

Farm Sector Income & Finances 2015 Outlook



Farmer Mac Refresh

By Ryan Kuhns and Kevin Patrick

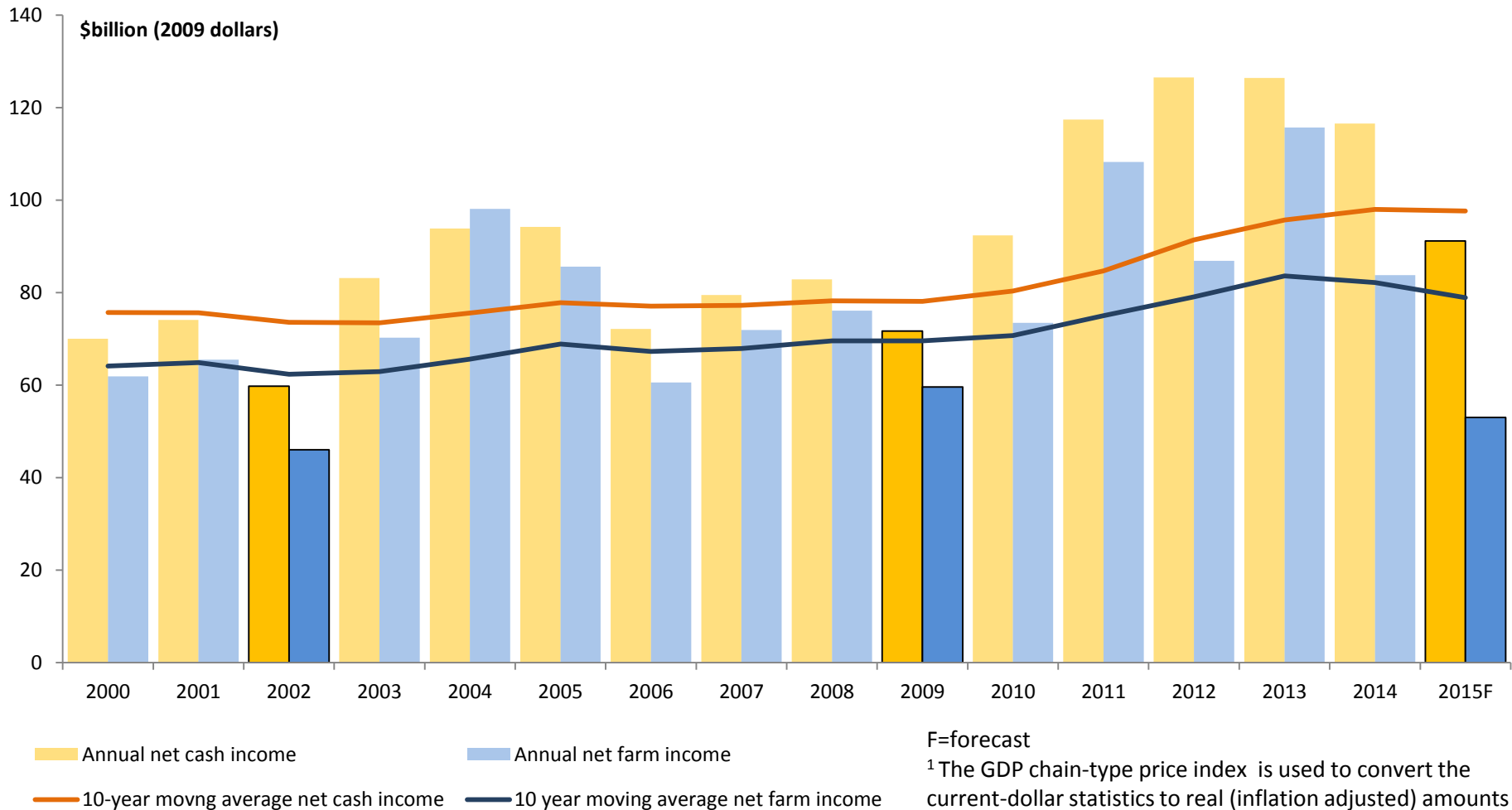
September, 30 2015



Net cash and net farm income forecast below 10-year moving average



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¹ The GDP chain-type price index is used to convert the current-dollar statistics to real (inflation adjusted) amounts (2009=100)

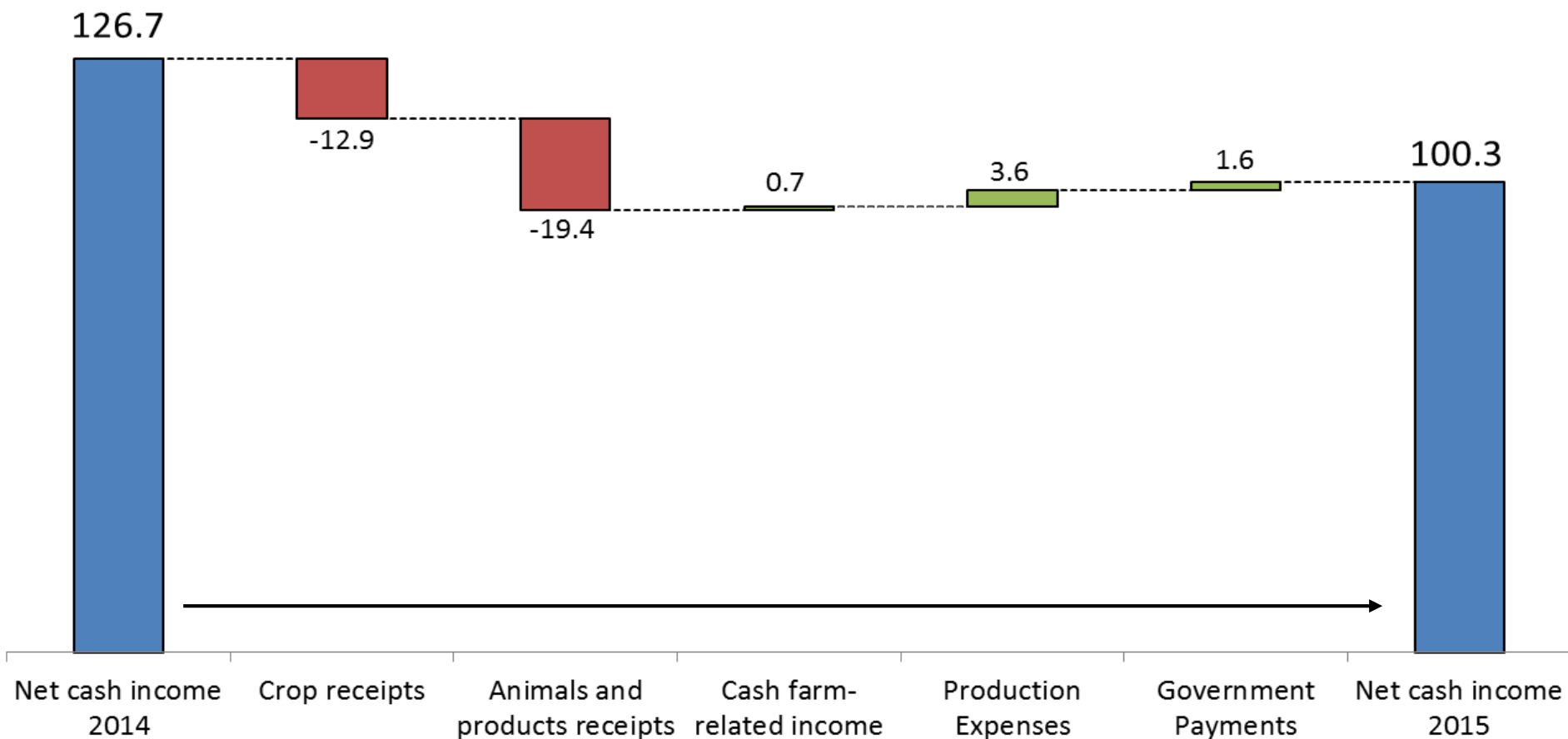
Source: USDA, Economic Research Service, Farm Income and Wealth Statistics. Data as of August 25, 2015.





United States Department of Agriculture

Lower commodity receipts drive the expected decline in net cash income from 2014 to 2015F



All figures are in \$ Billion

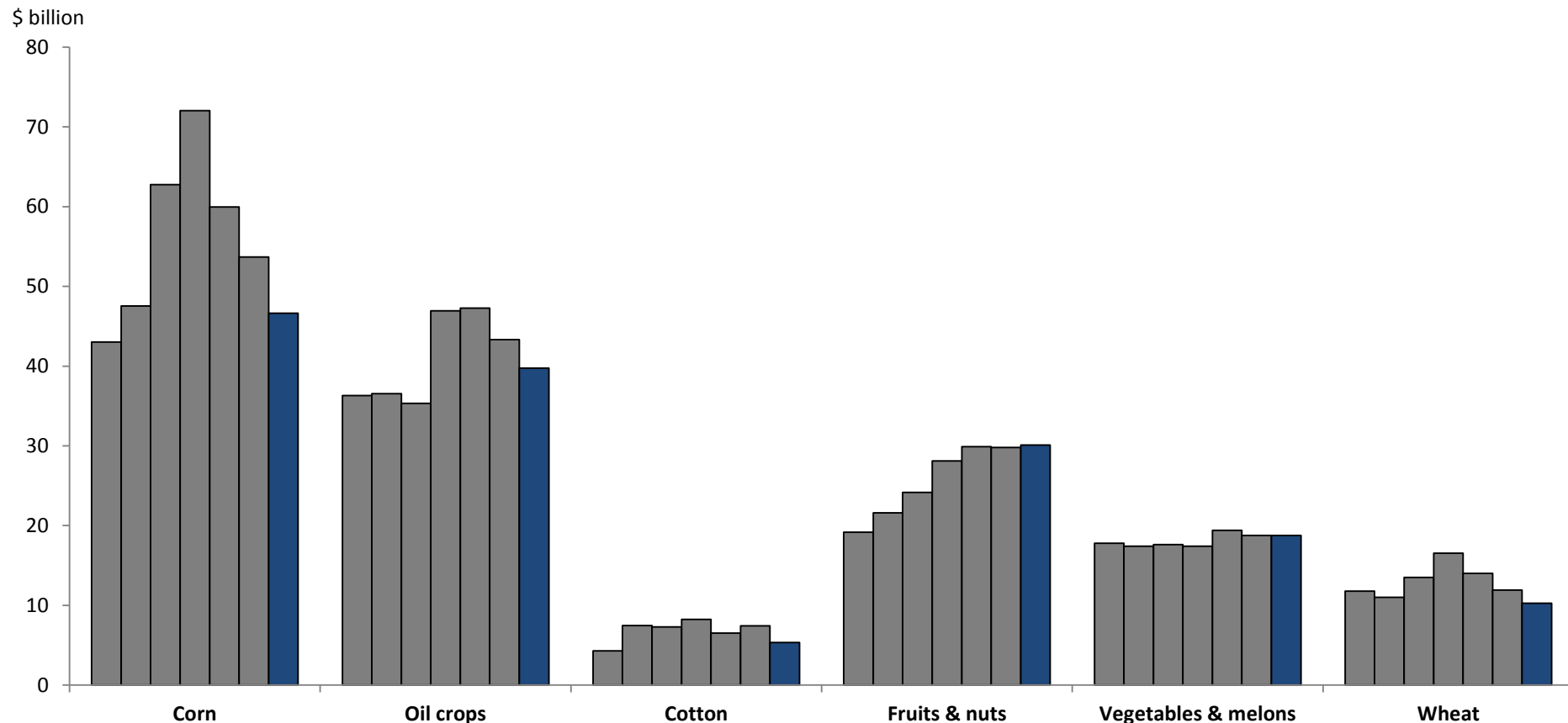
Source: USDA, Economic Research Service, Farm Income and Wealth Statistics



