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GLOBAL AGRICULTURAL WEATHER SITUATION

Raymond P. Motha
Supervisory Meteorologist
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Summary

The immediate area of concern is the prospect for winter wheat in the southern Great Plains. Spring planting conditions must also be watched closely in the western Corn Belt. Recent rain helps Argentina's soybeans but more is needed. Moisture supplies are favorable for early spring growing conditions in Ukraine and southern Russia. Periodic flooding hits eastern corn areas of South Africa.

United States

Winter wheat was poorly established in the southern Great Plains prior to winter dormancy, due to insufficient autumn moisture. Highly fluctuating winter temperatures and below-normal precipitation and periodic high winds have aggravated crop conditions. Recent warmth is pushing the crop out of dormancy, but winter grains are still vulnerable to late winter and early spring freezes. This year is very similar to the 1988 (planting)/1989 (growing) season.

If the persistent, highly variable weather pattern plaguing the Great Plains expands into the western Corn Belt, spring planting may be affected. Timely rain would then be needed for corn and soybean establishment.

Europe

Winter crop prospects are favorable, although periodic bitter cold in the northeast stressed winter barley and rapeseed. Autumn moisture was favorable for winter crop emergence. Atlantic storms have recently brought precipitation for spring growth. The long running drought over the Iberian peninsula was broken by heavy winter rains.

FSU

Winter grains are in good condition, with favorable planting moisture and adequate winter snowcover in most areas. Moisture supplies in traditional winter wheat producing areas in Ukraine and southern Russia have been much better than the previous year, providing a good start to spring growing conditions.

Northwestern Africa

Adequate to abundant moisture since planting began in November has kept winter grains well-watered in Morocco. Rainfall in November and December was below normal in Algeria and Tunisia, but soil moisture has increased substantially in recent weeks, boosting winter grain prospects.

South Africa

One of the wettest corn growing seasons on record provides much improved production prospects compared with last year's drought-reduced crop (9.0 MMT February 1996 estimate vs. 4.7 MMT in 1994/95). One concern is the response of local drought-resistant varieties to cold, wet weather. Beneficially warmer and drier weather in early February improved conditions, but marginal corn growing areas in the west experienced some stress. Inundating rain this past week renewed flooding in sections of the corn belt and coastal sugarcane areas.

Argentina

Wheat production declined (8.6 MMT vs. 11.3 MMT in 1994/95) due to unfavorably dry weather. Oppressive heat and dryness adversely affected corn establishment in December, but January weather improved for corn development (11 MMT February 1996 estimates vs. 10.9 MMT in 1994/95). Soil moisture is limited due to the variable rainfall. Recent rain benefits flowering soybeans but more rain is needed.

Brazil

Heavy rain in January and early February eased early season dryness in time for soybean flowering (23.0 MMT vs. 26.0 MMT in 1994/95, a new record). Moisture supplies have dramatically increased in recent weeks, with some localized flooding.

Australia

Timely rain boosted wheat production to 17.0 MMT vs. 8.9 MMT in 1994/95. Most summer crop areas have received abundant rains, improving prospects for sorghum, cotton, and sugarcane. Due to a recent drying trend, western and southern pastures need rain.

China

Warmer weather causes winter wheat to lose some winter hardiness across the North China Plain. January rainfall benefits winter grains and oilseeds across the Yangtze Valley.

Foreign Regional Issues Shaping the Long-Term Agricultural Trade Outlook

Commercial Agricultural Division
Economic Research Service
USDA

ERS

SUMMARY

- Tighter bulk commodity markets
 - Competition counters U.S. gains after 2000
- Continued growth in HVP share of U.S. exports
- Key regional issues shape the trade outlook
 - China market grows, but slower than some analysts predict
 - EU exports curbed by Uruguay Round limits
 - Limited FSU imports and export competition
 - East Asian demand concentrated in HVP's
 - Strong growth in Mexican demand

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OUTLINE

- Overview -- Rip Landes
- China -- Hunter Colby
- European Union (15) -- Maryanne Normile
- Former Soviet Union -- Christian Foster
- East Asia -- John Dyck
- Mexico -- Dan Plunkett

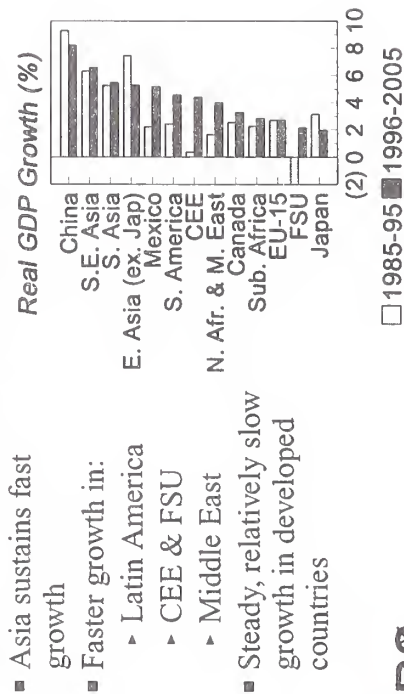
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Background Assumptions

- U.S. Policy Assumptions (1990 Legislation)
 - Target prices & payment yields at 1995 levels
 - Limited use of acreage reduction program
 - Compliance with UR limits on EEP
 - CRP acreage falls to 27.5 million acres in 2005
- International Policy Assumptions
 - Compliance with existing multilateral, bilateral & regional agreements
 - No major new agreements
 - No WTO accession
 - No enlargement of EU-15

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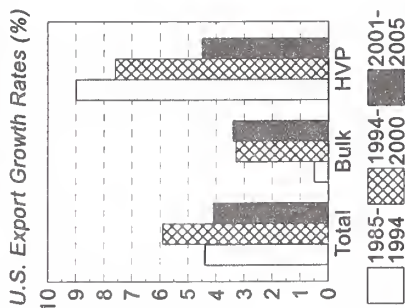
Foreign GDP Growth Prospects



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Total Agricultural Trade Outlook

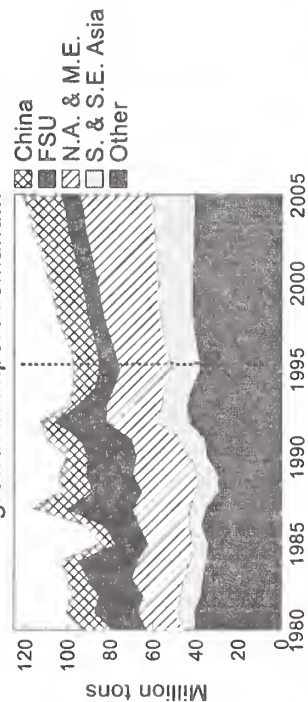
- Bulk exports strengthen
 - ▶ LDC demand
 - ▶ Firmer prices
 - ▶ Less EU competition
- HVP exports slower
 - ▶ Demand from Asia & NAFTA
 - ▶ U.S. highly competitive
 - ▶ But, assume no new market openings
- U.S. exports near \$80 billion in 2005



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World Wheat Imports

China, Southeast Asia & North Africa drive faster growth in import demand...

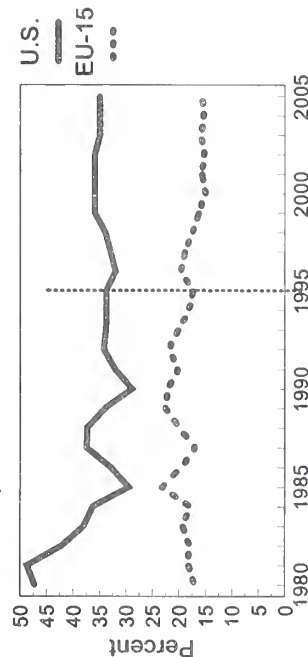


Note: Excludes EU-15 intratrade.

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World Wheat Market Shares

U.S. market share rises until EU & other competition increases after 2000...

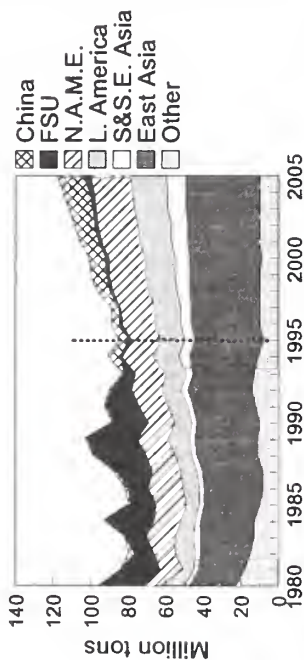


Note: Excludes EU-15 intratrade.

