

How Heritage Foundation's U.S. Farm Policy Proposals Would Put America Last

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Introduction

U.S. farm policy, which has been in place in one form or another since our nation's founding, impacts everyone.¹ The livelihoods of U.S. farmers and ranchers are directly impacted by farm policy, certainly. But all Americans are affected by policies that concern the availability, safety, and affordability of food and fiber, even when agriculture's significant economic, employment, trade, conservation, energy, and cultural contributions are put aside. Any discussion, then, concerning the policies affecting so important a sector ought to be rooted in facts. And relevant data should be presented in ways that inform the discussion concerning the direction of U.S. farm policy, rather than in ways that distort information or confuse the debate.

The Heritage Foundation's report, entitled "Farms and Free Enterprise: A Blueprint for Agricultural Policy" (Heritage Report) is flawed.² The Report selectively uses data in a manner that allows certain conclusions to be drawn about U.S. agriculture and farm policy. The Heritage Report's recommendations are based on these conclusions.

This paper seeks to present facts concerning U.S. agriculture and farm policy in a manner supported by all available data. The paper will largely track the specific arguments made in Part I of the Heritage Report. Specifically, Part I concerns the ability of farmers and ranchers to manage risk, the effect of policies designed to help farmers and ranchers mitigate that risk, and specific criticisms concerning the safety net provided by the Farm Bill's Commodity Title and Federal Crop Insurance.

This paper also provides helpful insights and perspectives on the state of the U.S. farm and ranch economy and the effects that U.S. farm policy has on farmers and ranchers and the country, generally. In doing so, this paper is meant to serve as a useful resource for policymakers.

About the Author

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¹ Effland, Anne B.W. "U.S. Farm Policy: The First 200 Years." *Agricultural Outlook* 269:21-5. U.S. Department of Agriculture, Economic Research Service, March 2000.

http://www.farmlandinfo.org/sites/default/files/US_Farm_Policy_March_2000_1.pdf.

² Bakst, D. (ed.) 2016. "Farms and Free Enterprise: A Blueprint for Agricultural Policy." Washington, DC: Heritage Foundation.

Executive Summary

The Heritage Report provides observations on U.S. farm policy as well as recommendations for policymakers. Unfortunately, many of the observations outlined in the Report are difficult to reconcile with the data provided by its authors as well as the realities faced by America's farmers and ranchers. U.S. farm policy is complex. Yet, the Heritage Report provides the reader with only one, narrow perspective based upon select statistics. This paper attempts to present a more realistic and balanced picture regarding the impacts of U.S. farm policy.

The Heritage Report recommends that the safety net provided by the Farm Bill's Commodity Title be eliminated for crop and dairy farmers although analysis of a more modest proposal offered during the 2008 Farm Bill debate concluded that most farms and ranches would not be able to survive the resulting erosion in farm income. The Heritage Report's recommendation comes at a time when national net farm income has fallen 50 percent over the past four years and, regionally, farmers have endured difficult conditions for an even longer period. The previous proposal was put forward at a time when the farm economy was relatively strong affording farmers an opportunity to build up reserves and equity.

The Heritage Report also recommends that crop insurance be cut but maintained in the short-term, along with livestock disaster assistance, until a complete transition away from any government involvement in agriculture is achieved. The cuts to Federal Crop Insurance recommended in the Heritage Report would erase the significant gains made under crop insurance over the past 23 years and, in effect, restore the previous federal policy of maintaining a weak crop insurance system buttressed by costly, un-budgeted ad hoc disaster assistance. The reversal in policy would come at a time when Congress has not enacted an ad hoc crop loss disaster program for 10 years and 90 percent of all U.S. planted acres are insured.

The Heritage Report further recommends that the U.S. make total and unilateral concessions on agriculture in the World Trade Organization (WTO) and eliminate all domestic trade laws with the objective of causing foreign trading partners to do the same on the strength of America's leadership. However, analysis of the Heritage proposal indicates that the high and rising subsidies, tariffs, and non-tariff trade barriers of foreign competitors would continue, leaving U.S. farmers and ranchers to fend alone against the predatory trade practices of other nations which is inconsonant with current U.S. objectives on trade.

The Heritage Report's recommendations are built upon the selective use of data. For instance, the Heritage Report uses statistics in order to arrive at the conclusion that farmers and ranchers are wealthy and can, therefore, manage agricultural risk. However, 70 percent of the income counted by Heritage is not agricultural income. Thus, the Heritage Report is able to

conclude that agricultural risk is not significant because such risk is naturally not an issue for people who do not farm or ranch. Heritage also maintains that agricultural risk is no different than the risks of other businesses by ignoring a global agricultural market distorted by foreign subsidies, tariffs, and non-tariff trade barriers, far lower rates of return for agriculture, Mother Nature, and the highly volatile nature of agricultural income. However, data demonstrate that costs for farmers often outpace returns and a majority of farmers today are in or near economic trouble.

The Heritage Report states that the farm safety net is harmful despite its successes on a full-range of fronts, including agricultural output which has almost tripled in the past 70 years, Americans paying a lower share of their income on grocery bills than any other consumers in the world, U.S. agriculture running a trade surplus while creating 21 million jobs and accounting for 5.5 percent of U.S. Gross Domestic Product (GDP), the halving of soil erosion over the past 32 years, taxpayer savings of over \$100 billion under the current Farm Bill, and academic analysis that indicates that most U.S. farmers and ranchers simply could not survive long without it. The Heritage Report also exaggerates the actual character of U.S. farm policy, suggesting that farm policy dictates planting decisions and prices when, in fact, markets determine both.

The Heritage Report describes the safety net provided by the current Farm Bill as flawed primarily due to what the report claims are higher than promised taxpayer costs. However, the latest report by the Congressional Budget Office reveals that the 2014 Farm Bill is expected to achieve greater savings than anticipated when the legislation was enacted, with total savings expected to reach more than \$100 billion, or greater than four times the savings pledged. To arrive at its conclusion to the contrary, the Heritage Report focuses on two policies within the Farm Bill's Commodity Title that for many farmers serve as the primary means of mitigating the 50 percent drop in net farm income sustained over the past four years. Yet, despite these conditions, overall Commodity Title spending is still projected to be more than \$4 billion lower over 10 years. The Heritage Report misses the fundamental changes to U.S. dairy policy and the fact that dairy farmers are paying more in premiums to the government than receiving in benefits. And, the Heritage Report states that U.S. sugar policy is costly to taxpayers and consumers despite U.S. sugar policy operating at no cost for all but one of the past 15 years – the year Mexico illegally dumped sugar onto the U.S. market at below Mexico's cost of production – and U.S. wholesale and retail consumers paying less for sugar than counterparts elsewhere.

Finally, the Heritage Report bases its crop insurance proposal on the belief that crop insurance was only meant to cover the footprint of ad hoc disaster programs despite all of the legislative history to the contrary. The Heritage Report also makes a comparison of costs between ad hoc disaster programs and crop insurance, stating that ad hoc disaster is less expensive than crop insurance. Analysis demonstrates that the 1988 drought disaster program would have cost taxpayers more than \$17 billion had it been in place for the 2012 drought, or \$3 billion higher than crop insurance spent in this worst of all years. The Heritage Report challenges conventional wisdom that multi-peril crop insurance would be unavailable to farmers without federal involvement although Heritage concludes that such insurance may be “conceivable” if Federal Crop Insurance and the Farm Bill are totally eliminated. The Heritage

Report alludes to crop insurance as a source for farmers to collect benefits despite just 19 percent of policies paying an indemnity in 2016. And, Heritage contends that crop insurance is too costly to taxpayers despite latest CBO projections showing crop insurance 10-year costs to be \$6.69 billion lower than anticipated, with crop insurance costs expected to approximate 2004 levels. Lost in the discussion are the 290 million acres covered by crop insurance today, including roughly 90 percent of all U.S. planted acres and 130 commodities, with about \$100 billion in liability protection in force. Lost also is the absence of Congressionally enacted ad hoc crop loss disaster programs over the past decade and the doubling of crop insurance participation over the past 17 years which has coincided with an impressive actuarial soundness record, an improper payment rate that is half the government-wide average, and \$17 billion in cost savings since 2008, primarily achieved through cuts to private sector delivery.

At bottom, the Heritage Report states that behind its recommendations is the conviction that there is no proper role for farm policy in America, with a harkening for the days of old when there was not such federal involvement. Those days never existed. U.S. farm policy has been around since the beginning of the country and "...throughout the years a remarkably consistent public consensus has remained: that the problems inherent in farming warrant public support."³ In responding to the Heritage Report, this paper helps explain why.

Importance of Agriculture and Brief History of U.S. Farm Policy

U.S. agriculture and related industries contributed \$992 billion, or 5.5 percent, to the U.S. GDP in 2015.⁴ For the purpose of providing a few comparisons, the utilities sector contributed 1.6 percent; mining, 1.8 percent; arts, entertainment, recreation, and accommodations, also 1.8 percent; transportation and warehousing, 3 percent; construction, 4.1 percent; information, 4.7 percent; retail trade, 5 percent; and finance and insurance, 7.2 percent.⁵

While impressive, the percentage of GDP attributable to agriculture seems to understate the impact individual farms and ranches have on local communities. For instance in 2015 alone, farms and ranches spent \$362.8 billion on inputs to produce crops and livestock valued at \$375.4 billion.⁶

U.S. agriculture and related industries also created full-time and part-time work for 21 million Americans in 2015, more than 11 percent of the total U.S. workforce.⁷ For the purpose of providing a few comparisons, management occupations created 5.05 percent; business and

³ See note 1, *supra*.

⁴ USDA, Economic Research Service. Ag and Food Statistics. <https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/ag-and-food-sectors-and-the-economy>. Web. Accessed June 7, 2017.

⁵ Bureau of Economic Analysis. Value Added by Industry as a Percentage of Gross Domestic Product. <https://www.bea.gov/iTable/iTable.cfm?ReqID=51&step=1#reqid=51&step=51&isuri=1&5114=a&5102=5>. Web. Accessed June 7, 2017.

⁶ USDA, National Agricultural Statistics Service. "Farm Production Expenditures 2015 Summary." <http://usda.mannlib.cornell.edu/usda/current/FarmProdEx/FarmProdEx-08-04-2016.pdf>. Web. Accessed June 14, 2017.

⁷ See note 4, *supra*

financial operations occupations, 5.19 percent; computer and mathematical occupations, 2.97 percent; architecture and engineering occupations, 1.78 percent; education, training, and library occupations, 6.15 percent; healthcare practitioners and technical occupations, 5.92 percent; sales and related occupations, 10.35 percent; and office and administrative support occupations, 15.69 percent.⁸

U.S. agriculture is also a significant source of trade revenue. While, overall, the U.S. runs a very substantial annual trade deficit – almost \$745.1 billion in 2015 – the U.S. runs a trade surplus in agriculture that stood at \$19.42 billion in the same year.⁹

U.S. consumers spend 6.4 percent of total expenditures on food consumed at home, the lowest in the world. Only seven other countries in the world spend less than 10 percent and all spend more than the U.S.¹⁰

Each of these data points underscores the economic value of the U.S. agriculture sector. U.S. agriculture's contribution to jobs and the economy and its benefits to consumers have steadily grown over the course of time and is still trending in this direction with continued growth.¹¹ This record of success has been achieved with the help of U.S. farm policy that, in one form or another, has been around since the country began.¹²

U.S. farm policy in its formative years concerned expansion and development, with lawmakers offering land at reduced prices or eased credit terms in both 1790 and 1800.¹³ Later laws approved in 1820, 1841, and 1854 further reduced land prices, forgave debts, and gave land squatters an opportunity to attain title to land.¹⁴ Ultimately, in 1862, land was given away to anyone who would farm it.¹⁵ "Federal land policy created a precedent for Federal support for an independent family farm system, which has continued to be a prominent public goal of farm policy."¹⁶

The second phase of U.S. farm policy primarily concerned improving productivity and quality of life on the farm and ranch. In 1862, the U.S. Department of Agriculture and land grant

⁸ Bureau of Labor Statistics. Occupational Employment Statistics. https://www.bls.gov/oes/current/oes_nat.htm#00-0000. Web. Accessed July 6, 2017.

⁹ United States Census Bureau. Foreign Trade. <https://www.census.gov/foreign-trade/balance/c0004.html>. Web. Accessed June 14, 2017. *See also* USDA, Economic Research Service. [https://www.ers.usda.gov/data-products/foreign-agricultural-trade-of-the-united-states-fatus/us-agricultural-trade-data-update/#Latest U.S. Agricultural Trade](https://www.ers.usda.gov/data-products/foreign-agricultural-trade-of-the-united-states-fatus/us-agricultural-trade-data-update/#Latest%20U.S.%20Agricultural%20Trade). Web. Accessed June 14, 2017

¹⁰ Gray, Alex. "Which Countries Spend the Most on Food?" World Economic Forum. Dec. 2016. <https://www.weforum.org/agenda/2016/12/this-map-shows-how-much-each-country-spends-on-food/>. Web. Accessed June 7, 2017

¹¹ USDA, Economic Research Service. Agricultural Productivity in the U.S. <https://www.ers.usda.gov/data-products/agricultural-productivity-in-the-us/>. Web. Accessed July 31, 2017.

¹² *See note 1, supra.*

¹³ *Ibid.*

¹⁴ *Ibid.*

¹⁵ *Ibid.*

¹⁶ *Ibid.*

colleges were established.¹⁷ Support for agriculture research and experiment stations began in the 1870s while the Cooperative Extension Service, providing adult education, began in 1914.¹⁸

A third phase in U.S. farm policy also began in the early 20th century, much of which focused on strengthening the position of farmers and ranchers in a marketplace dominated by other sectors to the detriment of producers.¹⁹ For example, farmers and ranchers were allowed to band together to form cooperatives to market commodities and to buy inputs.²⁰

The fourth phase in U.S. farm policy got its start near the end of World War I, with lawmakers focused on improving credit and addressing commodity prices that were sharply falling.²¹

Prior to 1933, however, efforts were too modest to deal effectively with the impacts of the Great Depression and the Dust Bowl. However, these singular events prompted passage of legislation in that year to provide price supports and restrict plantings in order to raise collapsed prices.²² Although the 1933 law would later be struck down by the Supreme Court due to a processor tax, a 1938 law without the tax survives to the present day, although most of its provisions have been suspended during the effective periods of subsequent Farm Bills, the duration of which have typically run anywhere from 5 to 7 years.²³

A fifth phase in U.S. farm policy has focused on the need for America's farmers and ranchers to be competitive in global trade.

Over the course of time, the objective of U.S. farm policy has evolved in a way that provides a safety net for U.S. farmers and ranchers to help them mitigate risks while departing from the old restrictive policies of the 1930s in favor of total planting flexibility where market conditions determine commodity prices. The market-oriented agriculture policy that has emerged, particularly since 1996, has had the additional effect of reducing taxpayer costs. In fact, the percentage of the total federal budget comprised by the farm safety net has fallen from 1.463 percent in the 1960s to 0.347 percent earlier this decade and to just 0.26 percent today.²⁴

Although there have been conflicts in how best to meet the unique needs of U.S. farmers and ranchers over the course of more than 200 years, "throughout the years a remarkably

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid.

²² "United States v. Butler." Oyez, <https://www.oyez.org/cases/1900-1940/297us1>. Web. Accessed June 30, 2017.

²³ United States Congress. *Agricultural Adjustment Act of 1938*. 75th Cong. 3rd sess. <https://www.gpo.gov/fdsys/granule/USCODE-2010-title7/USCODE-2010-title7-chap35>. Web. Accessed July 5, 2017.

²⁴ Farm Policy Facts. "Standing Up for America's Farm & Ranch Families." October 4, 2016. <https://www.farmpolicyfacts.org/2016/10/standing-americas-farm-families/>. Web. Accessed July 17, 2017.

consistent public consensus has remained: that the problems inherent in farming warrant public support.”²⁵

Heritage Report: *Farmers Have the Financial Means to Manage Risk Without a Safety Net.*

- **Reality:** *For the top 4 planted crops, producers’ costs have outpaced market returns 70 percent of the time in the past 19 years.*²⁶
- **Reality:** *Without off-farm income, most farmers would be unable to pay off their farm debt.*²⁷

In its Report, the Heritage Foundation concludes that farmers have the financial ability to manage their risk without need of U.S. farm policy. In order to draw this conclusion, the Heritage Report uses median farm household income – which counts a significant amount of income from non-farmers and non-farm-related or off-farm work, as well as benefits of U.S. farm policy.²⁸

In doing so, Heritage includes the income of the nearly 60 percent of “farms” that consist of retirees or individuals whose primary occupation is not farming in determining whether “farmers” have the means necessary to manage their own risk and if they need farm policy.²⁹ It is difficult to conclude that farming is low-risk and that farmers do not rely on farming or need farm policy unless one misinterprets USDA statistics by adding to the equation the income of non-farmers or income from non-farm-related or off-farm work, which is exactly what Heritage does in its report.

The Heritage Report is not only able to minimize agriculture risk and the need for farm policy in this way, but Heritage is also able to exaggerate the financial condition of actual farmers and ranchers. By adding the income from non-farmers and non-farm-related or off-farm work to the income that farmers and ranchers make from actual agricultural production activities, the Heritage Report is able to depict far healthier farm incomes than it otherwise could. In turn, the higher income is used by the Heritage Report to reinforce the case that “farmers and ranchers” have the financial means of absorbing risks inherent in agriculture without need of U.S. farm policy.

While by no means a perfect comparison, comparing farm income to that of other self-employed households, as opposed to non-farm households, generally, certainly makes more

²⁵ See note 1, *supra*.

²⁶ Data compiled by USDA, Economic Research Service using Agricultural Resource Management Survey data and other sources. <https://www.ers.usda.gov/data-products/commodity-costs-and-returns/commodity-costs-and-returns/#Current%20Costs%20and%20Returns:%20All%20commodities>. Web. Accessed July 13, 2017.