Crop receipts are expected to fall for most major categories in 2015



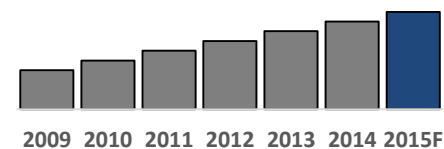
United States Department of Agriculture



F= Forecast.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics

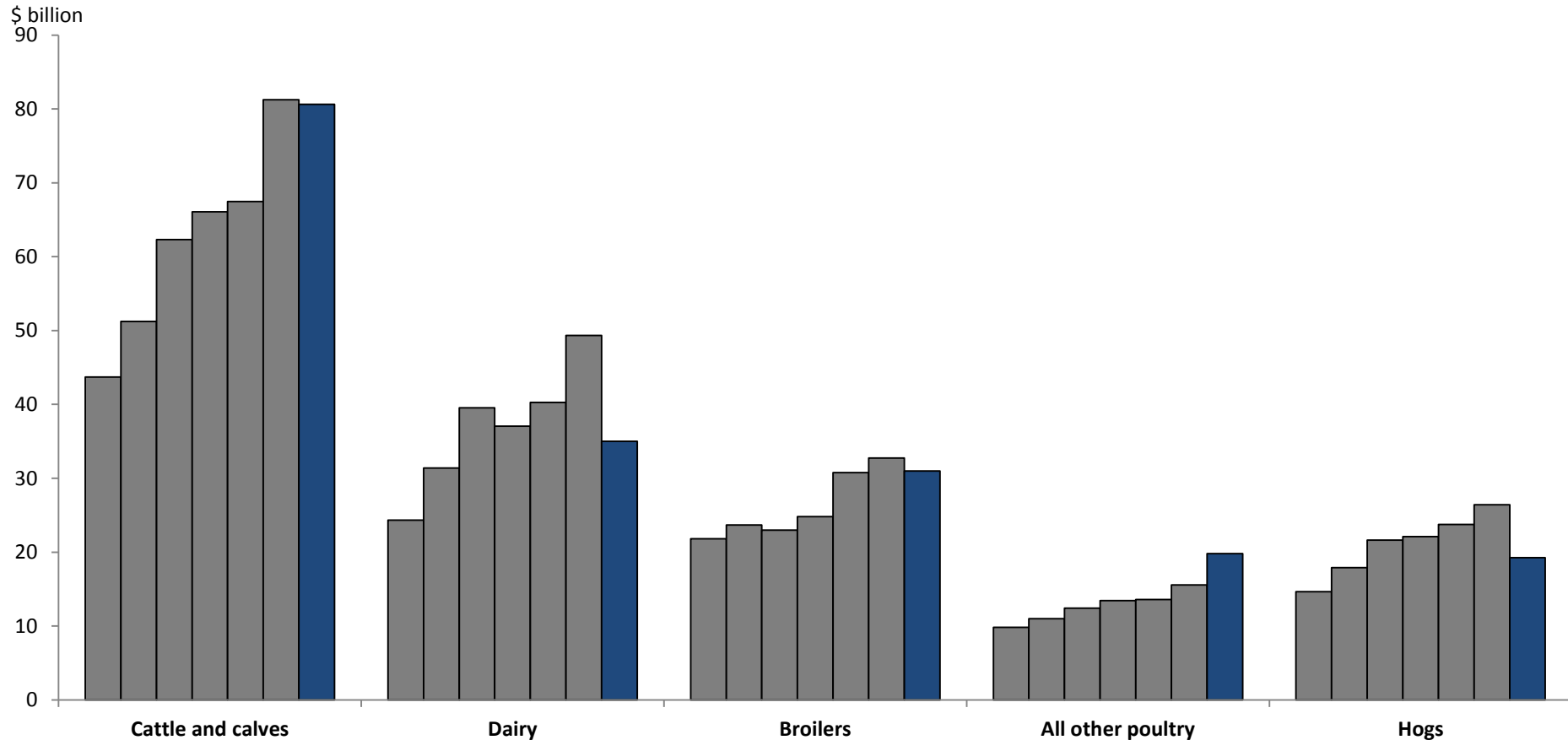
Data as of August 25, 2015



Animal receipts are also expected to fall for most categories in 2015



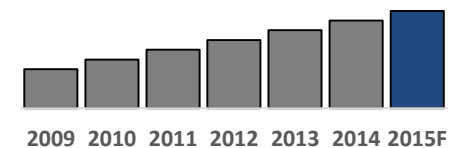
United States Department of Agriculture



F= Forecast.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics

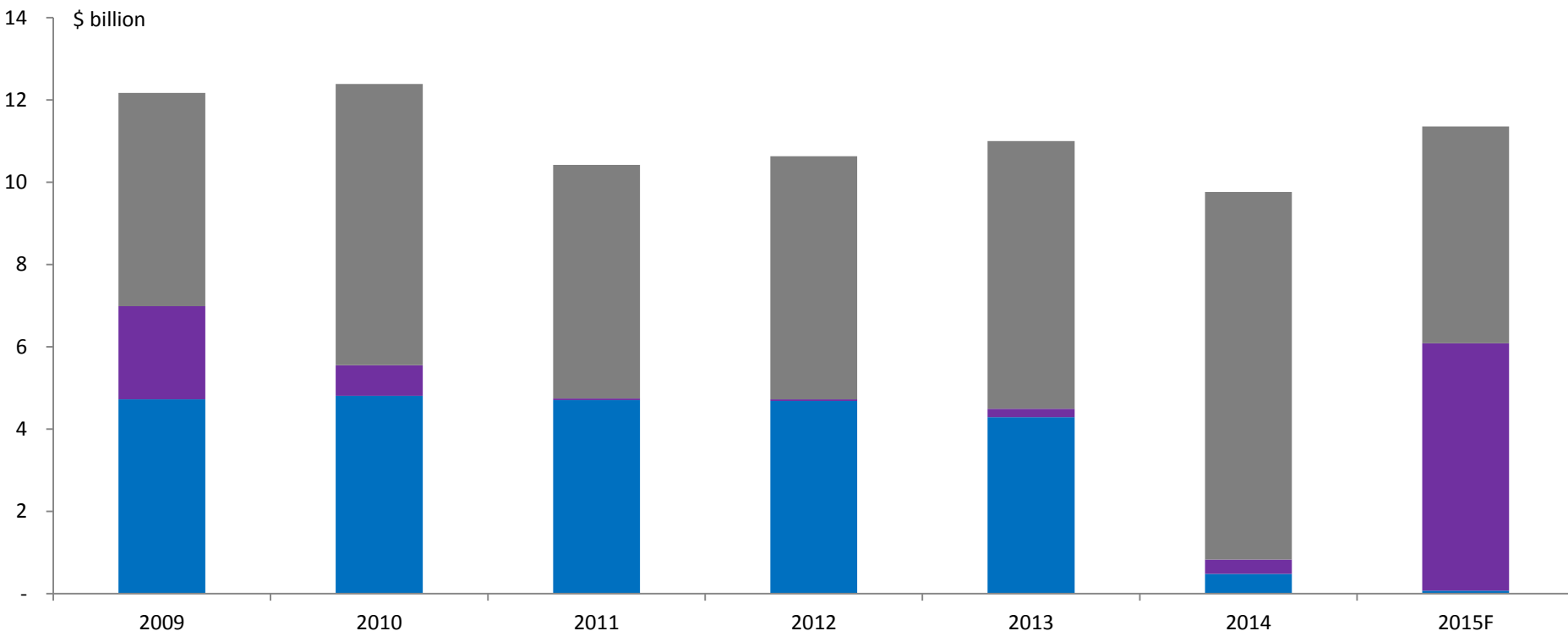
Data as of August 25, 2015



Crop price based payments are expected to make up a larger of government payments in 2015



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F=forecast.

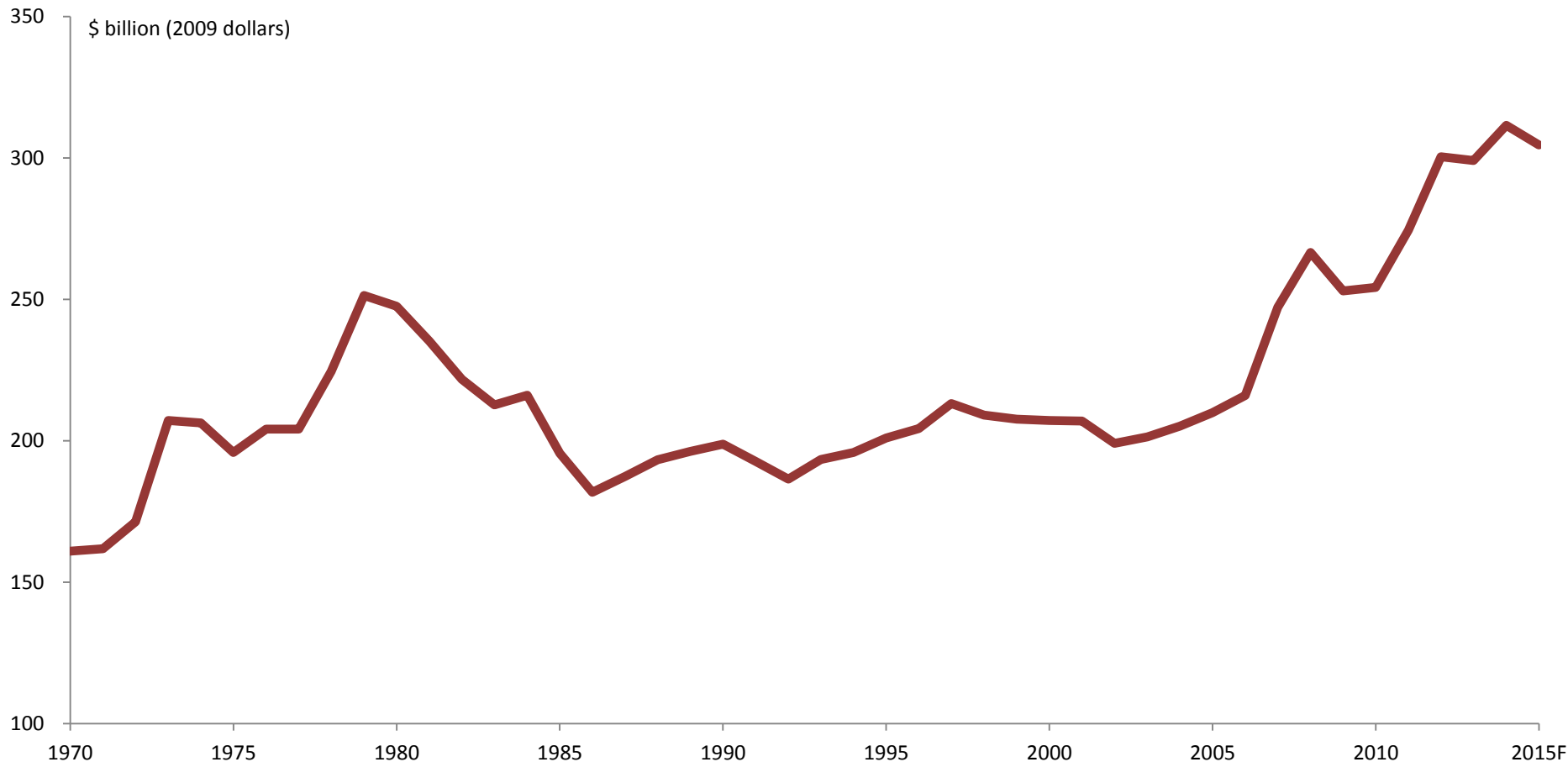
Fixed payments	Crop price based payments	All other payments
<i>Includes fixed direct payments and cotton transition payments.</i>	<i>Includes PLC , and ARC, ACRE, counter-cyclical payments, and other programs where payment rates vary with market prices.</i>	<i>Include disaster relief payments, tobacco transition payments, dairy program payments, and conservation payments.</i>



Cash expenses are expected to decline for the first time since 2009



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F= Forecast. Values are adjusted using the chain-type GDP deflator, 2009=100

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics

Data as of August 25, 2015

Economic Research Service

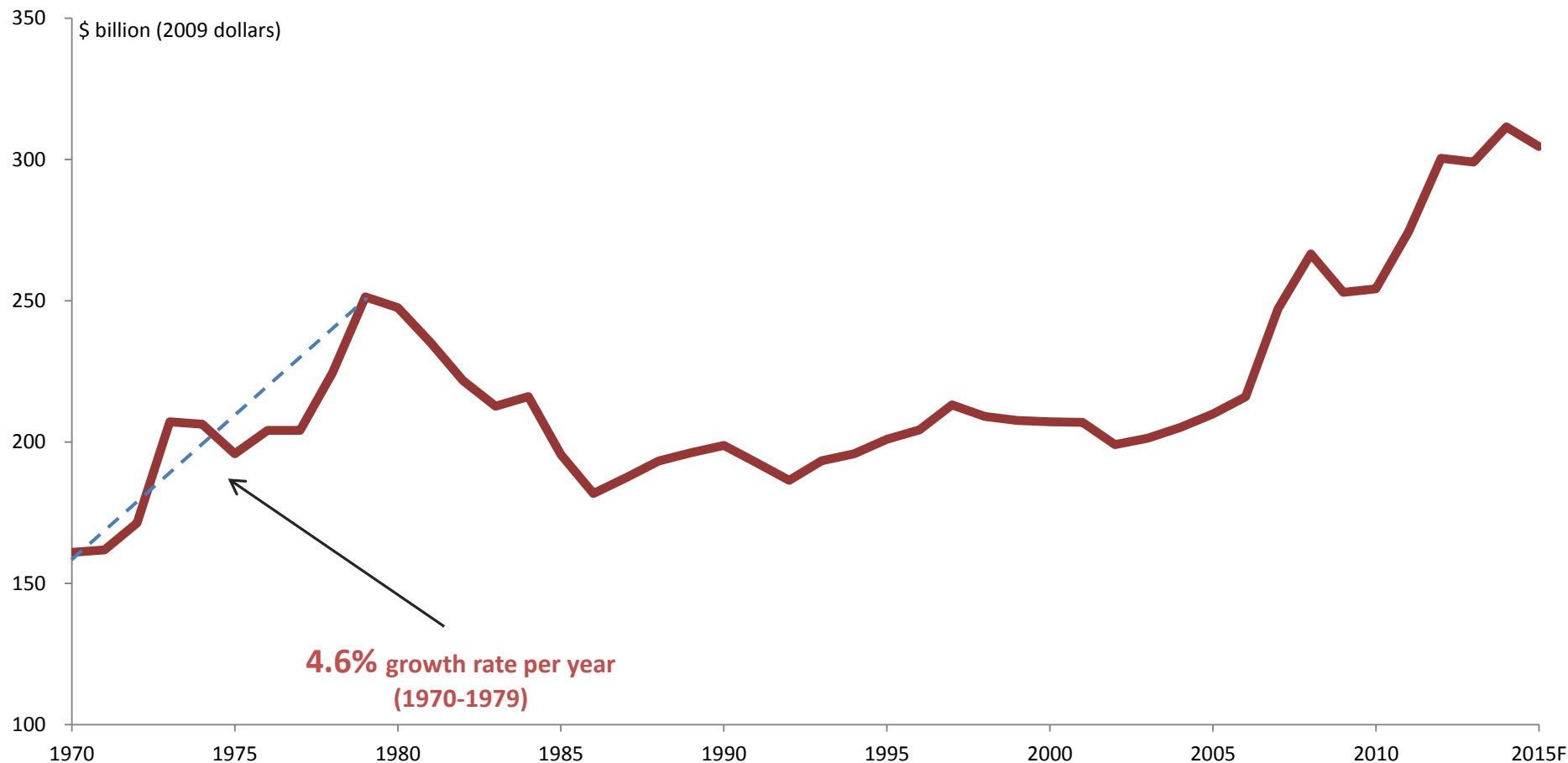
www.ers.usda.gov



Cash expenses are expected to decline for the first time since 2009



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4.6% growth rate per year
(1970-1979)

F= Forecast. Values are adjusted using the chain-type GDP deflator, 2009=100

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics

Data as of August 25, 2015

Economic Research Service

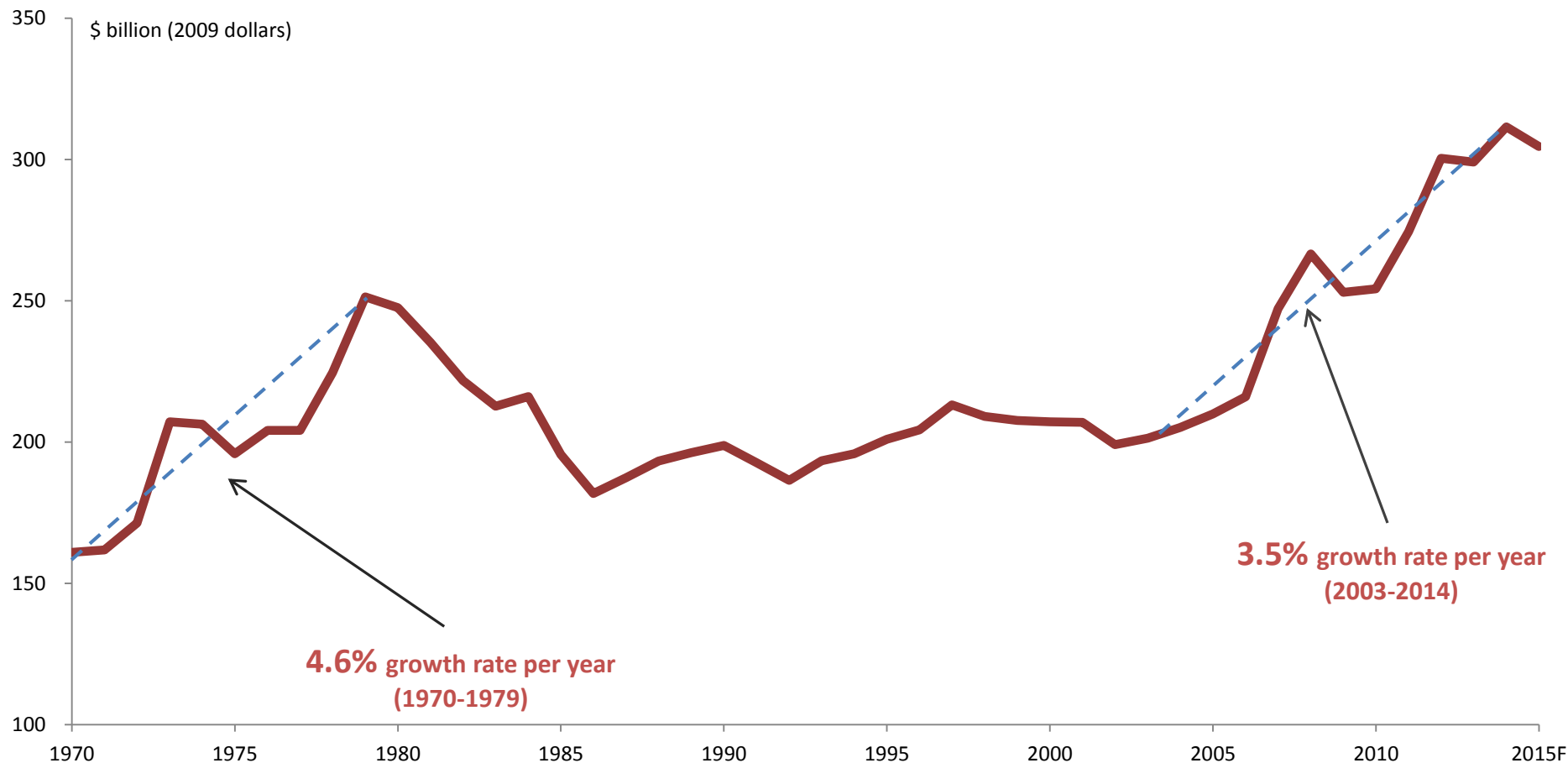
www.ers.usda.gov



Cash expenses are expected to decline for the first time since 2009



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F= Forecast. Values are adjusted using the chain-type GDP deflator, 2009=100