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World Coarse Grain Imports

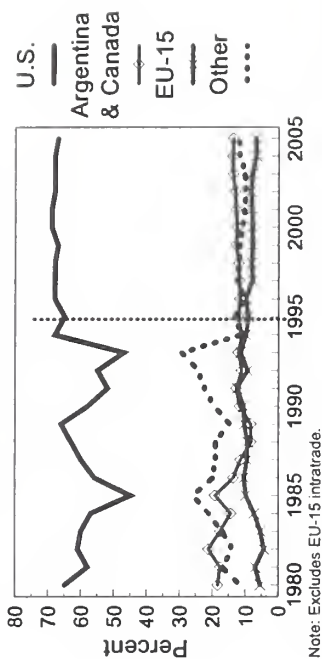
Developing country feed demand & shifts from barley & feed wheat strengthen corn demand...



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World Coarse Grain Market Shares

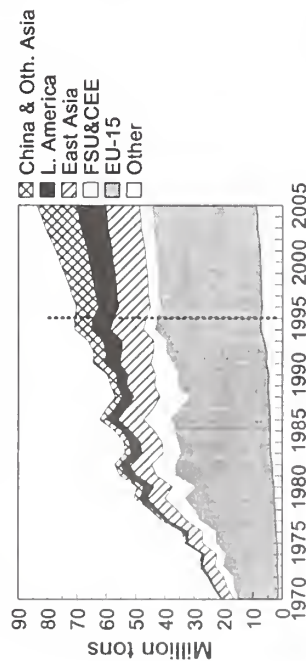
U.S. market share continues to rise, with limited new competition after 2000...



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World Soybean & Meal Imports

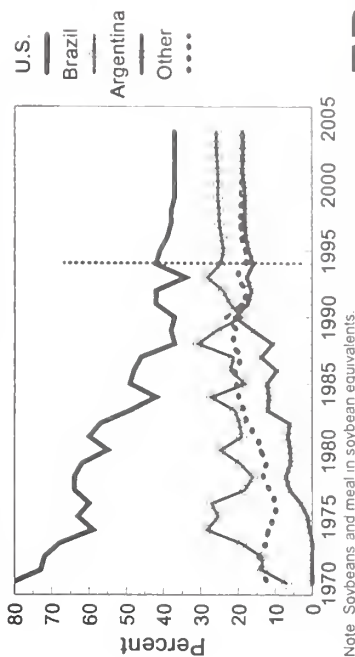
Developing countries, including China & Mexico, drive future growth...



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World Soybean & Meal Exports

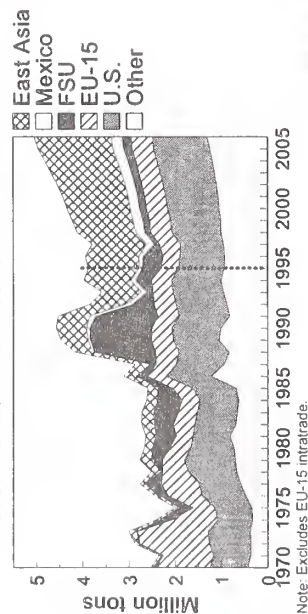
U.S. market share continues its slow decline...



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World Beef Imports

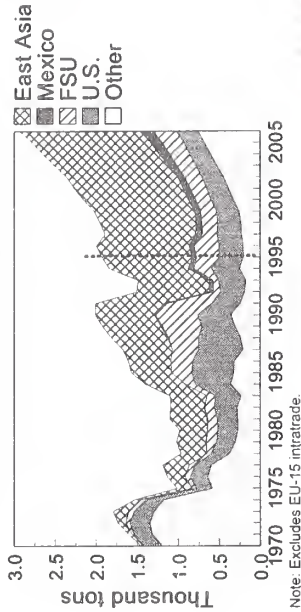
East Asia leads strong growth in demand & U.S. market share continues to rise...



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World Pork Imports

East Asia also leads growth in pork demand, with gains in U.S. market share

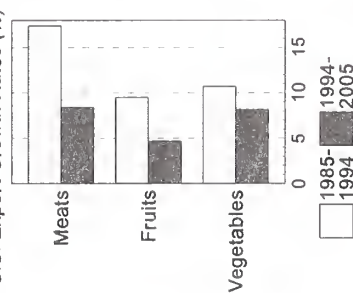


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HVP Export Prospects

- Robust growth in meat exports expected
 - ▶ High East Asian demand
 - ▶ U.S. competitive
- Fruit & vegetable exports slower
 - ▶ East Asia & NAFTA lead growth
 - ▶ But we assume no major new market openings

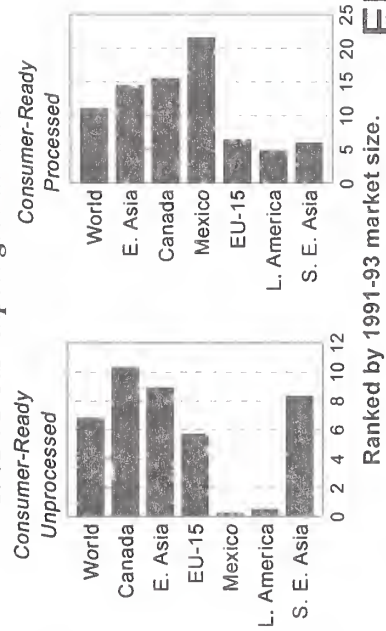
U.S. Export Growth Rates (%)



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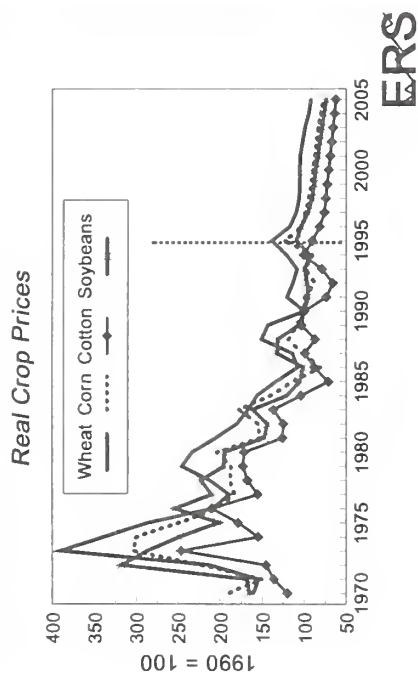
Major HVP Export Markets

1982-92 U.S. export growth rates...

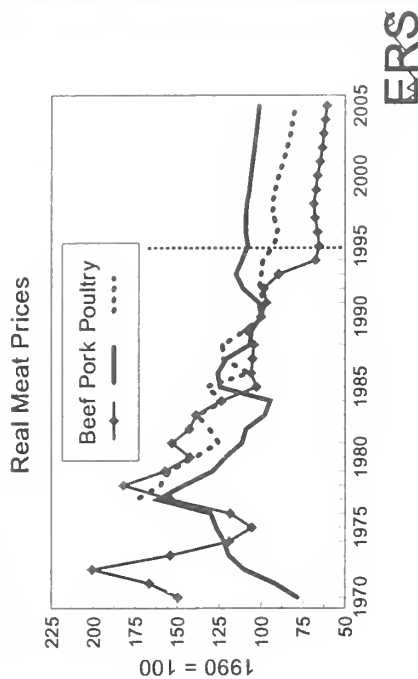


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Crop Prices Projected to Strengthen Gradually



While Meat Prices Continue to Decline



Key Regional Issues

- China
 - Key source of global bulk trade growth
- European Union
 - Post UR competitiveness
- Former Soviet Union
 - Trade impacts of economic transition
- East Asia
 - Major source of HVP trade growth
- Mexico
 - Strong recovery of key U.S market

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China's Rank in 1994/95 World Agricultural Trade

Commodity	Imports	Exports
Wheat	1st	--
Rice	2nd	26th
Corn	4th	4th
Barley	3rd	--
Cotton	1st	28th
Soy Oil	1st	13th
Palm Oil	1st	4th
Poultry mt	9th	6th

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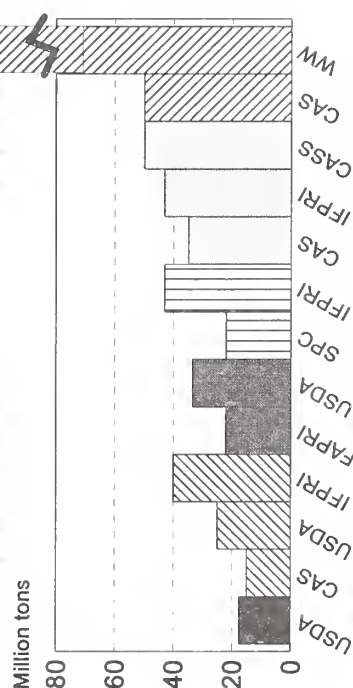
CHINA