²⁷ Briggeman, Brian C. “The Importance of Off-Farm Income to Servicing Farm Debt.” Economic Review, First Quarter 2011, Federal Reserve Bank of Kansas City, 83. <https://www.kansascityfed.org/publicat/econrev/pdf/11q1Briggeman.pdf>. Web. Accessed July 12, 2017.

²⁸ See note 2, *supra*.

²⁹ Ibid.

sense. Using this comparison, farm income is still below that of other self-employed households.³⁰ This is significant for reasons the Economic Research Service (ERS) explains.

As ERS points out, “Because all family-owned businesses can add to as well as drain a significant portion of family income and wealth, using the nonfarm entrepreneurial class as a reference group for farm businesses...deepens [the] understanding of the farm household.”³¹

However, ERS adds an important caveat, distinguishing farm income from even the income of other self-employed households:

Farm household wealth is disproportionately invested in the physical capital used for farming. Two-thirds of U.S. farm households have 80 percent or more of their wealth invested in the farm business. In contrast, only 9 percent of nonfarm proprietorships have this high a level of specialization in their investments. In fact, half of these proprietorship households hold less than 20 percent of their total wealth in their businesses. This disparity is because physical capital in farming is used both in production and as an investment, whereas most nonfarm households hold wealth in both physical capital and financial capital.³²

In other words, farmers put most of their personal wealth at risk in the inherently risky business of running their farms. Thus, comparing farm and non-farm household income is misleading because most non-farm households do not have to put their wealth at risk in order to earn wages or a salary. And, comparing farm income with the income of other self-employed individuals, while more accurate, still presents its own set of problems due to the heavy investment by farmers in their operations.

This paper does not attempt to determine the best way to measure the financial ability of farmers and ranchers to withstand the risks inherent in agriculture, but it does provide insights regarding the returns from major crops, information on the percentage of farmers in financial peril, the debt situation of farmers, and information about off-farm income. In this way, the paper will allow readers to better understand the financial condition of farmers and ranchers in the United States and draw their own conclusions regarding the nature of agricultural risk and the capacity of producers to manage these risks without the benefit of farm policy.

A More In-Depth Look at Farm Income Statistics

As previously discussed, the Heritage Report combines the income of those on retirement farms and individuals living on farms who rely on a primarily off-farm occupation – which accounts for nearly 60 percent of all “farms” – with the income of actual farm and ranch

³⁰ Zulauf, Carl. “Farm Policy Background: Income of U.S. Farm vs. Nonfarm Population.” FARMDAILY. July 3, 2013. <http://farmdaily.illinois.edu/2013/07/Farm-Policy-Income-Farm-Nonfarm.html>. Web. July 11, 2017.

³¹ USDA, Economic Research Service. “Farm and Nonfarm Household Comparability. Income, Wealth, and the Economic Well-Being of Farm Households.” AER-812. p. 33. https://www.ers.usda.gov/webdocs/publications/41451/31366_aer812g.pdf?v=41271. Web. Accessed July 17, 2017.

³² Ibid.

families.³³ Median farm household income aggregates non-farm income with farm income, even though farm income comprises only about 30 percent of median farm household income.³⁴ Yet, the Heritage Report cites strong “median farm household income” as a justification to sharply reduce and even eliminate U.S. farm policy.³⁵ Since this approach does not accurately illustrate actual farm income, neither can it illustrate profitability, reliance upon farming for income, nor need of U.S. farm policy. After all, what other sector’s financial health is determined based on a measurement under which 70 percent of income is derived from other sectors?

By using median farm household income, the Heritage Report not only fails to capture the essence of actual farm income but it altogether misses the large number of actual farmers and ranchers who are considered to be “financially vulnerable” today by those who closely monitor financial conditions on the farm. Why does Heritage make this mistake? Part of the answer to this question lies in USDA’s historical definition of a “farm”.

USDA’s definition of a “farm” has remained unchanged for over 40 years, making it easy to combine into one metric the income of everyone who owns property in rural America, including those who may not use the property to produce any agricultural products whatsoever. Falling into this error is possible in part because USDA defines a “farm” as “any place that produced and sold—or *normally* would have produced and sold—at least \$1,000 of agricultural products (including any government payments) during a given year.”³⁶ This definition of a farm, which has not been adjusted for inflation since 1974, allows many households that would not have historically been considered “farming households” to be counted as farming households and their household income to be considered as income from farming despite being derived nearly exclusively from non-farming activities.

By combining the income of those who do not farm – but who have higher levels of income than the average American – with the income from households that do produce agricultural products on their land, the Heritage Report misleads readers into believing that farm income is both more stable and higher than it actually is.

Exacerbating the situation, “point farms” have significantly grown as a percentage of overall farms. “Point farms” are properties that do not have sales of at least \$1,000 but to which USDA’s “point system” still assigns “values for acres of various crops and head of livestock to estimate normal sales (i.e., where 1 point equals 1 dollar in estimated sales).” In other words, point farms include properties with sales of less than \$1,000. And, point farms’ share of the total farm count grew from just 11 percent of all farms in the 1982 Census of Agriculture to 31 percent in 2007.³⁷

³³ O’Donoghue, Erik J. *et al.* “The Changing Organization of U.S. Farming.” EIB-88, 3. U.S. Department of Agriculture, Economic Research Service. December 2011.
http://www.ncga.com/upload/files/documents/pdf/changing_structure_of_us_farms_usda_ers.pdf. Web. Accessed June 7, 2017.

³⁴ Ibid.

³⁵ See note 2, p. 6, *supra*.

³⁶ See note 33, *supra*.

³⁷ Ibid. p. 3.

In short, the Heritage Report’s inclusion of non-farmers and non-farm income distorts actual farm income, wealth, and the ability of farmers and ranchers to manage risk without a safety net. Even comparing farm income to that of other self-employed households, while an improvement, still suffers flaws. Therefore, better measurements are needed if readers are to get an accurate glimpse into conditions on the farm and ranch and the capacity of producers to manage risk without the benefit of farm policy. This paper next explores some possibilities.

Costs vs. Returns

The average farm produces 1.3 crops.³⁸ Annually, USDA provides analysis on the average costs of production and compares them to the value of production. This provides the best information available on the average costs and returns for major crops. For most crops, data go back at least 18 years. The table below lists the number of years each crop’s value of production was above the total cost of production. On average, for the top four crops, when all costs are taken into account, a farmer has a profit less than 30 percent of the time.³⁹

Number of Years Producers Covered Their Full Cost of Production from 1997-2015	
Corn	7 out of 19 years
Soybeans	11 out of 19 years
Wheat	2 out of 19 years
Cotton	3 out of 19 years

Off-Farm Income is Necessary for Many Farm Families

As discussed earlier, analyzing median farm household income, frequently cited to demonstrate an income of farmers that is ostensibly above average, is not actually analyzing income from farming or ranching at all. Rather, it is the combining of off-farm income with on-farm income. Although a significant amount of off-farm income is retiree income or income from persons who are non-occupation farmers, there is yet another aspect to non-farm income that is relevant. For many farm families whose primary occupation is farming, off-farm income is absolutely necessary in order to keep the farm solvent.⁴⁰

When the Kansas City Federal Reserve studied whether actual farmers would have the ability to repay their farm debt using farm income alone, it found that “[w]hen considering farm income alone, most farmers would be unable to service their debt.”⁴¹ Looking at USDA’s debt repayment capacity utilization (DRCU) ratios for farms, the Kansas City Federal Reserve found

³⁸ Effland, Anna, and Carolyn Dimitri. “Milestones in U.S. Farming and Farm Policy.” USDA ERS. June 1, 2005. <https://www.ers.usda.gov/amber-waves/2005/june/data-feature/>. Web. Accessed June, 15 2017.

³⁹ USDA, Economic Research Service. <https://www.ers.usda.gov/data-products/commodity-costs-and-returns/>. Web. Accessed June 14, 2017.

⁴⁰ See note 27, *supra*.

⁴¹ Ibid. p. 88.

that, since 1998, the average farm DRCU never fell below 100 percent.⁴² That means that, since 1998, the average farm could not afford to take on any additional debt because its outstanding debt already equaled the maximum amount that the farm could afford.⁴³

In addition, the volatility of farm income and the changing levels of farm debt caused the farm DRCU to fluctuate widely. Sharp declines in farm income and rising debt in 1998, 2002, and 2006 contributed to steep increases in the farm DRCU, while rising farm income and slower debt growth in 1999, 2004, and 2007 led to steep declines.⁴⁴

Because most farmers are unable to service their debt on farm income alone, people in farm households are forced to work second jobs. For these farmers, health insurance, retirement, and cash flow are only achievable when there is off-farm income coming into the home.

Yet, a good many full-time family farms and ranches do not even allow time for off-farm income. These farmers and ranchers not only lose the benefits that go with off-farm jobs, but also the relative stability of off-farm income. Just as lopsided percentages of a farm or ranch household's wealth is tied up in the farm or ranch, so is all of the time and energy of the family members who comprise it. In short, they are "all in" on the risky investment of farming.

Whether on or off of the farm, America's farmers work some of the longest hours compared to counterparts in other sectors. USDA economists Mary Clare Ahearn and Karen S. Hamrick found that, despite the large number of farmers who are fifty years old or older, "farmers and ranchers do, in fact, work significantly more than all employed persons.... They work more than all self-employed [people], as well. [And, they] allocate more time to work both during the weekday and during the weekend and holidays."⁴⁵

⁴² Ibid. p. 88.

⁴³ Ibid. p. 87.

⁴⁴ Ibid. p. 88.

⁴⁵ Ahearn, Mary Clare and Karen S. Hamrick. "Time Use in Farm Operator Households: How Do They Manage." 9. October 18-20, 2007. http://www.atusers.umd.edu/wip2/papers_i2007/ahearn.pdf. Web. Accessed June 7, 2017.

**Average annual labor hours worked at off-farm jobs, by farm size and occupation
(hours/year)**

	Size of farm (annual farm sales)		
	< \$50,000	\$50,000 - \$249,999	\$250,000 or more
Operator			
Management & professional	1,806	1,458	1,333
Services	1,599	1,865	1,217
Sales & office support	1,839	1,409	1,168
Natural resources, construction, & maintenance	1,896	1,593	1,194
Production, transportation, & materials moving	2,147	1,873	1,059
Weighted average across all occupations	1,832	1,664	1,241
Spouse			
Management & professional	1,341	790	219
Services	1,351	1,145	118
Sales & office support	1,302	766	236
Natural resources, construction, & maintenance	1,579	1,474	97
Production, transportation, & materials moving	1,329	638	241
Weighted average across all occupations	1,346	910	222

Notes: Subsample used only includes family farm households with married couples. The annual estimate is derived using the sum of the average hours worked off farm in each quarter multiplied by the number of weeks in each quarter.

Source: USDA's 2010 Agricultural Resource Management Survey, Version 1.

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The evidence suggests that farmers have tight and often negative margins forcing even those producers who are nearing or are beyond the average retirement age to work longer hours than others, both on and off farm, in order to service farm debt that farm income alone cannot cover. Data that show the market price exceeding the cost of production only 30 percent of the time over a 10-year period highlights the mercurial nature of price and production that makes agricultural risk especially unique and difficult to manage. Current net farm income, nationally, reveals current economic hardships in farm country, while regional net farm income indicates that these hardships are ongoing for a great many farmers and ranchers.

Forgotten in most discussions regarding the income of farmers is that many farmers, including a significant number who are nearing or are already beyond average retirement age, are putting in far more hours than their counterparts in other sectors. The misleadingly simple sound bite is that farmers earn lots of money. The more accurate explanation, however, is that many farmers work long days, weekends, and holidays not to get rich, but to stay above water and pay off farm debts that farm income alone cannot cover.

⁴⁶ Brown, Jason P., Jeremy G. Weber. "The Off-Farm Occupations of U.S. Farm Operators and Their Spouses." EIB-117, 14. U.S. Department of Agriculture, Economic Research Service. September 2013. <https://www.ers.usda.gov/publications/pub-details/?pubid=43792>. Web. Accessed July 17, 2017.

Heritage Report: *Agricultural Risk is Not a Significant Issue for Most Farmers.*

- ***Reality: Even with a safety net, agriculture exit rates are still higher than other businesses.***⁴⁷
- ***Reality: In 2015, 46 percent of midsized family farms and 36 percent of large family farms had Operating Profit Margins low enough to be deemed “high risk” by USDA.***⁴⁸

In an address in Peoria, Illinois, President Dwight D. Eisenhower told an audience that, “[f]arming looks mighty easy when your plow is a pencil, and you’re a thousand miles from the corn field.”⁴⁹ Apparently, being 1,000 miles away from a corn field also makes it easier to misuse agricultural statistics.

Statements such as “agricultural risk is not a significant issue for most farmers”⁵⁰ are rooted in either a lack of practical knowledge about farming or the misuse of agriculture statistics, or possibly both. The data demonstrate that a sizable segment of U.S. farmers are currently in economic peril and that operating margins are very tight. A safety net is often what stands between continuing to farm and bankruptcy.

Data Show Many U.S. Farms Are in Peril

As this paper will explore further below, many farmers and ranchers today are routinely one or two bad years away from insolvency. This is in part due to farming’s perfectly competitive market structure, which results in relatively small per-unit operating margins even in so-called “good years.”⁵¹ It is also due to the farmer’s need to repay large annual operating expenses – averaging nearly \$200,000 in 2015⁵² – the ability of which hinges on uncontrollable factors, including the cooperation of Mother Nature and an equally volatile global market, the latter of which is fraught with high foreign subsidies, tariffs, and non-tariff trade barriers.⁵³

USDA’s evaluation of the profitability of farms of different sizes and types is helpful in capturing the essence of current conditions.

⁴⁷ Hoppe, Robert, Penni Korb. “Understanding U.S. Farm Exits.” USDA, Economic Research Report No. (ERR-21) 42 pp. June 2006. <https://www.ers.usda.gov/publications/pub-details/?pubid=45570>. Web. Accessed July 5, 2017.

⁴⁸ USDA, Economic Research Service. “America’s Diverse Family Farms 2016 Edition.” EIB-164, 8. December 2016. <https://www.ers.usda.gov/webdocs/publications/81408/eib-164.pdf?v=42709>. Web. Accessed July 11, 2017.

⁴⁹ Eisenhower, Dwight D. Address at Bradley University, Peoria, Illinois. September 25, 1956.

⁵⁰ See note 2, p. 27. *supra*.

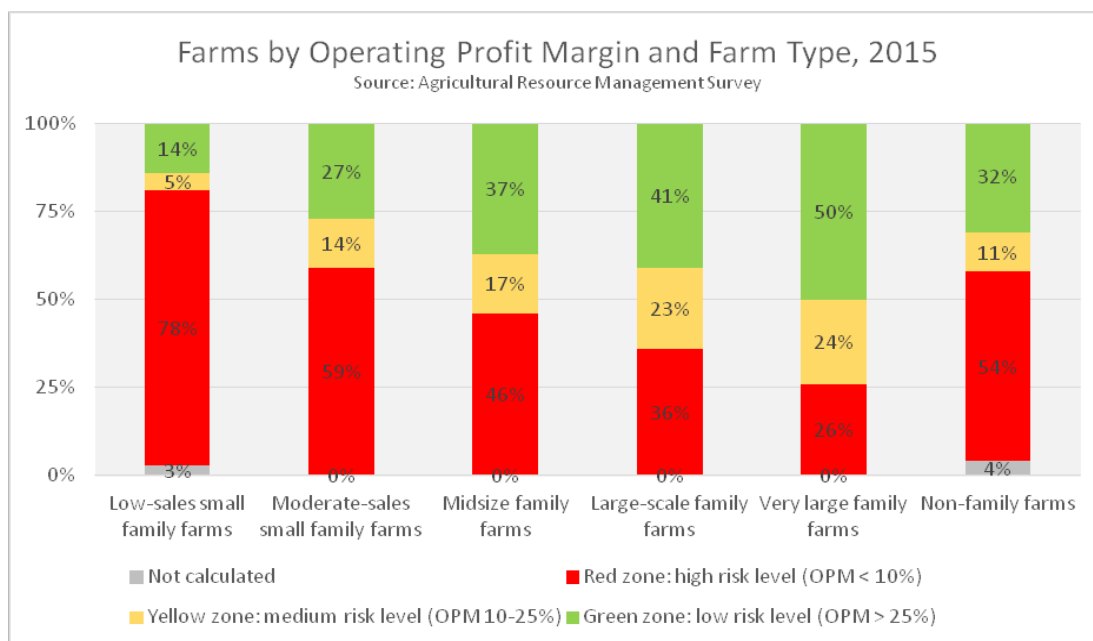
⁵¹ Penson, John B., Oral Capps, and Richard T. Woodward. *Introduction to Agricultural Economics*. Boston: Pearson Education, 2015. Print. p. 86.

⁵² See note 6, *supra*.

⁵³ Gilliland, John. “U.S. Farm Policy and Free Trade, The Heritage Foundation’s Farm Policy Proposals: Harmful to U.S. Farmers and Ranchers and Ineffective in Advancing Free Trade.” June 13, 2017. <http://www.farmpolicyfacts.org/wp-content/uploads/2017/06/John-Gilliland-Study.pdf>. Web. Accessed June 23, 2017.

One commonly used measure of profitability is the farm's operating profit margin (OPM), the ratio of operating profit to gross farm income. Operating profit measures funds available to finance the farm's ongoing operation after deducting the estimated market value of the unpaid labor and management services provided by the farm household. A farm is considered to be in the 'critical [red] zone,' indicating potential financial problems, if operating profits comprise less than 10 percent of the farm's gross cash farm income (GCFI) from the sale of commodities and other farm-related goods and services, together with Government payments.⁵⁴

As illustrated below, the most recent analysis shows that for every category of farm, even relatively larger farms, at least 50 percent of each type of farm are either high-risk or medium-risk. Further, for low-sales, moderate-sales, and midsized farms, which account for over 90 percent of all occupation farms, 78, 59 and 46 percent, respectively, are in the high-risk, critical zone category.