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics

Data as of August 25, 2015

Economic Research Service

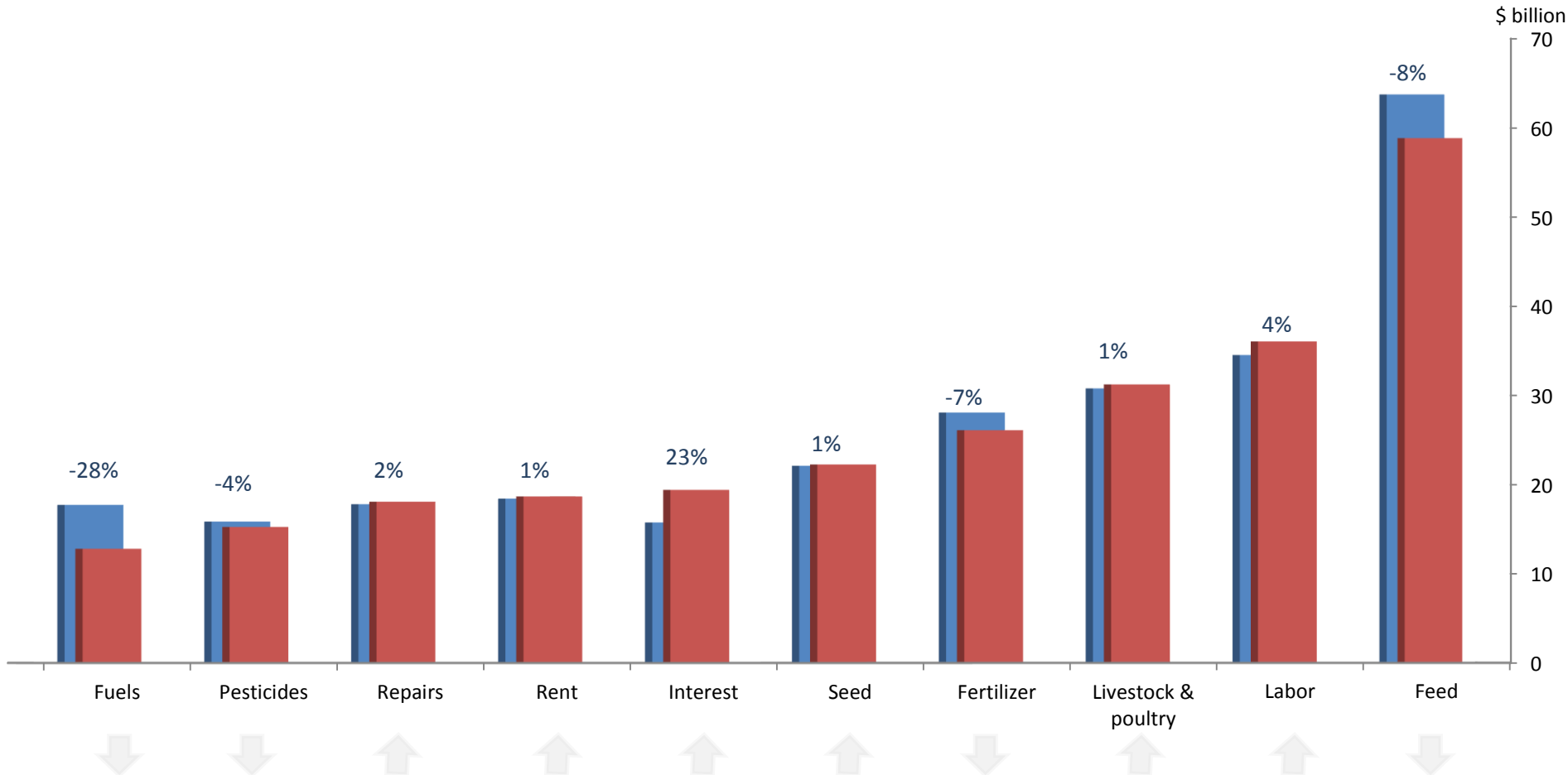
www.ers.usda.gov



Cash expenses expected to decline for the first time since 2009



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F=forecast

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics. Data as of August 25, 2015

2014
2015F

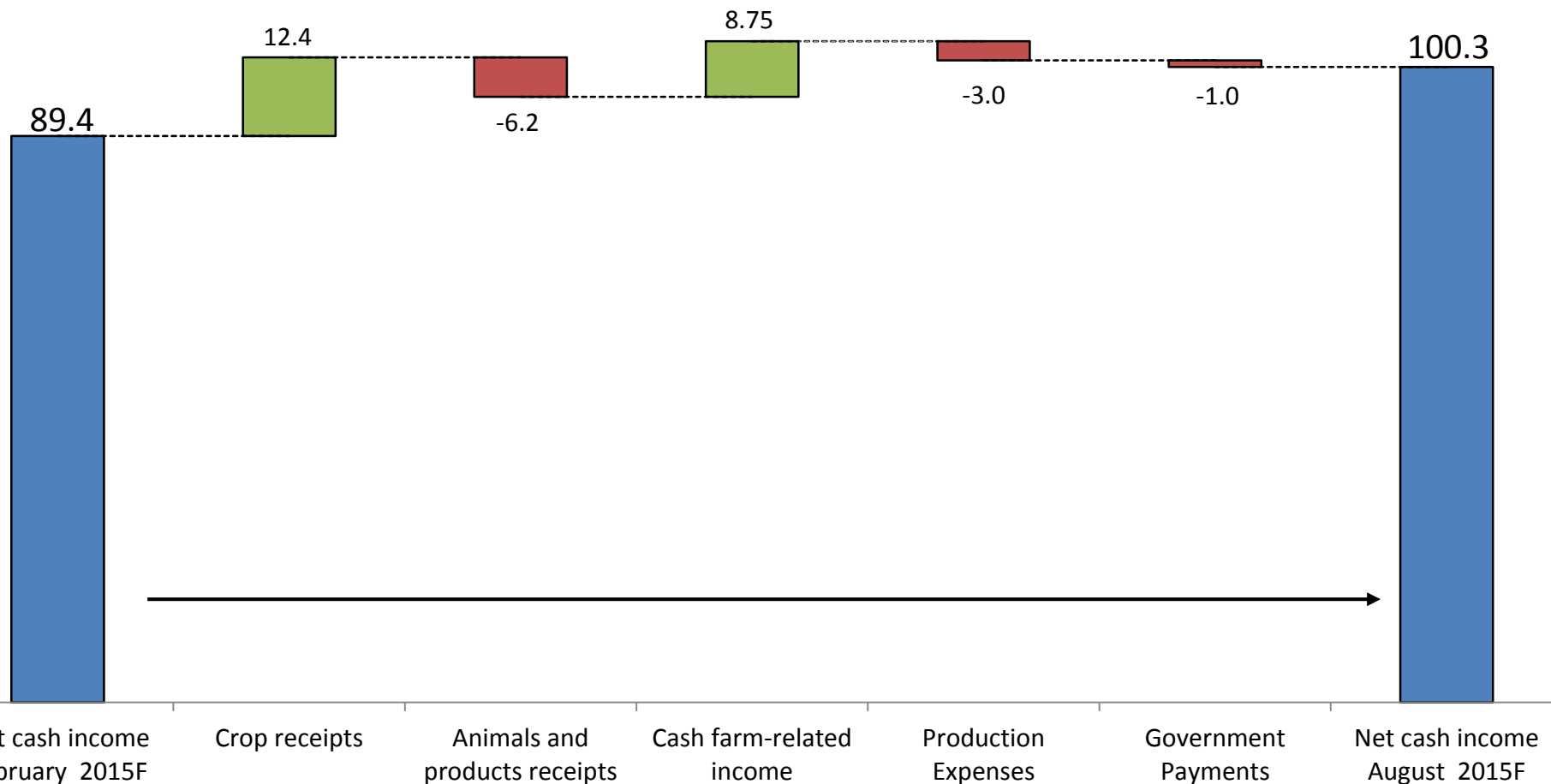
Economic Research Service
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The 2015 net cash income forecast improved by \$10.9 billion from February to August



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All figures are in \$ Billion

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics

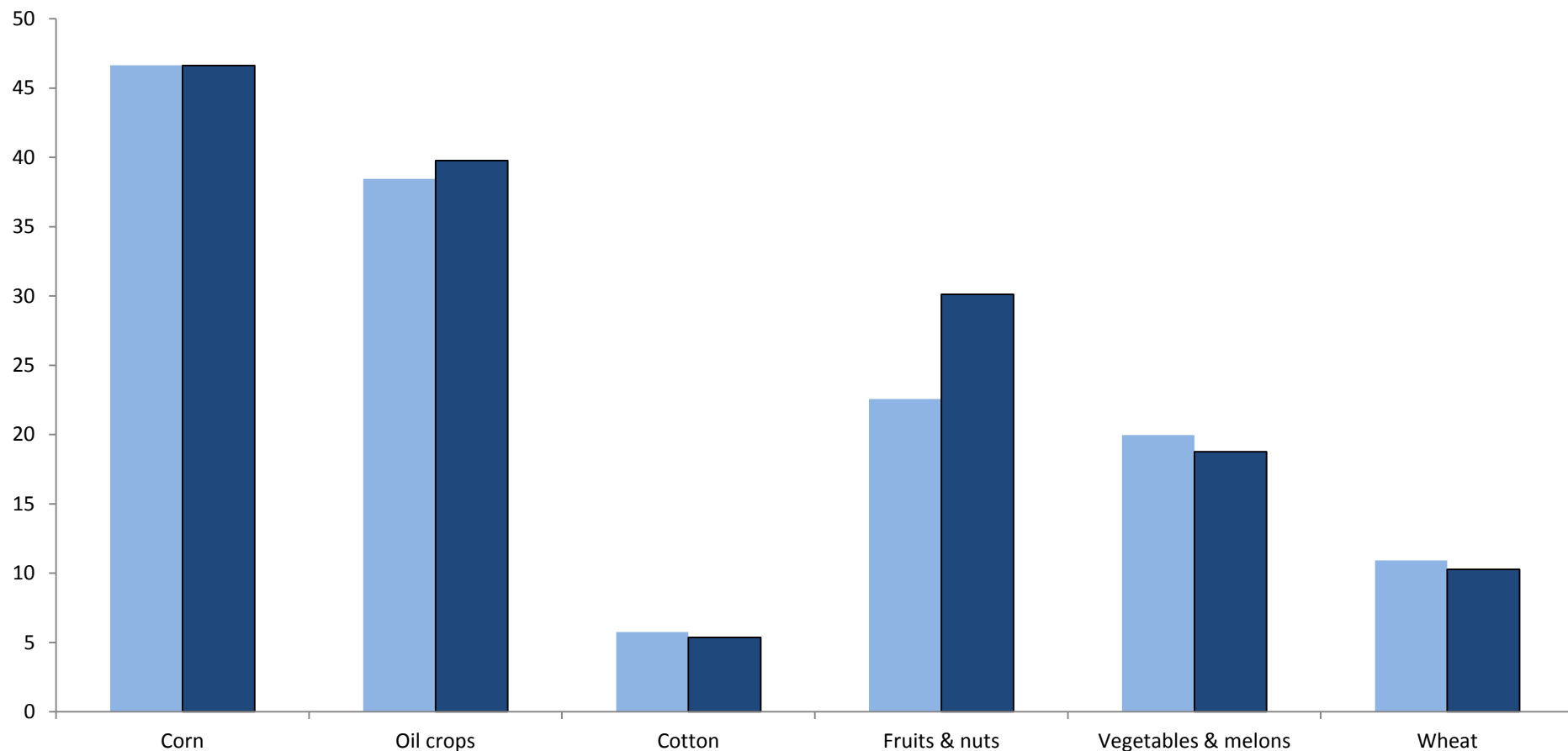


Fruit and nut receipts are expected to increase the most relative to February



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\$ billion



F= Forecast.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics

Data as of August 25, 2015

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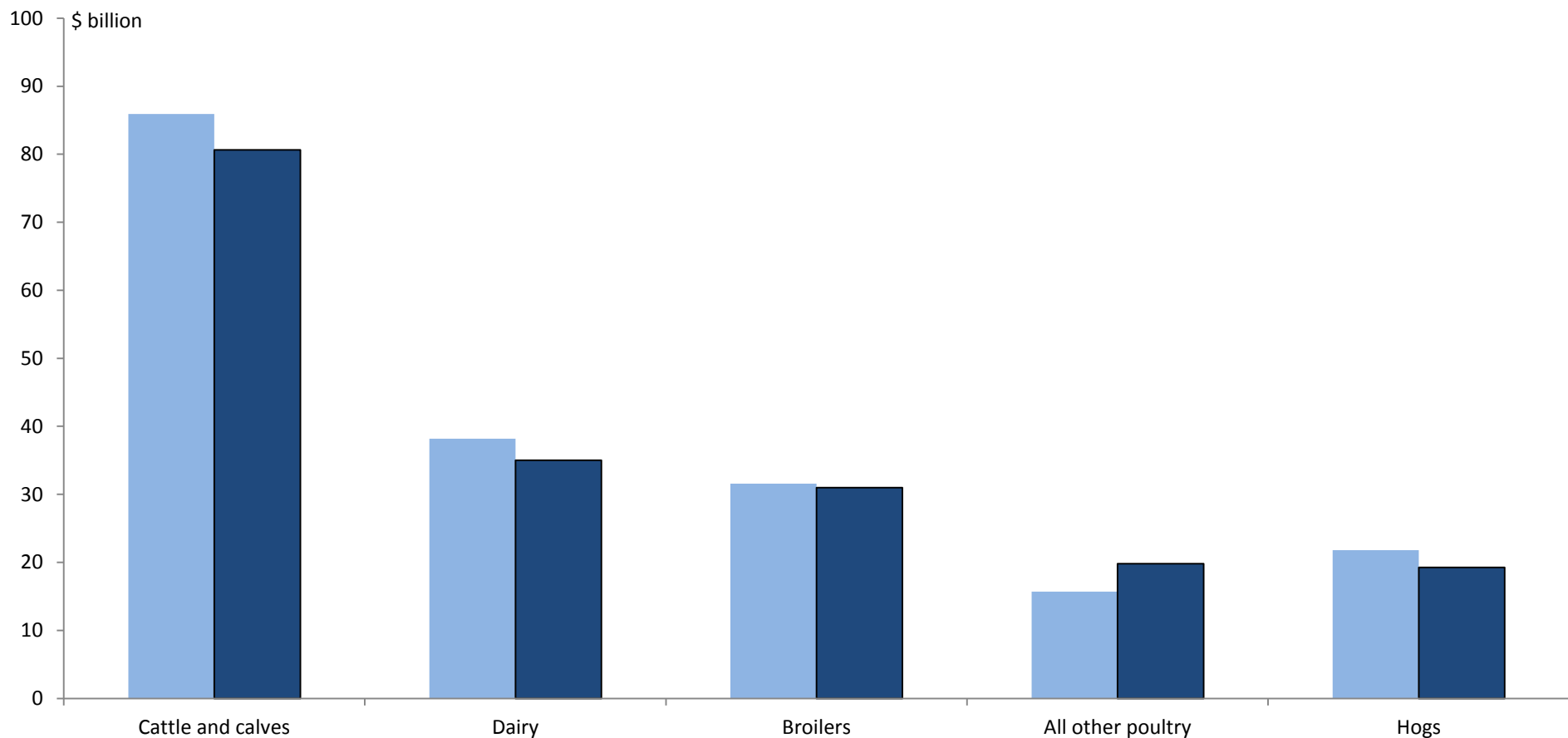
February 2015F

August 2015F

Cash receipts for most major animals and products categories are forecast lower relative to February



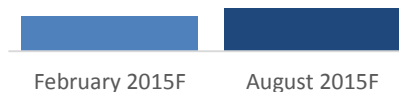
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F= Forecast

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics

Data as of August 25, 2015



Livestock purchases and net rent payments drive the increase in forecast cash expenses