Hunter Colby
Commercial Agriculture Division
Economic Research Service
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Estimates of China's Future Grain Imports



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Assumptions

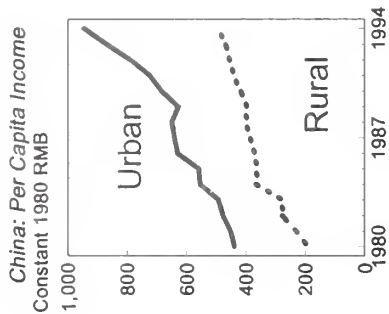
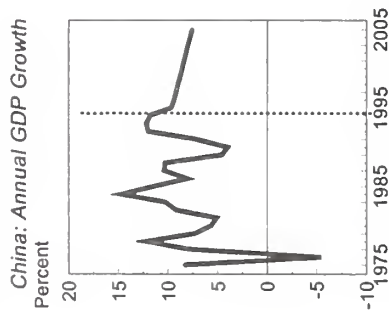
- Social/political stability
- Self-sufficiency abandoned
- Slow, uneven pace of trade & economic liberalization
- Infrastructure development keeps up with trade growth
- Constant policy/market price margin
- Tariffs & state trading restrict meat imports in favor of coarse grains

Issues

- No consensus income or price elasticities
- Good technical parameters non-existent (feed/meat conversion rates, yields)
- Government trade & stock policy not transparent
- Impact of state-trading quotas
- Administrative fiat affects crop selection/sown area

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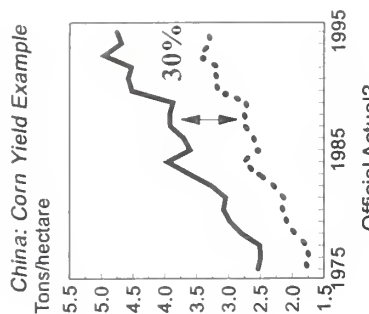
Continued Rapid Economic Growth



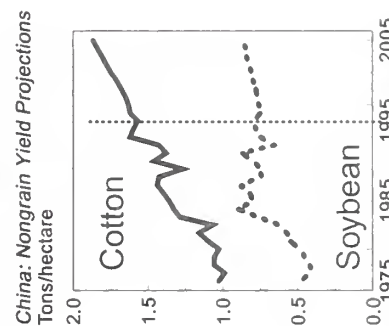
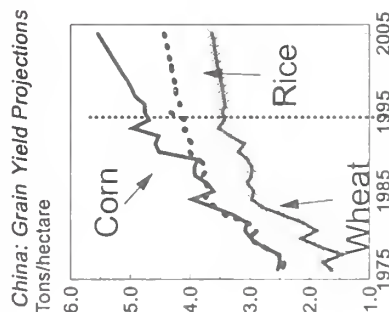
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What is the Potential for Grain Yield Growth?

- Corn, wheat, and rice area are underreported, but...
- Yield figures are raised to approximate actual production, so...
- Likely more potential for yield growth than China's official statistics suggest

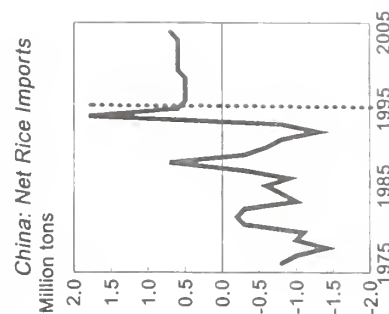
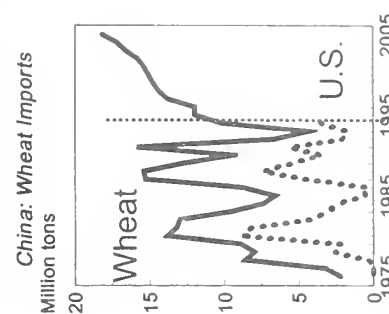


Technology, Management & Seeds to Boost China's Yields



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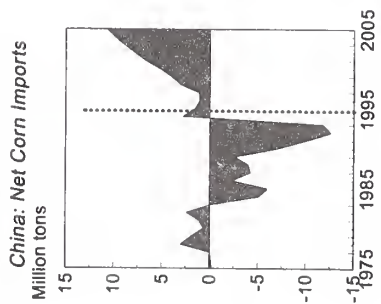
Rising Domestic Demand Drives Net Food Grain Imports



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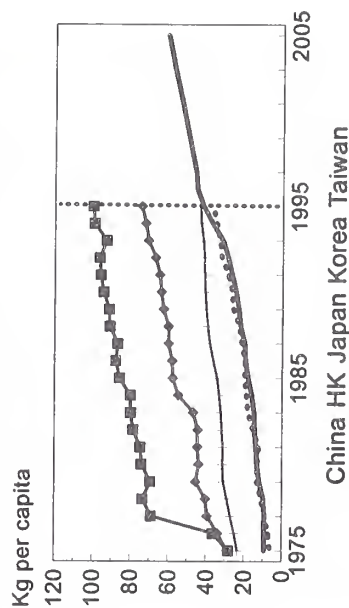
Meat Demand Drives Shift From Corn Net Exports to Imports

- Feed imports cheaper than meat imports
- Feed assumptions:
 - Feed efficiency rising, but...
 - Meat output growth in grain- and protein-fed commercial sector, so...
 - More feed grains and protein meals required
- Rising use of compound feed by small producers



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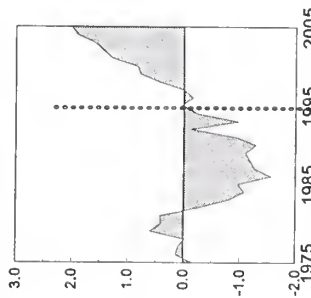
China's Per Capita Meat Demand Surpasses Korea and Japan



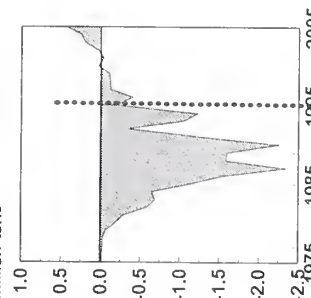
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Growing Meat and Oil Demand Drives Oilseed and Meal Imports

China: Net Soybean Imports
Million tons



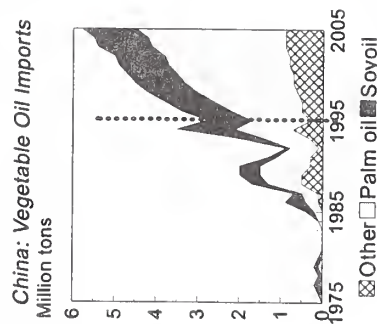
China: Net Soymeal Imports
Million tons



ERS

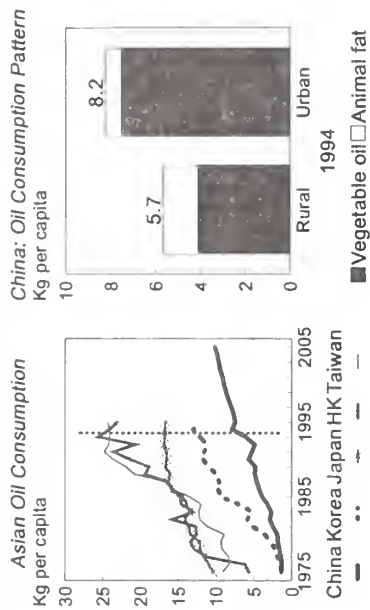
China: Net Edible Vegetable Oil Import Forecast

- Relative prices favor palm over other oils
- Rapid expansion of food processing industry
- Domestic crush capacity rising
- Government policy favors soybean over soy oil imports



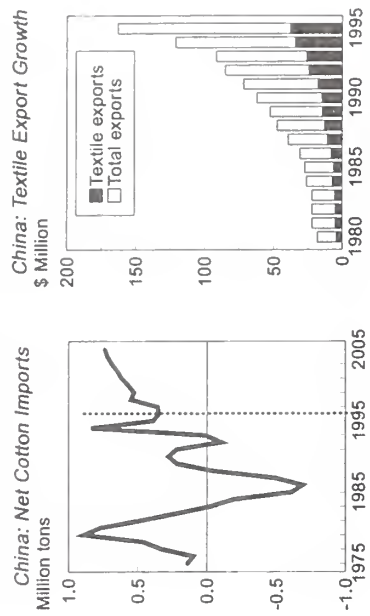
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Which Path Will China's Edible Oil Consumption Follow?



