



K-STATE
Research and Extension

Kansas State University
2012
Swine Profitability
Conference

Forum Hall
K-State Union
Tuesday, February 28



Sponsored by
Department of Animal Sciences and Industry
K-State Research and Extension
Kansas Pork Association
National Pork Board

Short and Long-Term Price Outlook: How Will Consumer Preferences on the Welfare Front Impact Your Operation?

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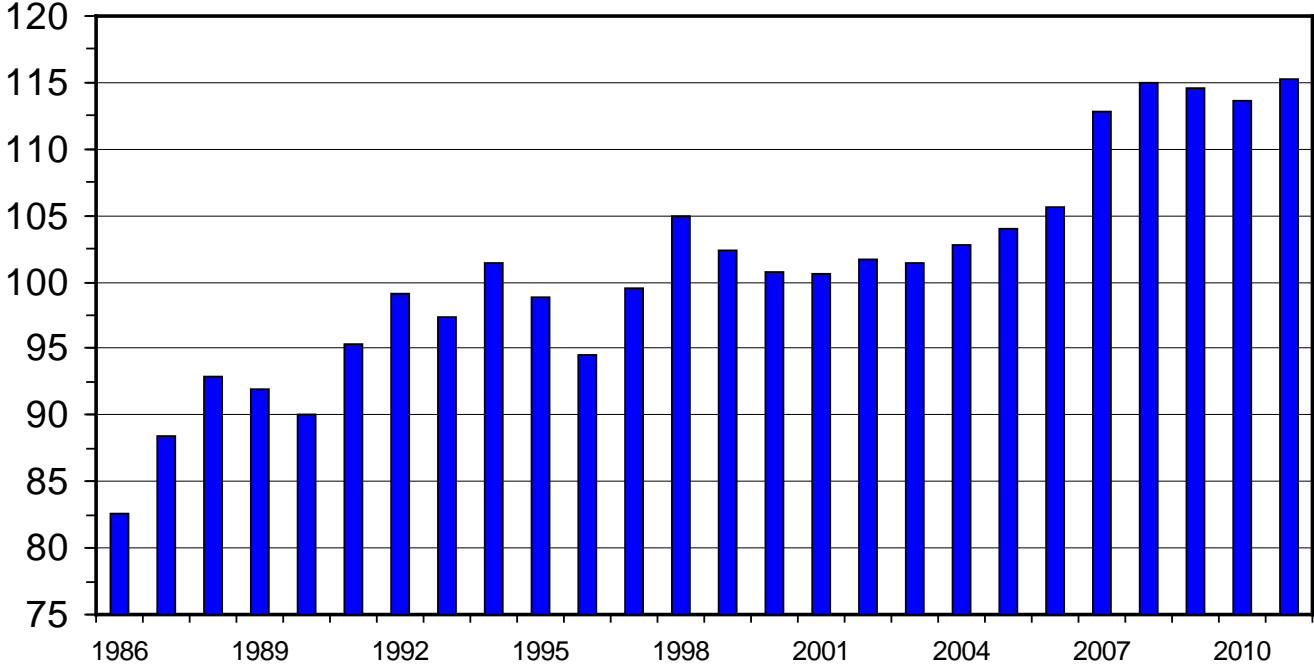
Economic Outlook Overview:

- Expansion possible/probable
 - How much is broader uncertainty at play?
- Strong futures-implied 12' Far-Fin returns
- Export importance continues to grow
- Factors beyond “base fundamentals” rising in importance...



ANNUAL PIG CROP U.S.