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All figures are in \$ Billion
Source: USDA, Economic Research Service, Farm Income and Wealth Statistics





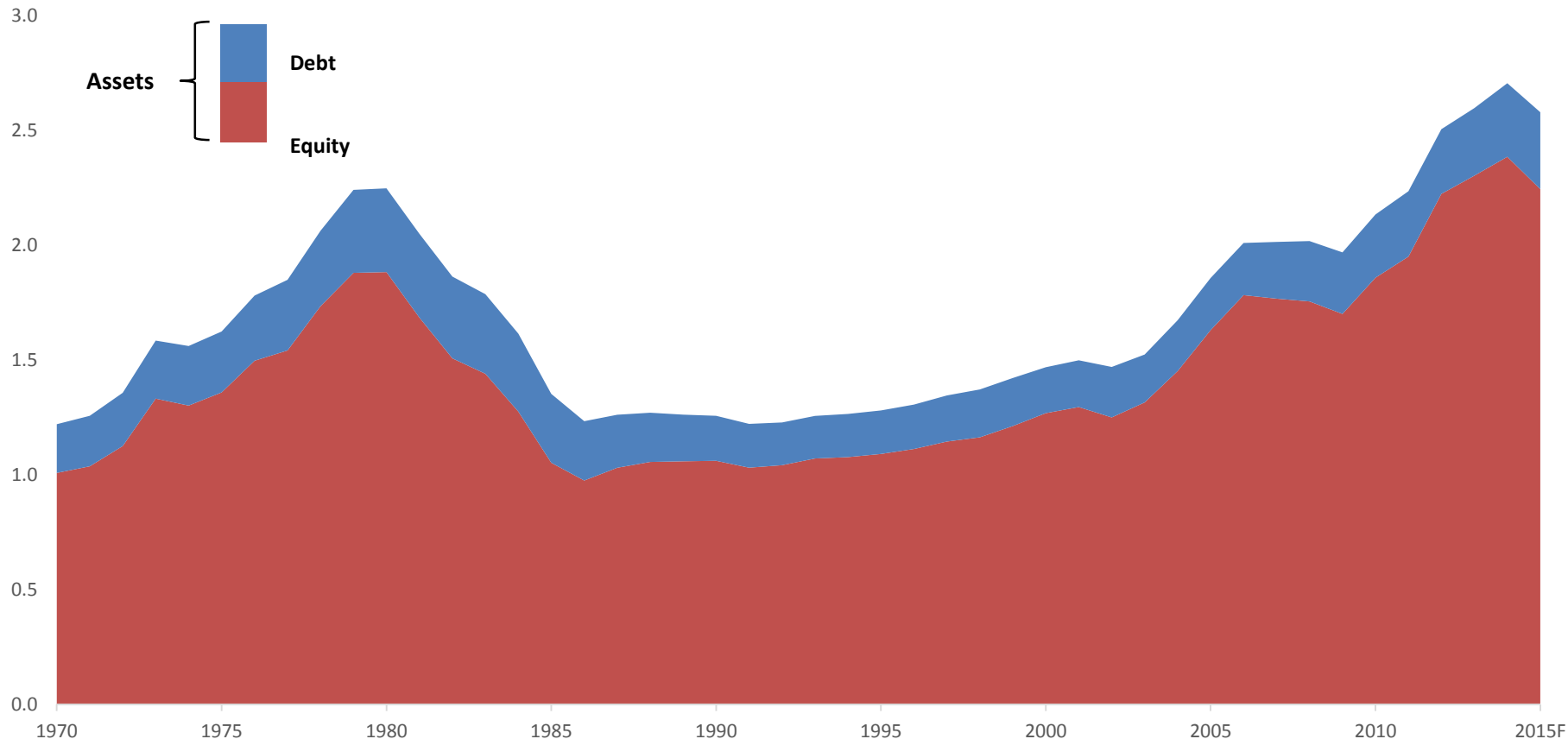
Farm Sector Balance Sheet Outlook

2015 marks first expected decline in real¹ asset and equity values since 2009



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\$ Trillion (2009 dollars)



F=Forecast

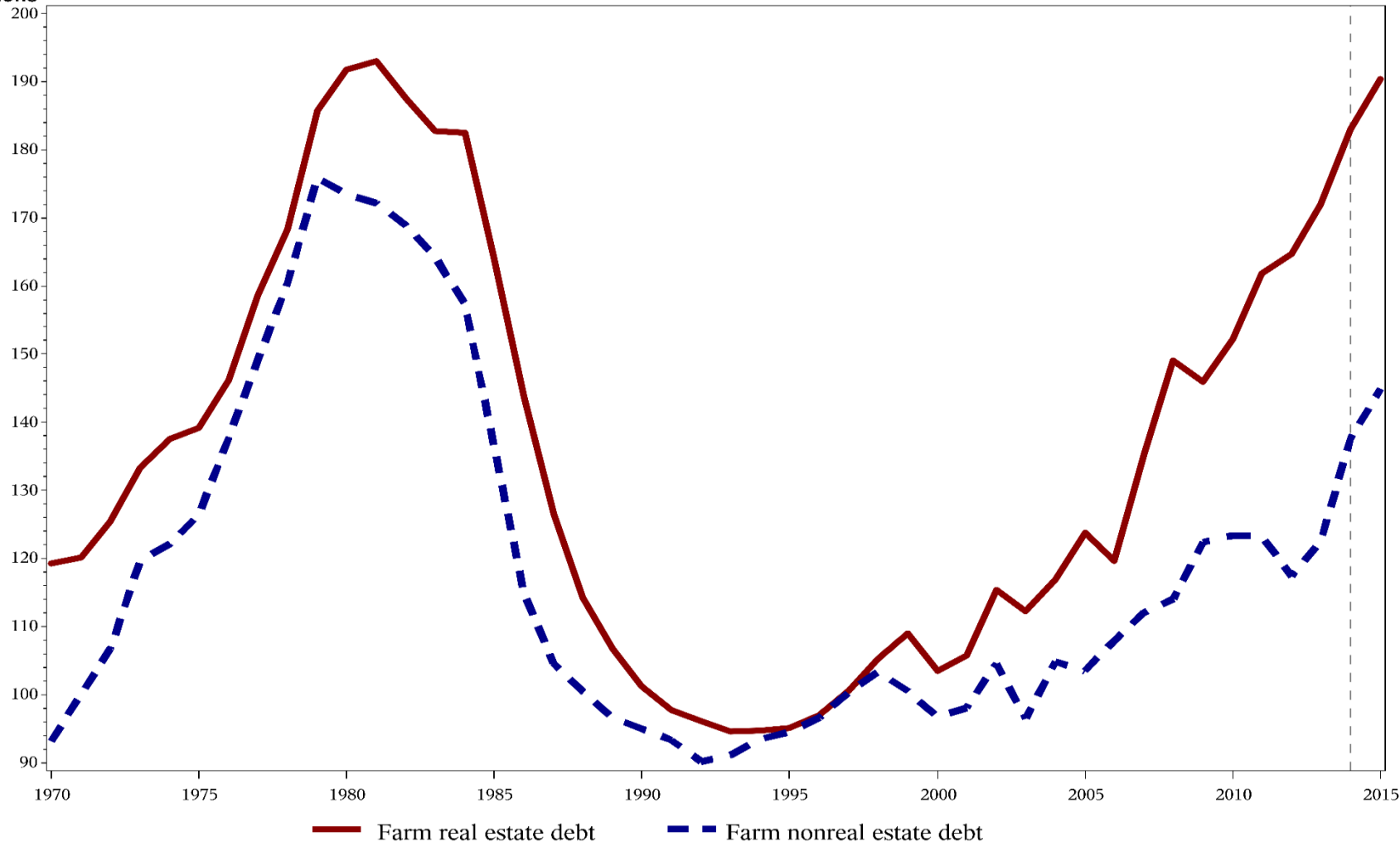
¹The GDP chain-type price index is used to convert current-dollar amounts to real (inflation adjusted) amounts (2009 = 100).

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics. Data as of August 25, 2015.



Inflation adjusted debt is expected to grow in 2015 and real estate debt approaches its 1980s peak

2009 \$ Billions



2015 data are forecasts

Note: Adjusted for inflation using the BEA chain-type implicit GDP deflator.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.

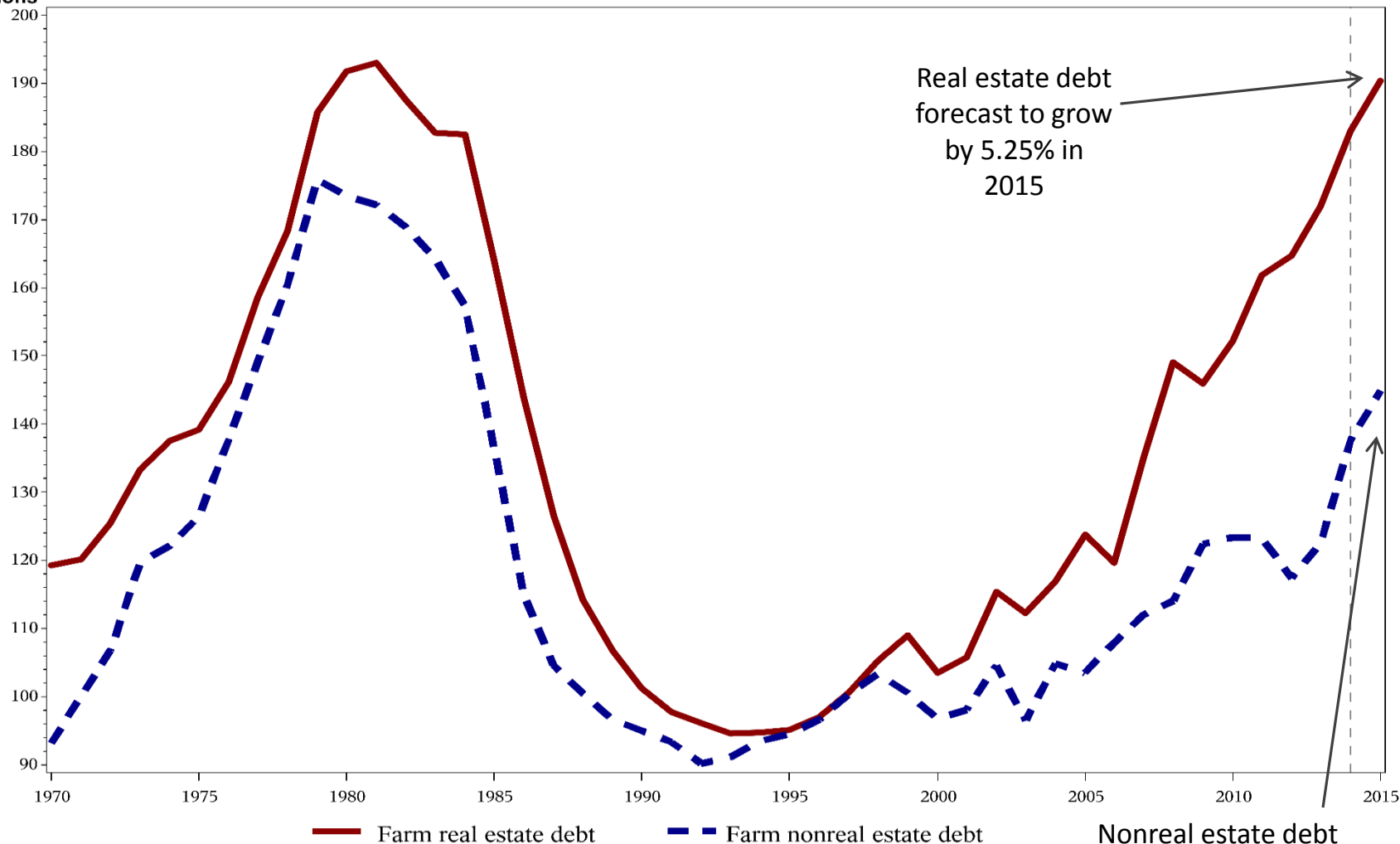
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Inflation adjusted debt is expected to grow in 2015 and real estate debt approaches its 1980s peak

2009 \$ Billions



2015 data are forecasts

Note: Adjusted for inflation using the BEA chain-type implicit GDP deflator.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.

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An expected small decline in farm real estate values is primary driver of forecast drop in farm asset values



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Percent change



F = forecast

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics. Data as of August 25, 2015.



An expected small decline in farm real estate values drives forecast drop in farm asset values



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Percent change



2.1 percent decline in farm real estate assets

F = forecast

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics. Data as of August 25, 2015.

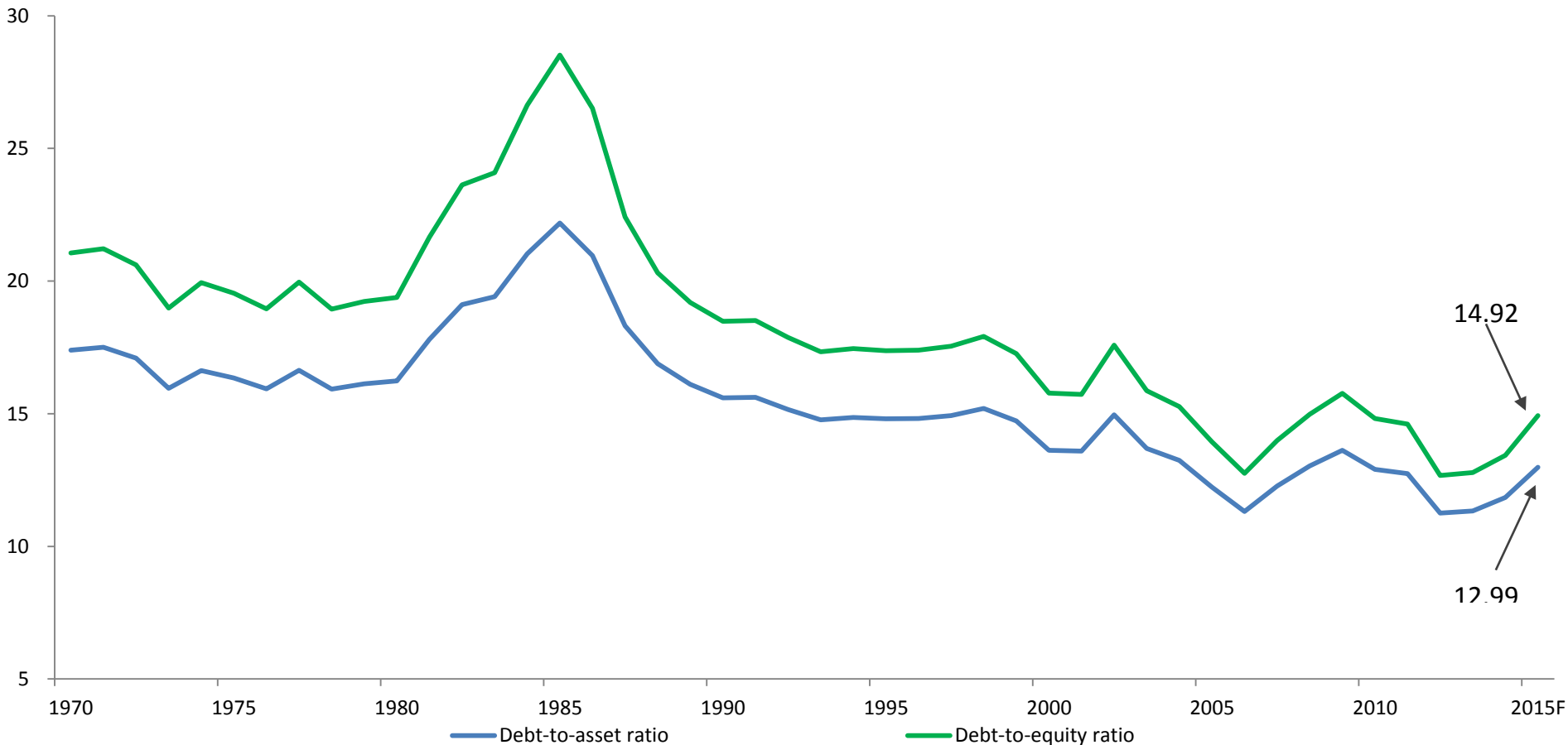


Sector leverage remains historically low, despite debt being forecast to grow faster than assets in 2015