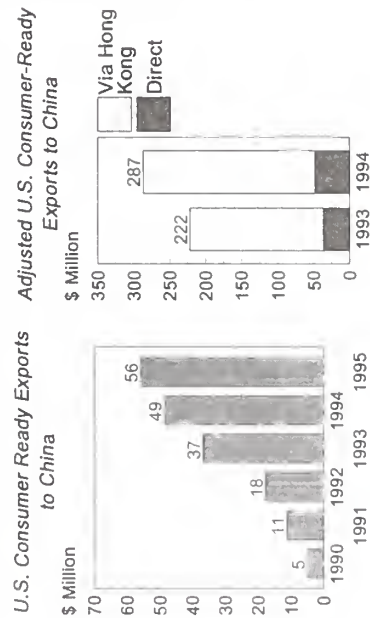
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Domestic and Export Textile Demand Drive Cotton Imports



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China the 10th Largest Market for U.S. Consumer-Ready Foods



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EUROPEAN UNION

Mary Anne Normile
Commercial Agriculture Division
Economic Research Service
USDA

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EU: Summary

- Uruguay Round commitments will be major determinant of trade and production
- EU can fulfill UR commitments under current policy under certain conditions
- EU will be able to export some commodities without subsidies, particularly in later years

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EU Rank in World, 1995

	Production	Imports	Exports
Wheat	2	12	3
Coarse grains	3	7	2
Barley	1	--	1
Soybeans	9	1	--
Soymeal	3	1	5
Beef	2	4	3
Pork	2	8	1
Poultry	2	6	2

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EU: Key Issues in the Outlook

- Effects of CAP reform
- Uruguay Round implementation
- Productivity growth

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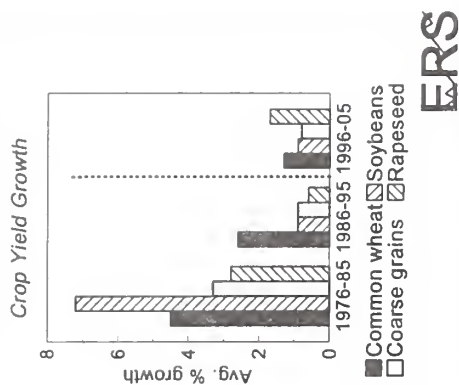
EU: Main Assumptions

- Current policy instruments maintained
 - policy prices constant
 - set-aside, intervention retained
 - arable base unchanged
- Low or zero price transmission for most commodities
- Some internal market price flexibility
- Slower yield growth for most crops

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EU: Crop Yield Growth Slows

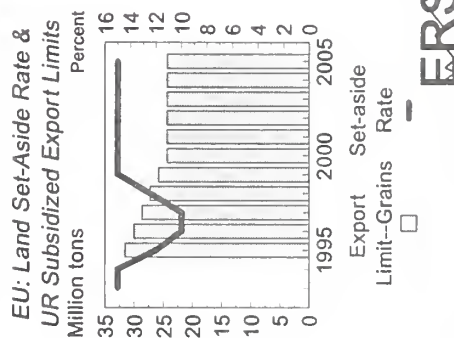
- Continued slowing of yield growth due to CAP reform
- Rapeseed yield growth higher as hybrids adopted



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EU: Set-Aside Rate

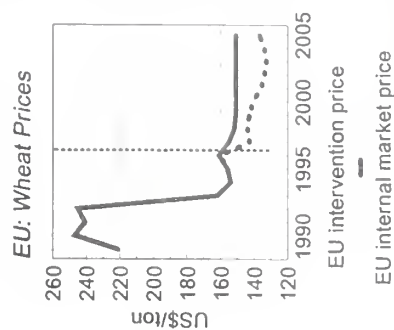
- Set-aside rate low in early years, reflecting market conditions
- Set-aside rate gradually increased to constrain supply as GATT export limits tighten



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EU: Wheat Prices

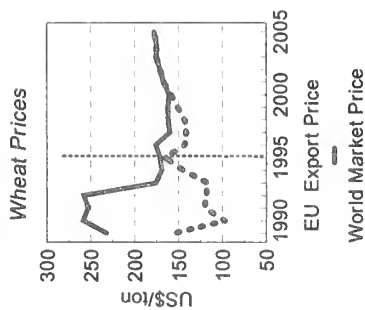
- EU intervention price is constant in ECU
- Internal market price will decline to maintain exports within GATT limits



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EU & World Wheat Prices

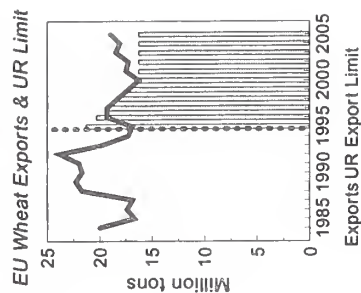
- EU export price is internal market price plus transport charges
- World price exceeds EU price in 2001, EU exports without subsidies



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EU: Wheat Exports & UR Limit

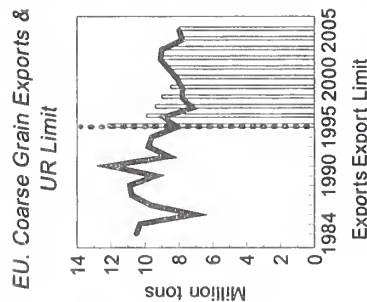
- Exports capped by GATT limits until 2001
- World price exceeds EU price in 2001
- Set-aside rate kept at 15%



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EU: Coarse Grain Exports & UR Export Limits

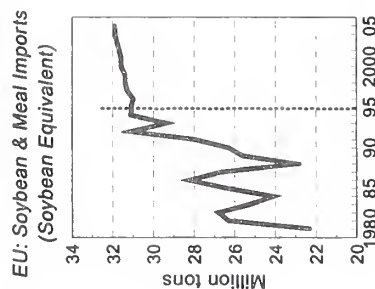
- GATT limits total coarse grain exports
- Exports less than GATT limit in some years
- Set-aside continues to constrain output
- No unsubsidized exports



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EU: Soybean & Soymeal Imports

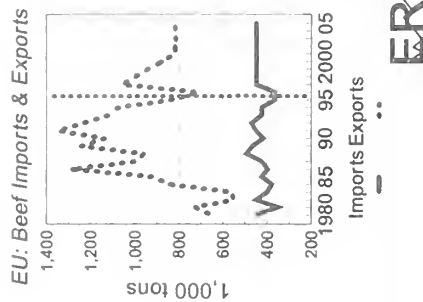
- Import growth slows as lower grain prices favor grain feeding over protein meal
- Soybeans account for most growth in 1996-2000, soymeal favored in later years
- Soybean meal use grows at expense of other protein meal



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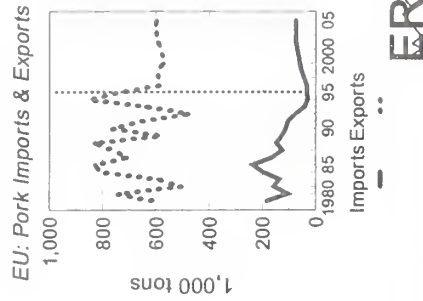
EU: Beef Trade

- Uruguay Round commitments limit exports
- No unsubsidized exports
- Imports limited to volumes covered under trade agreements



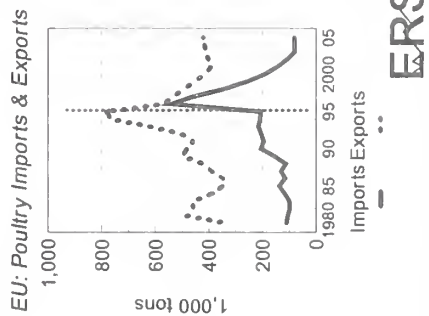
EU: Pork Trade

- Exports constrained by Uruguay Round limits on subsidized exports
- Extent of unsubsidized exports uncertain
- Imports rise due to minimum access commitments



EU: Poultry Trade

- Exports constrained by Uruguay Round limits on subsidized exports
- Unsubsidized exports rise
- Imports fall as domestic production rises, exports limited



EU: Prospects for HVP Trade

- EU a world leader in HVP trade
- UR limits on export subsidies on HVP may reduce exports
- Limited improvement in market access in UR for HVP imports
- U.S. HVP exports to EU rising as share of U.S. agricultural exports

EU: Pressures for Policy Change

- Price weakness or high stocks
- Enlargement to East
- New GATT round?