Mil. Head



Livestock Marketing Information Center

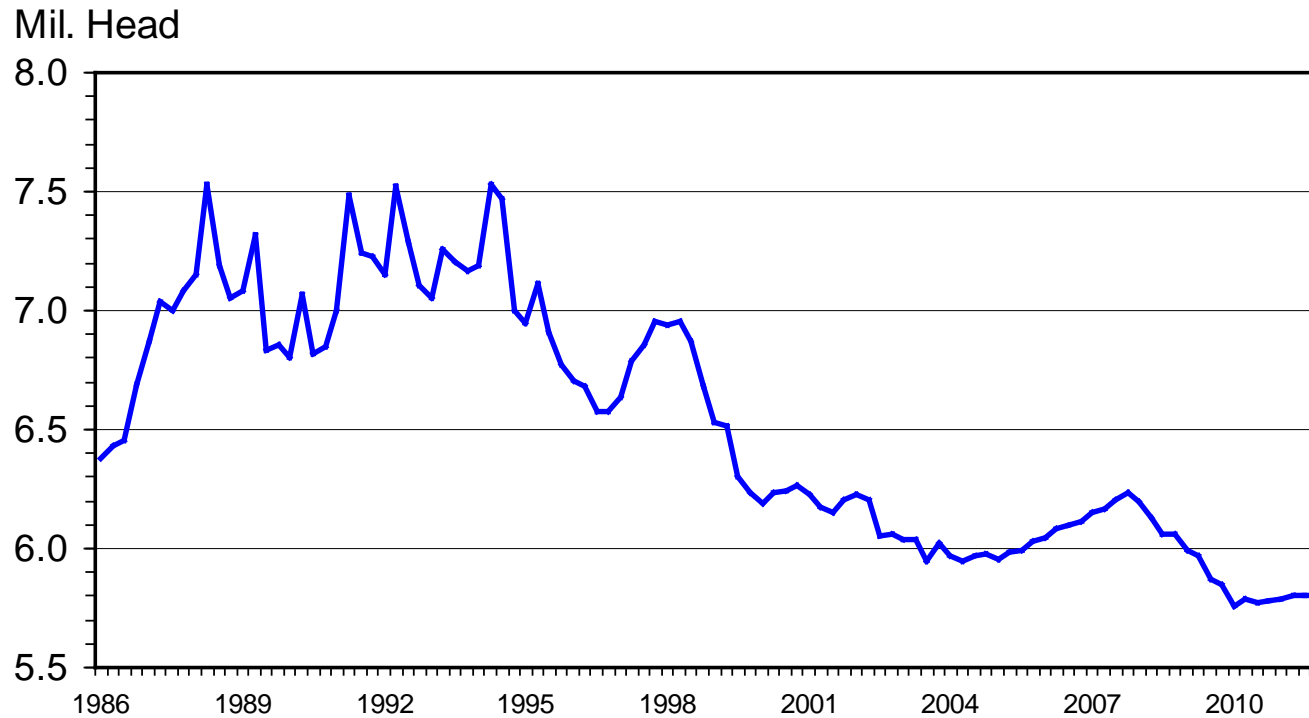
Data Source: USDA-NASS

H-N-52
12/23/11



HOGS KEPT FOR BREEDING

Quarterly



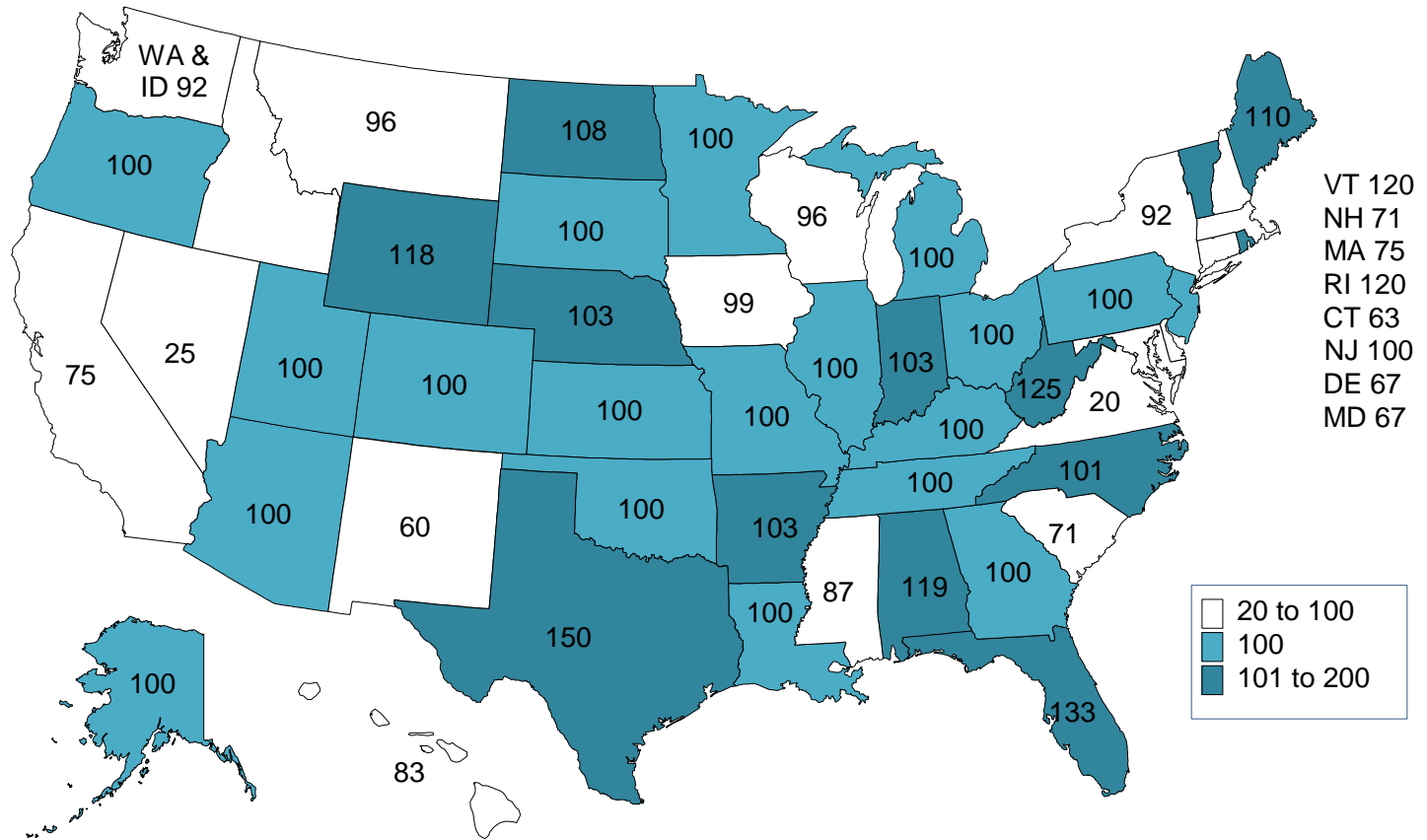
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Data Source: USDA-NASS