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Percent

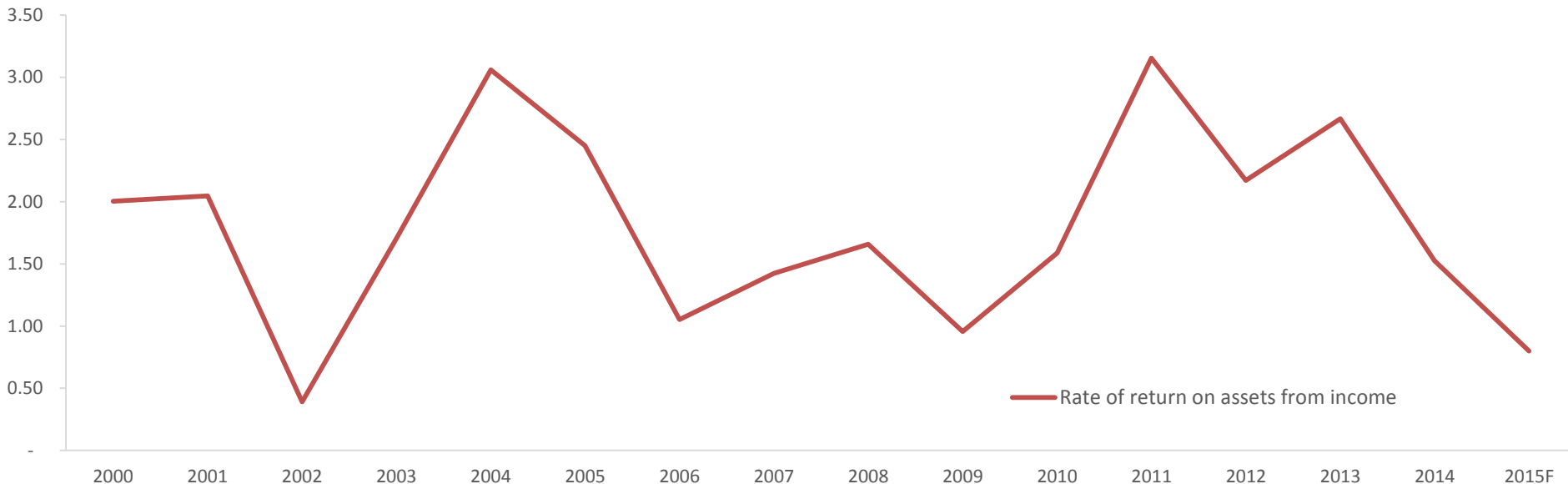


F= Forecast.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics. Data as of August 25, 2015



The rate of return on farm assets expected to fall in 2015



- Decomposing the rate of return on farm assets (ROA)

$$ROA = Asset\ Turnover\ Ratio * Profit\ Margin\ Ratio$$

Value of production
that assets generate

Profit margin on
value of production

F = forecast

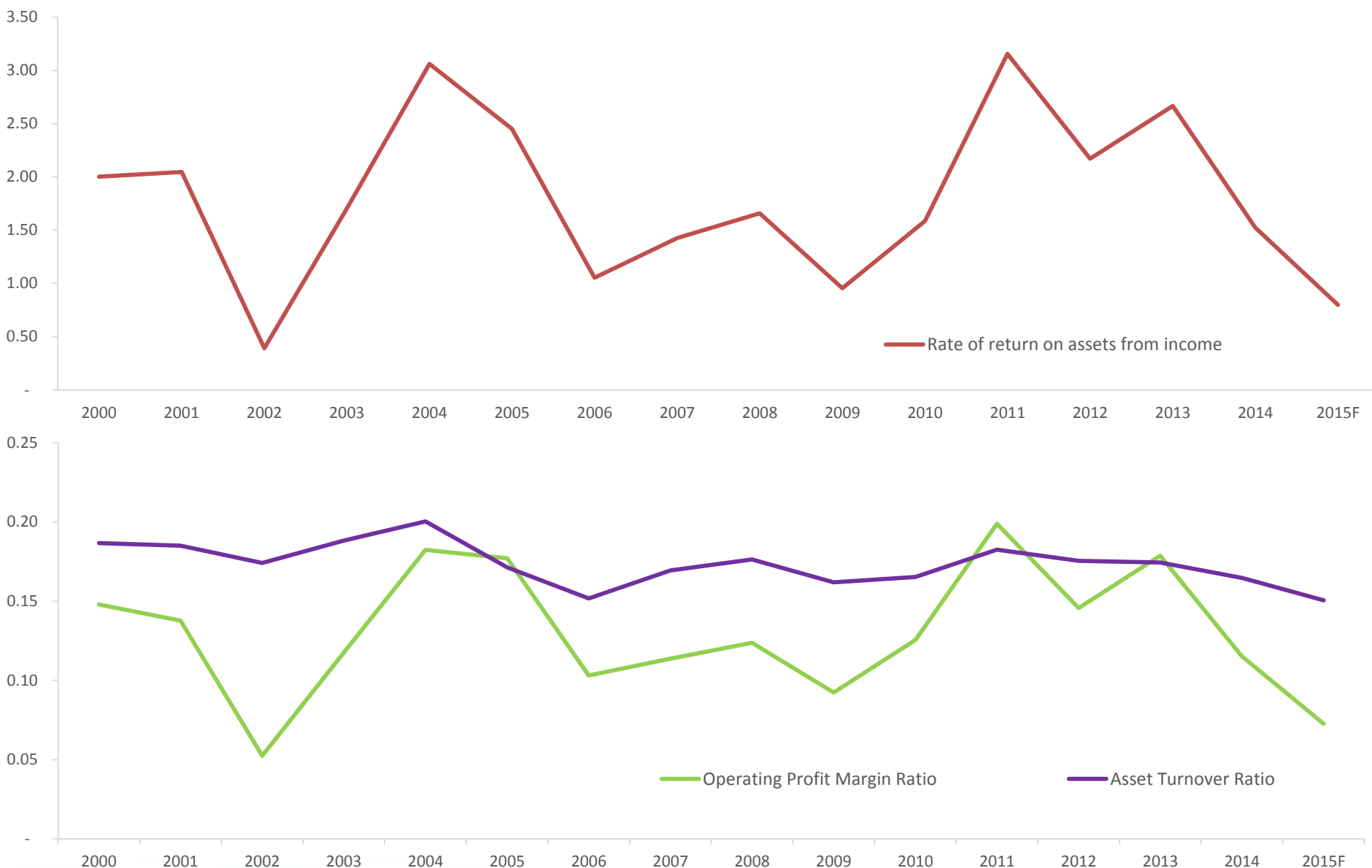
Source: USDA, Economic Research Service, Farm Income and Wealth Statistics. Data as of August 25, 2015.

Sector financial ratio documentation:

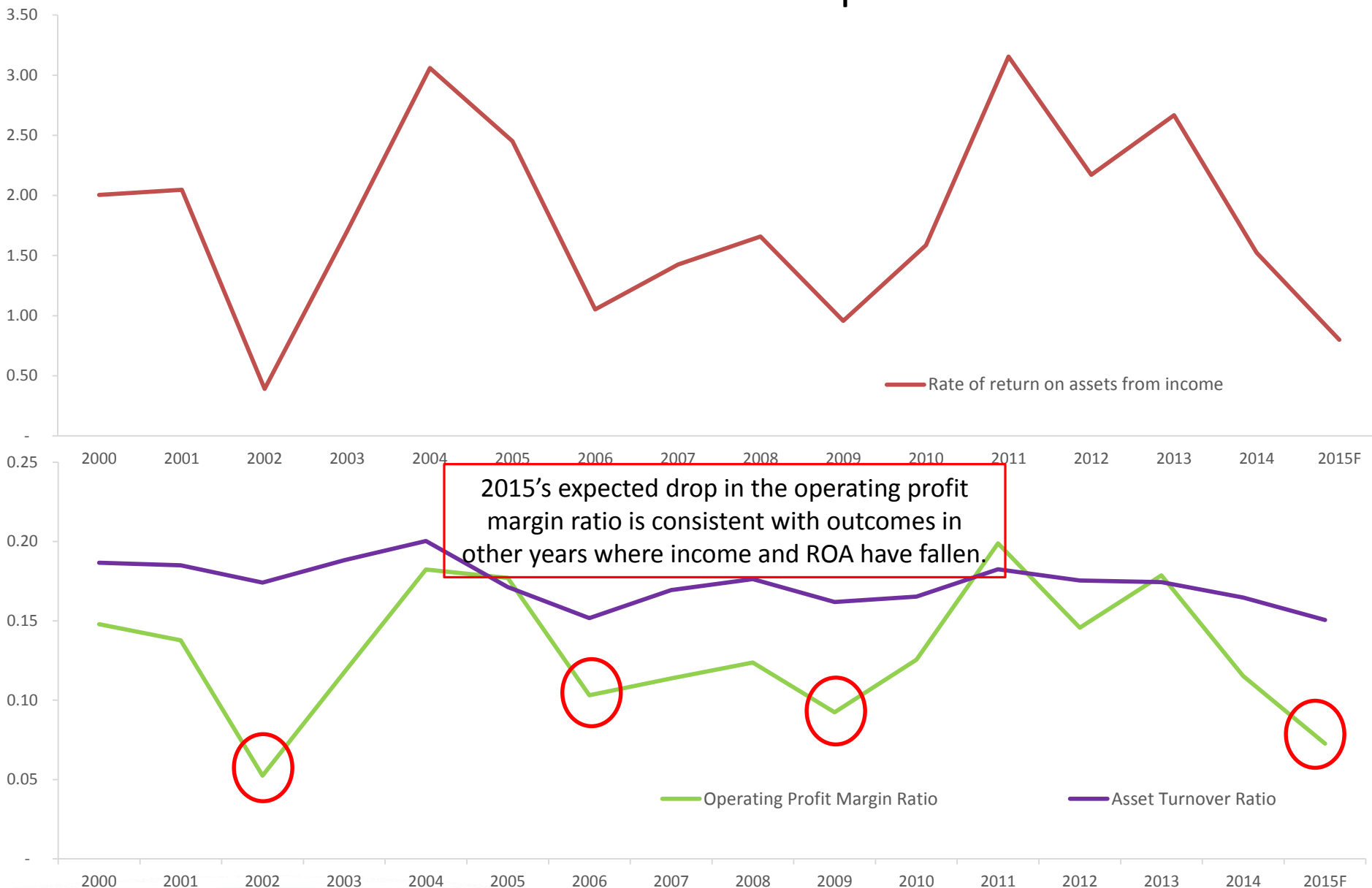
<http://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics/documentation-for-the-farm-sector-financial-ratios.aspx>



The rate of return on farm assets expected to fall in 2015



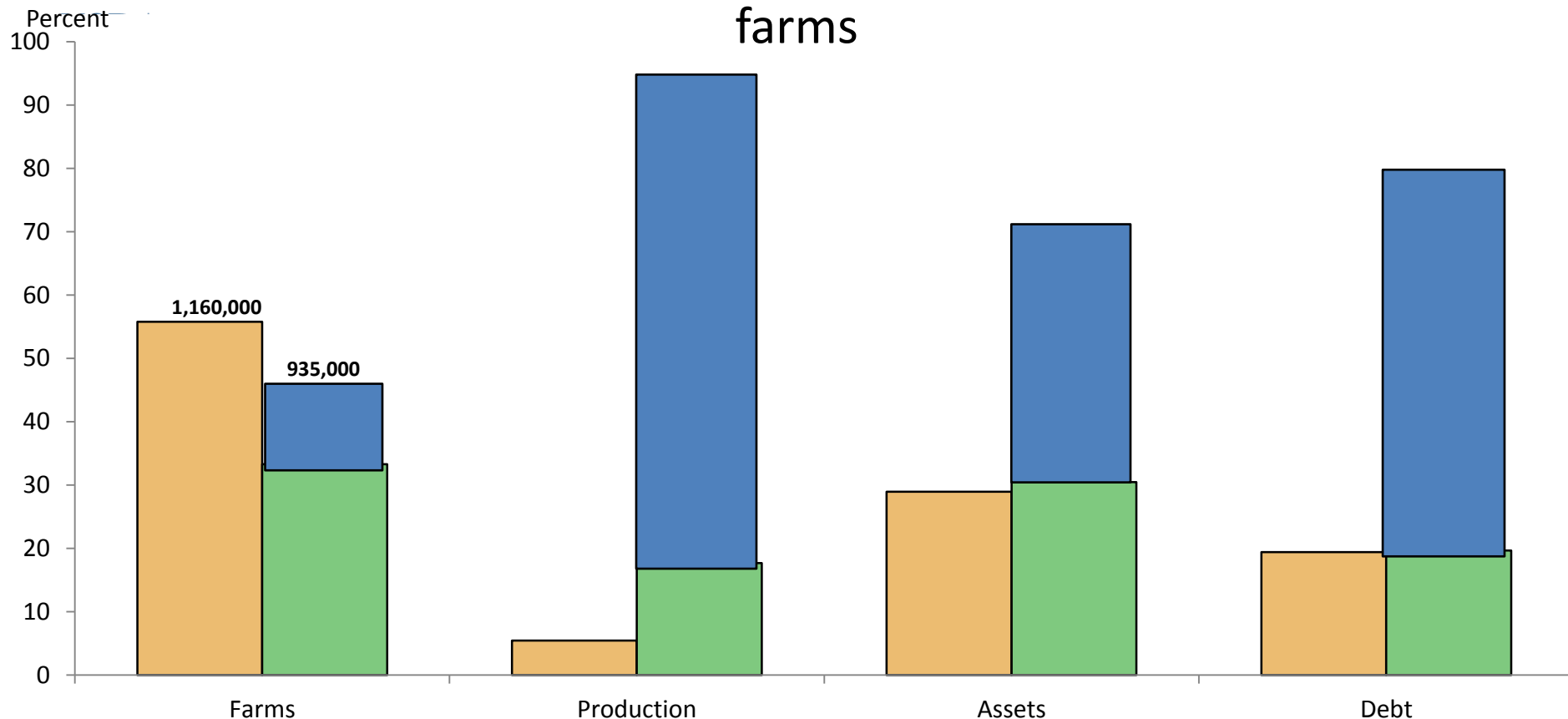
The rate of return on farm assets expected to fall in 2015



Farm Business Outlook



Farm businesses account for over 90% of farm production and 45% farms



Farm Businesses

Residence

Operators report they are retired or have a major occupation other than farming.

Intermediate

Gross cash farm income less than \$350,000 and operators report farming as their major occupation.