Notes: Operating profit margin (OPM) = 100% x (net farm income + interest paid – charge for operator and unpaid labor – charge for management) + gross farm income. Small family farms have annual gross cash farm income (GCFI) < \$350,000. Midsize family farms have GCFI of \$350,000-\$999,999. Large-scale family farms have GCFI of \$1,000,000 or more.

Source: USDA, Economic Research Service and National Agricultural Statistics Service. 2015 Agricultural Resource Management Survey (data as of December 2016).

<https://www.ers.usda.gov/webdocs/publications/eib164/eib-164.pdf?v=42709>. Web. Accessed July 17, 2017.

A reasonable question to ask is: how can farmers choose to stay in business given their risky financial position? As USDA notes, “[m]any operators stay in business by undervaluing

⁵⁴ Hoppe, Robert. “Profit Margin Increases with Farm Size.” USDA, Economic Research Service. February 2, 2015. <https://www.ers.usda.gov/amber-waves/2015/januaryfebruary/profit-margin-increases-with-farm-size/>. Web. Accessed June 27, 2017.

their labor, effectively ignoring the implicit value of the unpaid labor and management they provide. . . They often use off-farm income to cover farm expenses and make investments in their farm operations.”⁵⁵ Undervaluing labor is at least in part how farmers can continue to farm even when their total costs are above the price they receive 70 percent of the time.⁵⁶

Most if not all U.S. farmers and ranchers would therefore struggle to reconcile the day-to-day realities of farming and ranching with the statement by the Heritage Foundation that “agricultural risk is not a significant issue for most farmers”.⁵⁷ It is worth noting that, even with a safety net in place, at least 50 percent of all sized farms are currently rated as high-risk or medium-risk financially.⁵⁸

Heritage Report: Agricultural Risk is No Different than Risk in Other Businesses and Can Be Effectively Managed Without a Safety Net.

- ***Reality: The rate of return on agricultural assets exceeded the return on nonfarm assets in only one of the 32 years analyzed.***⁵⁹
- ***Reality: “The data show that farm households have much more volatile total income than do nonfarm households. The median change in total income between years was about eight times larger for the farm households than nonfarm households.”***⁶⁰
- ***Reality: “Unlike for nonfarm households, where income volatility declines with average income, we find that income volatility increases with farm size. Total household income is more volatile on larger farms because operators of larger farms derive a greater share of household income from the farm and because they have more volatile off-farm income.”***⁶¹

The Heritage Report suggests that agriculture risk is no different than risk in other markets, pointing out that the volatility of other non-agricultural commodities are on par with agriculture.⁶² However, left out of the report are agriculture’s lower rate of returns, weather-related risks, and market risks due to a global market distorted by high foreign subsidies, tariffs, and non-tariff trade barriers.

⁵⁵ Ibid.

⁵⁶ See note 33, *supra*.

⁵⁷ See note 2, p. 27. *supra*.

⁵⁸ See note 48, *supra*.

⁵⁹ Erickson, Kenneth W., Charles B. Moss & Ashok K. Mishra, “Rates of Return in the Farm and Nonfarm Sectors: How Do They Compare?” 36,3 J. AGRIC. & APPLIED ECON. 793. December 2004. <http://ageconsearch.tind.io/bitstream/43477/2/Erickson%20JAAE%20December%202004.pdf>. Web. Accessed July 6, 2017.

⁶⁰ Key, Nigel, Daniel Prager, and Christopher Burns. “Farm Household Income Volatility, An Analysis Using Panel Data From a National Survey.” ERR-226. USDA, Economic Research Service. February 2017. <https://www.ers.usda.gov/webdocs/publications/82564/err-226.pdf?v=42787>. Web. July 28, 2017.

⁶¹ Ibid.

⁶² See note 2, p. 29. *supra*.

The discussion, below, explores farm exits and their relationship to U.S. farm policy, farm income variability compared to other sectors, and means by the which farmers are attempting to reduce their own risk.

Farm Exits

The current farm safety net provides relatively modest help to U.S. farm and ranch families in weathering distorted global markets and natural disasters. As will be discussed further below, U.S. expenditures on farm policy are small both in comparison to other countries and as a portion of total federal expenditures. Nevertheless, even with a safety net, farm exits (i.e., the rate at which farmers quit farming) are still above exits from non-farm businesses.⁶³

If farm exits are already higher than exits from other small businesses despite the benefit of a safety net, what might exits look like without a safety net in place?

Relatively recent analysis can give us a sense of the impact. In 2007, the Agricultural and Food Policy Center (AFPC) at Texas A&M University analyzed the impact of a proposal by Rep. Ron Kind (D-WI) to generally phase out the safety net provided by the Commodity Title of the Farm Bill over a short period of time.⁶⁴ Using representative farms, AFPC was able to demonstrate the economic impacts on these farmers in low price years under the 2007 proposal. Specifically, the report found that, “[24] of 25 representative crop farmers would see more than a 25 [percent] decline in net cash income with 19 of 25 experiencing declines over 50 [percent].”⁶⁵ The report concluded that, “...most of the farms and ranches would not be able to survive the erosion in farm income...”⁶⁶

It is important to note that the 2007 proposal was offered at a time when the farm economy had been relatively strong for a few years, allowing many farmers to build equity and reserves. This would have been taken into account in evaluating the ability of farms and ranches to weather the loss in income. In the current instance, farmers have had to weather several years of bad farm income, eliminating reserves and reducing equity for many.⁶⁷ Moreover, while the 2007 proposal sought generally to phase out the safety net provided under the Commodity Title over a short period of time while leaving crop insurance fully intact, the Heritage Report recommends immediate repeal of the entire Commodity Title, except livestock disaster assistance, and intimates that it would phase out livestock disaster assistance and crop insurance over time, although it proposes deep and immediate cuts to crop insurance in the meantime.⁶⁸ The Heritage Report also proposes eliminating domestic trade laws and the U.S. making total

⁶³ See note 47, *supra*.

⁶⁴ Outlaw, Joe L., et al. “Impacts of the FARM 21 proposal on representative crops, dairy and beef cattle farms.” No. 07-8. AFPC briefing paper, 2007. <https://www.afpc.tamu.edu/pubs/3/475/briefing%20report.pdf>. Web. Accessed June 26, 2017.

⁶⁵ *Ibid*.

⁶⁶ *Ibid*.

⁶⁷ Schnepf, Randy. “U.S. Farm Income Outlook for 2017.” Congressional Research Service. February 14, 2017. <https://fas.org/sgp/crs/misc/R40152.pdf>. Web. Accessed July 11, 2017.

⁶⁸ See note 2 and 64, *supra*.

and unilateral concessions on agriculture in the context of the World Trade Organization, among other things.⁶⁹

All of this begs the question: if a more modest proposal offered in the midst of relatively prosperous times for agriculture would have met with such truly disastrous consequences, as AFPC indicated that it would have, what would the economic impacts look like were the Heritage Report's proposal adopted now after U.S. farmers and ranchers have just experienced a 50 percent decline in net farm income over the past four years?⁷⁰ While this paper leaves a more precise answer to that question to the quantitative analysis of others, there are tell-tale signs that can give the reader a clear indication.

Income Variability

According to USDA analysis:

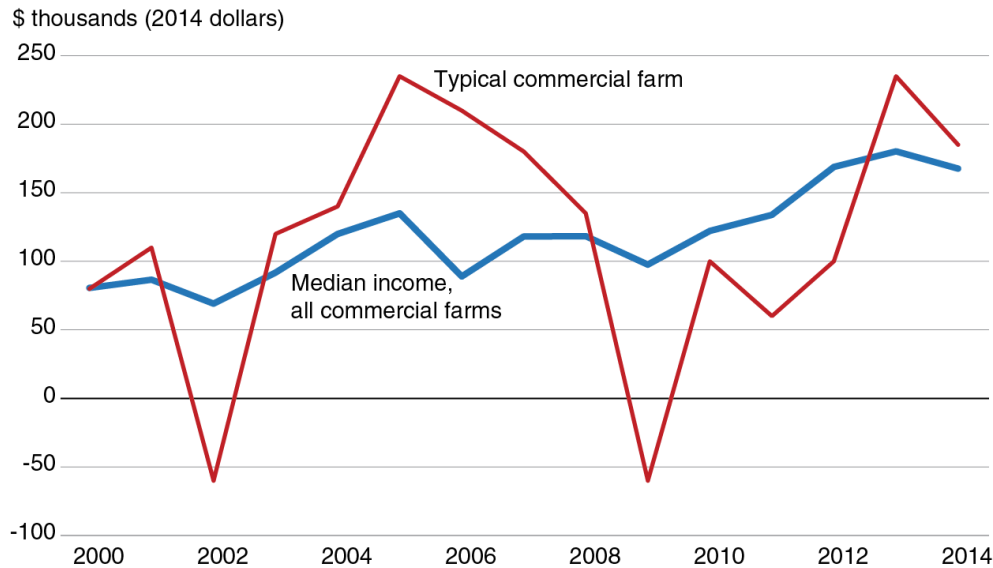
Farm income is highly variable, with earnings subject to wide fluctuations in yields and prices. Farm output can vary unexpectedly because of weather that can damage crops or make it difficult to access fields with equipment at critical planting or harvest times. Plant pests and diseases can be difficult to control and can cause substantial yield reductions. Livestock feed crops are subject to many of the same hazards as food crops. The livestock themselves are also vulnerable to weather and disease risks that can damage herds.⁷¹

⁶⁹ See note 2, *supra*.

⁷⁰ See note 64 and 67, *supra*.

⁷¹ See note 60, *supra*.

Farm income for a typical farm varies more than median aggregate farm income



Note: Commercial farms earn at least \$350,000 in annual gross cash farm income, adjusted for inflation. The median is the income level at which half of farms have lower incomes and half have higher incomes.

Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, 2000-2013 Agricultural Resource Management Survey and the 2014 Tenure, Ownership, and Transition of Agricultural Land survey.

“In addition to unexpected yield fluctuations, farmers must cope with commodity prices that vary more than most nonfarm goods and services,” notes USDA.⁷² For example, the average price received by a corn farmer in 2012 was \$6.89 per bushel, yet just a few years later, in 2016, the projected price was only \$3.40 per bushel.⁷³

The price variability is partly caused by the time lag between the decision to produce and when output can be sold. Because farmers often make their production decisions months or (in the case of investments in buildings, equipment, fruit trees, or livestock) years before harvest, their ability to alter supply is limited in the short run. Hence, product markets may continue to be flooded with output, even when prices are low. At the same time, consumers and processors of agricultural products generally do not alter their demand quickly to changing prices. As a result, shocks to either supply or demand – caused by rapidly changing economic conditions abroad, exchange rate fluctuations, production shocks, or policy changes – can result in wide price fluctuations.⁷⁴

Were price variability alone the justification for a farm safety net, the case might be somewhat less compelling. But, of course, price variability is not the only risk to farm household income. According to USDA:

⁷² Ibid. p.1.

⁷³ USDA, National Agricultural Statistics Services. “Agricultural Prices.” 03.30.2017. <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1002>. Web. Accessed June 23, 2017

⁷⁴ See note 60, p. 1 *supra*.

The data show that farm households have much more volatile total income than do nonfarm households. The median change in total income between years was about eight times larger for the farm households than nonfarm households. Total household income for farmers is highly volatile mainly because farm income varies much more than off-farm income.⁷⁵

USDA further notes that:

Crop farms have, on average, more volatile total household income than livestock farms because crop farms are larger and derive more of their total income from farm sources and also because crop farm income is more volatile than livestock farm income. Crop farms also have more volatile farm income, which might be explained by the vulnerability of crops yields to weather and pest risks and the fact that a substantial share of livestock is produced under production and marketing contracts, which reduce income risks for farmers.⁷⁶

This difference may help explain the varying approaches and needs of farmers and ranchers under U.S. farm policy.

A Perfectly Competitive Industry

All commodity markets possess the ability to produce price spikes and dips as that is the nature of markets. For farmers, however, commodity price movements can be especially impactful due to the highly competitive market structure for agriculture and the perishability of agricultural commodities. In fact, economists often use agriculture as the example of a perfectly competitive industry. That is because agriculture has a large number of farms, and each farm produces an insignificant percentage of the total market output and the product they produce is often indistinguishable from that produced by other farmers. Thus, no single farm can influence the market price. That means that farmers are true price-takers with little to no market power.

Most agricultural commodities are fungible and cannot be differentiated in terms of quality or price. In addition, agricultural commodities have a finite storage life due to their perishability, which further limits the market power of farmers. In addition to competing in a perfectly competitive market that limits market power, farmers also experience variations in the quantity and quality of production as a result of changes in weather and growing conditions (*e.g.*, drought, flooding, excessive heat, and other weather-related problems) that can affect crop yields and end-use quality characteristics. Perfectly competitive industries, such as agriculture, realize long-run average net returns that are near zero, which, when combined with variations in growing conditions, create a high-risk operating environment for farmers.⁷⁷

⁷⁵ Ibid. p. 36.

⁷⁶ Ibid.

⁷⁷ See note 51, *supra*.

Rate of Return for Agriculture

The Heritage Report accurately notes that price risk is not unique to agriculture.⁷⁸ However, what is unique to agriculture is that, over time, other sectors have rates of return that are far higher than agriculture, which provides businesses in the other sectors greater ability than farmers to absorb the economic losses from bad years. For instance, one study found that, "[over an] entire sample, the rate of return on nonfarm assets exceeded the rate of return on farm assets by 9.6%."⁷⁹

Economists have found that, historically, the rate of return on nonfarm assets dominates the return on agricultural assets, "producing both a higher rate of return and a lower risk."⁸⁰ Nonfarm assets generally do produce both higher average returns and lower risks.⁸¹ In fact, in one study, the rate of return on agricultural assets was found to exceed the return on nonfarm assets in only one of the 32 years analyzed.⁸²

Currently, USDA is projecting a 1 percent rate of return on farm assets from farm income for 2017. This would be the fourth year in a row that returns would be less than 2 percent. As displayed in the chart below, farming produces chronically low rates of return due in large part to the previously discussed perfect competition that exists in agriculture. These rates of return include income derived from the farm safety net.⁸³

⁷⁸ See note 2, *supra*.

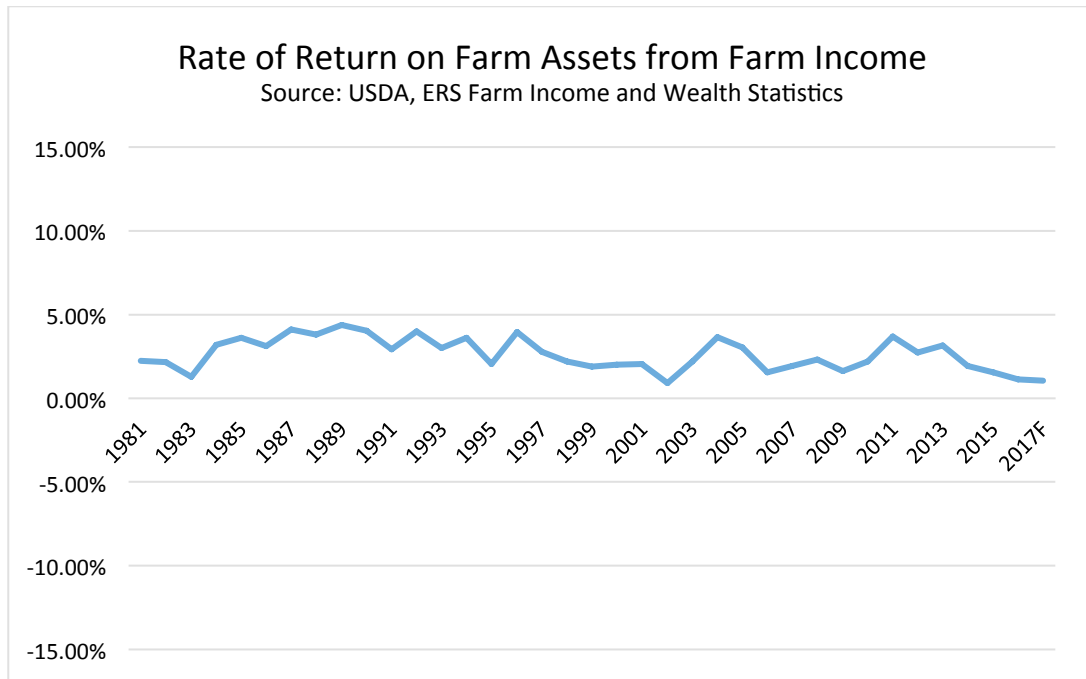
⁷⁹ See note 59, *supra*.

⁸⁰ Ibid. p. 794. (using Bureau of Economic Analysis data from 1960-2001, the researchers found that "in general, ... the rate of return on non-farm, non-financial corporate assets dominate the rate of return on farm assets, producing both higher average returns and lower risk (measured by standard deviation of returns) for each subsample.").

⁸¹ Ibid.

⁸² Ibid. p. 794.

⁸³ USDA, Economic Research Service. Farm Income & Wealth Statistics. <https://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics/data-files-us-and-state-level-farm-income-and-wealth-statistics/>. Web. Accessed July 11, 2017.



Other Options to Manage Risk

The Heritage Report suggests that off-farm income, diversification, vertical integration, crop rotation, hedging, leasing inputs and hiring custom work are ways in which farmers can more effectively manage risk, obviating any need for a safety net under U.S. farm policy.⁸⁴ Farmers are already doing these things and more.

