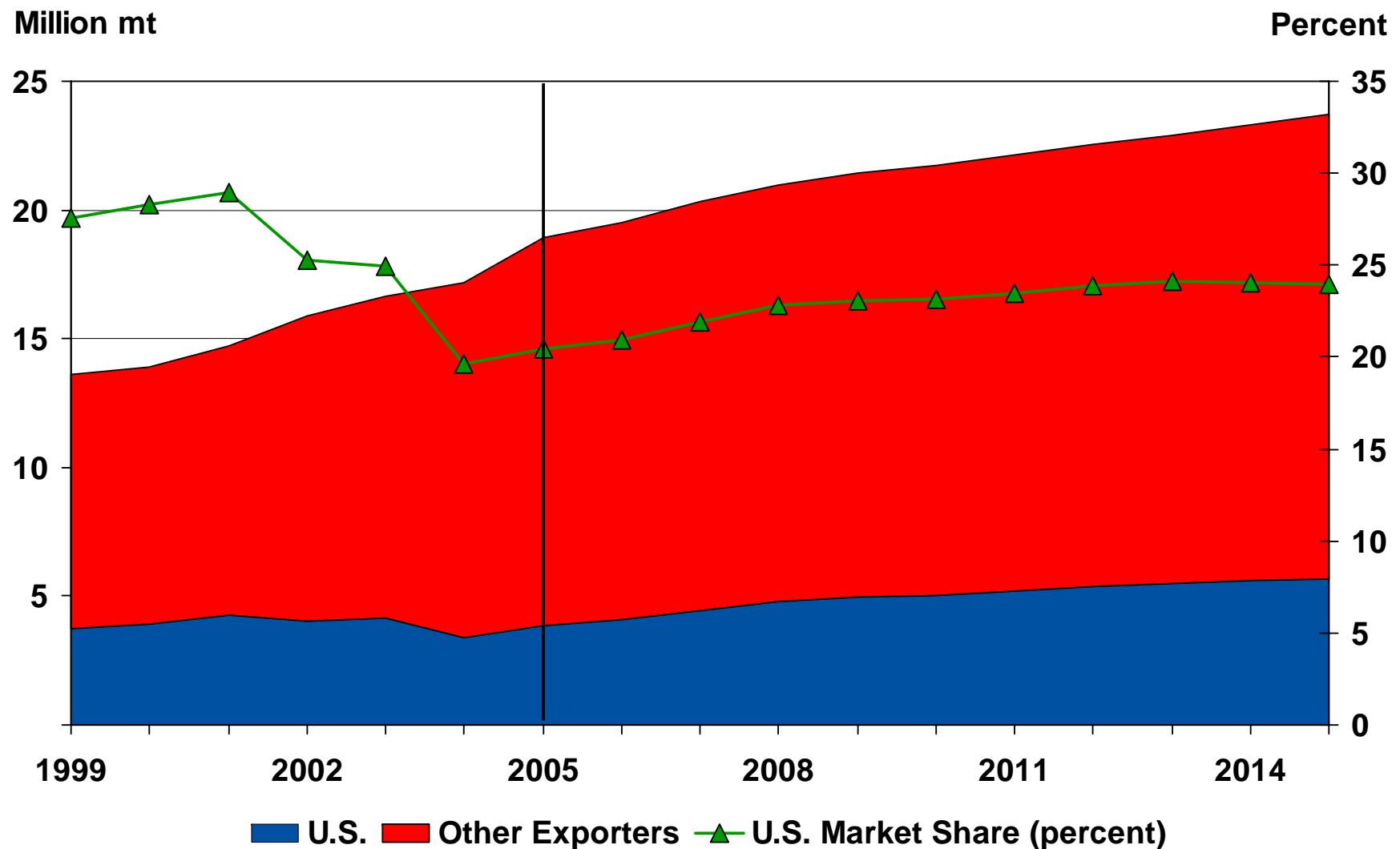
Percent



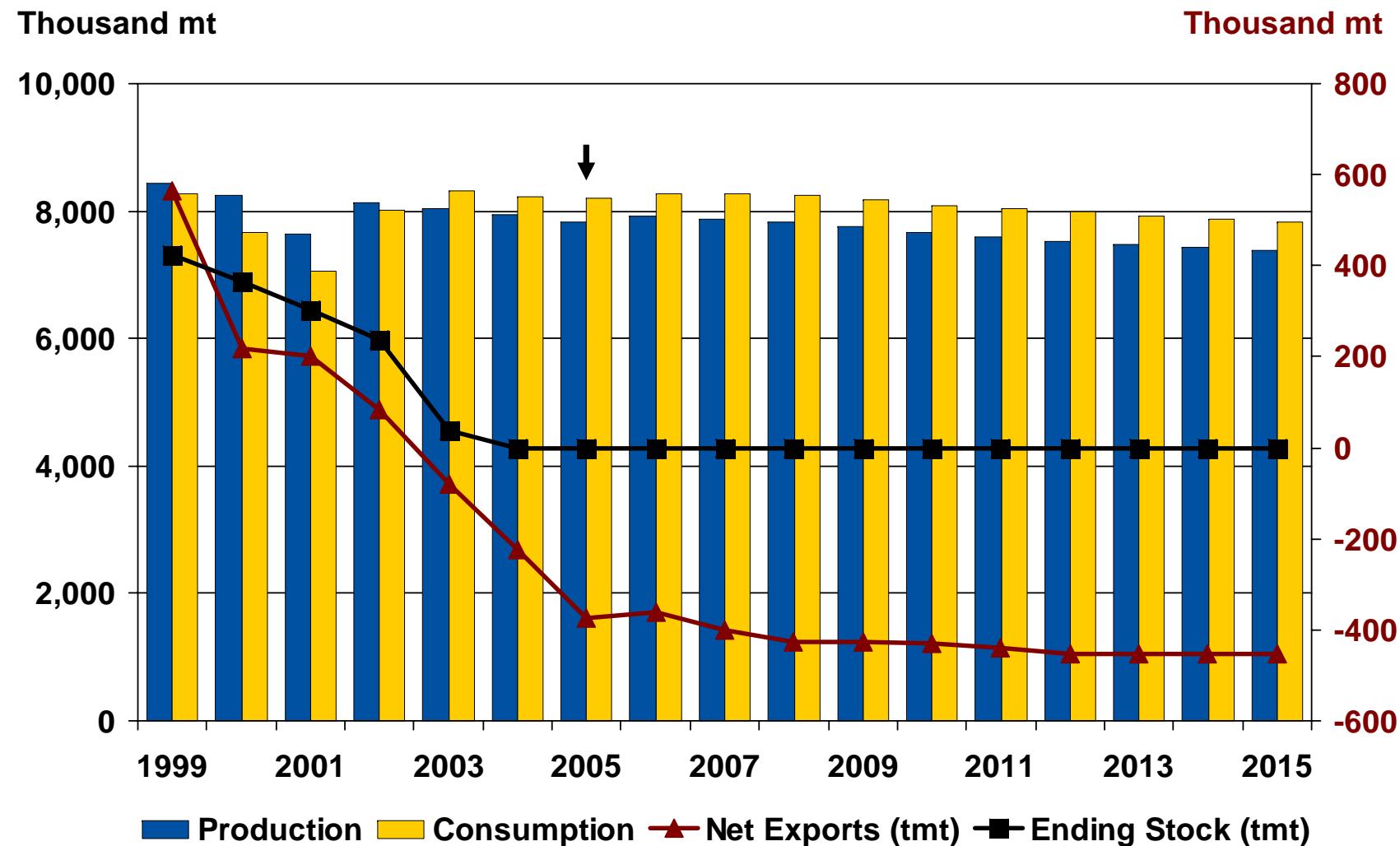