Commercial

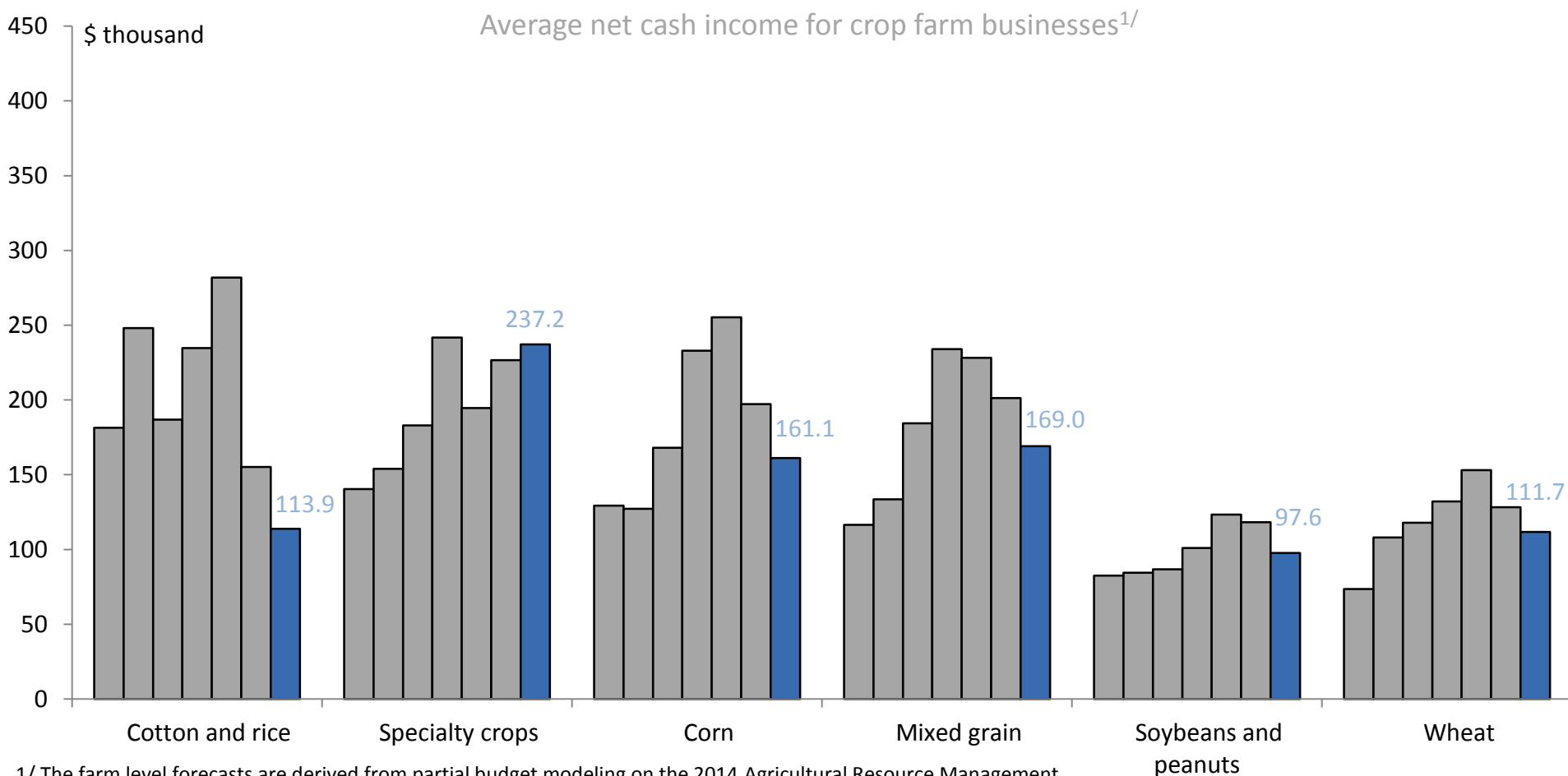
Gross cash farm income greater than \$350,000 and farms organized as nonfamily corporations or cooperatives.





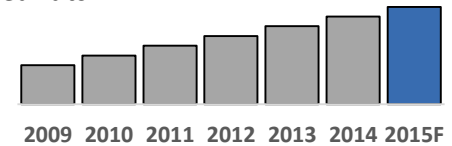
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Declines in average net cash income expected for most farm businesses specializing in crops



^{1/} The farm level forecasts are derived from partial budget modeling on the 2014 Agricultural Resource Management Survey (ARMS) using parameters from the sector forecasts. The model is static and therefore does not account for changes in crop rotation, weather, and other local production impacts that occurred after the base year

F = forecast

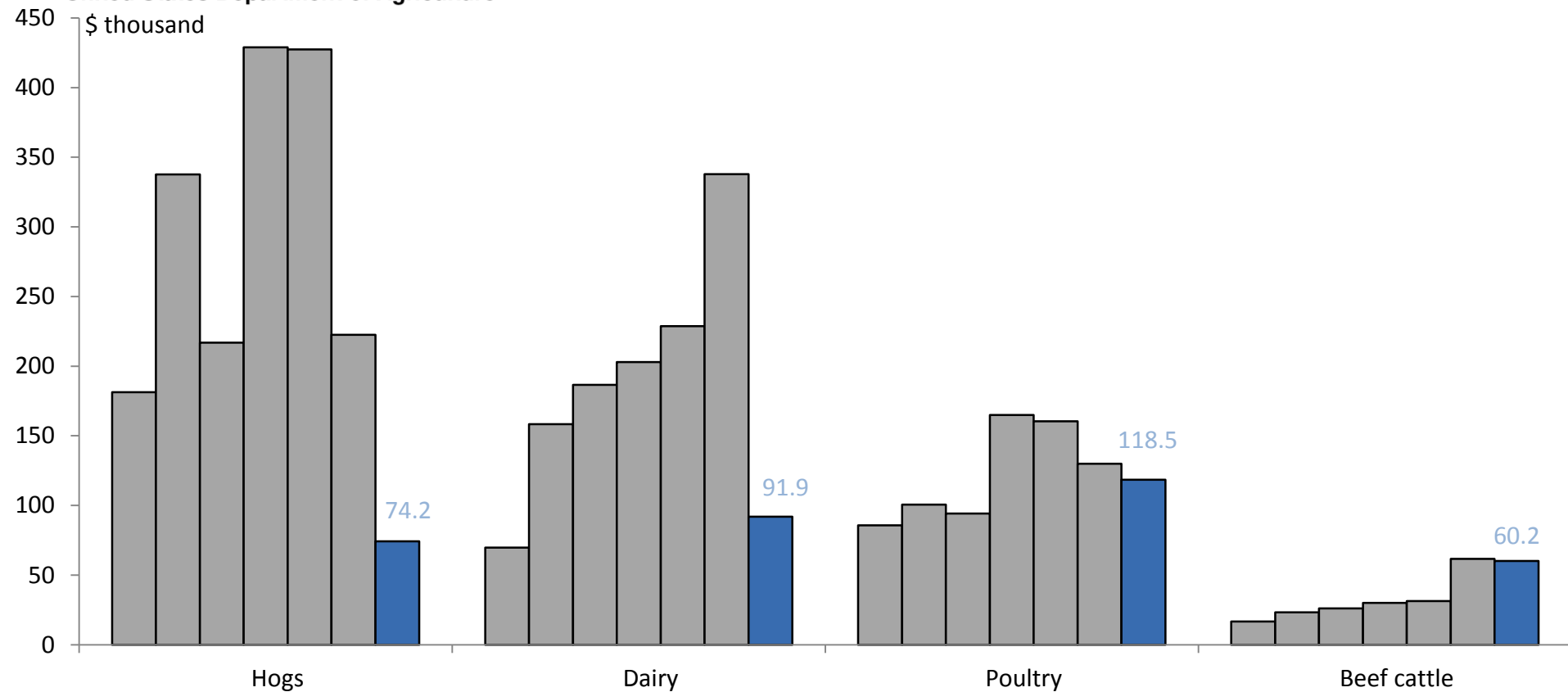


Average net cash income also forecast to fall for farm businesses specializing in livestock, dairy and poultry



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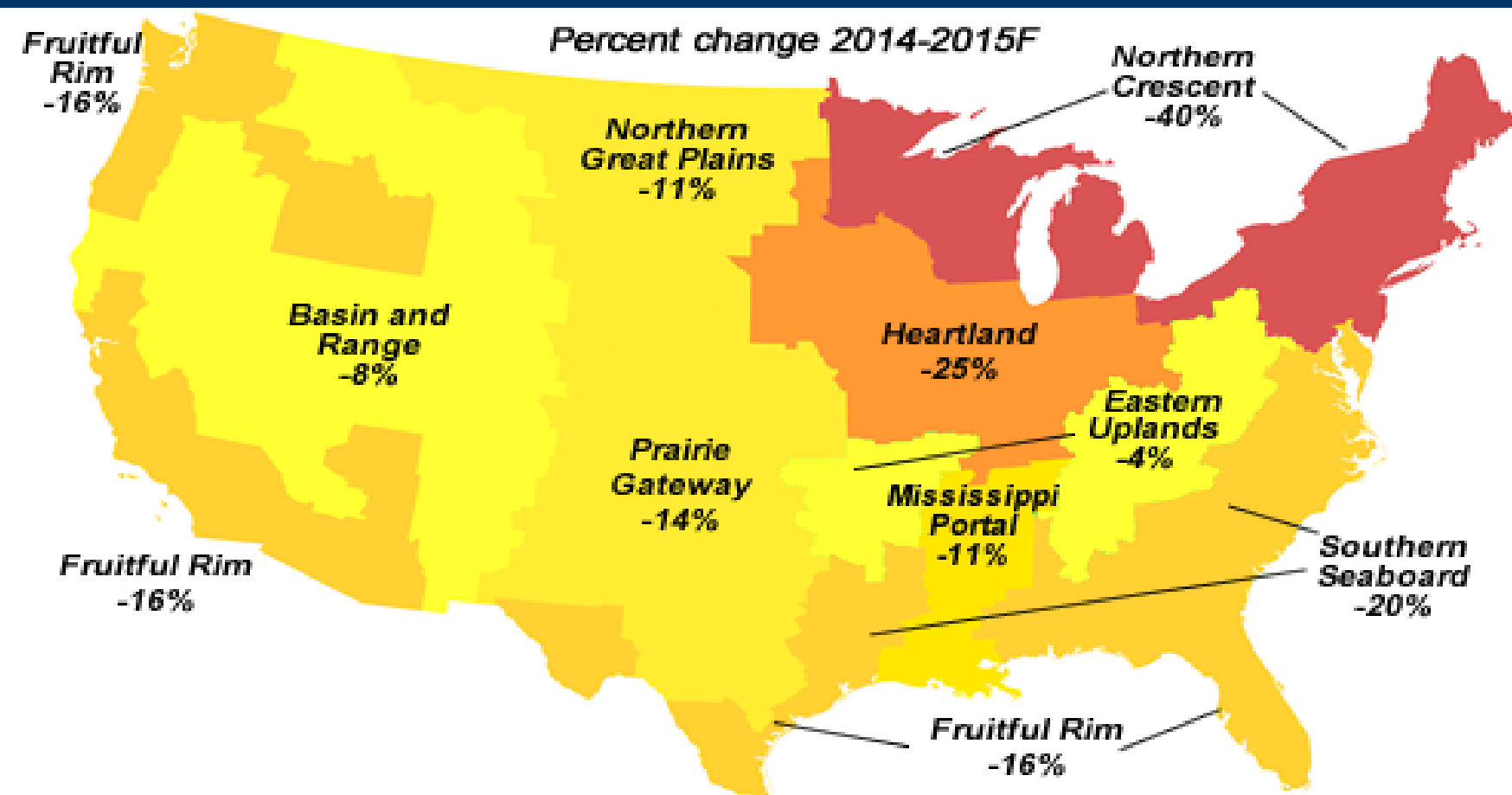
Average net cash income for livestock farm businesses ^{1/}



^{1/} The farm level forecasts are derived from partial budget modeling on the 2014 Agricultural Resource Management Survey (ARMS) using parameters from the sector forecasts. The model is static and therefore does not account for changes in crop rotation, weather, and other local production impacts that occurred after the base year
F = forecast



Farm business average net cash income by resource region, 2015F compared with 2014



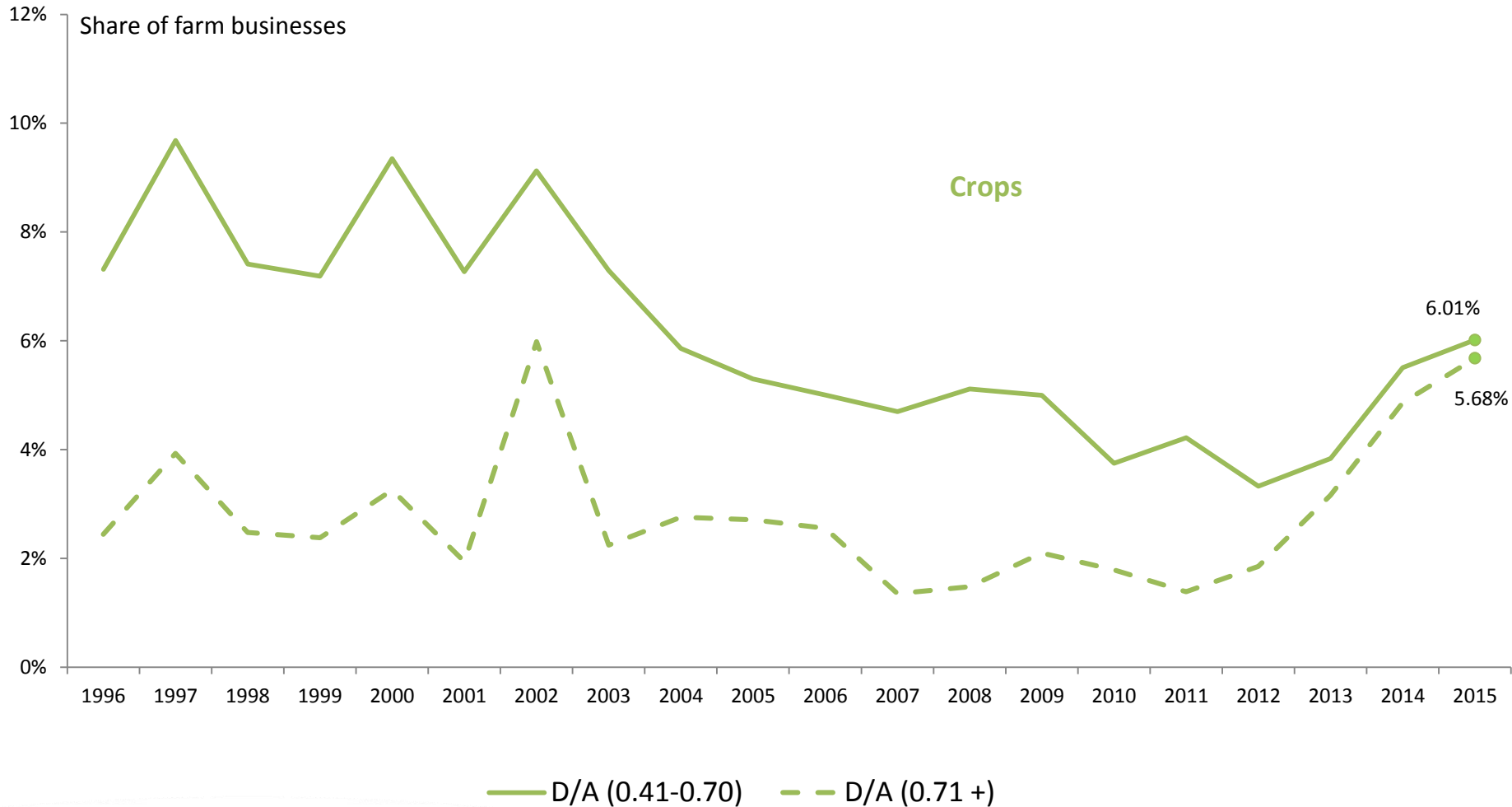
Note: F = forecast. The partial budget forecast model is based on the 2014 Agricultural Resource Management Survey (ARMS) using parameters from the sector forecasts. The model is static and does not account for changes in crop rotation, weather, and other location production impacts that occurred after the base year. Data as of August 25, 2015. Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.