Farmers and ranchers are constantly taking steps to manage and mitigate risk whenever and wherever they can, including but hardly limited to investing in and adopting new technologies, using the futures markets to lock in prices, finding niche markets, and diversifying production. And, as previously discussed, farmers and ranchers already work a truly staggering number of hours in a second, off-farm job in order for the farm to service its debt and, hopefully, to create a cushion to help absorb lower yields, higher input prices, or lower market prices. But, farmers cannot escape natural disasters, dramatically fluctuating commodity prices, or the predatory trade practices of other countries and, thus, each year farm families “bet the farm” that they can pay back their bank loan at the end of the year.

Finally, while farmers and ranchers certainly utilize the latest technology in order to boost yields and reduce risk, not all technology is as helpful to farmers as the Heritage Report suggests. Specifically, Heritage “compares 1933 to 2013 in terms of some of the important (and stark) differences that make it possible for farmers to operate far more effectively than in the past.”⁸⁵ There is no doubt that farmers have benefited from technological advances alongside other sectors, but one is left to wonder exactly how the increased number of air travel passengers,

⁸⁴ See note 2, *supra*.

⁸⁵ *Ibid.* p. 32.

internet access, telephones, air conditioning, and an improved infant mortality rate particularly help mitigate the inherent risks that are unique to farming.⁸⁶

In sum, agriculture risk is a significant challenge for U.S. farmers and ranchers. Even with a farm safety net in place, farm exits are still higher than other businesses. Based on the findings of a previous study, most farms and ranches would not be able to survive the erosion in farm income without a safety net. As previously noted, while other non-agricultural commodities may suffer price fluctuations similar to agriculture, farmers do not experience the kind of high returns that allow other businesses to absorb market downturns, as demonstrated by the fact that the rate of return on agricultural assets was found to exceed the return on nonfarm assets in only one of the 32 years analyzed.⁸⁷

Also, as previously noted, agriculture is different from other industries because agriculture operates in a condition economists refer to as perfect competition. In other words, farmers primarily produce homogeneous products and they are price takers. As a result, the per-unit profit margins are very thin. When combined with weather uncertainty, already-thin profit margins can increase the risk of situations where even relatively modest production or price setbacks can imperil the financial stability of the farm.

Heritage Report: Subsidies that Address Risk are Harmful.

- ***Reality: Most of the farms and ranches would not be able to survive the erosion in farm income in low price years without a safety net.***⁸⁸
- ***Reality: U.S. agricultural output has almost tripled (up 269 percent) since 1948.***⁸⁹
- ***Reality: Americans pay less of their disposable income on food than any other nation.***⁹⁰
- ***Reality: In FY 2016, agriculture was one of the few areas of the economy with a large trade surplus (\$16 billion).***⁹¹
- ***Reality: The farm safety net, consisting of the Commodity Title of the Farm Bill and Crop Insurance, constitutes about one quarter of one percent of the federal budget. The June 2017 CBO estimates show \$100.8 billion in savings (FY2018-27) from the 2014 Farm Bill relative to the pre-sequester budget baseline used to write***

⁸⁶ Ibid.

⁸⁷ See note 59, *supra*.

⁸⁸ See note 64, *supra*.

⁸⁹ USDA, Economic Research Service, Agricultural Productivity in the United States, Data Sets, National Tables, 1948-2013, Table 1, updated December 2015, <https://www.ers.usda.gov/data-products/agricultural-productivity-in-the-us/agricultural-productivity-in-the-us/#National%20Tables,%201948-2013>. Web. Accessed July 6, 2017.

⁹⁰ USDA, Economic Research Service, Food Expenditures, Data Sets, <https://www.ers.usda.gov/data-products/food-expenditures/>. Web. Accessed July 6, 2017.

⁹¹ Baylis, Kathy. "A Quick Primer on US Agricultural Trade." FARMDAILY. Dec. 22, 2016. <http://farmdaily.illinois.edu/2016/12/a-quick-primer-on-us-agricultural-trade.html>. Web. Accessed July 6, 2017.

*the bill, which is up from \$23 billion in savings that were pledged at the time of passage.*⁹²

- ***Reality:*** *Agriculture constitutes 5.5 percent of the U.S. Gross Domestic Product and creates 21 million American jobs, on and off the farm.*⁹³
- ***Reality:*** *Soil erosion has been nearly cut in half since 1985 and the nation enjoys cleaner water and air, and an abundance of wildlife and wildlife habitat.*⁹⁴

Suggestions that U.S. farm policy has been harmful stands in stark contrast to the facts. Whether measured in terms of its contributions to improved farm income, growth in productivity, advances in conservation, trade surpluses, the low price for food paid by consumers, jobs and the economy, or the low and declining cost of the safety net borne by taxpayers, it is difficult to conclude U.S. farm policy is anything other than a success.

Agriculture Innovation and Productivity Continue to Increase

As previously noted, due to the undifferentiated nature of most agricultural commodities, farmers are true price-takers and must compete on the basis of productivity. This race to out-produce the competition (i.e., other farmers) has been very beneficial to reducing food costs in the U.S. while combatting hunger abroad. However, it also often results in periods of excess production and depressed commodity prices for farmers. Unlike other sectors that are not perfectly competitive, the logical response to low prices for a farmer can, out of necessity, actually be to produce even more in order to lower the per-unit cost of production and “out compete” the competition. Since 1948, U.S. agricultural output has almost tripled, up 269 percent, and this dynamic in the agricultural market has certainly played a role.⁹⁵

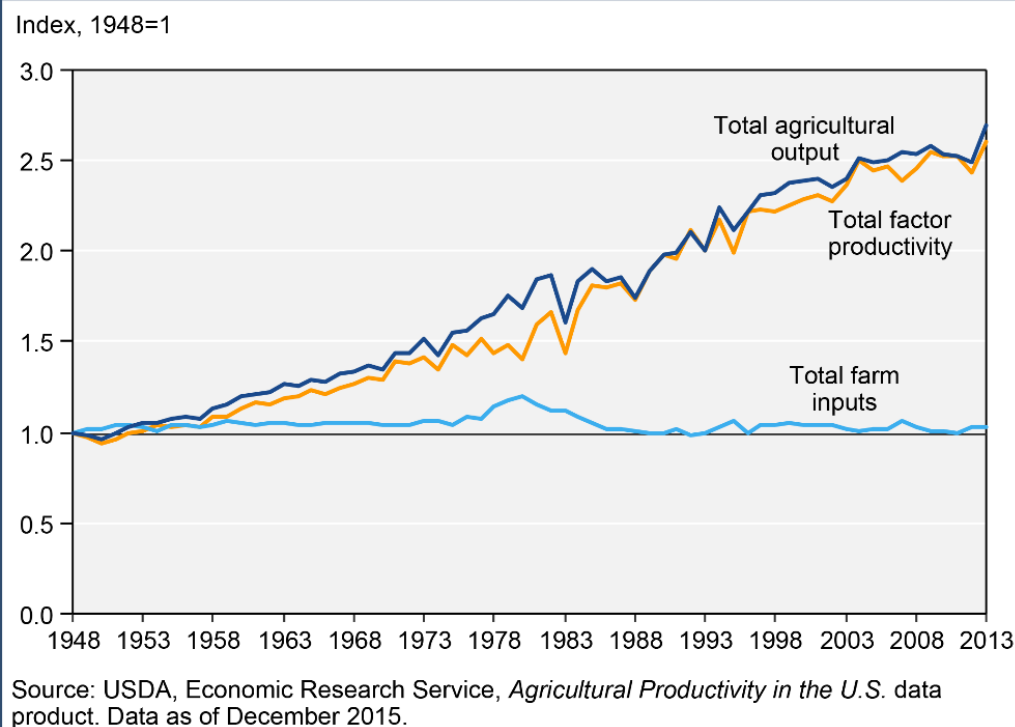
⁹² Congressional Budget Office. CBO’s June 2017 Baseline for Farm Programs. January 24, 2017. <https://www.cbo.gov/sites/default/files/recurringdata/51317-2017-06-usda.pdf>. Web. Accessed July 28, 2017.

⁹³ See note 4, *supra*.

⁹⁴ Claassen, Roger. "Have conservation compliance incentives reduced soil erosion?" *Amber Waves* 2.3 (2004): 30. <https://www.ers.usda.gov/amber-waves/2004/june/have-conservation-compliance-incentives-reduced-soil-erosion/>. Web. July 6, 2017.

⁹⁵ See note 89, *supra*.

U.S. agricultural output, inputs, and total factor productivity, 1948-2013



Moreover, according to the Economic Research Service (ERS):

Innovations in farm organization, business arrangements, and production practices have allowed farmers to produce more with less. Fewer labor hours and less land are used today than 30 years ago, and practices such as the use of biotech seeds and no-till have dampened increases in machinery, fuel, and pesticide use. Likely aided by the increased use of risk management tools such as contracts and crop insurance, U.S. agricultural productivity has increased by nearly 50 percent since 1982.⁹⁶

In addition, ERS observes that:

As a result of this transformation [in production], U.S. agriculture has become increasingly efficient and has contributed to the overall growth of the U.S. economy. Output from U.S. farms has grown dramatically, allowing consumers to spend an increasingly smaller portion of their income on food and freeing a large share of the population to enter nonfarm occupations that have supported economic growth and development.⁹⁷

⁹⁶ See note 33, *supra*.

⁹⁷ Dimitri, Carolyn, Anne BW Effland, and Neilson Chase Conklin. "The 20th century transformation of US agriculture and farm policy." Vol. 3. Washington, DC: US Department of Agriculture, Economic Research Service, 2005. <http://ageconsearch.umn.edu/bitstream/59390/2/eib3.pdf>. Web. Accessed June 23, 2017

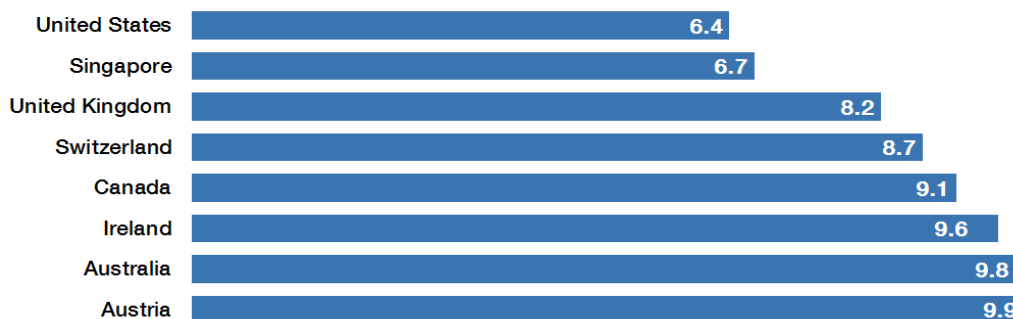
By helping farmers manage price and production risks, U.S. farm policy has not hindered but facilitated this innovation and growth in productivity.

Consumers Benefit from Strong Agriculture Policy

Often forgotten in the debate over U.S. farm policy is its favorable impact upon the 99 percent of the population that does not farm or ranch for a living, but does rely on America's farmers and ranchers for food and fiber. The data show that the U.S. At-Home Food Share (i.e., what it costs to eat at home) is the lowest in the world. In fact, since 1930, Americans have consistently been spending less of their disposable income on food.

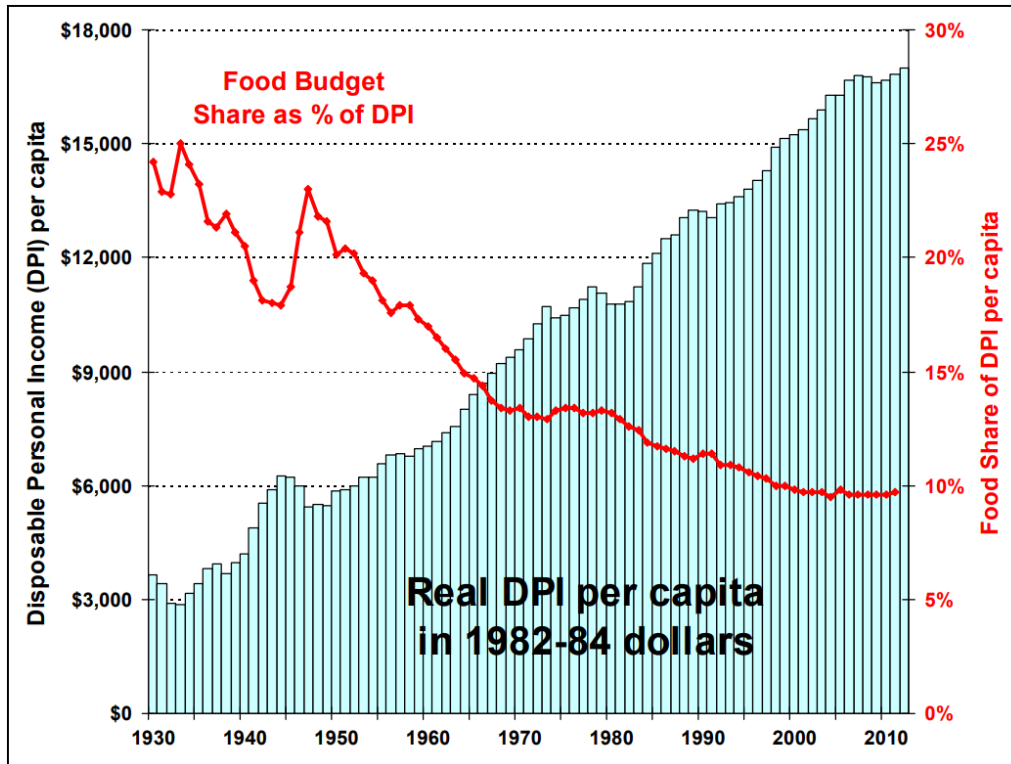
These countries spend the least on food

Percent of consumer expenditure spent on food that was consumed at home, by selected countries, 2015



Source: ERS, USDA calculations based on data from Euromonitor International

Comparison of Real U.S. Disposable Personal Income (DPI) Per Capita and the Share of DPI Spent on Food, 1930-2011



Source: Randy Schnepf, *Consumers and Food Price Inflation*, Congressional Research Service Report R40545, 9, September 13, 2013, available at <https://fas.org/sgp/crs/misc/R40545.pdf>.

Environmental Benefits

The Heritage Report suggests that U.S. farm policy may be responsible for environmental harm. Putting aside for the moment the Farm Bill's Conservation Title and focusing solely on the Commodity Title and Crop Insurance, which are subjects of the Heritage Report, the data indicate that just the opposite is true.

There is a beneficial impact on the environment that can be linked directly to the farm safety net. According to a Congressional Research Service report:

The Food Security Act of 1985 ... included a number of significant agricultural conservation provisions designed to ... conserve soil and water resources. Many of the provisions remain in effect today, including the two compliance provisions – highly erodible land conservation (sodbuster) and wetland conservation (swampbuster). The two provisions, collectively referred to as conservation compliance, require that in exchange

for certain [USDA] program benefits, a producer agrees to maintain a minimum level of conservation on highly erodible land and not to convert wetlands to crop production.⁹⁸

While farmers are frustrated at times in their efforts to meet conservation compliance requirements as a prerequisite to participating in the farm safety net (often due to paperwork issues rather than actually failing to meet conservation compliance), research has demonstrated that the response to conservation compliance requirements by farmers has been impressive. USDA's own analysis shows that:

Between 1982 and 1997, excess erosion dropped sharply on ... farms [that received Federal farm program payments], and the reduction in erosion appears to have been larger on farms receiving payments than on farms not receiving payments, particularly on farms with wind-erodible soils. Overall, a significant share of erosion reduction between 1982 and 1997 is likely to have occurred on land directly subject to conservation compliance requirements.⁹⁹

To put this into some perspective, USDA states that, "an estimated 295 million tons of erosion reduction per year could be directly attributed to implementation of conservation compliance policy."¹⁰⁰ As one analysis pointed out, that is "an amount that would cover Washington DC with four and a half feet of soil every year – that has been held in place and kept from entering our rivers, lakes, and streams, or clogging our ditches or blowing away with the wind."¹⁰¹ The graph below demonstrates the significant declines in erosion following the passage of the conservation compliance requirements of the 1985 Farm Bill.

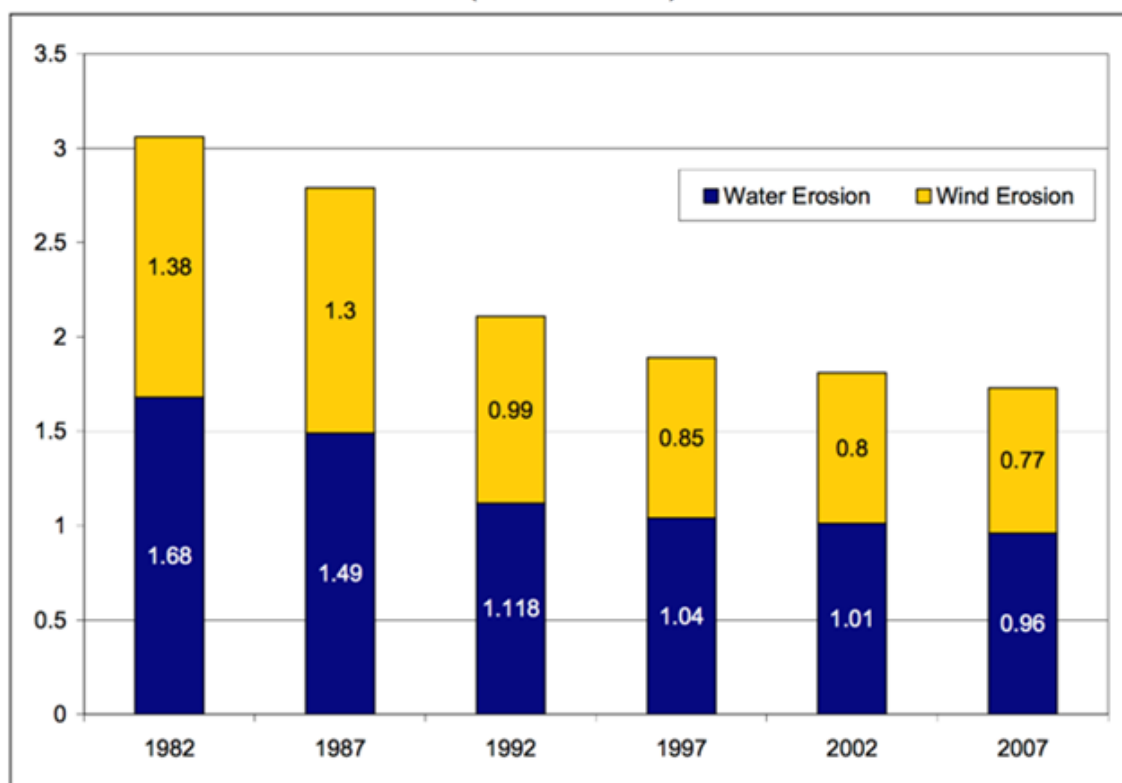
⁹⁸ Congressional Research Service. Conservation Compliance and U.S Farm Policy. October 6, 2016. https://www.everycrsreport.com/files/20161006_R42459_b6934ad2a5995224d8b9695cdf37d71a7d9153b.pdf. Web. Accessed June 23, 2016.