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FORMER SOVIET UNION

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Commercial Agriculture Division
Economic Research Service
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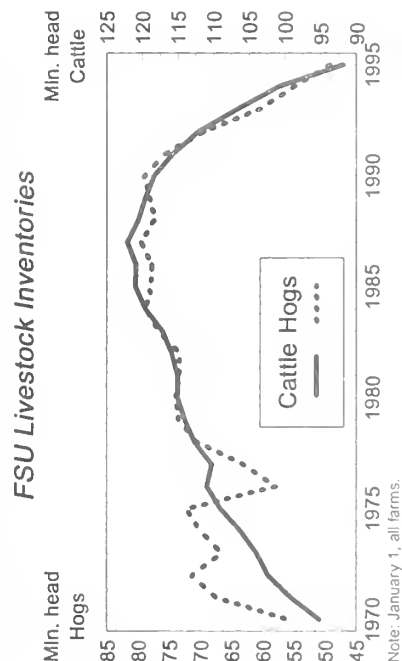
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FSU: Outlook for 2005

- Livestock Sector Will Not Recover Quickly
- Grain Imports Will Remain Low
- Soybean Meal Imports Increase Modestly, but Remain Below Pre-Reform Levels
- Imports of HVP's Continue Growth in the Near to Medium Term

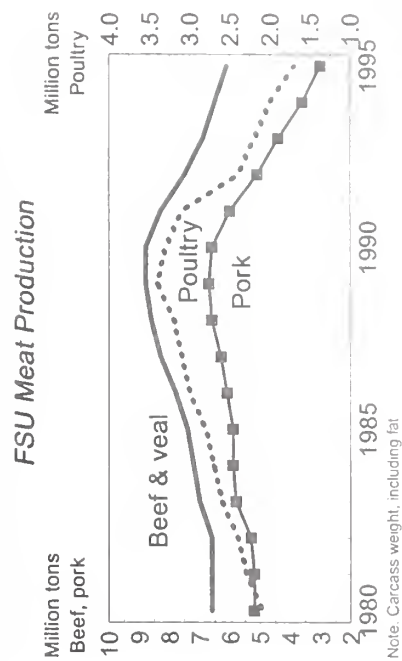
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FSU: Livestock Inventories



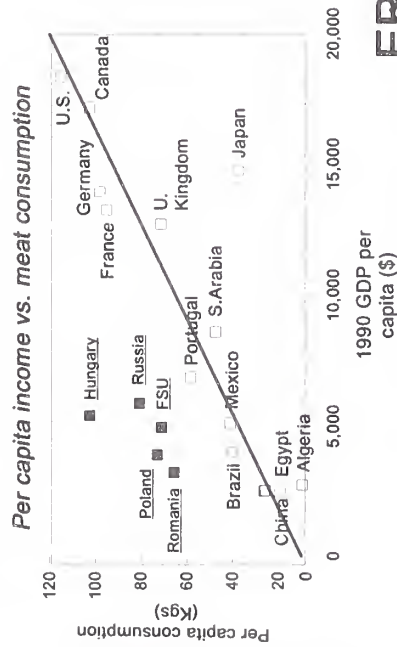
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FSU: Meat Production

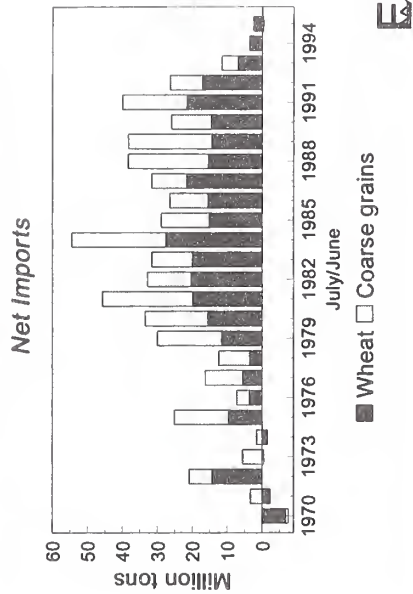


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Per Capita GDP & Meat Consumption, 1990

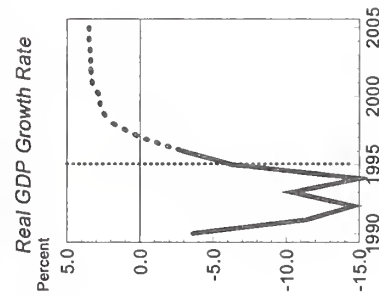


FSU: Net Grain Imports



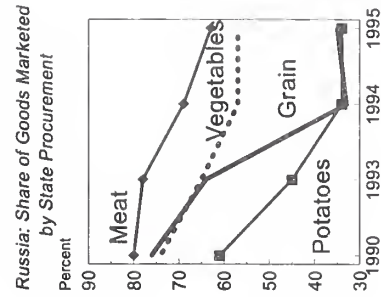
FSU: Macro Assumptions

- Economic reform in the FSU continues
- By 1998, real GDP begins rising
- Inflation stabilizes at 50% annually



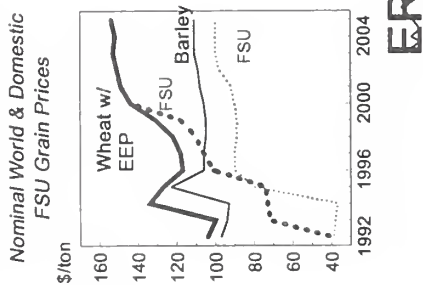
FSU: Agricultural Policy Assumptions

- State procurement system nearly eliminated by 2005
- Producer/consumer subsidies remain low
- Slow progress in land reform, privatization of down/upstream firms, and development of market infrastructure



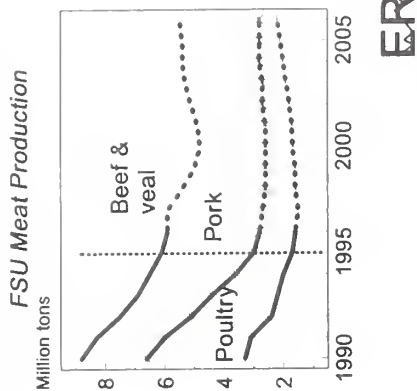
FSU: Trade & Price Policy Assumptions

- Continued growth in private sector trade activity
- Tariffs on bulk commodities remain low, on livestock products at 15-25%
- Domestic grain prices gradually approach world prices



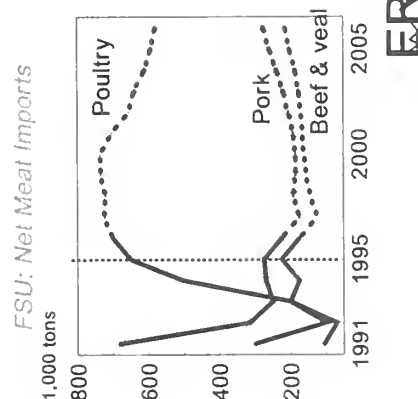
FSU: Projected Meat Production

- Assumptions:
 - Slow rise in income
 - Higher productivity growth for poultry than for beef, pork



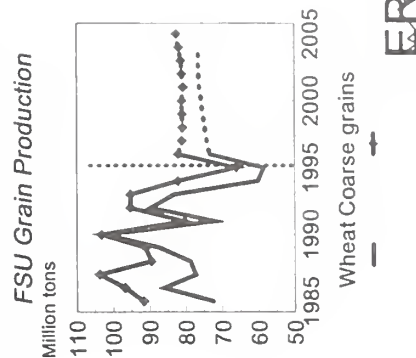
FSU: Projected Net Meat Imports

- Assumptions:
 - Import Tariffs Constant at 15-25%
 - Export subsidies (EU, US) cut back under UR



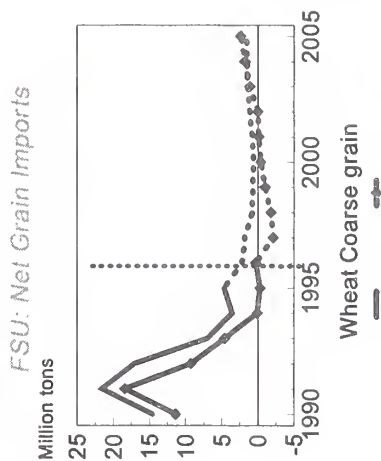
FSU: Projected Grain Production

- Assumptions:
 - No major land reform
 - Modest yield growth
 - Input use remains below former levels