H-N-55
12/23/11



DECEMBER 1 BREEDING HOGS AND PIGS 2011 AS PERCENT OF 2010

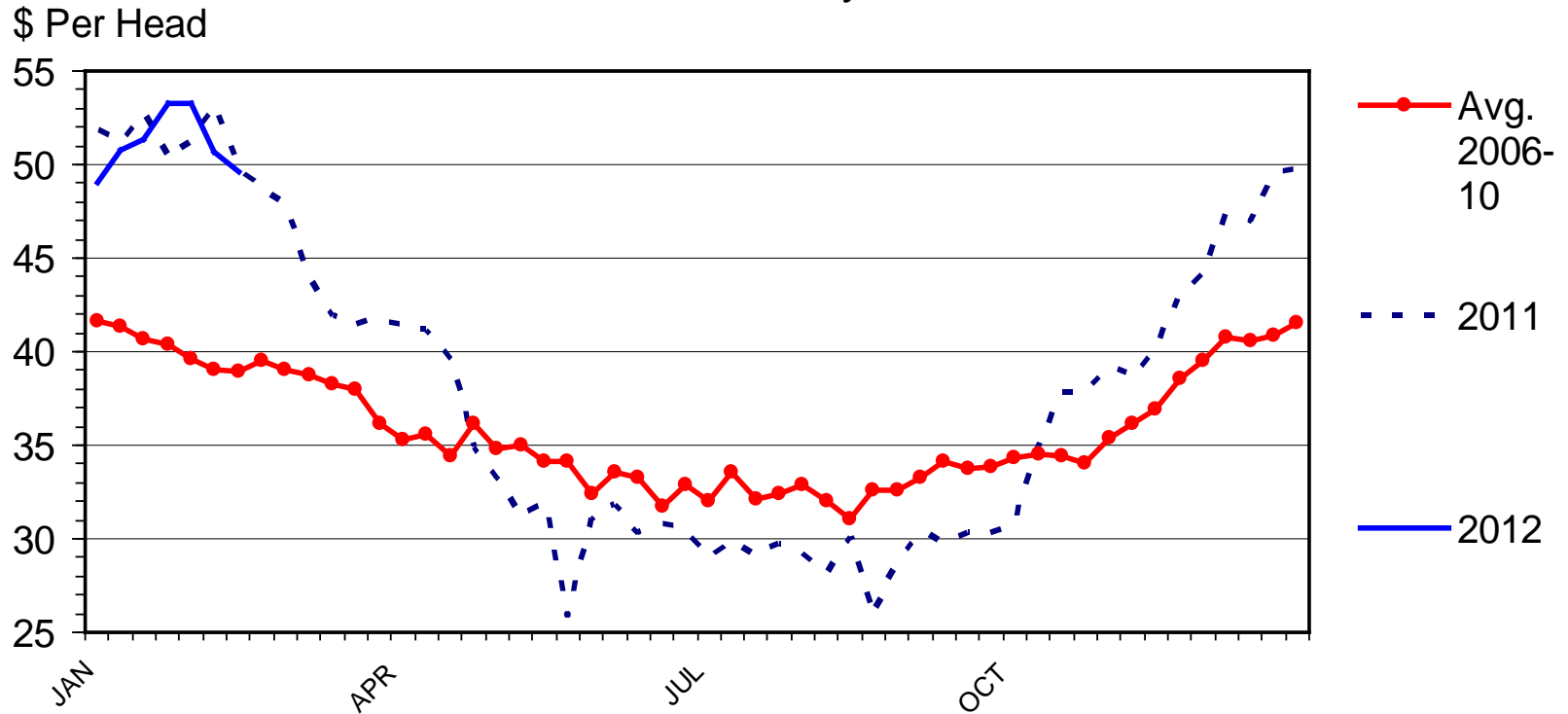


US Total: 100



EARLY WEANED PIG PRICES

National, 10-12 Lbs (January 2012 to present), Delivered,
Weekly



Livestock Marketing Information Center

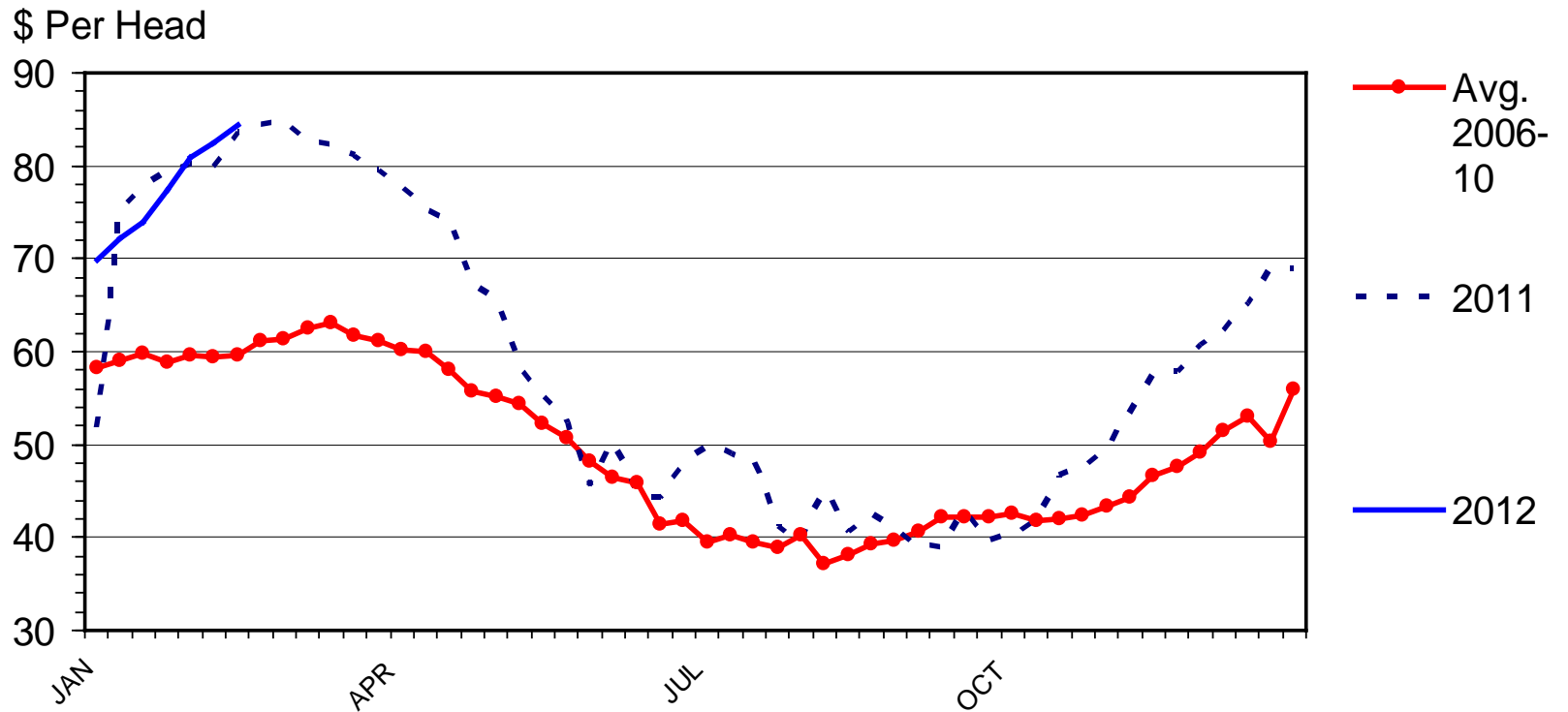
Data Source: USDA-AMS

H-P-21
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FEEDER PIG PRICES

40 Pounds, Weekly



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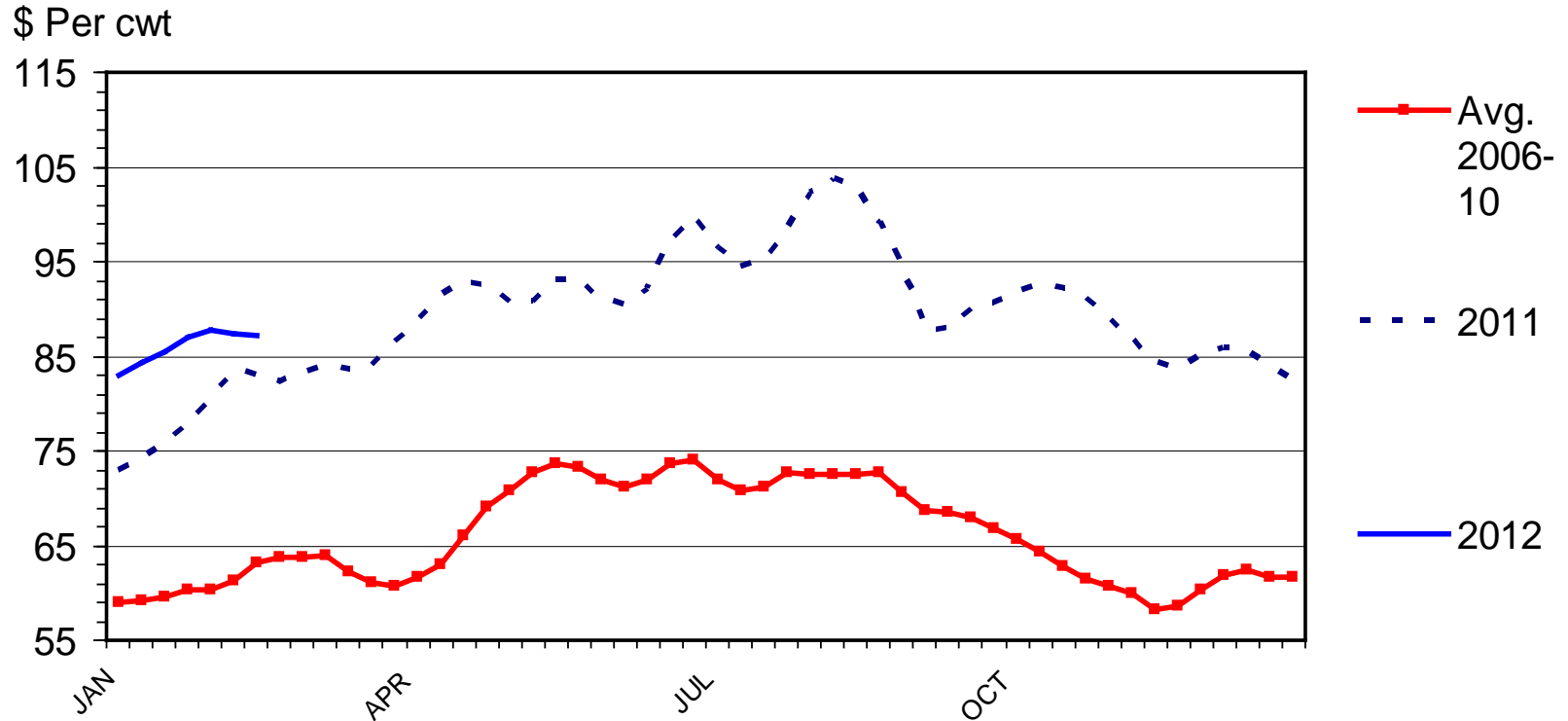
Data Source: USDA-AMS

H-P-01
02/21/12



NET SLAUGHTER HOG PRICES

National, Weighted Average Carcass Price, Weekly



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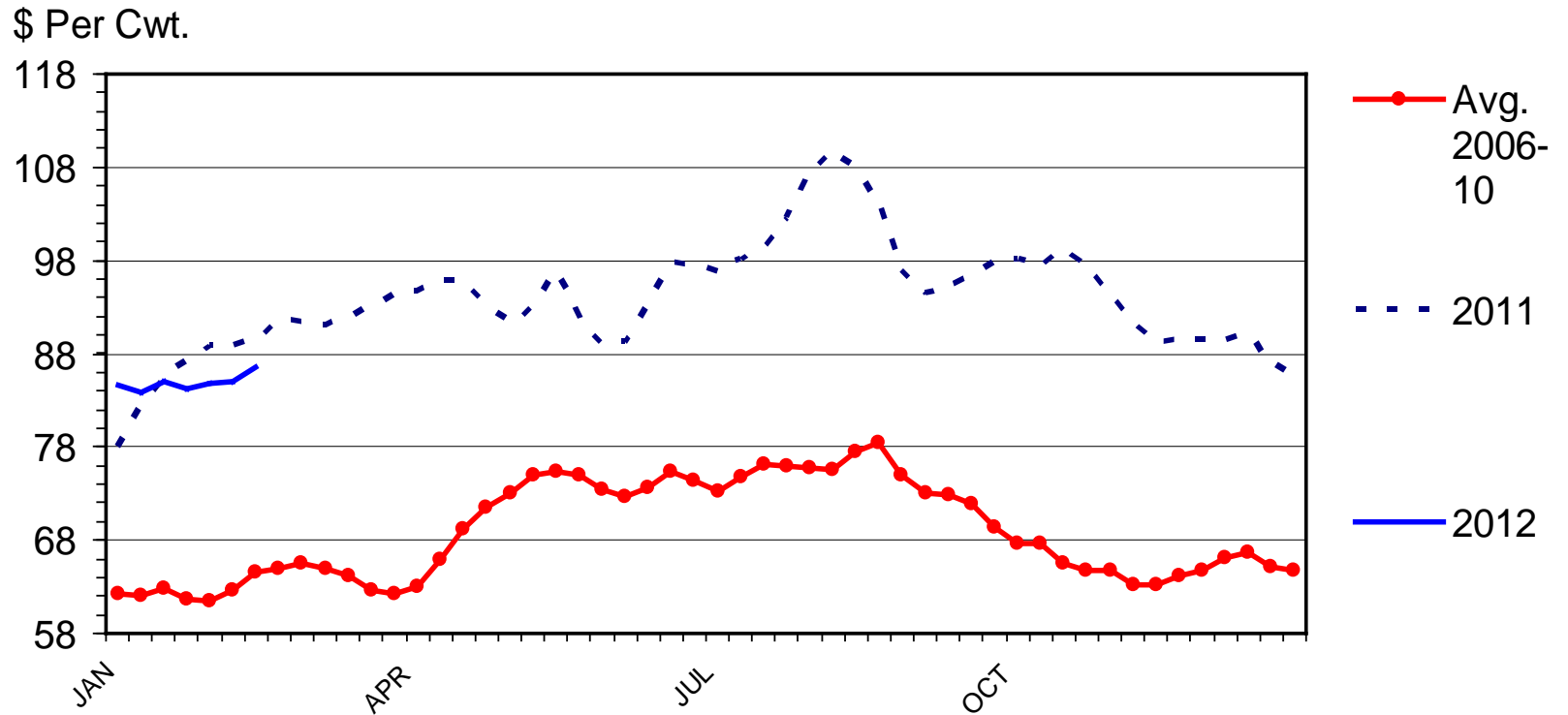
Data Source: USDA-AMS, Compiled & Analysis by LMIC