⁹⁹ See note 94, *supra*.

¹⁰⁰ Ibid.

¹⁰¹ Moseley, Jim. "Conservation Compliance: A 25-Year Legacy of Stewardship". February 2013. <http://www.farmbillfacts.org/wp-content/uploads/2013/02/Conservation-Compliance-Legacy.pdf>. Web. Accessed June 23, 2017.

Soil Erosion on Cropland by Year (billions of tons)



Source: Stubbs, Megan. *Conservation Compliance and U.S. Farm Policy*. Congressional Research Service Report R42459, 9, April 2, 2012. <https://fas.org/sgp/crs/misc/R42459.pdf>. Web. Accessed July 17, 2017.

This graph does not take into account conservation initiatives – outside the 1985 conservation compliance linkage to the Farm Bill’s Commodity Title – that span from efforts to combat the Dust Bowl in the 1930s to present day efforts to enhance water and air quality, wildlife, and wildlife habitat nor the 2014 Farm Bill’s linkage of conservation compliance to crop insurance.

Farmers and Ranchers Need a Safety Net

As previously noted, the Heritage Report recommends eliminating the Farm Bill’s Commodity Title, except for livestock disaster which Heritage would extend for the short-term. The Heritage proposal also seeks deep cuts to crop insurance prior to its phase-out, complete and unilateral concessions in the context of the WTO, and the repeal of domestic U.S. trade laws, among other things. In exchange, Heritage proposes a one-time block grant to states of some unspecified portion of one-year savings from the repeals it calls for to be spent on agriculture at the discretion of the states.

As previously discussed, in evaluating a similar if somewhat more modest proposal, the Agricultural and Food Policy Center (AFPC) at Texas A&M University studied the impact on actual farms and in July 2007 reported its findings. Under a higher crop price scenario, AFPC

found that “[13] of the 25 representative crop farms would experience more than a 25 [percent] decline in net cash income...”¹⁰² Even more significant, under a relatively lower crop price scenario, the study concluded that, “[24] of 25 representative crop farms would see more than a 25 [percent] decline in net cash income with 19 of 25 experiencing declines over 50 [percent].”¹⁰³ Moreover, the study found that, “[17] of the representative crop farms would experience more than a 25 [percent] decline in ending net worth...”¹⁰⁴ AFPC ominously concluded that under a low price scenario, “most of the farms and ranches would not be able to survive the erosion in farm income” unless the government intervened to help.¹⁰⁵

The AFPC study is relevant to the discussion of the Heritage Report’s proposal because the 2007 study analyzed much the same proposal, albeit the proposal then was somewhat milder than what Heritage now proposes and it was offered during better economic times for farmers and ranchers. It is reasonable to conclude, then, that the Heritage Foundation’s proposal would meet with equal or worse consequences for U.S. farmers and ranchers. In response, at least if history is any guide, the public would call for economic ad hoc relief for farmers and ranchers, thus making the Heritage Report’s recommendation penny wise but pound foolish.

Trade Surplus and U.S. Agriculture’s Record on Trade

Agriculture has been a bright spot on the trade front for years. According to one academic analysis, “For all the talk about the US trade deficit, agriculture is one industry where the US has a trade surplus – in FY2016, we exported \$129.7 billion while importing \$113.1 billion of agricultural goods. And despite a global slowdown in overall trade, US agricultural exports are increasing.”¹⁰⁶

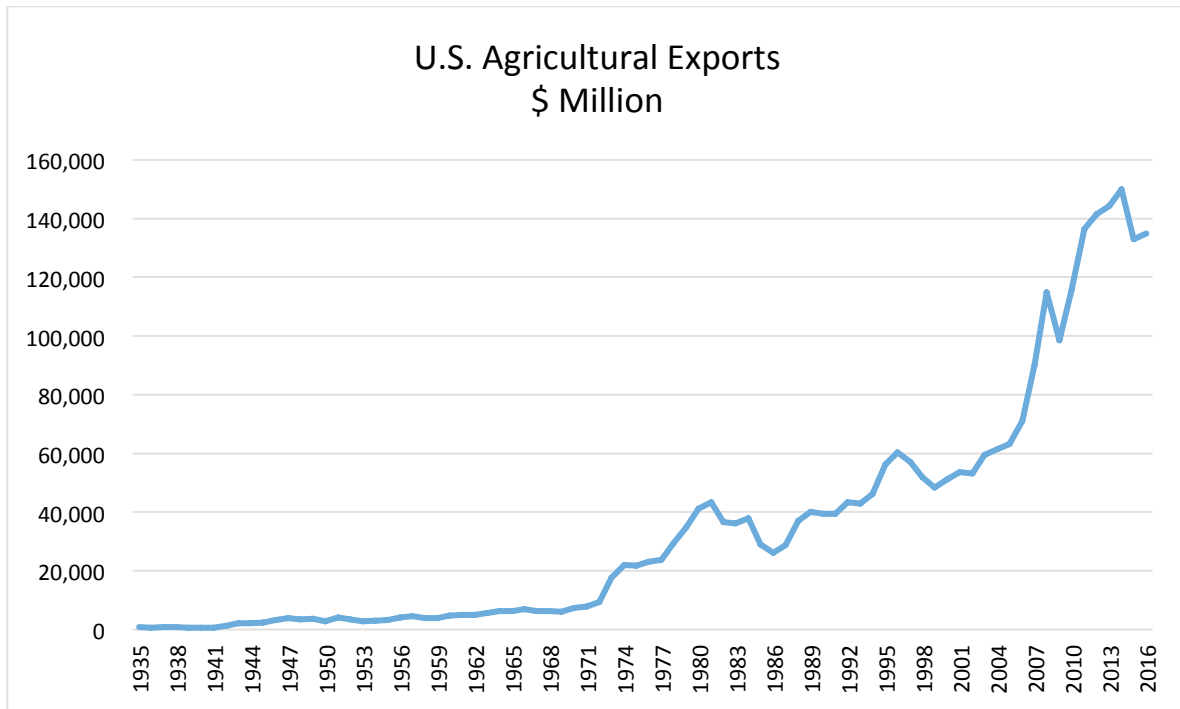
¹⁰² See note 64, *supra*.

¹⁰³ Ibid.

¹⁰⁴ Ibid.

¹⁰⁵ Ibid.

¹⁰⁶ See note 91, *supra*.



Source: USDA, ERS Foreign Agricultural Trade of the United States. Value of U.S. agricultural trade, by calendar year. <https://www.ers.usda.gov/data-products/foreign-agricultural-trade-of-the-united-states-fatus/calendar-year/#By Year>

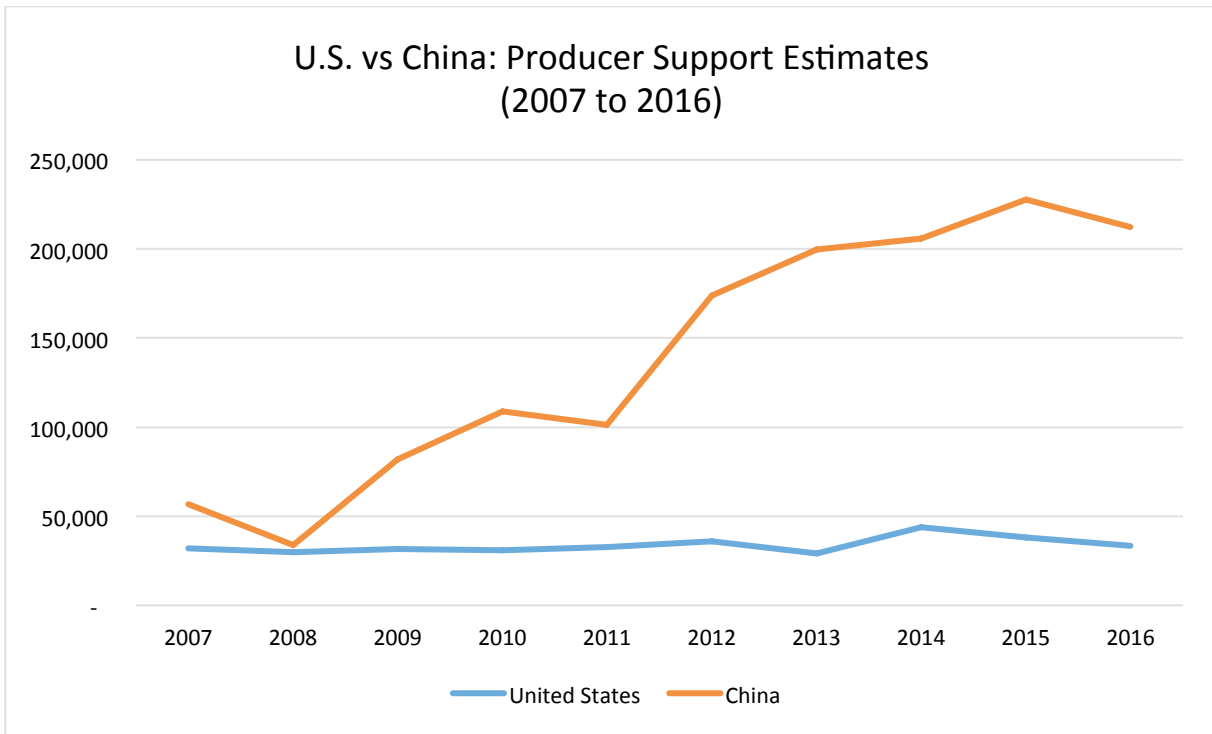
U.S. farmers and ranchers have achieved this trade surplus competing on an uneven playing field in the face of high and rising foreign subsidies, tariffs, and non-tariff trade barriers, even as support for U.S. producers declines.

In fact, the U.S. Producer Support Estimate (PSE) – which measures the sum supports provided directly to agricultural producers through government payments – “has historically fallen below the OECD average and in recent years has been among the lowest ... [in the world]”, according to the USDA.¹⁰⁷ The PSE also tracks the share of support provided “as an indicator in the monitoring of policy reform, tracking movement by a country away from policies that are potentially more trade distorting...toward those that likely have more neutral effects on trade.”¹⁰⁸ The USDA adds, “Policy progress by the United States as measured by [the PSE] has also been positive.”¹⁰⁹

¹⁰⁷ USDA, Economic Research Service. U.S. Domestic Agricultural Support in the International Context. <https://www.ers.usda.gov/topics/farm-economy/farm-commodity-policy/us-domestic-agricultural-support-in-the-international-context/>. Web. Accessed June 23, 2017.

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.



Source: Organization for Economic Co-Operation and Development. Producer and Consumer Support Estimates Database.

<http://stats.oecd.org/viewhtml.aspx?QueryId=77838&vh=0000&vf=0&l&il=&lang=en>. Web. Accessed July 17, 2017.

A similar story can be told concerning tariffs. Trade expert, John Gilliland, writes:

According to the WTO, the simple average U.S. bound tariff rate on imported agriculture products is only 4.8%...By comparison, the averages in the largest U.S. trading partners are all higher: Canada has a simple average bound rate of 16.6%...Mexico has an average bound tariff rate of 45.0%...while the European Union's [average is] 10.9% ... Average tariff rates among developing countries are also generally much higher.¹¹⁰

In contrast to the Heritage Report's assertion that the U.S. is out of compliance with the WTO, Gilliland notes:

For 2014, the first year under the current farm bill, the United States reported AMS of only \$3.809 billion, roughly a fifth of the amount it *could* spend without violating its WTO limit. This was the most recent year, as of this writing, for which the United States has submitted a formal notification, but subsequent years will likely show similarly low levels of AMS. It is also worth noting the U.S. Secretary of Agriculture retains the authority to pare back farm spending, in the unlikely event it exceeds U.S. AMS limits.

¹¹⁰ See note 53, *supra*.

This authority is granted to the Secretary expressly to ensure the United States remains in compliance with its WTO obligations.¹¹¹

Gilliland also offers a broader perspective on U.S. agriculture's record on trade:

The United States is one of the most open agriculture economies in the world, with low tariff and non-tariff barriers. Moreover, U.S. farm policy has undergone significant reform over the last two decades. U.S. farmers and ranchers are generally competitive and technologically advanced. This is a major reason why the U.S. farm community has long been, and should continue to be, a staunch and reliable supporter of U.S. trade liberalization... It is doubtful the U.S. Congress would have approved either the URA or many of the largest FTAs over the past twenty-five years – such as the North American Free Trade Agreement (NAFTA), the Dominican Republic-Central America Free Trade Agreement (CAFTA), or Korea FTA – without the vocal and sustained lobbying support of the U.S. farm community. It is thus demonstrably false that U.S. farm policy stands in the way of market liberalization. To the contrary, the U.S. agriculture sector has been – and remains – a leader in the push for new trade agreements and greater market liberalization. However, unilaterally eliminating U.S. farm policy and reducing all U.S. tariffs to zero would devastate the U.S. farm economy, and greatly diminish any practical leverage the United States would have to secure reforms from its trading partners at the negotiating table. While such a dramatic act might be welcome news in many foreign capitals, prospects for a new multilateral agreement in the WTO would remain dim for a host of reasons unrelated to the U.S. position on agriculture.¹¹²

Gilliland then contrasts U.S. agriculture's record with that of its trading partners:

The increase in China's spending reflects a general surge in spending by the larger developing countries. DTB Associates, a U.S.-based international trade and agriculture policy consulting firm, has closely tracked the domestic support levels in China, India, Brazil, Turkey, and Thailand. Its report documents increasing subsidization rates over a ten-year period in all of the countries. For the 2013/2014 and 2014/2015 crop year, DTB compared the price support levels in three staple commodities – wheat, corn, and long-grain rice. In all three commodities, DTB estimated support price levels in all of the relevant countries, except for Brazil, that are higher than in the United States. Even in the case of Brazil, the price support for wheat was greater. Most importantly, DTB concluded that the estimated support levels of these three crops, alone, violate the WTO commitments of all five countries. Overall, DTB estimated that China's price support for these three crops amount to between \$48.4 – \$109.8 billion per year. For India, the estimate (which included other forms of support) ranged between \$36.1 – 93.4 billion.¹¹³

Gilliland thus draws the conclusion that, “To succeed in this environment, the United States needs bargaining power – tangible, offensive leverage that will convince other countries to come to the table. Negotiating from the pretense of ‘moral’ superiority – demonstrated in the

¹¹¹ Ibid.

¹¹² Ibid.

¹¹³ Ibid.

form of unilaterally eliminating U.S. farm policy – would be an ineffective tool in securing global free trade in agriculture.”¹¹⁴

To the Heritage Foundation’s suggestion, Gilliland offers this observation: “Reform of global agriculture markets will take years, perhaps decades, unfortunately. In the meantime, if Congress were to follow the Heritage Foundation’s proposal, U.S. farmers would face a long, difficult period trying to survive as they wait for the rest of the world to meet them in the aspirational free market.”¹¹⁵

The Gilliland paper, entitled “U.S. Farm and Free Trade, The Heritage Foundation’s Farm Policy Proposals: Harmful to U.S. Farmers and Ranchers and Ineffective in Advancing Free Trade” may be accessed by readers [here](#).

Economic and Jobs Contributions of U.S. Agriculture

U.S. agriculture and related industries play an integral part in the U.S. economy, contributing \$992 billion, or 5.5 percent, to the U.S. GDP in 2015.¹¹⁶ Farms and ranches spent \$362.8 billion on inputs to produce crops and livestock valued at \$375.4 billion.¹¹⁷ U.S. agriculture is also a major driver in U.S. employment, contributing 21 million full and part time jobs or 11.1 percent of total U.S. employment.¹¹⁸

U.S. agriculture also allows U.S. consumers to spend only 6.4 percent of expenditures on food consumed at home, the lowest percentage in the world.¹¹⁹ Moreover, U.S. agriculture runs a \$19.42 billion trade surplus while the country as a whole runs a \$745.1 billion trade deficit.¹²⁰

U.S. Farm Policy’s Budget Record

The farm safety net constitutes a very small portion of the total federal budget. The Commodity Title accounts for 0.11 percent, and crop insurance accounts for 0.15 percent, for a combined total of 0.26 percent of the federal budget.¹²¹ In short, the farm safety net accounts for roughly one quarter of one percent of the federal budget.

While comprising such a small portion of the total budget, the farm safety net has achieved very substantial budget savings under the current Farm Bill and through previous legislative and administrative changes to policies. This paper will highlight these savings more extensively in the next section.

¹¹⁴ Ibid.