FSU: Projected Net Grain Imports

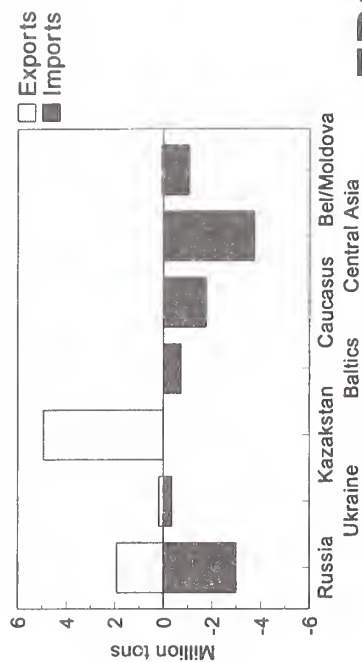
- Assumptions:
 - Import tariffs low or nonexistent
 - Rising incomes and higher meat consumption boost grain use



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FSU: Grain Trade in 1994/95

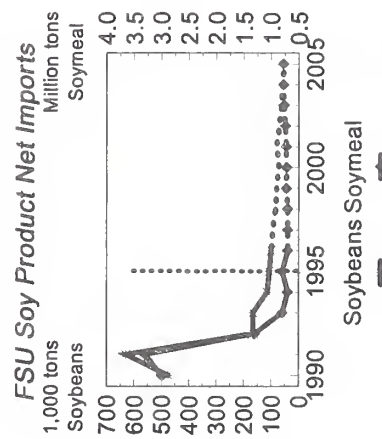
Grain Trade by FSU Republics (1994/95)



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FSU: Projected Oilseed Net Imports

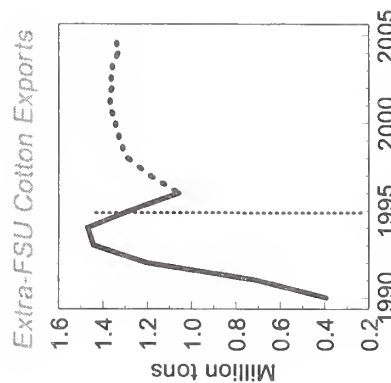
- Assumptions:
 - Domestic production of other oilseeds increases
 - Slow recovery of livestock sector



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FSU: Projected External Cotton Exports

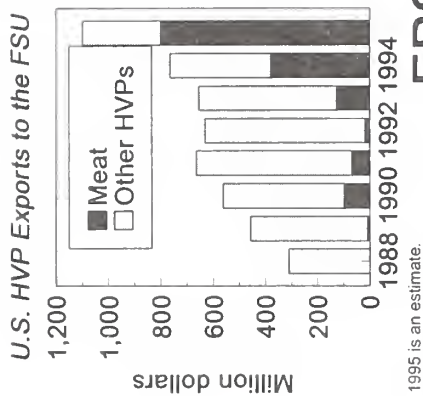
- Assumptions:
 - Area falls as region diversifies
 - Productivity gains increase yields



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FSU: Reasons for Rising HVP Imports

- Growing income inequality
- Appreciation of real exchange rate
- High-cost domestic production
- Growth in private sector trade
- Successful export promotion/marketing



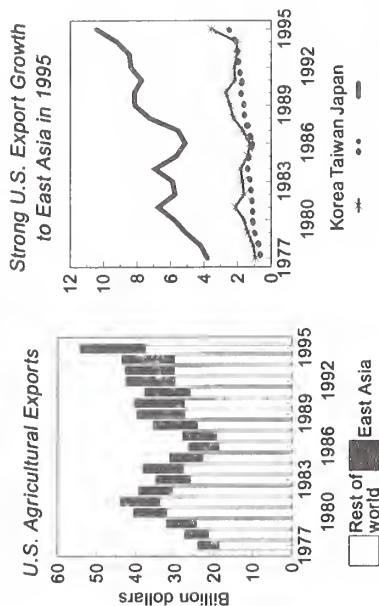
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EAST ASIA

John Dyck
Commercial Agriculture Division
Economic Research Service
USDA

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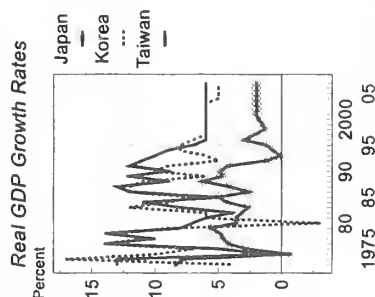
East Asia: The Largest Regional Market for U.S. Agriculture



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Economic Growth in East Asia

- Economic growth is expected to moderate in Taiwan and Korea, but, at 6%, will still support fast dietary change
- Economic growth in Japan will resume, but be slower than in the past



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East Asia: Other Economic Factors -- No Shocks

- Population growth slow, getting slower
- Youth market less important, senior market more important
- Inflation slowing in Korea and Taiwan
- Deflation ending in Japan, very modest inflation in the future
- Exchange rates appreciating slowly, gradually

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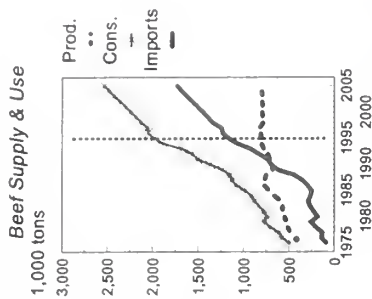
East Asia: Policy Environment

- Economic policies will generally encourage further liberalization, which should result in lower input costs for agriculture
- Agricultural subsidies will remain
- Protectionism for agriculture will be high, limited by multilateral and bilateral agreements

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Beef Market in East Asia

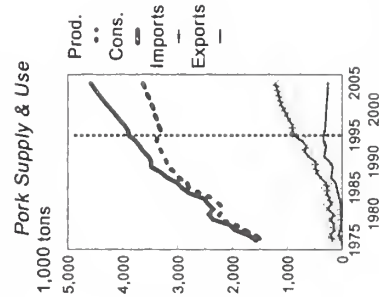
- Consumption will continue to grow in all three markets
- Production will be stable, with large subsidies
- Imports will increasingly favor grainfed beef
- Tariffs are the remaining barrier in Japan and in Korea after 2000



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Pork Market in East Asia

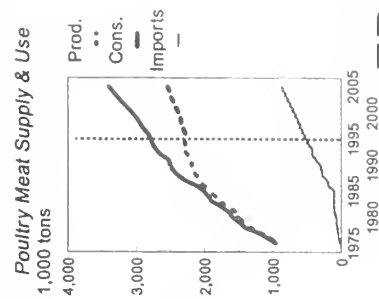
- Consumption will be affected by beef prices
- Supply uncertainty: competitiveness in East Asia could increase as costs fall
- If trade barriers fall, lively trade in cuts will follow



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Poultry Market in East Asia

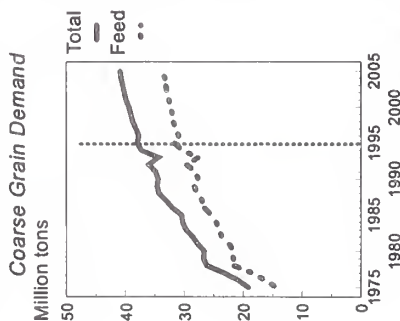
- Fewer, larger-scale producers will maintain current levels of total output
- Increased consumption will be met primarily by greater imports, primarily of legs and processed meat



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East Asia Coarse Grain Market

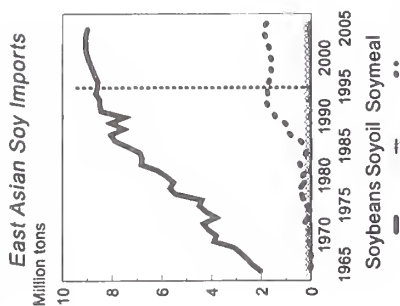
- Feed use will add another 2.5 million tons to imports in the next decade--much less growth than in the past
- Nonfeed use will grow faster than feed use, stimulated by industrial uses of starch



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Soybean Complex Will Have Slow Import Growth