H-P-24
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HOG CUTOUT VALUE

Weekly



Livestock Marketing Information Center

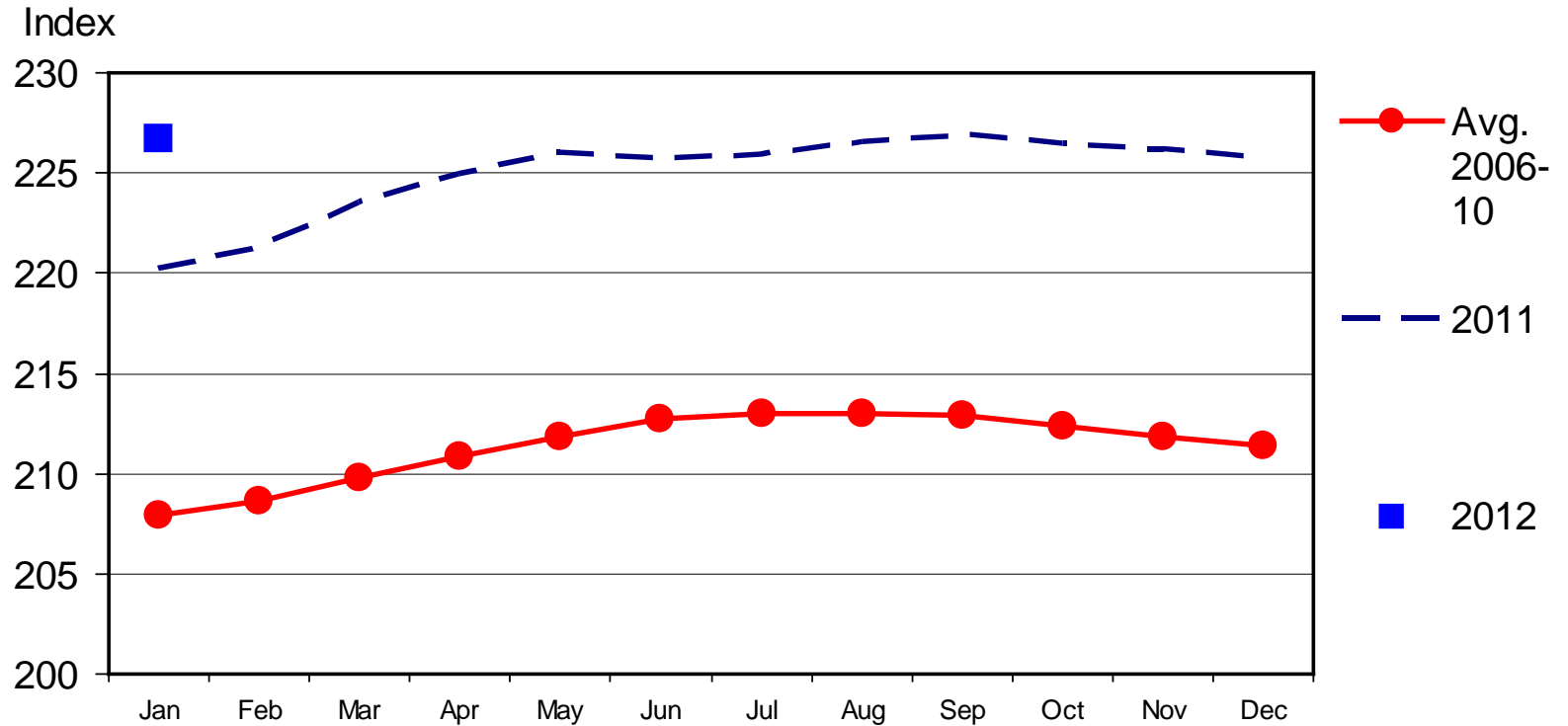
Data Source: USDA-AMS, Compiled & Analysis by LMIC

H-P-10
02/21/12



CONSUMER PRICE INDEX - ALL ITEMS

1982-1984 Base, Monthly



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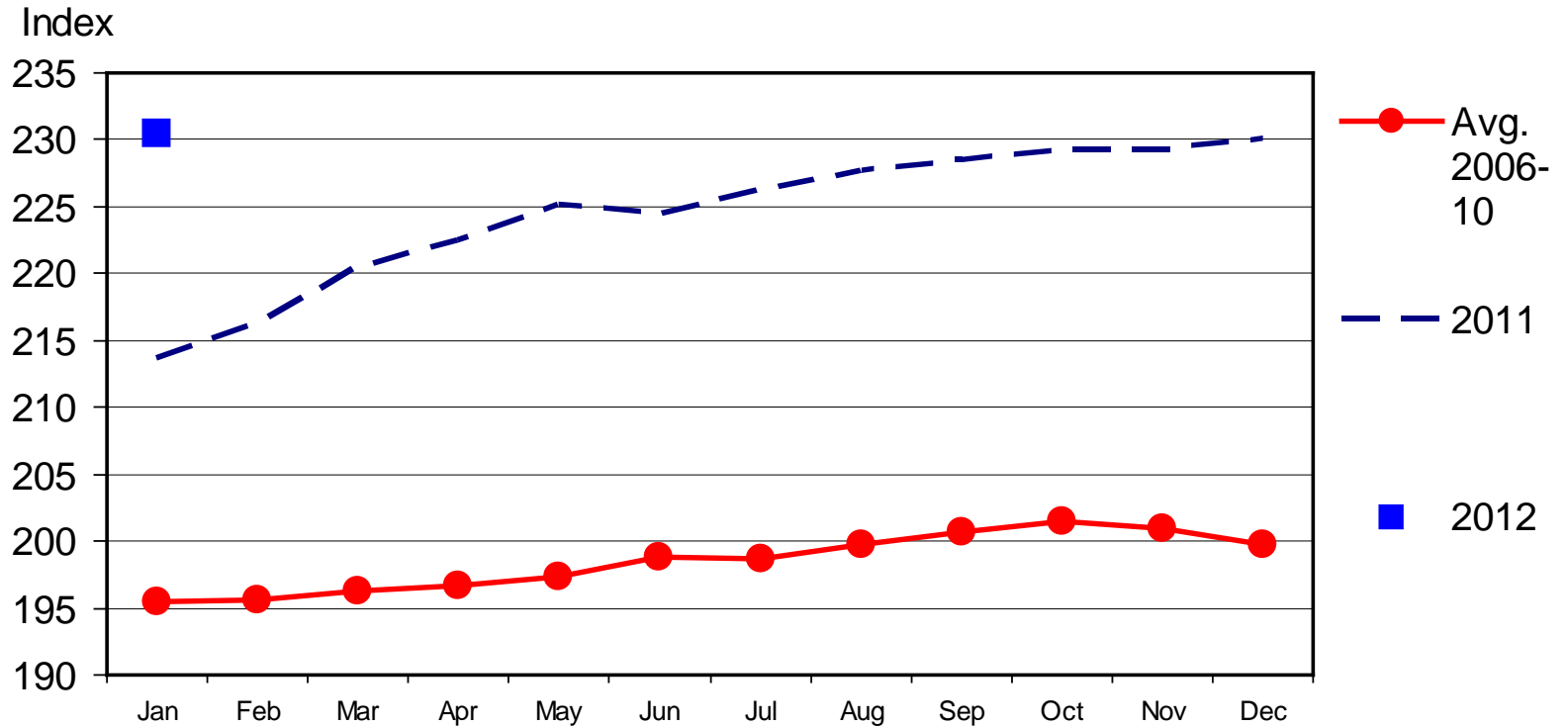
02/17/12