¹¹⁵ Ibid.

¹¹⁶ See note 4, *supra*.

¹¹⁷ See note 6, *supra*.

¹¹⁸ See note 4, *supra*.

¹¹⁹ See note 10, *supra*.

¹²⁰ See note 9, *supra*.

¹²¹ See note 92, *supra*.

Market Forces Drive Planting Decisions

Years ago, it would have been accurate for the Heritage Foundation to contend that U.S. farm policy impacted what crops and how many acres a farmer might plant. However, today, assertions that farm policy determines planting decisions and that U.S. farm policy is tantamount to “central planning” are inaccurate.

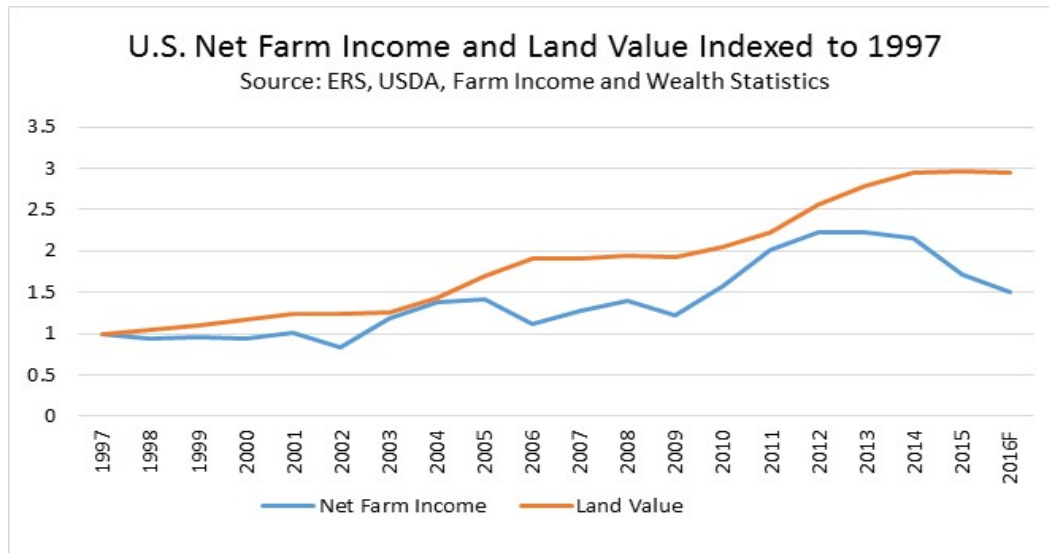
The trend toward the current market-oriented safety net has unfolded over time but began in earnest in the 1970s as U.S. farmers and ranchers saw a growing consumer market beyond U.S. borders. A decade later, in the mid-1980s, the marketing assistance loan was specifically altered to conform to market conditions. And, by the 1996 Farm Bill, Congress had provided farmers with near total planting flexibility. Subsequent Farm Bills would later build on the foundation laid by the 1996 Farm Bill, providing complete planting flexibility.

Since the 1996 Farm Bill, farmers have made planting decisions based on market factors, not farm policy. That continues under the 2014 Farm Bill. As the Congressional Research Service (CRS) notes, “[The safety net] under...the 2014 Farm Bill [is provided] on base acres, not current plantings. This feature – decoupling payments from current plantings – is intended to better comply with World Trade Organization...rules on domestic support and [also] to minimize any influence on producer behavior and prevent any subsequent market distortion.”¹²²

Land Prices Driven by Crop Prices, Not the Safety Net

The Heritage Report also overstates the impact that the farm safety net has on farm land prices. Historically, to a small extent, farm policy benefits were factored into the value of farm land. Today, however, the largest driver of farm land prices is farm income. As illustrated in the chart, below, farmland value typically tracks net farm income. Although there has been an anomalous gap between farmland values and net farm income since 2013 due to a rapid decline in farm incomes, this gap is unlikely to persist in the long-term.

¹²² Shields, Dennis A. “Farm Commodity Provisions in the 2014 Farm Bill.” P.L. 113-79. Congressional Research Service. <http://nationalaglawcenter.org/wp-content/uploads/assets/crs/R43448.pdf>. Web. Accessed June 23, 2017.



U.S. farm policy may not be perfect, but the results are impressive and speak for themselves. Agriculture productivity gains in the past 80 years have allowed consumers to pay a lower percentage of their disposable income for food than consumers in any other nation.¹²³ Soil erosion has been nearly cut in half and the nation enjoys cleaner water and air, and an abundance of wildlife and wildlife habitat.¹²⁴ Farmers, frequently the most financially vulnerable of all small and mid-sized businesses, are far more likely to stay in business with a safety net in place, and agriculture continues to make significant contributions to jobs and the economy, including providing the U.S. with a trade surplus.

Heritage Report: The 2014 Farm Bill's Commodity Policies Are Flawed

- ***Reality: “Relative to spending and revenues projected under CBO’s May 2013 baseline, CBO estimates that enacting the [2014 Farm Bill] conference agreement would lower budget deficits by \$16.6 billion over that 10-year period.”¹²⁵***

This paper has previously responded to the central criticisms the Heritage Report’s section 3 levels against the Farm Bill’s Commodity Title. For instance, this paper has clarified that U.S. farm policy has existed since the beginning of the country, that statistics surrounding farm household income can be misused, that agricultural risk is unique, and that market forces – not U.S. farm policy – determine commodity prices and planting decisions. We will not revisit these issues here.

The Heritage Report frequently returns to what it contends are the impacts of the Farm Bill’s Commodity Title on taxpayers and consumers. This paper has already generally discussed

¹²³ See note 10, *supra*.

¹²⁴ See note 94, *supra*.

¹²⁵ Elmendorf, Douglas. Letter to Honorable Frank Lucas. Congressional Budget Office. January 28, 2014. <https://www.cbo.gov/sites/default/files/113th-congress-2013-2014/costestimate/hr2642lucasltr00.pdf>. Web. Accessed July 5, 2017.

consumer impacts, namely the lowest grocery bills in the world. As such, this section of our paper will focus primarily on the implications of the Farm Bill's Commodity Title on taxpayers.

Before getting to the issue of cost, it is worth touching on the true character of today's U.S. farm policy. The Heritage Report states that, "Agricultural commodity programs are a legacy of the government's attempt to raise farm income during the Great Depression – programs that continue today..." and that, "Agriculture of today is a far cry from agriculture of the 1930s, but that difference is not reflected in federal policy."¹²⁶

Yet, the Heritage Report later acknowledges that, in fact, there have been very significant changes in U.S. farm policy over the years, including that, "the farm safety net [has transitioned] away from one centered on direct government control and toward managing the risks of production."¹²⁷

This is a fundamental change that the Heritage Report tends to gloss over.

But, the facts surrounding the implication of U.S. farm policy for taxpayers are hard to ignore. As cited at the top of this section, the Congressional Budget Office estimated that the 2014 Farm Bill would save taxpayers \$16.6 billion over 10 years.¹²⁸ In addition to these savings estimates, the budget sequester reduced spending by another \$6.4 billion.¹²⁹ The combined savings from CBO's 2014 estimate and the sequester savings are more than \$23 billion.

However, the CBO baseline update from January 2017 increased its projection of taxpayer savings under the 2014 Farm Bill, according to the Congressional Research Service. Reports CRS:

The result of these new [CBO] projections, as of January 2017, is that [Supplemental Nutrition Assistance Program or] SNAP outlays are projected to be nearly \$26 billion less for the five-year period FY2014-18 than was expected in February 2014 (-7%). Crop insurance outlays are projected to be \$11 billion less (-26%) and conservation outlays nearly \$4 billion less (-13%) for the five-year period. In contrast, farm commodity and [livestock] disaster program payments are projected to be nearly \$14 billion higher than was expected at enactment (+59%) due to lower commodity market prices...and higher livestock payments due to disasters. Overall, the five-year projection of the four major titles of the 2014 farm bill...is \$26.7 billion less than what was projected at enactment (-6%).¹³⁰

That the 2014 Farm Bill is saving taxpayers money is incontrovertible. According to CRS, overall Farm Bill spending for the five-year period (FY2014-2018) is down by more than

¹²⁶ See note 2, *supra*.

¹²⁷ Ibid.

¹²⁸ See note 125, *supra*.

¹²⁹ Monke, Jim. "Budget Issues That Shaped the 2014 Farm Bill." Congressional Research Service. April 10, 2014. <http://nationalaglawcenter.org/wp-content/uploads/assets/crs/R42484.pdf>. Web. Accessed July 17, 2017.

¹³⁰ Johnson, Renee, Jim Monke. The 2014 Farm Bill (Agricultural Act of 2014). Congressional Research Service. February 7, 2017.

\$26.7 billion.¹³¹ A second fact is that even if nutrition is removed from the equation, net spending on agriculture is still down.¹³²

Moreover, if estimated savings from fiscal years 2014 to 2023 are compared to savings estimates for fiscal year 2018 to 2027, the budget savings are even greater. Based on the CBO baseline update from June 2017, the estimated 10-year savings from fiscal year 2018 to 2027, relative to the pre-sequester budget baseline used to write the 2014 Farm Bill, are expected to total more than four times the budget savings initially estimated.¹³³

Specifically, SNAP outlays are projected to be \$85.25 billion less.¹³⁴ Crop insurance outlays are projected to be \$6.69 billion less while conservation outlays are estimated to be \$3.85 billion less.¹³⁵ Moreover, even the Commodity Title is projected to be \$4.13 billion less than was expected.¹³⁶ Overall, projected spending for all 12 titles of the 2014 Farm Bill is \$100.8 billion less than originally projected.¹³⁷

Section 3 of the Heritage Report focuses on the Farm Bill's Commodity Title but zeroes in on temporarily higher than anticipated – although more than fully offset – costs associated with two policies within that title (i.e., ARC and PLC) while overlooking the cost of other policies that are either at or under budget. Sugar and dairy policy are two examples worth examining.

In the case of U.S. sugar policy, the law specifically requires that loans made to sugar producers be administered by the U.S. Department of Agriculture in a manner that ensures the producers repay their loans at principal plus interest to, in turn, ensure that sugar policy operates at no cost to the Federal government.¹³⁸ In fact, according to the Agricultural and Food Policy Center (AFPC) at Texas A&M University:

U.S. sugar policy has operated at no cost to U.S. taxpayers over a period of the last 15 years with the exception of 2013, the year Mexico was found to have illegally dumped below-cost sugar onto the U.S. market. Measured over a longer period of time, U.S. sugar policy has operated at no cost in all but three of the past 29 years, with one of the three years due to Mexican dumping. Subsequent refinements made to U.S. sugar policy have successfully worked to avoid the conditions under which costs were incurred.¹³⁹

¹³¹ Ibid.

¹³² Ibid.

¹³³ See note 92, *supra*.

¹³⁴ Ibid.

¹³⁵ Ibid.

¹³⁶ Ibid.

¹³⁷ Ibid.

¹³⁸ Outlaw, Joe, James Richardson. "Analysis of the Coalition for Sugar Reform Amendments to U.S. Sugar Policy: Potential Effect on Policy and Industry." Agricultural and Food Policy Center, Texas A&M University. May 2016. <https://sugaralliance.org/wp-content/uploads/2013/10/Texas-AM-5-17.pdf>. Web. Accessed July 5, 2017.

¹³⁹ Ibid.

The latest CBO budget baseline confirms that no cost U.S. sugar policy has continued under the 2014 Farm Bill.¹⁴⁰ If the agreement between the United States and Mexico to eliminate the injury to U.S. sugar farmers resulting from Mexican dumping of sugar onto the U.S. market at below Mexico's cost of production is successful, zero cost policy would presumably continue on into the future.

Meanwhile, dairy policy has actually been operating as a negative subsidy, meaning farmers are paying more into the policy than they are receiving in benefits, with the government incurring a profit.¹⁴¹

Cuts made in the 2014 Farm Bill are not the only means by which U.S. farm policy is contributing to deficit reduction. Budget reconciliation required under the Budget Control Act of 2011 is also a significant factor. For fiscal year 2017 alone, U.S. farm policy accounted for 32 percent of non-defense, non-Medicare mandatory sequester savings.¹⁴² Budget agreements reached in 2015 and 2017 extended the sequester for two years, with the additional budget savings from U.S. farm policy redirected to pay for non-agriculture budget priorities.

Although this section primarily means to focus on the budgetary implications of the Farm Bill's Commodity Title, this paper will touch briefly on some related issues not covered in the report.

First, although the higher cost associated with ARC and PLC are more than offset by savings elsewhere in the Farm Bill and the Commodity Title is still on target to achieve budget savings over the next 10 years, it is worth noting the reason behind the currently higher than expected costs associated with PLC and ARC.

During the 2014 Farm Bill debate, many argued that Direct Payments to farmers (i.e., payments made to farmers on historical production base regardless of actual plantings or commodity prices) ought to be repealed even though these payments were market-oriented, affording farmers total planting flexibility with market conditions driving plantings.

As the Heritage Report previously stated, "[Payments decoupled from price and production], by their design, go to farmers regardless of the growing conditions they face or market conditions. Direct Payments were a prime example of the problem. Thus, they can go to farmers who do not need them..."¹⁴³

Based on this kind of criticism, policymakers repealed the Direct Payment in the 2014 Farm Bill and instead provided a choice between two policies that maintain the planting flexibility provided under Direct Payments, but that require a producer to sustain an economic loss to receive assistance.

¹⁴⁰ See note 92, *supra*.

¹⁴¹ Miller, Sam. "How well is the Dairy Margin Protection Program really working?" *Progressive Dairyman*. April 14, 2017. <http://www.progressivedairy.com/topics/management/how-well-is-the-dairy-margin-protection-program-really-working>. Web. Accessed July 5, 2017.

¹⁴² See note 92, *supra*.

¹⁴³ See note 2, *supra*.

Since enactment of the 2014 Farm Bill, U.S. farmers and ranchers have experienced a 50 percent drop in net farm income, the largest four-year percentage decline since the Great Depression.¹⁴⁴ Faced with declining prices and the halving of net farm income, ARC and PLC have responded just as they were designed to. Had commodity prices remained steady or even increased, ARC and PLC would have likely already achieved or exceeded expected savings. Nonetheless, the fact that the Commodity Title is still on target to save \$4.13 billion over 10 years in the face of a 50 percent drop in net farm income is remarkable and stands in sharp contrast with past economic downturns that have resulted in significant cost overruns.¹⁴⁵

Second, the Heritage Report states that, “Federal dairy policy has failed to adjust to modern markets”; that, “Taxpayers guarantee the incomes of dairy producers...”; and that the “2014 farm bill created an insurance-like program to put taxpayers on the hook for guaranteeing income of dairy producers.”¹⁴⁶

This is an inaccurate appraisal of dairy policy.

The 1996 Farm Bill continued a dairy price support program which essentially served as a price floor because, under the program, a standing offer was made by the government to purchase dairy products at a certain price established in law. However, the 1996 Farm Bill lowered that established price from \$10.35 per hundredweight down to \$9.90 per hundredweight.¹⁴⁷ This was a significant reform that also achieved budget savings. While accomplishing this reform, the 1996 Farm Bill also authorized a Northeast Interstate Dairy Compact under which northeastern States could enter into a compact to establish high minimum prices for fluid milk.

The 2002 Farm Bill replaced the Northeast Interstate Dairy Compact with a national policy, where markets determined milk prices. The 2008 Farm Bill largely maintained this policy, with some modifications.

The 2014 Farm Bill, however, repealed both policies under the 2002 and 2008 Farm Bills and put in place a means by which farmers could pay a premium in order to protect their margins. Nevertheless, despite this protection, “Dairy producers experienced financial strain in each of the past two years, and the safety net of the [margin protection program or] MPP did not provide much assistance. To date, the program has collected significantly more in premiums than it has disbursed in indemnity payments.”¹⁴⁸

Over four years, dairy farmers have actually paid more into MPP than they have received in MPP benefits, with MPP actually netting the government \$98 million.¹⁴⁹

¹⁴⁴ See note 67, *supra*.

¹⁴⁵ See note 92, *supra*.

¹⁴⁶ See note 2, *supra*.

¹⁴⁷ United States Congress. *Federal Agriculture Improvement and Reform Act of 1996*. 104th Cong. 2nd sess. <https://www.congress.gov/104/plaws/publ127/PLAW-104publ127.pdf>. Web. Accessed July 5, 2017.

¹⁴⁸ See note 141, *supra*.

¹⁴⁹ *Ibid*.

Third, the Heritage Report states that, “Federal sugar policy is flawed and costly to consumers and taxpayers.”¹⁵⁰ This paper has previously noted that a 2016 study found that U.S. sugar policy has operated at no cost to taxpayers in all but one of the past 15 years – the year in which Mexico was found guilty of dumping sugar onto the U.S. market at below Mexico’s cost of production in violation of U.S. trade law – and all but three of the past 29 years. Since that study was conducted, U.S. sugar policy has operated another year at no cost to the taxpayer.¹⁵¹ It is hard to argue that a zero cost policy is costly to the taxpayer.