U.S. Livestock and Poultry Prices



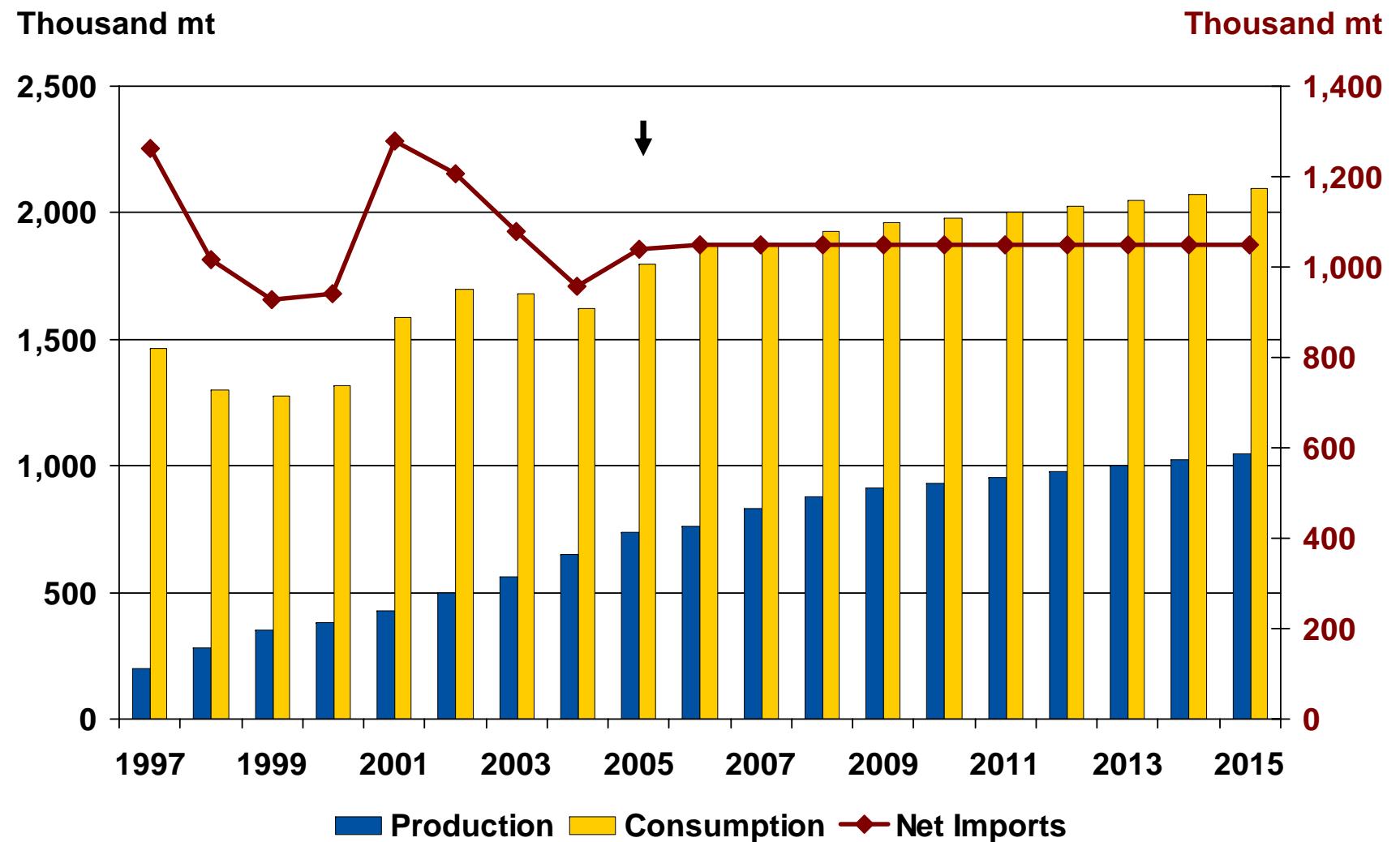
World Meat Trade and