Data Source: Bureau of Labor Statistics



CPI - MEATS

1982-1984 Base, Monthly



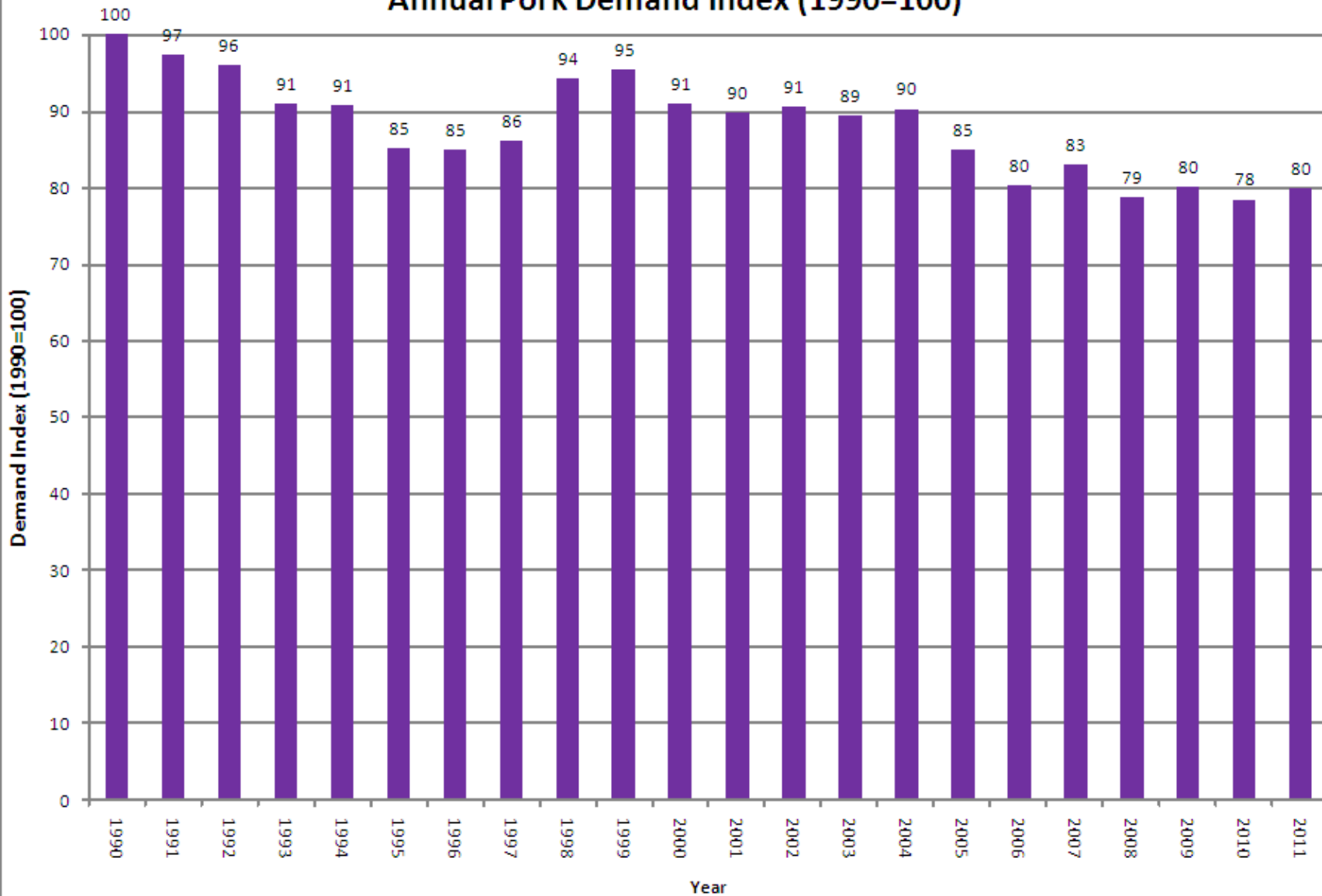
Livestock Marketing Information Center

02/17/12

Data Source: Bureau of Labor Statistics



Annual Pork Demand Index (1990=100)