Consumers have also benefitted under U.S. sugar policy. As the first chart below indicates, based on the International Sugar Organization’s survey of 78 countries, U.S. food manufacturers and retailers pay far less for sugar than do their foreign counterparts. Globally, foreign manufacturers are paying about 14 percent more for sugar than U.S. manufacturers while developed country manufacturers are paying 34 percent more.¹⁵²

The second chart, below, tells much the same story with respect to retail prices. American consumers pay far less for sugar than their counterparts in the rest of the world. According to a global survey by SIS International, foreign consumers pay 20 percent more for their sugar than America consumers do while fellow developed-country consumers pay, on average, almost 30 percent more.¹⁵³

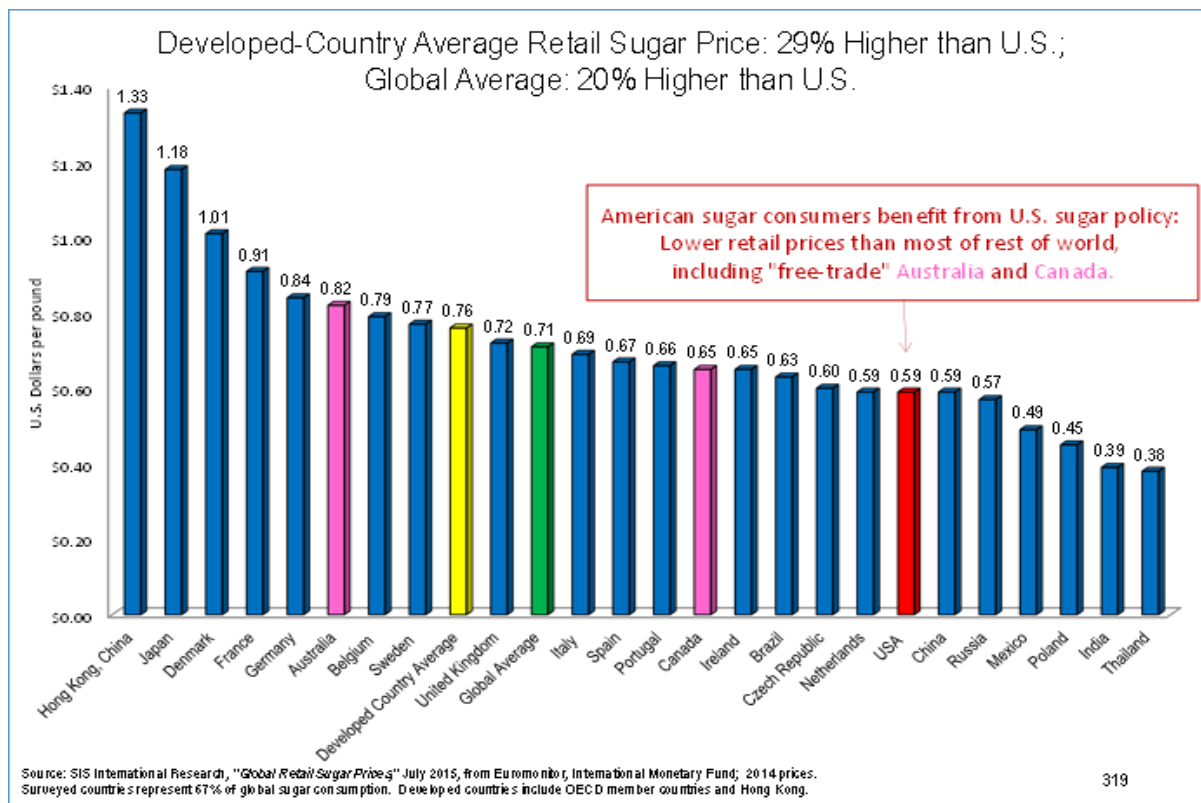
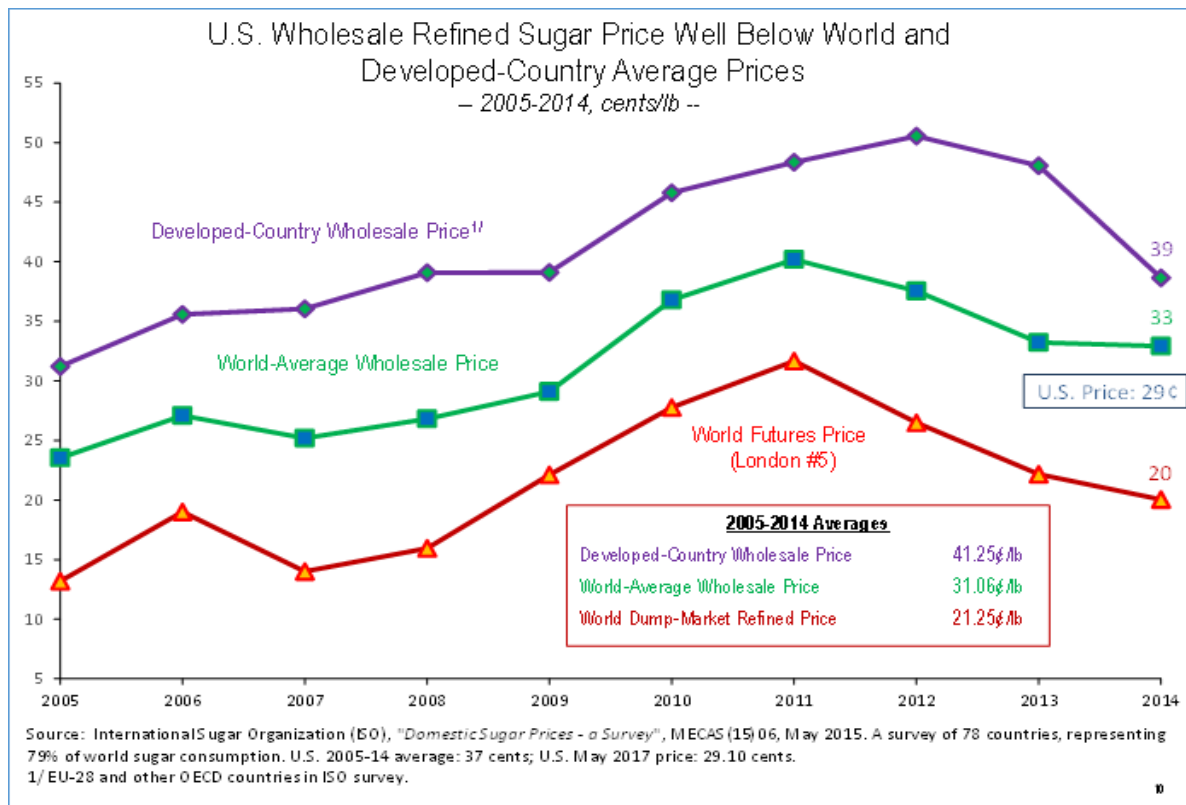
Critics of U.S. sugar policy frequently suggest that Australian and Canadian consumers benefit from their countries’ exposure to cheap, world-dump-market sugar. However, as noted in the second chart, below, retail prices in both Australia and Canada are actually higher than in the U.S.

¹⁵⁰ See note 2, *supra*.

¹⁵¹ See note 92, *supra*.

¹⁵² International Sugar Organization. Domestic Sugar Prices – A Survey. May 2015.

¹⁵³ SIS International Research. Global Retail Sugar Prices. July 2015.



Further AFPC analysis of “reforms” to the U.S. sugar policy found that taxpayers and consumers would be harmed. According to AFPC:

By proposing to weaken the safety net for U.S. sugar farmers to levels that were in place when more than half of American sugar processors closed, the result would be three-fold: (1) further injury to U.S. sugar farmers and processors at those times when they require a safety net and food manufacturers are already benefiting from low market prices for sugar; (2) further depressed prices received by producers, loan forfeitures, and U.S. taxpayer costs; and (3) ultimately, a substantial loss of U.S. sugar farmers and processors and, consequently, lower domestic sugar supplies and higher prices paid by food manufacturers, which they will pass on to consumers.¹⁵⁴

For a full discussion of U.S. sugar policy, readers may wish to read the AFPC’s “Analysis of the Coalition for Sugar Reform Amendments to U.S. Sugar Policy: Potential Effect on Policy and Industry” [here](#).

Fourth, we have previously noted conservation, crop insurance, and nutrition title savings. Alongside the Commodity Title, these titles comprise the major titles to the Farm Bill and are mainly responsible for achieving the estimated total of Farm Bill savings. Savings under the Conservation Title are generally on target (\$3.787 billion for fiscal years 2014 through 2018 and \$3.85 billion for fiscal years 2018 through 2027) as are crop insurance savings (\$10.887 billion for fiscal years 2014 through 2017 and \$6.69 billion from 2018 through 2027).¹⁵⁵ Meanwhile the estimate of SNAP savings has increased more than threefold for fiscal years 2014 through 2018 (\$25.813 billion) and nearly eleven-fold for fiscal years 2018 through 2027 (\$85.25 billion).¹⁵⁶ To put the SNAP savings into context, the budget reconciliation bill cutting SNAP that the House approved in 2013 would have saved \$39 billion had it been enacted into law according to CBO.¹⁵⁷

It is important to recall the context in which the farm safety net exists in the first place. At the time this paper was being written, Mexico and the U.S. had just concluded settlement agreements to eliminate the harm to U.S. sugar farmers as a result of Mexico’s illegal dumping of sugar onto the U.S. market at below Mexico’s cost of production; the Administration is in the midst of a World Trade Organization complaint against China, which evidently exceeded its permissible domestic support of just three crops in a single year by \$100 billion; the U.S. is complaining of Canada’s ongoing protections of dairy and softwood lumber; and U.S. cotton farmers are continuing to struggle because they face predatory trading practices by China, India, and others which have been depressing global cotton prices.

The current farm safety net has been key to improving the financial situation of farmers and ranchers. Prior to the creation of a farm safety net, a farmer could only expect to earn one-

¹⁵⁴ See note 138, *supra*.

¹⁵⁵ See note 92 and 130, *supra*.

¹⁵⁶ *Ibid*.

¹⁵⁷ Elmendorf, Douglas W. Letter to Honorable Frank Lucas. September 16, 2013. <https://www.cbo.gov/sites/default/files/hr31020.pdf>. Web. Accessed July 12, 2017.

third of what the rest of the population earned.¹⁵⁸ Since 1996, farmers have finally begun to earn a living that is at least closer to that of urban counterparts. Looking at median farm income — despite its exaggeration of real farm income, as previously discussed — it is today only slightly below that of other self-employed households.¹⁵⁹ Whatever the actual improvement, it certainly helps farmers in surviving mercurial markets and weather conditions that are unique to agriculture.

Heritage Report: “The federal crop insurance program is a failure... [because there] was no desire to create a bigger... ‘safety net’ for farmers or a belief that farmers were struggling and...needed a crop insurance program...”

- Reality: *“It is the purpose of this title to promote the national welfare by alleviating the economic distress caused by wheat-crop failure due to drought and other causes, by maintaining the purchasing power of farmers, and by providing for stable supplies of wheat for domestic consumption and the orderly flow thereof in interstate commerce.” Federal Crop Insurance Act of 1938*¹⁶⁰
- Reality: *“To improve and expand the federal crop insurance program and for other purposes.” Federal Crop Insurance Act of 1980*¹⁶¹
- Reality: *“Congress enhanced the crop insurance program...in [the Federal Crop Insurance Reform Act of 1994]...in order to encourage greater participation.”*¹⁶²
- Reality: *“To amend the Federal Crop Insurance Act to strengthen the safety net for agricultural producers by providing greater access to more affordable risk management tools and improved protection from production and income loss...” Agricultural Risk Protection Act of 2000*¹⁶³
- Reality: *“The combined findings for the relationship between wealth and insurance – for both non-limited-resource and limited-resource farmers – support the theory of crop insurance as an effective risk management tool for low – to middle-income farmers.”*¹⁶⁴

¹⁵⁸ Zulauf, Carl, David Orden. “80 Years of Farm Bills – Evolutionary Reform.” 31(4) CHOICES 1 (2016). http://www.choicesmagazine.org/UserFiles/file/cmsarticle_551.pdf. Web. Accessed July 13, 2017.

¹⁵⁹ See note 31, *supra*.

¹⁶⁰ United States Congress. *Conference Report to Accompany Agricultural Adjustment Act of 1938*. H.R. Rep. No. 75-1767 (3d Sess., 1928). <http://nationalaglawcenter.org/wp-content/uploads/assets/farmbills/1938conf-house1767.pdf>. Web. Accessed August 1, 2017.

¹⁶¹ United States Congress. *Federal Crop Insurance Act of 1980*. 96th Cong. 1st sess. <https://www.congress.gov/bill/96th-congress/senate-bill/1125>. Web. Accessed July 6, 2017.

¹⁶² Shields, Dennis A. “Federal Crop Insurance: Background.” Congressional Research Service. August 13, 2015. <https://fas.org/sgp/crs/misc/R40532.pdf>. Web. Accessed July 11, 2017

¹⁶³ United States Congress. *Agriculture Risk Protection Act of 2000*. 106th Congress. 1st sess. June 20, 2000. <https://www.congress.gov/bill/106th-congress/house-bill/2559>. Web. Accessed July 6, 2017.

¹⁶⁴ Farrin, Katie, Mario J. Miranda, Erik O’Donoghue. “How Do Time and Money Affect Agricultural Insurance Uptake? A New Approach to Farm Risk Management Analysis.” USDA, Economic Research Service. August 2016. https://www.ers.usda.gov/webdocs/publications/74679/60086_err212_errata.pdf?v=42593. Web. Accessed July 12, 2017.

It is difficult for farmers to reconcile a policy that has proven so successful with the heavy attacks that so frequently come from those whose livelihoods are not tied to farming. As critics debate policies that attempt to erode crop insurance, researchers in other nations are discovering the merits of crop insurance. At a time when proposals to cut the U.S. crop insurance appear weekly, other nations are requesting the U.S. Department of Agriculture to help them start their own crop insurance systems.

The Heritage Report concludes that crop insurance is a failure because, according to Heritage, crop insurance reforms under the Federal Crop Insurance Act of 1980 were only meant to reduce costs compared to the 1970s disaster programs crop insurance was designed to replace.

According to the Heritage Report, “Of particular importance is recognizing what was not a reason for creating the program. There was no desire to create a bigger... ‘safety net’ [than existing disaster programs] for farmers or a belief that farmers were struggling and...needed a crop insurance program...the program was ... to address disaster protection in a less costly manner.”¹⁶⁵

Heritage then notes that the disaster programs in place prior to 1980 were far cheaper than crop insurance has proven since, even when adjusted for inflation.

Legislative Goal of Expanded Coverage, and Comparison of Crop Insurance to Disaster Costs

There are two problems with this theory. First, it is not supported by the facts. As noted above, every major crop insurance law enacted by Congress has sought to improve and expand Federal Crop Insurance. Even the 1938 Agricultural Adjustment Act, which inaugurated Federal Crop Insurance, sought to expand coverage to “fruits, vegetables, and all other crops” even though it had begun insuring only wheat.¹⁶⁶ Second, the disaster programs of the 1970s provided very limited assistance on some major row crops, including rice, wheat, feed grains, and soybeans while Federal Crop Insurance covers more than 130 crops nationwide, making the comparison apples to oranges.¹⁶⁷

Heritage disagrees that Federal Crop Insurance ought to be measured by ever rising participation among U.S. farmers and ranchers, stating, “There has been so much attention to driving up participation rates that success with participation has somehow become the narrative that crop insurance is a success.”¹⁶⁸

However, that is exactly what Congress intended and, what is more, when more accurately compared against the cost of the more expansive ad hoc disaster bills of the 1980s, Federal Crop Insurance proves to be more cost effective.

¹⁶⁵ See note 2, *supra*.

¹⁶⁶ See note 160, *supra*.

¹⁶⁷ See note 162, *supra*.

¹⁶⁸ See note 2, *supra*.

For instance, one of the worst droughts to hit the U.S. occurred in the summer of 1988, causing corn yields to decline by 22 percent compared to the previous five-year average.¹⁶⁹ Congress responded by enacting ad hoc disaster legislation costing \$3.386 billion.¹⁷⁰ Fast forward now to 2012 when a drought of a similar magnitude hit the U.S., resulting in a 20 percent decline in corn yields.¹⁷¹ Had the same disaster program been enacted into law in 2012 as was enacted in 1988, disaster payments could have reached \$17.015 billion. This is \$3 billion more than the total cost of crop insurance in that worst of all years.¹⁷²

Estimated 2012 Ad Hoc Disaster Assistance - if 2012 Disaster Assistance was Based on the 1988 Assistance Level - using Corn as a Proxy for the Level of Support

	Year	Yield	Yield loss vs. Prior 5-yr Avg.	Planted Acres	National Avg. Price per bu.	Ad Hoc Disaster Assistance (Billions)
	A	B	C	D	E	F
1	1988	84.6	22%	67,717,000	\$2.54	\$3.386
2	2012	123.1	20%	97,291,000	\$6.89	\$17.015

Calculation: $F2 = F1 \times (B2/B1) \times (C2/C1) \times (D2/D1) \times (E2/E1)$

Feasibility of Crop Insurance without Federal Involvement

Concerning the widely accepted view that there would be no crop insurance absent federal involvement, the Heritage Report states: “The market is not failing when people do not buy this specific type of insurance, just like the market is not failing when people do not buy a Rolls Royce.”¹⁷³ Yet, a farmer’s need to insure his crop and the ability of a person to purchase one of the world’s most expensive luxury vehicles is certainly an unusual comparison.

Frequently, the Heritage Report references legislative efforts to expand participation in Federal Crop Insurance, stating: “Forcing taxpayers to pay an increasing amount of subsidies to get farmers to participate in a program that they would not pay for if they were charged the full cost does not [constitute] success” and, “If farmers did not want to participate in the program at a [government cost] level that made sense from a fiscal perspective, then that should have been the end of the program.”¹⁷⁴ In all of this is the matter of affordability.

In 1993 – one year prior to the enactment of the 1994 crop insurance bill – a book was published by the American Enterprise Institute, entitled, “The Economics of Crop Insurance and Disaster Aid.” According to the authors: “When normal commercial loading factors are applied, the premiums required by insurers to offer an actuarially viable private crop insurance contract

¹⁶⁹ Chite, Ralph. “Emergency Funding for Agriculture: A Brief History of Supplemental Appropriations, FY1989-FY2012.” Congressional Research Service. November 22, 2011.

¹⁷⁰ Ibid.