Share of highly leveraged farm businesses forecast to increase in 2015F



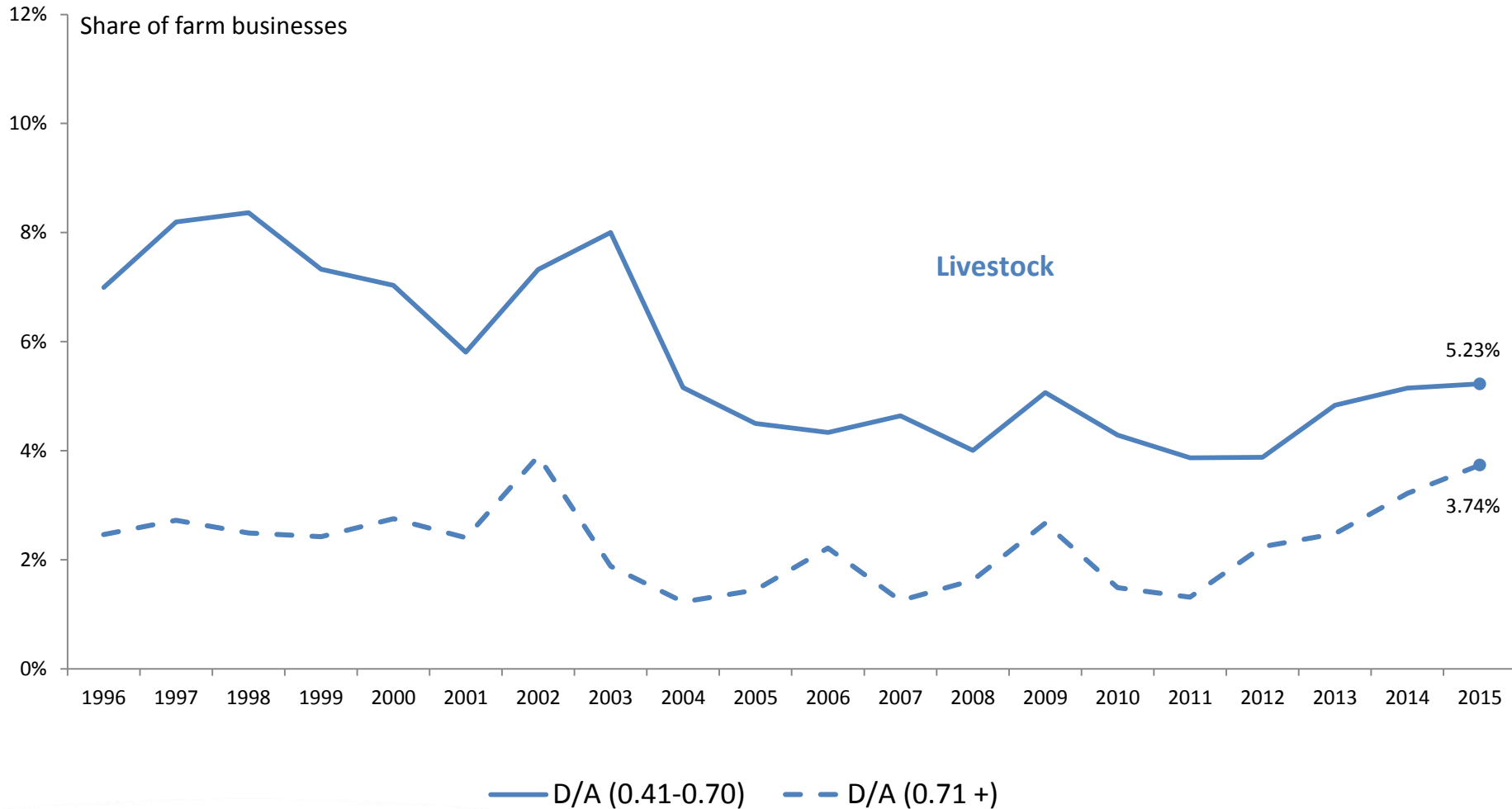
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Share of highly leveraged farm businesses forecast to increase in 2015F



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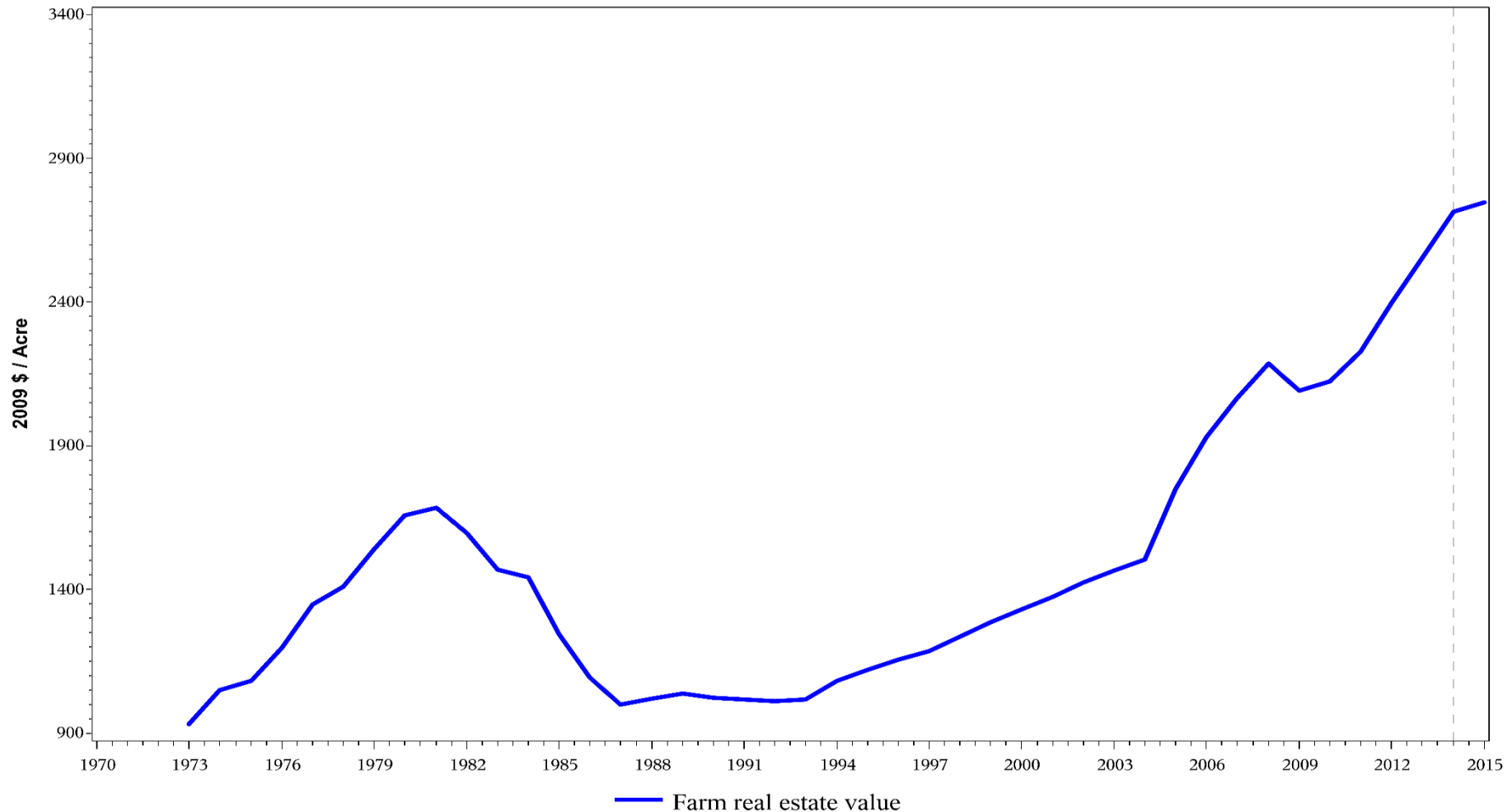


Farm Real Estate Outlook



National Land Values

Comparing Farm Real Estate Values to Capitalized Annual and Moving Average Returns



2015 data are forecasts

Note: Returns per acre are calculated as net cash income plus rental and real estate interest expenses.

Source: USDA, National Agricultural Statistics Service, June Area Survey; Economic Research Service, Farm Income and Wealth Statistics.

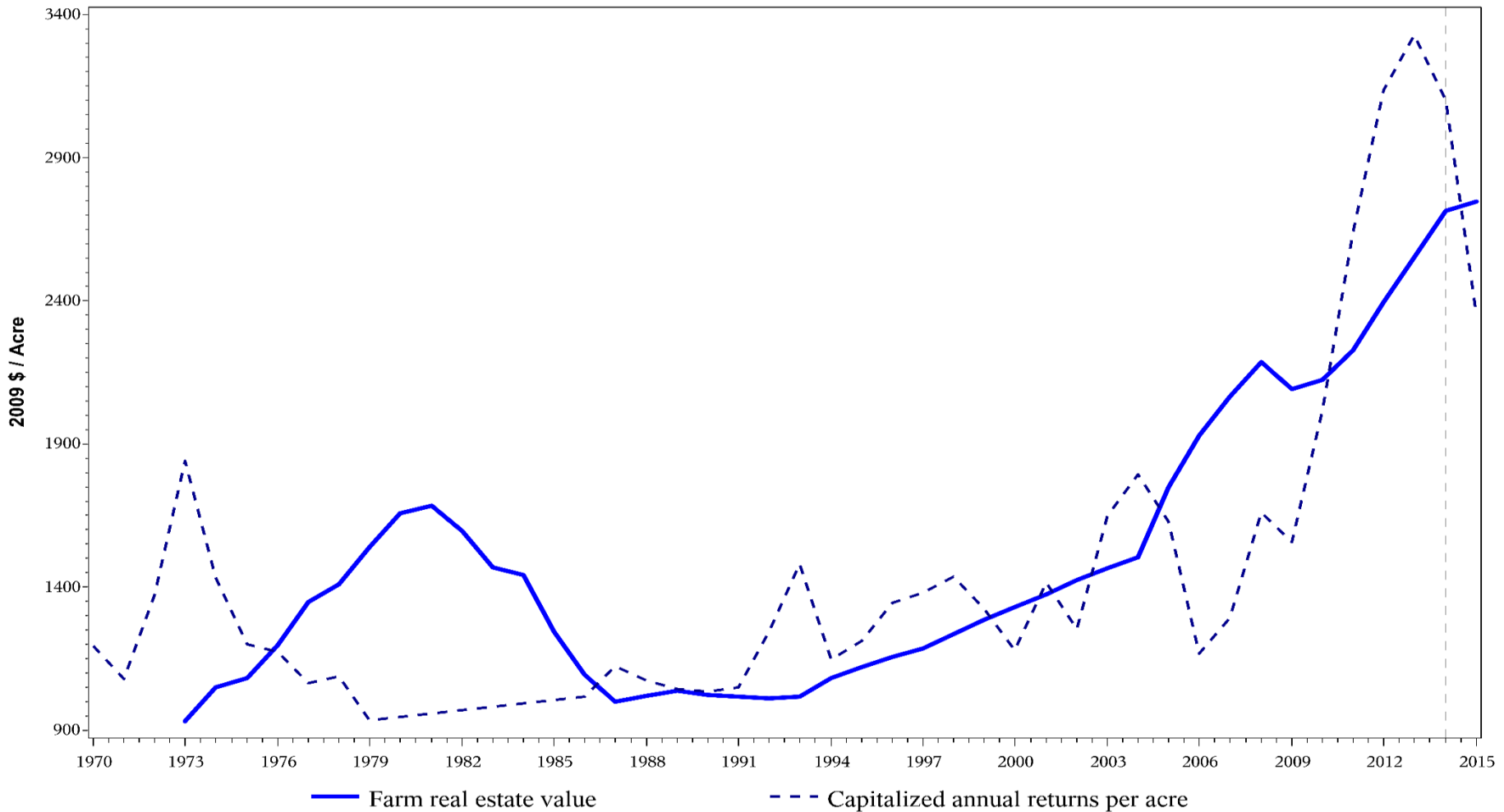
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National Land Values

Comparing Farm Real Estate Values to Capitalized Annual and Moving Average Returns



2015 data are forecasts

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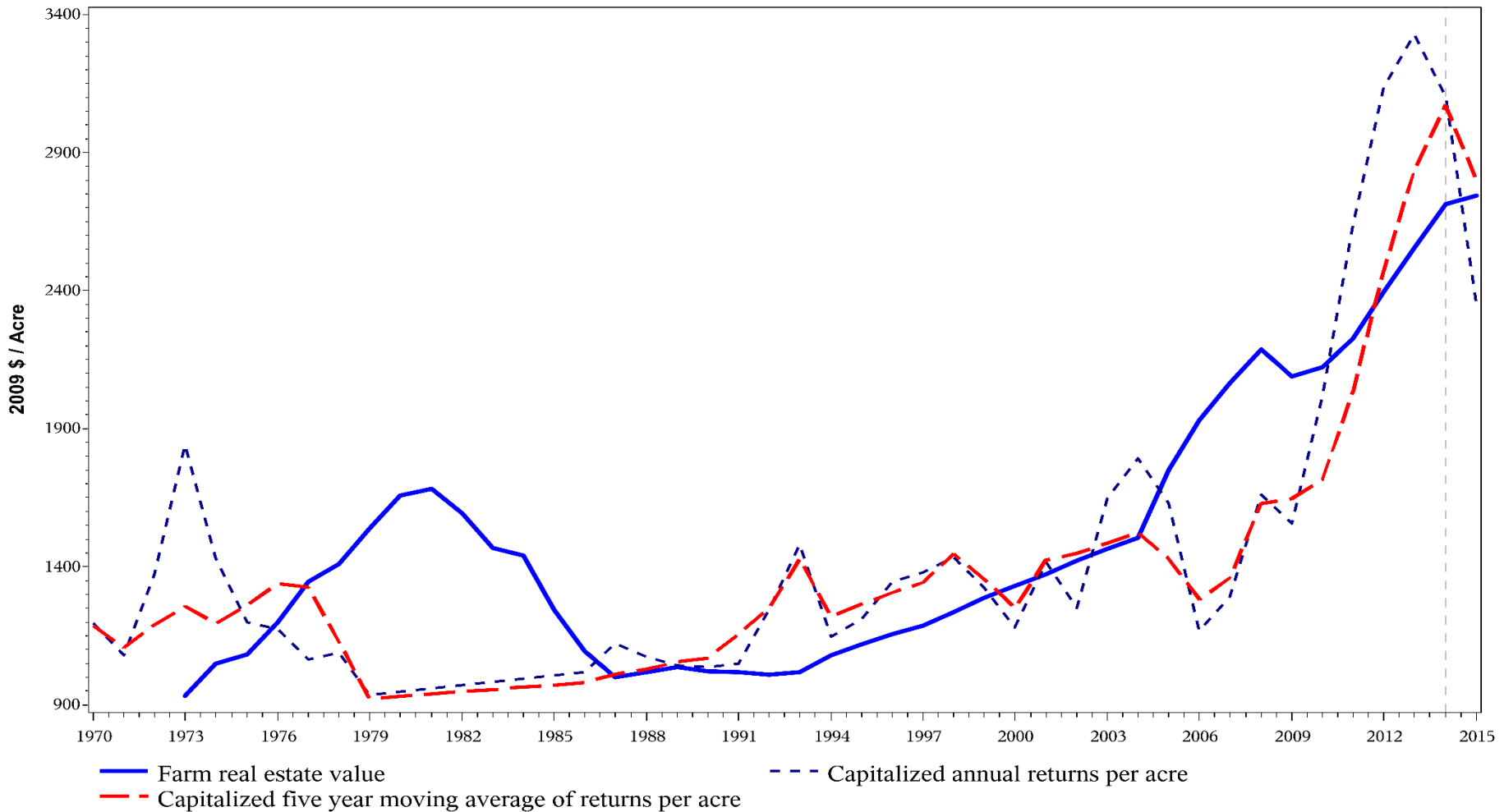
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National Land Values

Comparing Farm Real Estate Values to Capitalized Annual and Moving Average Returns