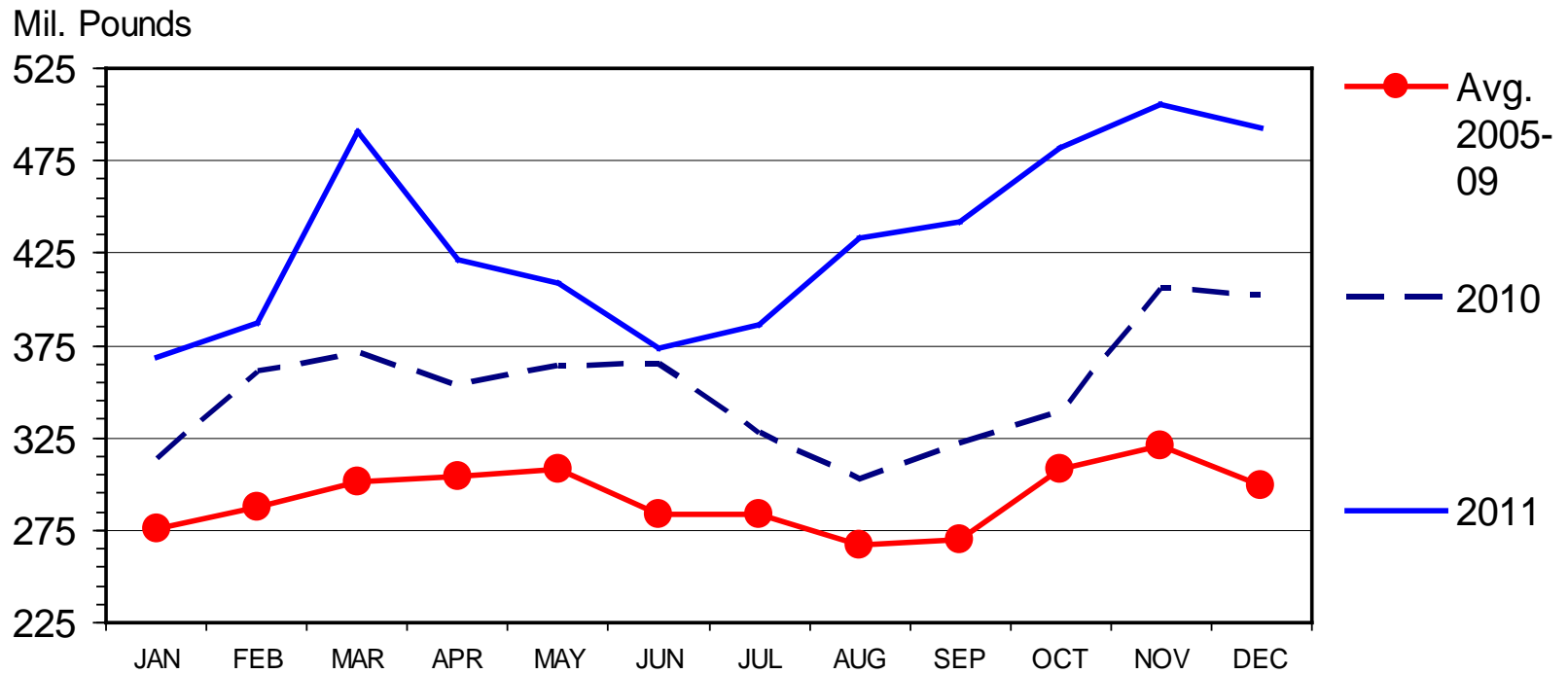


Source: Glynn T. Tonsor, Kansas State University, Jan. 2012



U S PORK EXPORTS

Carcass Weight, Monthly



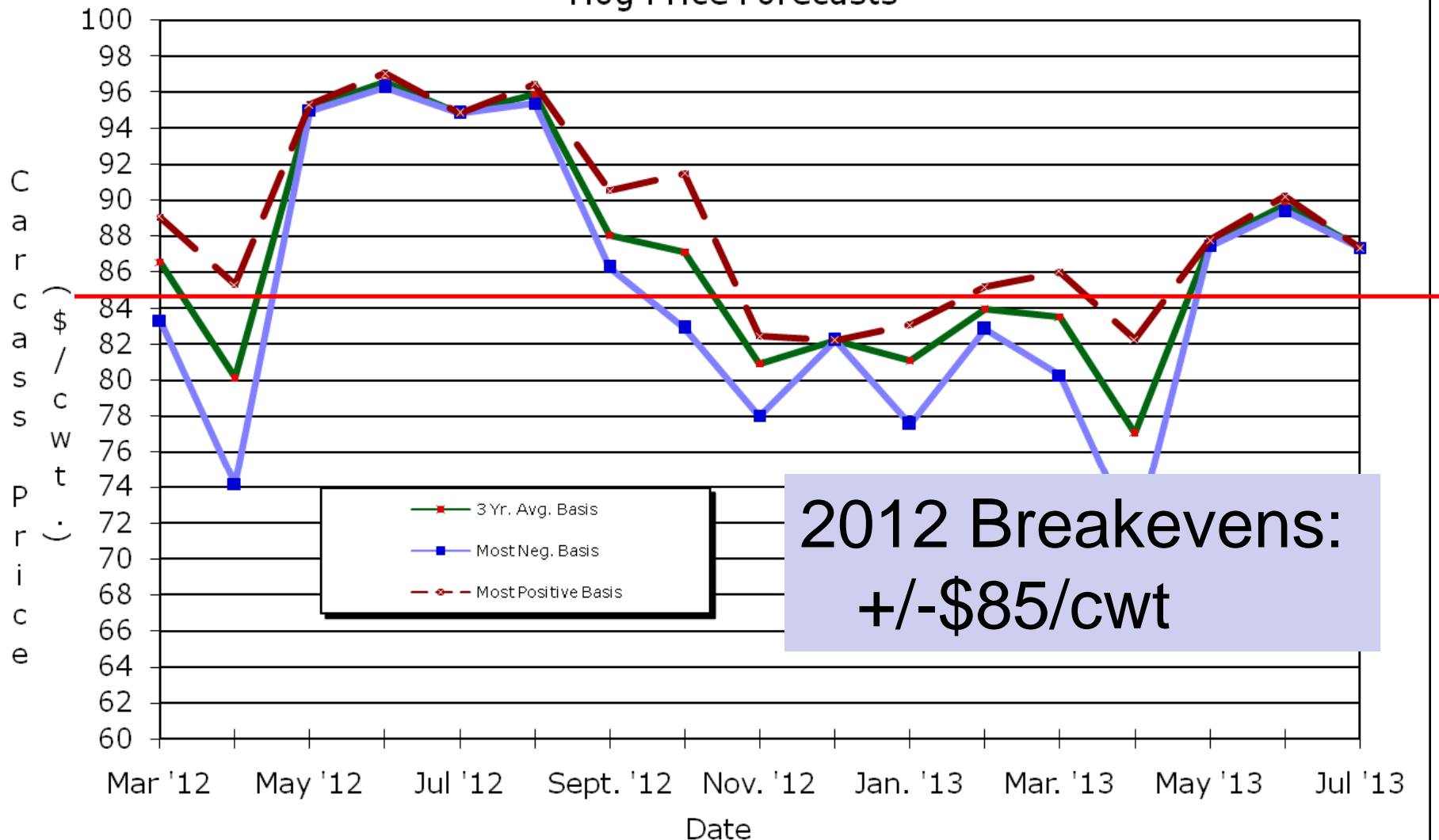
Livestock Marketing Information Center

Data Source: USDA-ERS & USDA-FAS

I-N-30
02/13/12



Futures Based National Base Hog Price Forecasts



2012 Breakevens:
+/- \$85/cwt

Source: USDA-AMS, CME, & K-State Research & Extension
Forecasts: 2.24.12 Futures Price + Basis Estimates

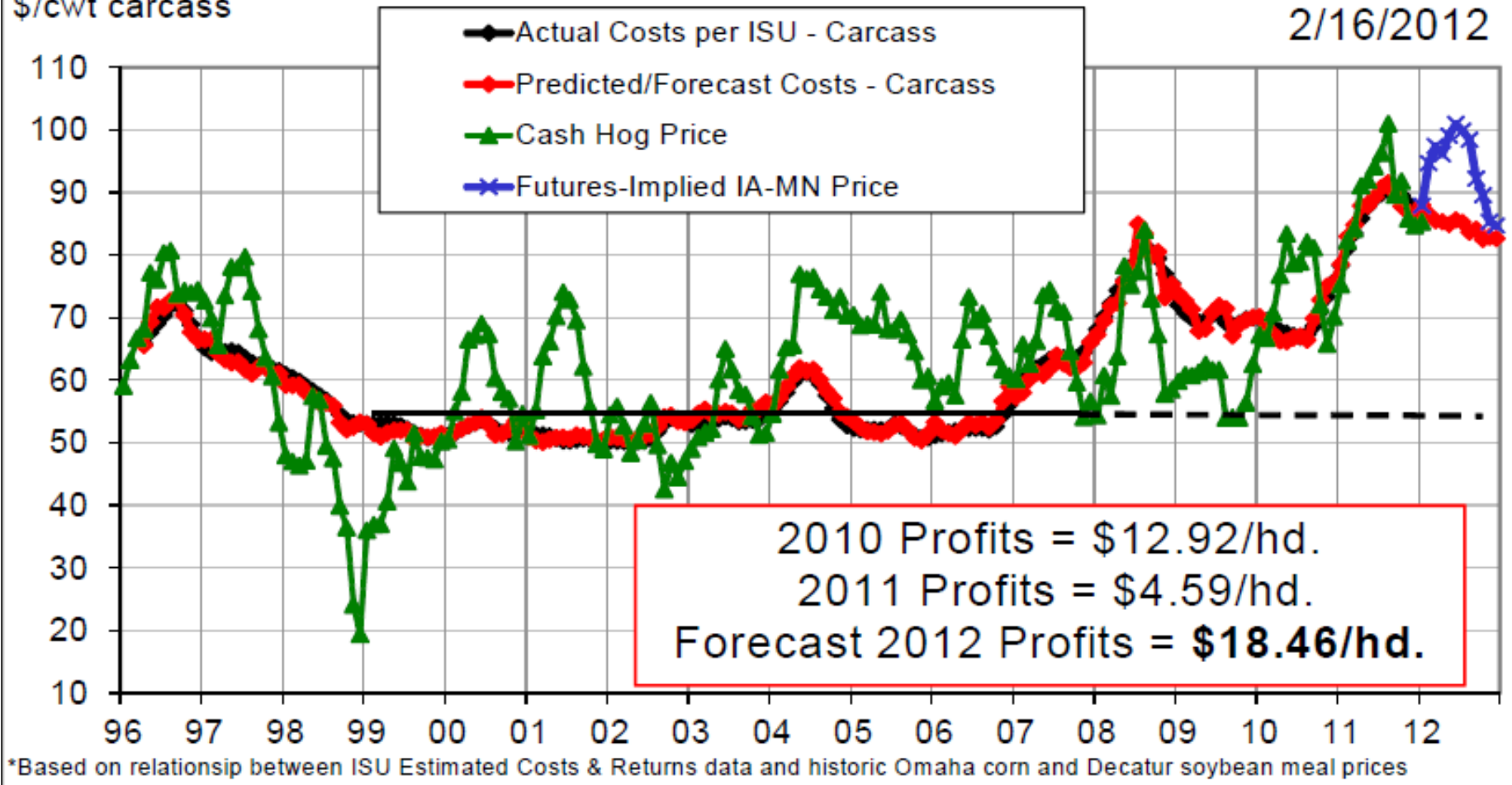
KSU Dept. of Ag Econ
www.agmanager.info



ACTUAL & PREDICTED HOG PRODUCTION COSTS* AND PRICES

\$/cwt carcass

2/16/2012



Source: CME Daily Livestock Report (Feb. 17, 2012);
<http://www.dailylivestockreport.com/>



USDA's longer-term projections (as of Feb. 2012) ...