U.S. Market Share



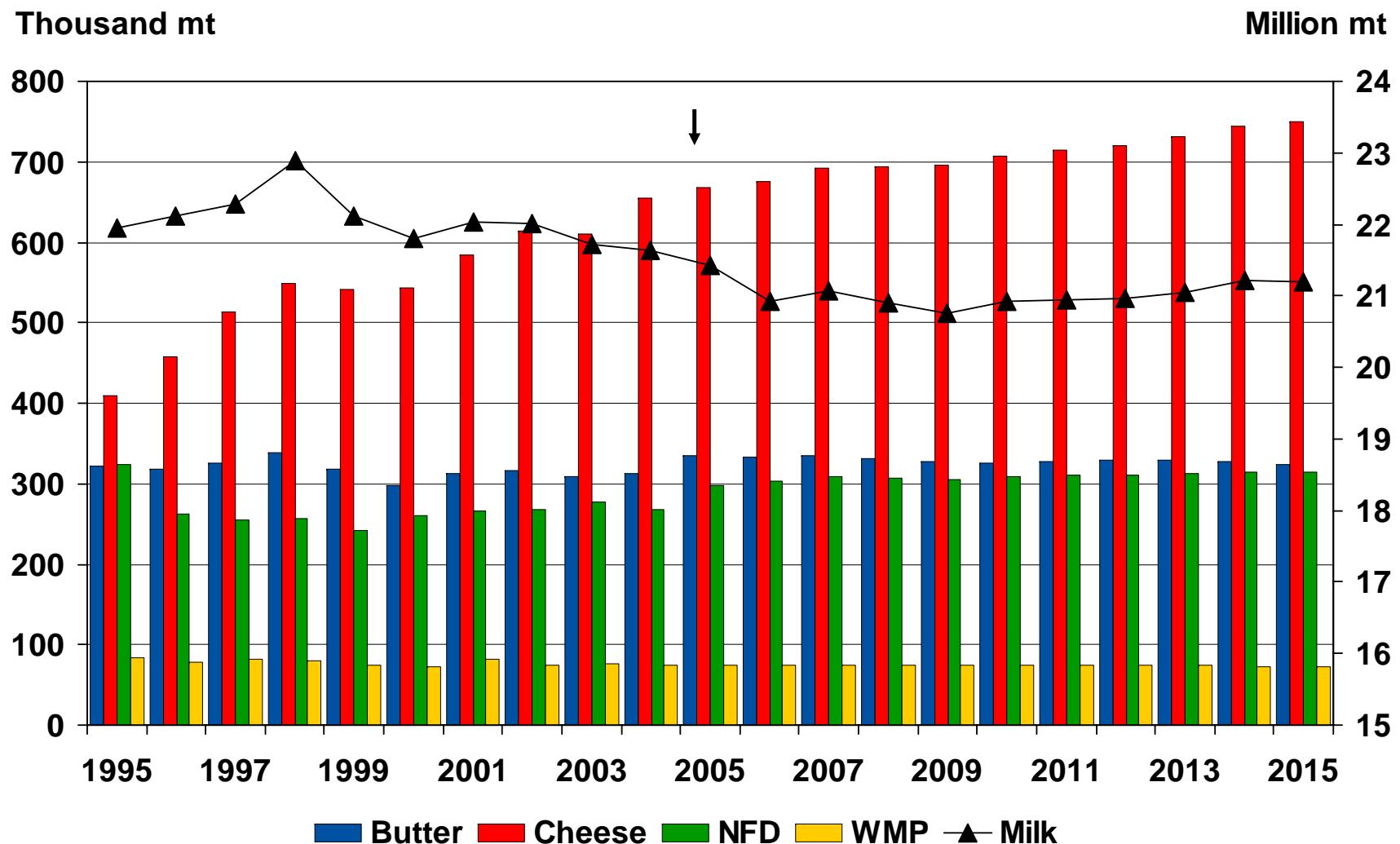
EU-15 Beef Supply and Utilization