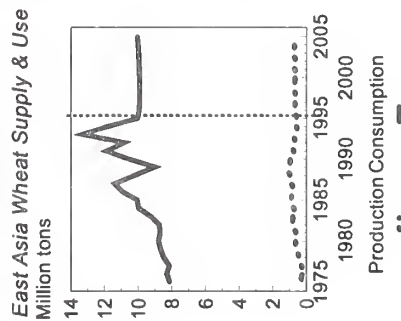
- Under the UR Agreement, oilseed crushing in Korea and Japan will be less profitable, as oil tariffs decline
- Soy oil faces continued competition from other oils
- Soy meal use will stagnate as livestock imports grow, keeping livestock production from increasing



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Wheat Market in East Asia

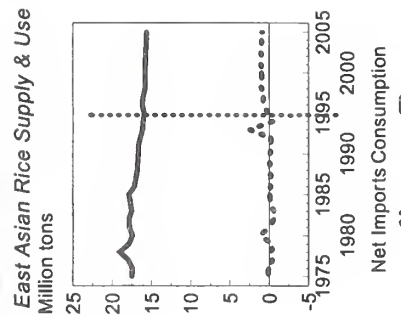
- High wheat prices will curb feed use of wheat
- Food use of wheat will be stable, leading to stable wheat imports
- The milling wheat market increasingly demands specific varietal characteristics



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Rice Market in East Asia

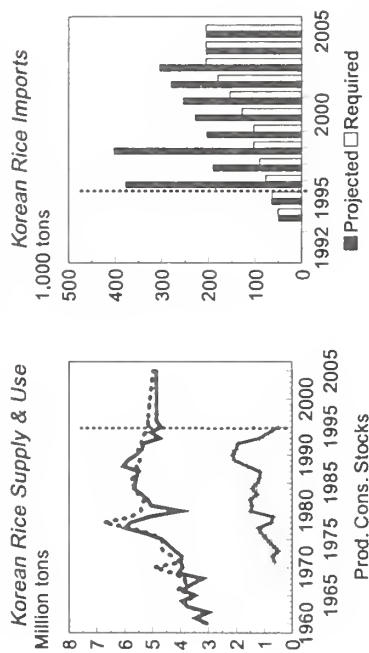
- Rice consumption will continue to decline
- Uruguay Round commitments will require imports & reduced production in Japan



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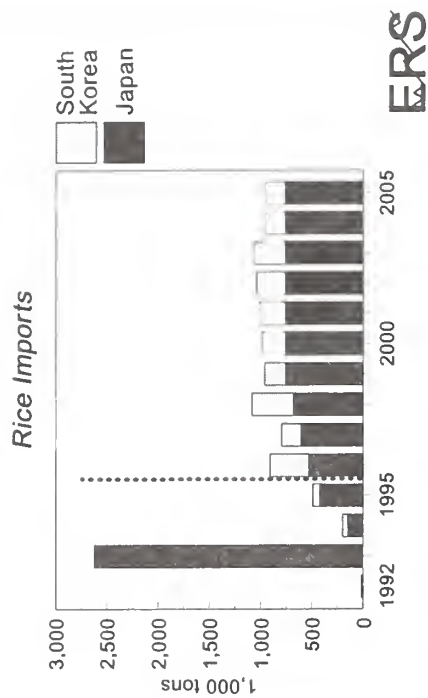
Korea: Prescription for Rice Imports

Production below consumption and low stocks...



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East Asia: Rice Imports



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Korea in 1995: A Pattern of the Past

Gains in U.S. exports came mostly from higher share in the bulk market...

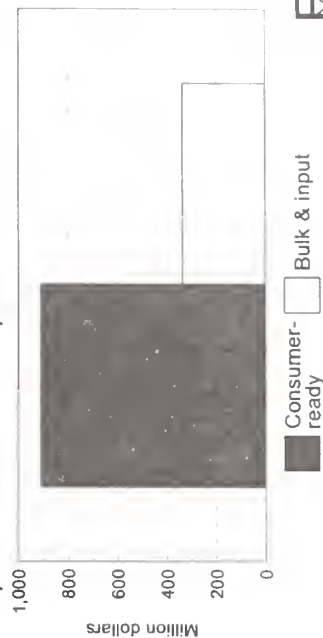


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Japan in 1995: A Pattern for the Future

Gains in U.S. exports came mostly from consumer-ready products...

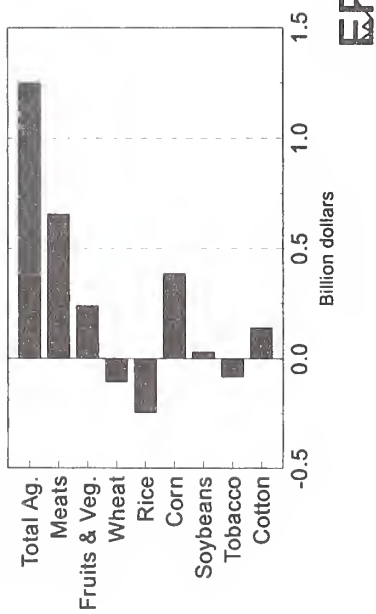
Japan: Increase in U.S. Exports: FY 1995 Over FY 1994



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Changes in U.S. Exports to Japan

Change in U.S. Exports: FY 1995 Over FY 1994



MEXICO

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Commercial Agriculture Division
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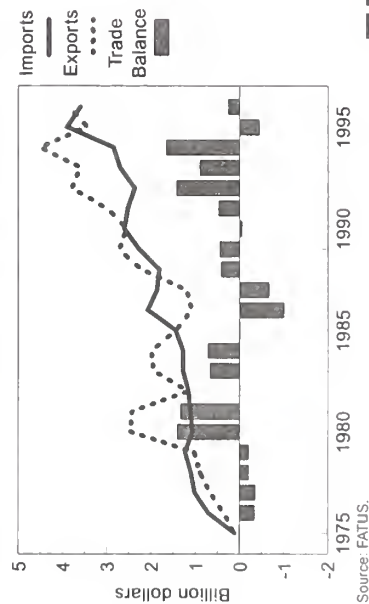
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Mexico: Summary

- Mexico is Expected to be a Growing Market
 - Sustained economic growth
 - Rising incomes = rising food demand
 - Free trade under NAFTA by 2008
- Important to a Wide Range of U.S. Exporters
 - Grains & feeds
 - Meat & dairy
 - Fruits & processed foods

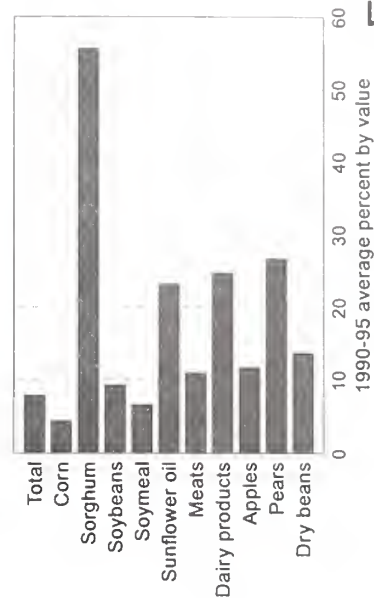
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U.S. Farm Trade With Mexico



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Mexico's Share of U.S. Exports to All Destinations



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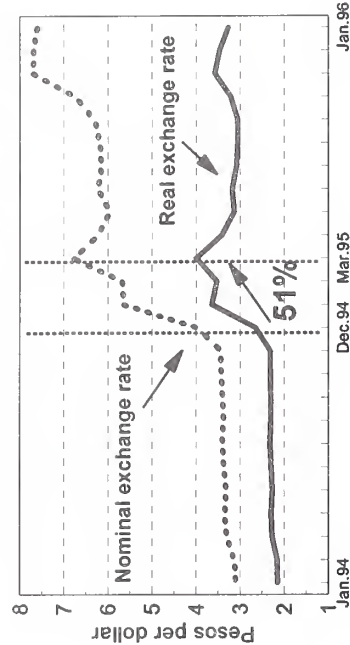
Major Forecasters Agree...

- Mexico's Economy Will Get Straightened Out
 - Monetary & fiscal restraint
 - Continued investment
 - Export-led growth
- Vigorous Long-Term Expansion
 - 1.8% real GDP growth in 1996 & 4.0-6.0% growth expected in 1997
 - Privatization & reform
 - Greater transparency in policymaking

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In the Crisis, Mexicans Lost Purchasing Power Rapidly...