<http://www.ers.usda.gov/Publications/OCE121/>



United States
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World Agricultural
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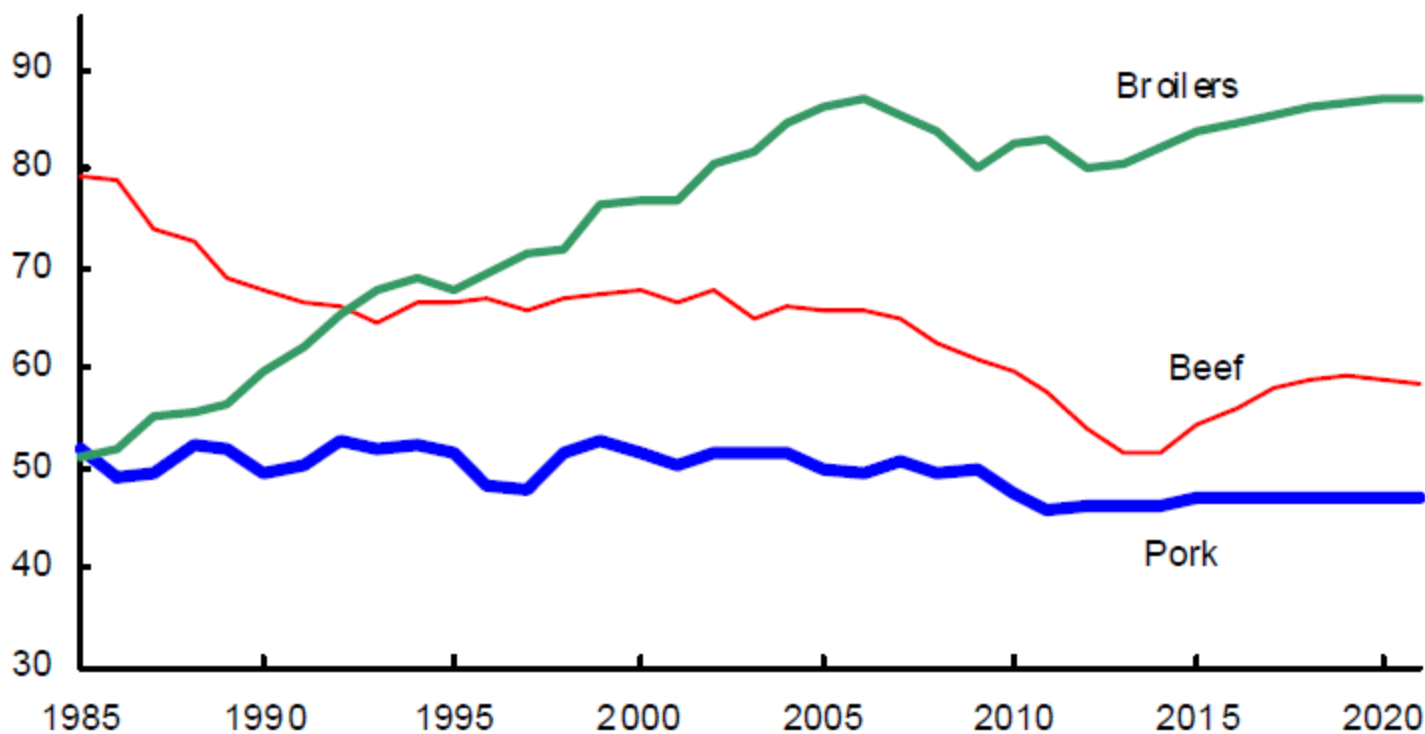
Long-term
Projections Report
OCE-2012-1

February 2012

USDA Agricultural Projections to 2021

U.S. per capita meat consumption

Pounds per capita, retail weight



USDA's longer-term projections (as of Feb. 2012) ...

<http://www.ers.usda.gov/Publications/OCE121/>

- **Dec. 1 Hog Inventory:**
 - 64.9 million in 2011
 - 65.9 million in 2012
 - 72.8 million in 2021
- **Domestic per capita red meat and poultry consumption:**
 - 221 lbs in 2004-2007 (**Pork=50.4 lbs**; Poultry=103.8 lbs; Beef=65.7 lbs)
 - 206 lbs in 2011 (**Pork=45.8 lbs**; Poultry=100.8 lbs; Beef=57.5 lbs)
 - 198 lbs in 2013 (**Pork=46.3 lbs**; Poultry=98.5 lbs; Beef=51.3 lbs)
 - 213 lbs in 2021 (**Pork=47.2 lbs**; Poultry=105.8 lbs; Beef=58.7 lbs)
- **Pork exports:**
 - 4.98 billion lbs in 2011
 - 5.09 billion lbs in 2012
 - 6.09 billion lbs in 2021



Cross-cutting issues: “Developing” trade discussions/events --- becoming “normal”...

- Japan may start accepting older cattle...
- FTA = reduction of South Korea tariffs
- USMEF – ID/Traceability study == U.S. falling behind
- WTO MCOOL ruling
 - U.S. response (Mar. 23, 2012) unknown...
 - Mexican tariffs on U.S. pork???



Policy/Regulation Issues & Trends

- GIPSA “fair market” proposed rules / “anti-competition” listening sessions ...
 - Ultimately limited action
 - **BUT** lots of wasted time & energy...
- Environmental regulation concerns
- WTO MCOOL ruling – U.S. response?
- Animal welfare
 - *Is overall uncertainty holding back investment throughout supply chain???*



Animal Welfare Research Overview

- 4 Surveys (w/ Christopher Wolf, MSU) Since 07'
 - Mainly gestation crate/stall and laying hen cage focused
- Aggregate meat demand, AW media impact study
- Mandatory labeling of AW information study
- Just started 3-Yr USDA Beef and Dairy Cattle project



Background & Motivation

- Consumer interest in production methods is growing
 - Think about discussions on food safety, farm size, GM-feed, hormone use, etc....
 - Includes animal welfare
 - well-being, care, and handling of livestock being raised for meat, milk, and egg production (Tonsor)



Events Summary

- State-by-State Events: Ballot initiatives, legislature, agreements
- Live Trade Events
 - May 11': Australia banned live cattle exports to Indonesia because of inhumane treatment
- National Legislation & Labeling?
 - July 11': UEP & HSUS agreement
- 2012 Announcements:
 - McDonald's – wants plans for g.stall phase out



CA's Proposition 2 Question:

Law would require farmers nationally to confine calves raised for veal, egg-laying hens, and pregnant pigs only in ways that allow these animals to lie down, stand up, fully extend their limbs, and turn around freely.

- CA actual vote (Nov 2008): 63% FOR
- Survey national question:
 - National support: 70% FOR (Oct/Nov 2008)
 - National support: 66% FOR (May 2010)

Source: Survey of 2,001 & 800 U.S. residents



Determinants of voting response in national Proposition 2 questions:

- State of residence not a factor
- Some observable socio-economic traits are influential
- Info. accuracy perceptions are most influential
 - Those perceiving livestock industry (consumer groups) to provide accurate AW information are much less (more) likely to vote FOR.

Source: Survey of 2,001 U.S. residents



Ballot Voting Implications

- Targeting residents is difficult (latent perceptions drive voting)
- Residents were insensitive to # years for producers to comply (6-8 is common).
 - 1st or most heard voice may set adjustment timetable
 - Substantial costs of not being active or sending mixed signals
 - Industry may have opportunity to pursue longer implementation timetable
- Majority show voting support but not matching purchasing behavior...



Mean vs. Median Issues...

- **MI Pork Chop Choice Experiment:**
 - 20% have preferences ‘justifying a gestation crate ban’
 - 80% “could be appeased” by voluntary production of gestation crate-free pork
 - So consumers may be valuing producer autonomy
- **Egg Purchasing Analysis** (Chang, Lusk, & Norwood, 2010)
 - Cage-free premium is 57%
 - driven by minority: <4% of sales nationally are cage-free



Impacts of Animal Welfare Media Coverage on Meat Demand



Results Summary

- AW media elasticities are notably smaller than price & expenditure effects
- Increases in AW media have:
 - Not directly impacted beef demand
 - Reduced pork demand (both in short- and long-run)
 - Reduced poultry demand (in long-run)
- AW impacts lead to expenditure reallocation to non-meat food rather than to increases in competing meats...
- 1999(1)-2008(4) pork & poultry AW media indices increased by 181% & 253%
 - = 2.65% pork & 5.01% poultry demand reductions...



Implications

- Aggregate meat demand impacts exist. Do they cover avg. adjustment costs?
 - Highlights the resident voting vs. consumption decision dilemma ...
 - Also consistent with limited “free market” disadoption observed to-date by livestock industry...
- Budget reallocation effects:
 - Supports notion of a broader meat industry response rather than species-specific responses
 - All species lose as expenditures leave meat complex...



***Mandatory Labeling of Animal
Welfare Attributes:
Public Support and Considerations
for Policy Makers***



Comparative Ad(dis)vantages = National Legislation???