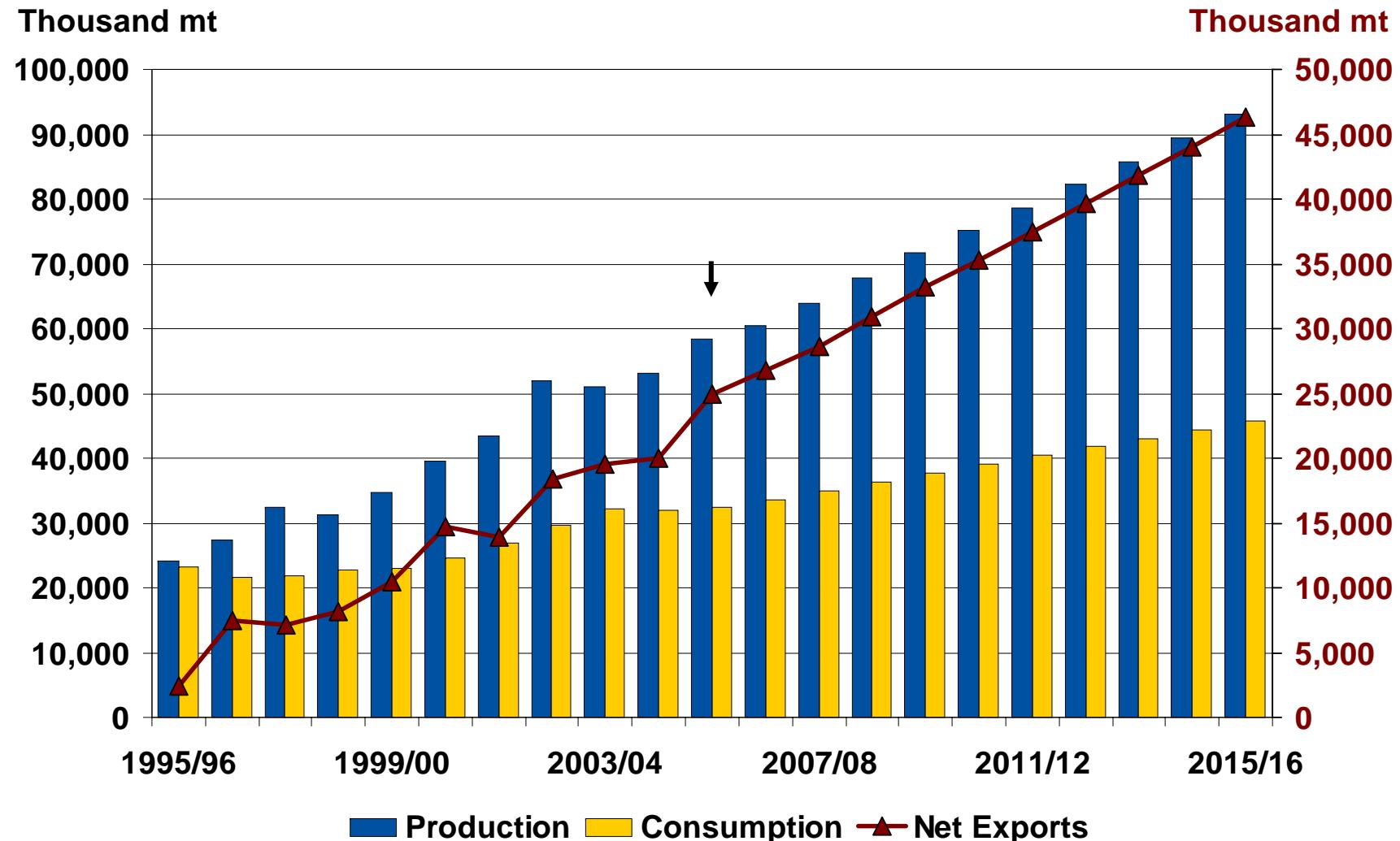
Russian Poultry Supply and Utilization



EU NMS Dairy Production



Brazilian Soybean Production and Utilization



Chinese Soybean Production and Utilization