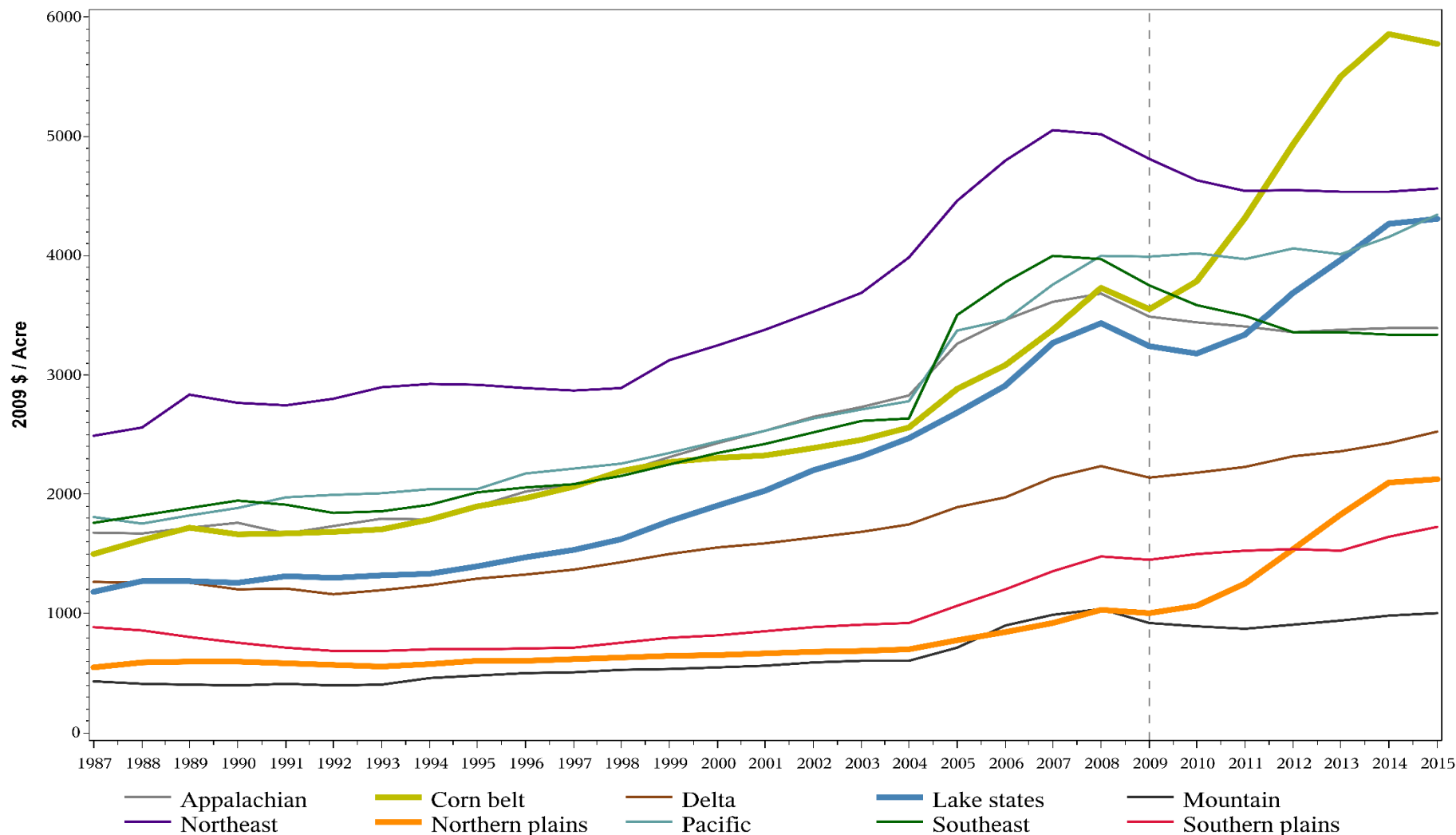
2015 data are forecasts

Note: Returns per acre are calculated as net cash income plus rental and real estate interest expenses.

Source: USDA, National Agricultural Statistics Service, June Area Survey; Economic Research Service, Farm Income and Wealth Statistics.



Real Estate Values Have Grown Unevenly Across Regions Since 2009

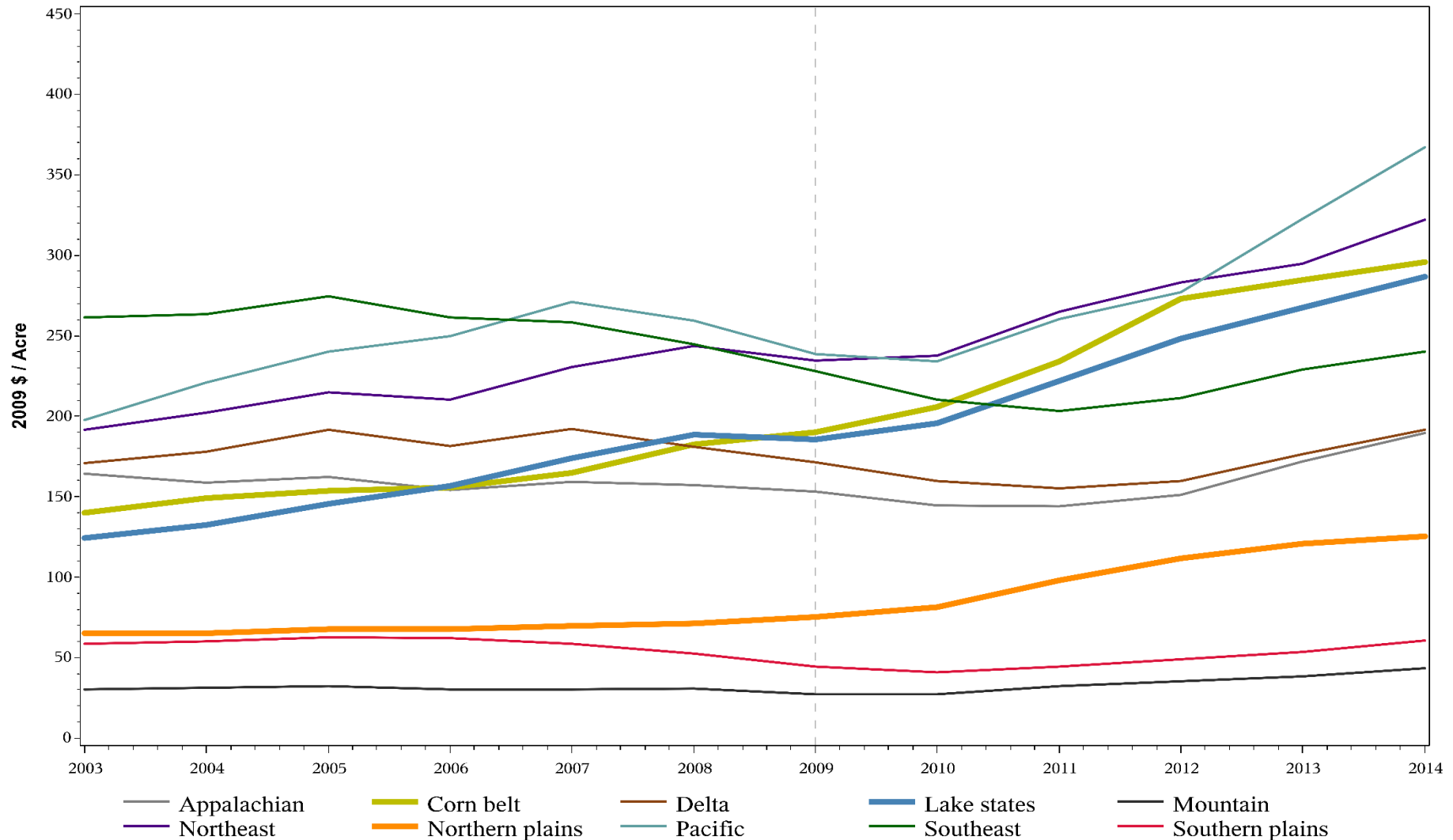


Note: Farm real estate includes land and buildings.

Source: USDA, National Agricultural Statistics Service, June Area Survey.



Cash Returns to Farm Real Estate Have Also Grown Unevenly Across Regions Since 2009

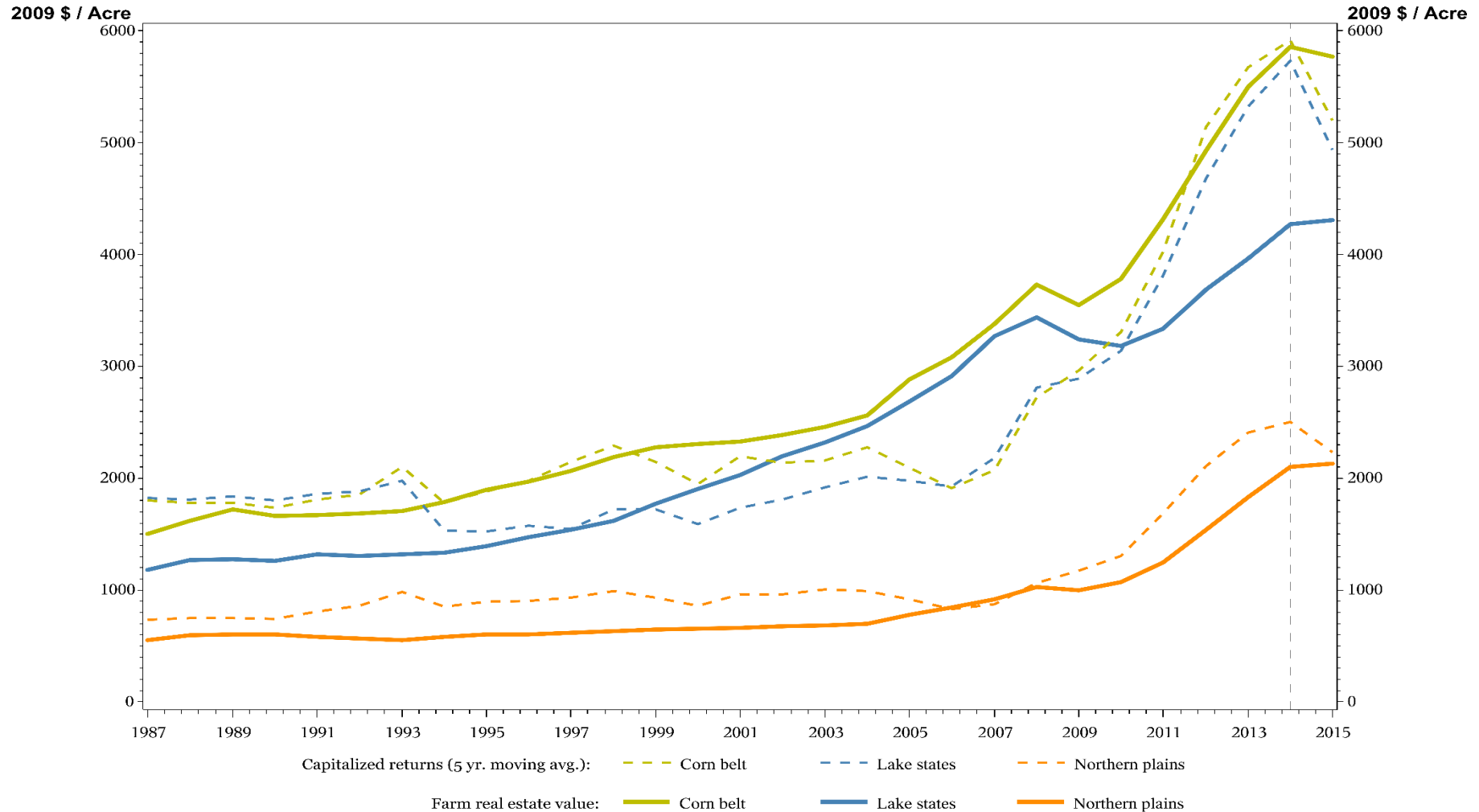


Note: Cash returns per acre are calculated as net cash income plus rental and real estate interest expenses.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.



Comparing Farm Real Estate Values to Capitalized Returns per Acre (5 year moving average) (Regions with Highest Real Appreciation Since 2009)



2015 data are forecasts

Note: Returns per acre are calculated as net cash income plus rental and real estate interest expenses.

Source: USDA, National Agricultural Statistics Service, June Area Survey; Economic Research Service, Farm Income and Wealth Statistics.





Additional Analysis and Data

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Farm Sector Income & Finances

Analysis coinciding with each of the ERS farm income group data release.

<http://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances.aspx>

Farm Sector Income and Wealth Statistics

Data product updated 3 times per year. Next update: November 24th, 2015.

Includes historical state and national estimates, and national forecasts.

<http://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics.aspx>





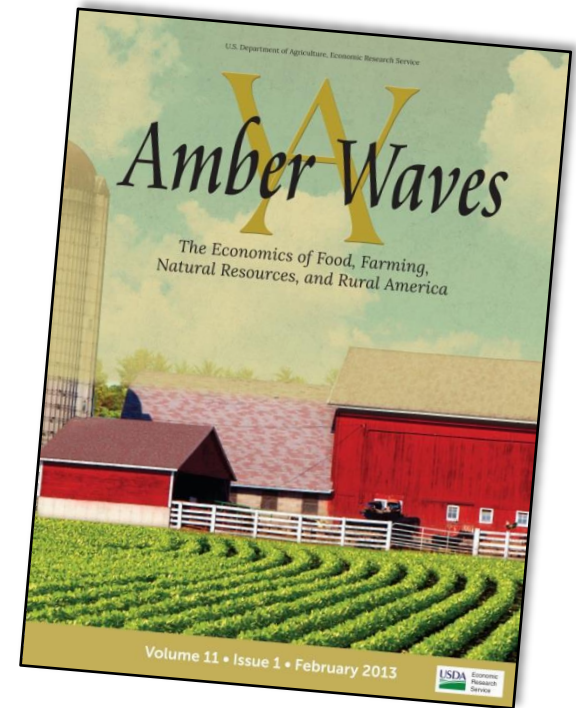
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Amber Waves:

Presents summaries of current ERS economic and policy research on agriculture, food, rural America, and the environment for policymakers, academics and the public.

- Via **web connection** or **mobile app**

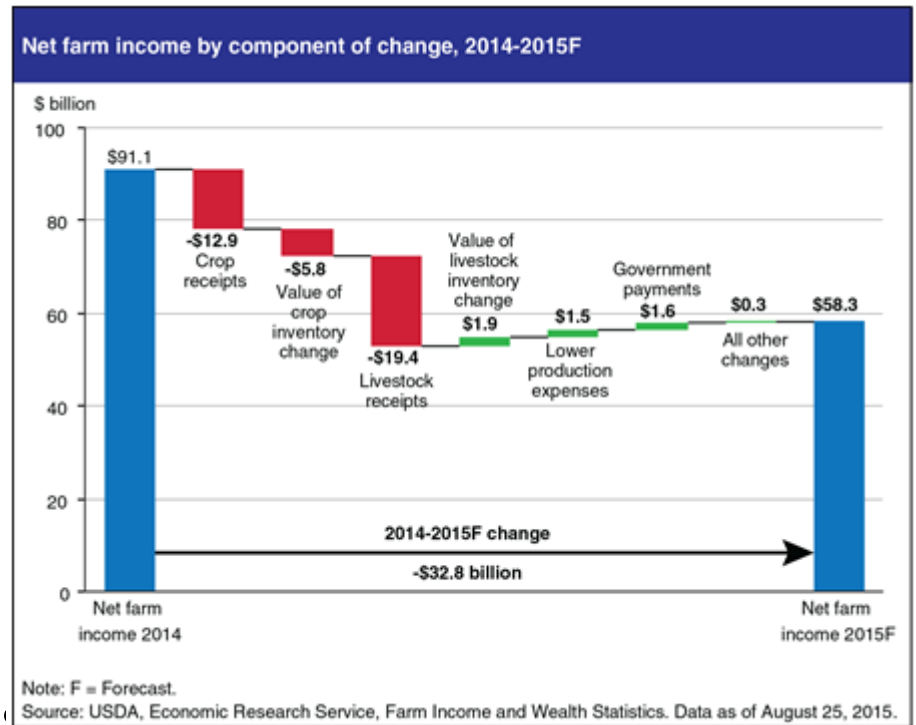
<http://www.ers.usda.gov/AmberWaves/>





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Chart of Note:



Farm income Chart of Note
from August 25, 2015.

Daily chart and short analysis on current ERS economic and policy research on agriculture, food, rural America, and the environment for policymakers, academics and the public.

<http://www.ers.usda.gov/data-products/charts-of-note.aspx>





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QUESTIONS?

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