- Adjustments of production practices varies across states
- Timelines of implementation vary across states
 - Possible support for national legislation to “level the field”
 - Increasingly pockets of producers may lead the call..
- July 7, 2011 UEP & HSUS agreement
 - call for national standards regarding laying hen housing
 - call for mandatory labeling of eggs



Results

- 62% in favor of mandatory labeling of pork (gestation crate/stall use) and eggs (laying hen cage use)
 - 44% reversed support with price considered
- WTP about 20% higher prices
 - Likely an upper bound
- Perceived accuracy of AW info. from livestock industries *relative* to consumer groups is critical demand driver



Pre-Mandatory Labeling Implementation Considerations

- Through benefit-cost assessment is needed
- Delineations needed:
 - Frequent consumer vs. advocates for change/bans
 - Producer impacts likely vary within industries
 - Mean vs. median economic welfare distinctions
- Alternative voluntary labeling consideration
- Consumer choice may not be enhanced
- Information overload possibility
- Composite AW index needed – AW isn't univariate



Ending Summary Points & Thoughts



Summary Points: Consumers & Residents

- Consumer/resident desires regularly initiate change
 - Perception drives decisions
 - “Accurate knowledge” and familiarity is NOT necessary to be influential
 - No one individual can be “educated” on everything...

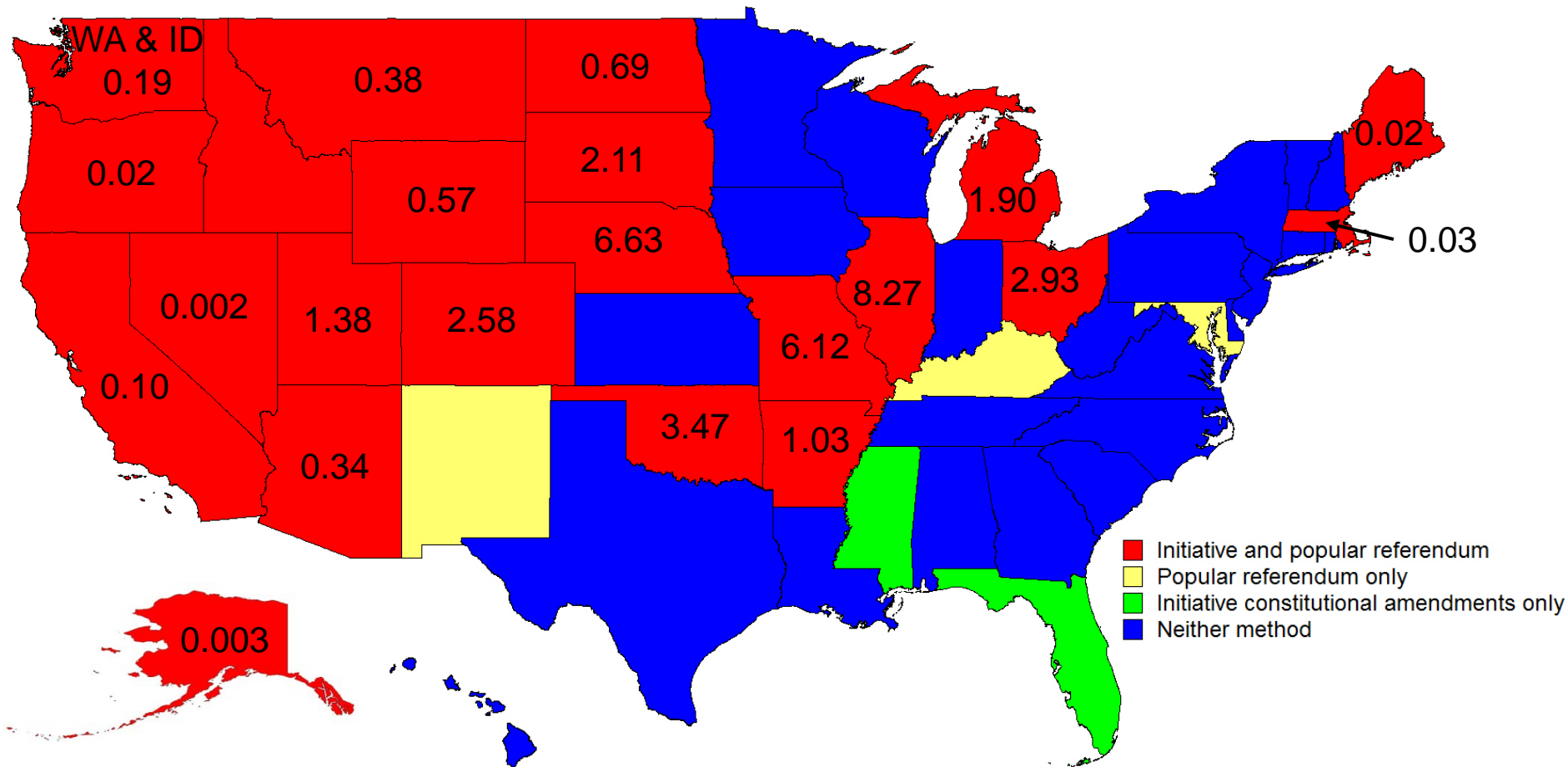


An Additional Critical Point

- A state passing a ballot initiative isn't likely necessary to cause change:
 - Packers or retailers may drive a switch:
 - Cost of segregation; switch at some critical volume
 - External pressures will likely continue to mount (e.g. Jan. 2012 HSUS video w/r/t OK pork; Wal-Mart PR pressure)
- **Implication**: “Fighting ballot initiatives at all costs” may not be optimal



December 1, 2011 TOTAL Hogs Breeding AS PERCENT OF TOTAL U.S.



Data Source: USDA-NASS

December 1, 2011 Total Hogs Breeding Inventory = 5,803,000
 Initiative and Popular Referendum = 43.22%



Wrap-Up Points

- AW discussion is here to stay
- No species nor state/region is immune
- Industry will increasingly face social pressures regarding food production practices
- Much more work is needed
 - Industry changes and policy consideration discussions are WAY ahead of current research based knowledge...
- Be aware, think carefully, and be proactive:
“this isn’t your father’s world” ...



More information @ AgManager (<http://www.agmanager.info/>)

<http://www.agmanager.info/livestock/marketing/AnimalWelfare/default.asp>



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In The Cattle Markets	Livestock & Hay Charts	Marketing Strategies	USDA News	Projected Budgets	BeefBasis.com	Animal ID & Traceability
Livestock Outlook Radio	Livestock Databases	Financial Analysis	Futures Market Prices	Historical Budgets	NAIBER	Animal Well-Being
Cattle Finishing Returns	Beef Demand Charts	Trade and Demand	Pork Price Reporting	Production Economics	LMIC	CLPER
	Grain Supply & Demand	Price Risk	Interest Rate Forecasts	LRP Insurance		
		Management		Policy		

Livestock & Meat Marketing: Animal Well-Being and Welfare

Title	Author	Date	Factsheet, Paper, Presentation, or Journal article	Video
Mandatory Labeling of Animal Welfare Attributes: Public Support and Considerations for Policymakers	Tonsor and Wolf	July, 2011	Journal Article Fact Sheet (AM-GT-2011.1)	WMV MP4
U.S. Meat Demand: The Influence of Animal Welfare Media Coverage	Tonsor	September, 2010	Journal Article Fact Sheet (MF2951)	WMV MP4
Consumer Preferences for Animal Welfare Attributes: The Case of Gestation Crates	Tonsor , Olynk , and Wolf	December, 2009	Journal Article	WMV MP4
Consumer Voting and Demand Behavior Regarding Swine Gestation Crates	Tonsor , Wolf , and Olynk	July, 2009	Journal Article	WMV MP4
Consumer Use, Perceptions, and Demand Impacts of Alternative Animal Information Sources	Tonsor	July, 2009	Presentation	
Alternative Animal Welfare Responses: Options and Implications for Producers and Industry-at-Large	Tonsor	March, 2009	Presentation	

Animal Welfare Videos by [Dr. Glynn Tonsor](#)

Mandatory Labeling of Animal Welfare Attributes (New!)

Consumer Preferences for Animal Welfare Attributes: The Case of Gestation Crates

Consumer Voting and Demand Behavior Regarding Swine Gestation Crates



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