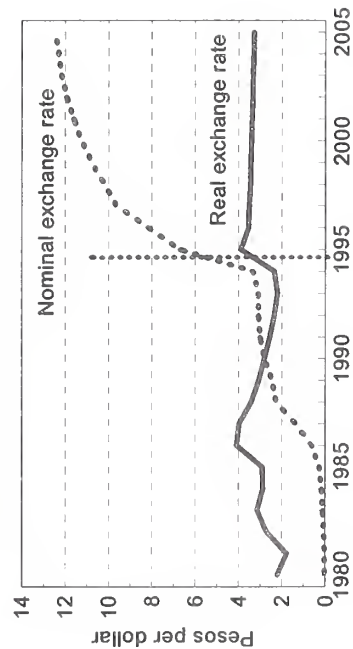
Peso/dollar Exchange Rates



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Despite Nominal Appreciation, Purchasing Power Will Be Steady

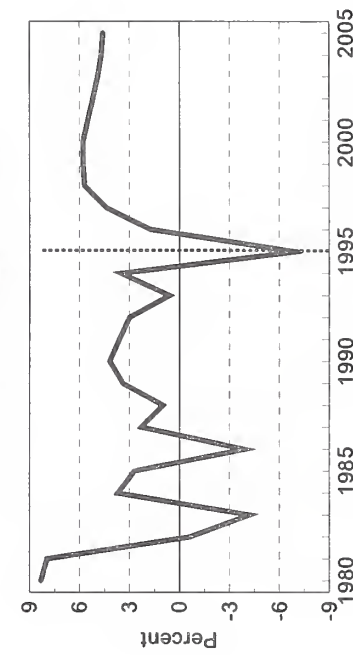
Peso/Dollar Exchange Rates



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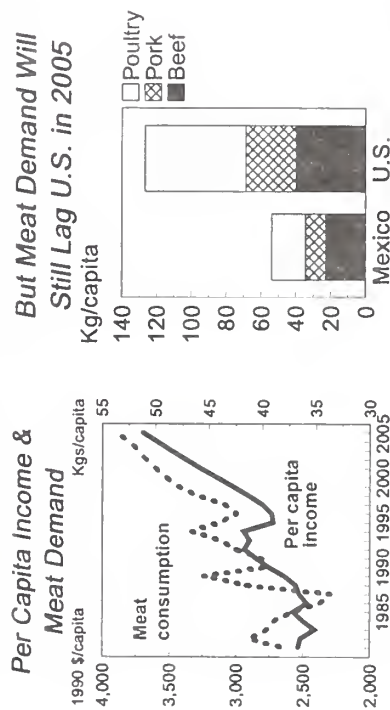
Mexican GDP Will Register Strong Post-Recovery Growth...

Real GDP Growth Rate



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Income Growth Will Drive Up Meat Demand...



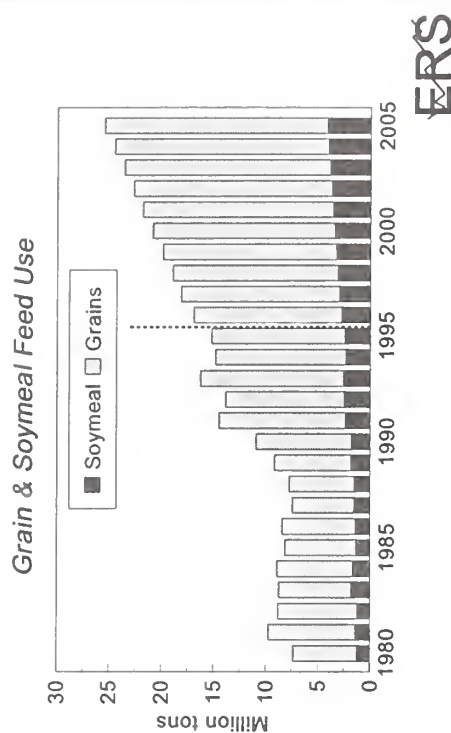
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Gains in Mexico's Farm Output Will Be Limited...

- Structural Limitations
 - Area constraints
 - Large subsistence sector
 - Low level of technology
- Declining Government Intervention
 - Limited producer price support
 - 15 year phase-out for payments
- Import Competition

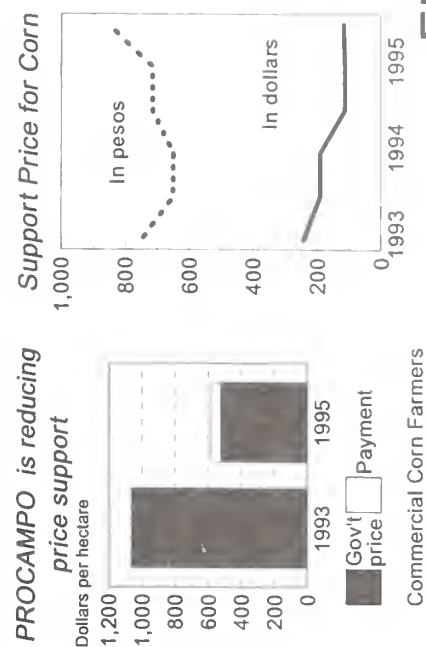
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Grain & Oilseed Feed Use Will Rise...



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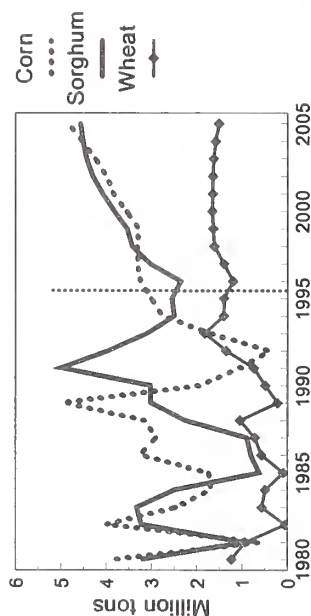
Greater Market Orientation for Crop Production



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Mexico's Projected Grain Imports...

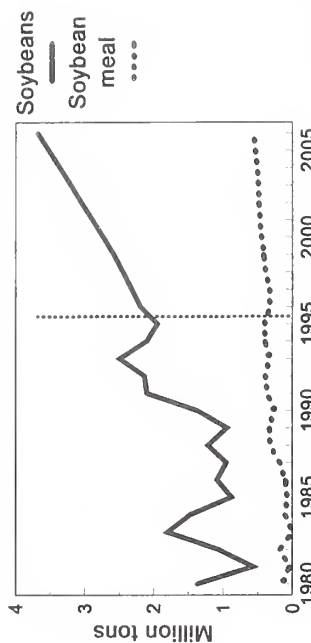
Grain Imports



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Mexico: Projected Soy Imports

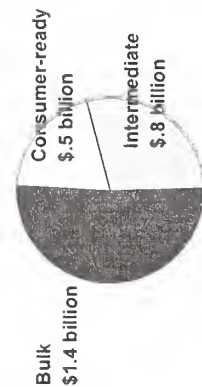
Soybean & Meal Imports



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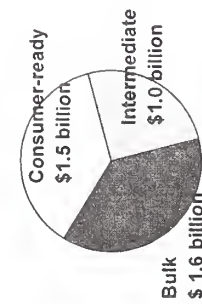
U.S. Farm Exports to Mexico are Shifting...

FY 1990



Potential is strong for import growth in consumer-oriented products, including meats

FY 1994

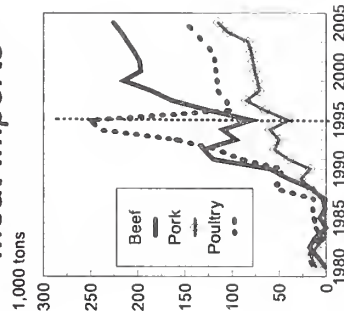


Consumer-ready share rose from 20% in FY 90 to 37% in FY 94, while value tripled

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Mexico's Meat Imports Will Rise...

Meat Imports

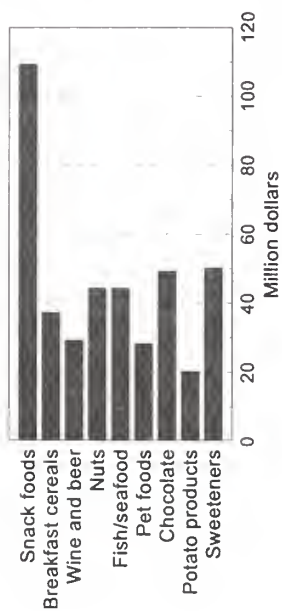


- A rising share of beef & pork consumption will be supplied by imports
- Enforcement of TRQ for poultry could limit imports & reduce its share from current 19%

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Strong Growth Expected in Mexico's HVP Imports...

Selected U.S. HVP Exports to Mexico
FY 1994



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