¹⁷¹ USDA, National Agricultural Statistics Service. Historic Corn Yields. https://quickstats.nass.usda.gov/results/90C69DEC-38D6-31B4-9953-4C6EB5E82D79?pivot=short_desc. Web. Accessed July 12, 2017.

¹⁷² See note 162, *supra*.

¹⁷³ See note 2, *supra*.

¹⁷⁴ Ibid.

are sufficiently high to reduce the demand for such contracts to zero... Thus, private markets for multiple-peril crop insurance are almost surely infeasible...¹⁷⁵

More recently, in 2013, the same authors wrote that, “most empirical evidence suggests that farmers’ willingness to pay for multiple peril crop insurance often does not exceed the cost associated with operating an actuarially sound commercial program.”¹⁷⁶

Yet, while the authors state that their finding “is not prima facie evidence of a market failure” because it may speak more to the question of what farmers are willing to pay for crop insurance rather than to affordability, the 2016 Heritage Report, to which the authors also contributed, concludes that, “Determining whether [crop insurance backed by private reinsurance markets] ... would be made available in this country absent government intervention is impossible.”¹⁷⁷

Were crop insurance and the Farm Bill’s Commodity Title eliminated, the Heritage Report is only able to conclude that wholly private multi-peril crop insurance products are “conceivable”.¹⁷⁸

On a related note, the Heritage Report claims that Federal Crop Insurance squeezes out innovation and competition in the private insurance market.¹⁷⁹ However, by statute, policies proposed to be offered through Federal Crop Insurance may not be approved if they would compete with products available in the private market.¹⁸⁰

Specific Crop Insurance Recommendations in Heritage Report

According to the Heritage Report:

Taxpayers subsidize up to an 85 percent coverage level for some crops, which means that if a producer’s yield or revenue loss is more than 15 percent of normal, indemnities can kick in... The current protection for minimal losses helps to effectively eliminate most downside risk for farmers and possibly cover losses that most businesses would consider normal business risk.¹⁸¹

In fact, deductibles range from as high as 50 percent to as low as 15 percent. Under the lowest coverage level, a producer would receive an indemnity on losses greater than 50

¹⁷⁵ Goodwin, Barry K., and Vincent H. Smith. “The economics of crop insurance and disaster aid.” American Enterprise Institute, 1995.

¹⁷⁶ Goodwin, Barry K., and Vincent H. Smith. “What Harm Is Done By Subsidizing Crop Insurance?” American Journal of Agricultural Economics. January 2013.
https://www.researchgate.net/publication/270833871_What_Harm_Is_Done_By_Subsidizing_Crop_Insurance. Web. Accessed August 1, 2017.

¹⁷⁷ See note 2, *supra*.

¹⁷⁸ Ibid.

¹⁷⁹ Ibid.

¹⁸⁰ 7 U.S.C. 1523 (a) (1) and (2). <https://www.gpo.gov/fdsys/pkg/USCODE-2013-title7/html/USCODE-2013-title7-chap36-subchapI-sec1523.htm>. Web. Accessed July 11, 2017.

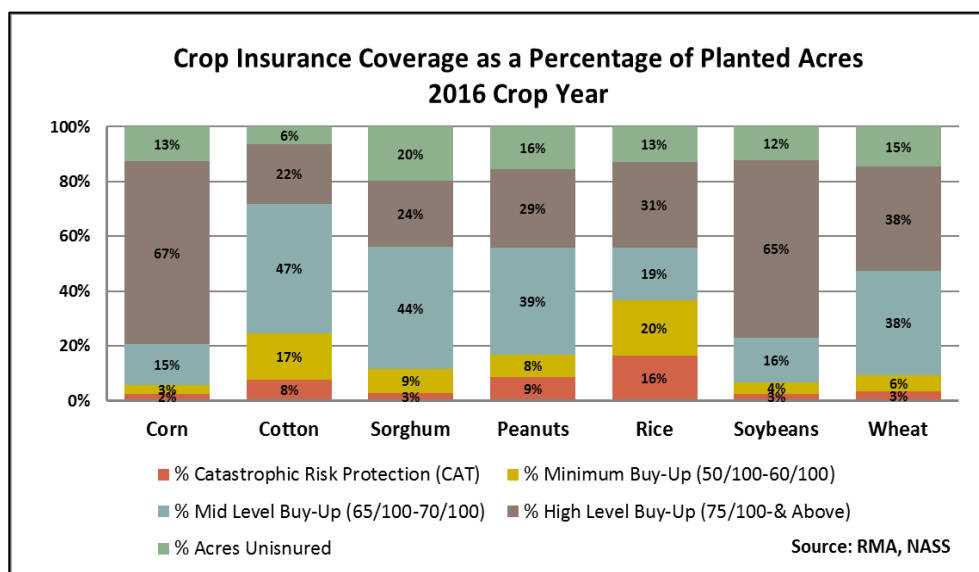
¹⁸¹ See note 2, *supra*.

percent.¹⁸² Under the highest available coverage, the producer would receive an indemnity on losses greater than 15 percent. The current average deductible is 25 percent.¹⁸³

Such losses are not “minimal” to farmers. In fact, losses the farmer must absorb before receiving an indemnity are often understated because of an effective “double deductible”. In situations where a farmer has recently suffered losses due to a year or more of natural disasters, the farmer’s insurable yield will be lower, meaning the deductible under the policy will have to be met starting with an already reduced level of protection in force.

Of course, the lower the deductible, the higher the cost of coverage for the farmer and the lower the percentage share of premium support provided by Federal Crop Insurance. For example, a farmer electing 85 percent coverage must pay 62 percent of the total premium.¹⁸⁴ As one might anticipate, the much higher premiums associated with 85 percent coverage already drive many farmers into lower coverage levels.

In 2016, for instance, farmers of 7 staple crops elected coverage levels as provided in the illustration below.



Short of repealing Federal Crop Insurance, which is the Heritage Report’s long term policy recommendation, the Heritage Report’s alternative recommendation is for crop insurance to be limited to 70 percent yield coverage, meaning a farmer would receive an indemnity on

¹⁸² USDA, Risk Management Agency. Policies Overview. <https://www.rma.usda.gov/policies/>. Web. Accessed July 11, 2017.

¹⁸³ American Farm Bureau Foundation. “Myth: Crop Insurance doesn’t even require a farmer to have a loss.” http://www.fb.org/files/2018FarmBill/CIRB_Myths_CI_Farmers_No_Loss17.0306.pdf. Web. Accessed July 11, 2017.

¹⁸⁴ 7 U.S.C. 1508 (e) (2) (G). <https://www.agriculture.senate.gov/imo/media/doc/75-30%20-%20Agricultural%20Adjustment%20Act%20Of%201938%20&%20Federal%20Crop%20Insurance%20Act1.pdf>. Web. Accessed July 11, 2017.

yield losses of greater than 30 percent.¹⁸⁵ However, the increased deductibles and loss of revenue coverage for farmers would result in lower participation and lower coverage levels. This increased exposure for farmers increases the likelihood that Congress will enact ad hoc disaster assistance to help fill the gap.

A reduced risk pool may also result in increased premiums on the insureds remaining in the pool, triggering further reductions in participation and coverage levels, and further increasing farmer exposure and the probability of ad hoc disaster assistance. Any policy change that has the effect of removing participants or acreage from the risk pool harms the farmers directly affected but also can have the unintended impact of increasing premiums on the farmers remaining in the risk pool.

By capping coverage levels at 70 percent, the Heritage Report recommendation would have the opposite effect of the Agricultural Risk Protection Act of 2000, the primary aim of which was to make higher levels of coverage, including revenue coverage, more accessible to farmers. The 2000 Act has nearly doubled covered acreage, with 17 year gains roughly equal to all increases in acreage under crop insurance over the previous 62 years.¹⁸⁶

The Heritage Report's recommendations thus threaten to erase this advance. Particularly hard hit would be farm and ranch families with limited equity or reserves, such as beginning producers who typically depend on crop insurance not only to see them through economic losses but also to obtain loans. Ironically, the Heritage Foundation frequently claims that crop insurance is a barrier to entry into agriculture when, in fact, it is crop insurance that very often makes farming and ranching possible for beginning producers. In fact, thousands of beginning farmers have taken part in special provisions for new producers included in the 2014 Farm Bill.

Concomitant with the recommendation to eliminate revenue coverage is also the effective repeal of the Harvest Price Option (HPO), which is akin to replacement coverage in property and casualty insurance lines. This is ironic because the Heritage Report states it is concerned about encouraging farmers to engage in more private risk management. The reality, however, is that repeal of HPO would seriously set back the private risk management tool known as forward contracting. Forward contracting allows a farmer to better market a crop by locking in a price well before the crop is out of the ground and often before it is planted. HPO encourages this private risk management by ensuring that a farmer can replace a lost crop in order to deliver on the contract. This is important because crop prices fluctuate significantly in a crop year and should crop prices rise between the time the farmer purchased insurance and the time of loss, the farmer would have to pay the difference in delivering on the contract and this can be prohibitively expensive.

The Heritage Report also states that Federal Crop Insurance is the "equivalent of a government run cartel."¹⁸⁷ According to Heritage, "The federal government has stepped in and controls the private crop insurance market in collaboration with its approved companies."¹⁸⁸ A

¹⁸⁵ See note 2, *supra*.

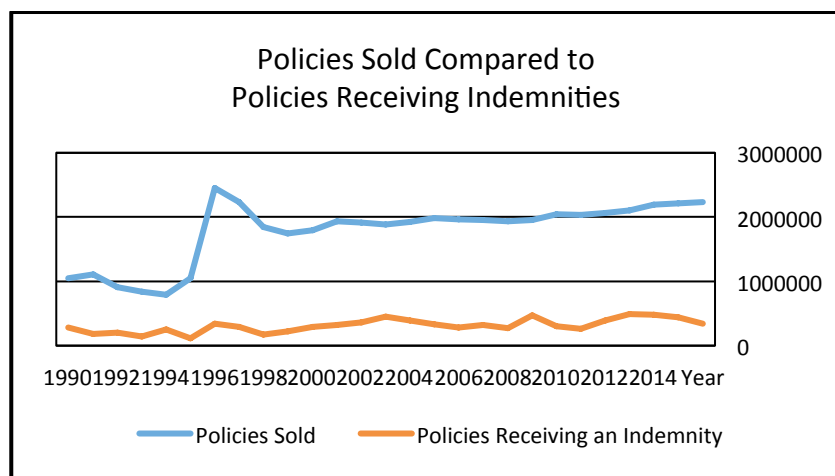
¹⁸⁶ See graphs on pages 51 and 52.

¹⁸⁷ See note 2, *supra*.

¹⁸⁸ *Ibid*.

cartel is generally a closed and illegal network of businesses that make a pact to maintain high prices by restricting competition. Crop insurance is not a cartel. Any entity that wishes to sell crop insurance and has the necessary structure in place may do so by signing a contract with the Federal Crop Insurance Corporation (FCIC). A contractual relationship is both necessary and appropriate since taxpayer dollars are involved. FCIC also establishes rules and regulations companies must abide by, including premiums established by FCIC. But, this establishment of premiums is not for the purpose of pricing farmers out of insurance but helping to ensure that premiums are affordable, subject to actuarial soundness requirements, in order to encourage participation and greater coverage levels. With FCIC sharing in the cost of total premium, lower premiums are also in the interest of the taxpayer. While companies may not compete on premium rates, selling crop insurance is a highly competitive industry where companies must compete on service to farmers.

According to the Heritage Report, Federal Crop Insurance is also a bottomless well of subsidies. But, as previously noted, many farmers pay premiums year after year without receiving an indemnity, with only about 19 percent of policies paying an indemnity in 2016.¹⁸⁹ Since 1988, crop insurance policies have covered \$15 trillion in liability to guard against losses.¹⁹⁰ During the same period of time, total premiums were \$136 billion and total indemnities paid to farmers came to \$116 billion.¹⁹¹ This reflects the reality that farmers view crop insurance as a means of liability protection and not as a bottomless well of subsidies.



Source: USDA, Risk Management Agency. Summary of Business Reports.

Crop Insurance Costs Are Down Sharply

On the topic of cost, the Congressional Budget Office has overstated the cost of Federal Crop Insurance in its estimates and has later had to make downward adjustments. For example,

¹⁸⁹ USDA, Risk Management Agency, Summary of Business Report. July 10, 2017. https://www3.rma.usda.gov/apps/sob/current_week/crop2016.pdf. Web. Accessed July 13, 2017

¹⁹⁰ USDA, Risk Management Agency. Summary of Business Reports. <http://prodwebnlb.rma.usda.gov/apps/SummaryofBusiness/HistoricalReports>. Web. Accessed July 6, 2017.

¹⁹¹ Ibid.

as previously noted, the Congressional Research Service reports that CBO overstated the five year costs for fiscal years 2014 through 2018 by \$10.887 billion.¹⁹²

The revised CBO estimate for this year is \$3.471 billion, approximating 2004 levels and down from the original estimate of \$7.771 billion.¹⁹³ Although CBO's latest projection of crop insurance costs shows annual costs settling into the \$7 billion range for the foreseeable future, this is still below CBO's 2014 Farm Bill estimates. Moreover, since CBO overestimated crop insurance costs for 2016 and 2017 by \$4.5 billion and \$5.3 billion, respectively, later adjustments by CBO may show substantially lower spending in future years as well.¹⁹⁴ The lower than expected costs stem from market conditions, including lower commodity prices and fewer losses, as well as roughly \$17 billion in legislatively or administratively achieved budget savings since 2008.¹⁹⁵

Successes of Crop Insurance

This paper has now spent considerable time responding to claims that crop insurance is a failure. It is now time to turn to at least some of the reasons why crop insurance is a success.

Participation in Crop Insurance is Significantly Higher

While the Heritage Report may not wish to measure the success of Federal Crop Insurance by participation rates, lawmakers nevertheless wanted to expand coverage and the data support that crop insurance is achieving that goal: participation rates having roughly doubled over the past 17 years, since the passage of the Agricultural Risk Protection Act.¹⁹⁶ The illustration below observes that the increases in acreage covered under Federal Crop Insurance is roughly equal to the increases experienced in the previous 62 years. There are approximately 290 million acres insured under Federal Crop Insurance today.¹⁹⁷

¹⁹² See note 130, *supra*.

¹⁹³ See note 92, *supra*.

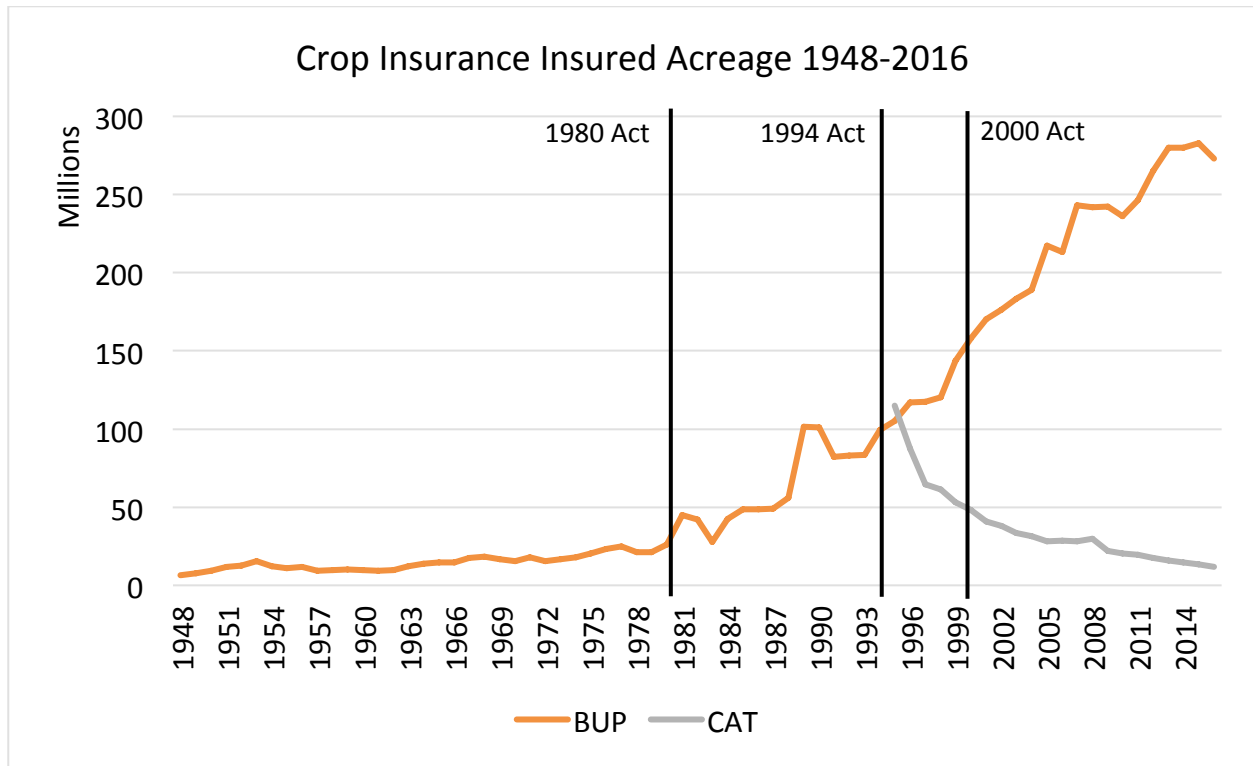
¹⁹⁴ *Ibid*.

¹⁹⁵ See note 162, *supra*. See also Congressional Research Service. Renegotiation of the Standard Reinsurance Agreement (SRA) for Federal Crop Insurance. August 12, 2010. And USDA, Risk Management Agency. USDA Moving to Lower Insurance Premiums for Corn and Soybean Producers in 2012.

<https://www.rma.usda.gov/news/2011/11/cornsoybeanpremium.html>. Web. Accessed July 11, 2017.

¹⁹⁶ See note 190, *supra*.

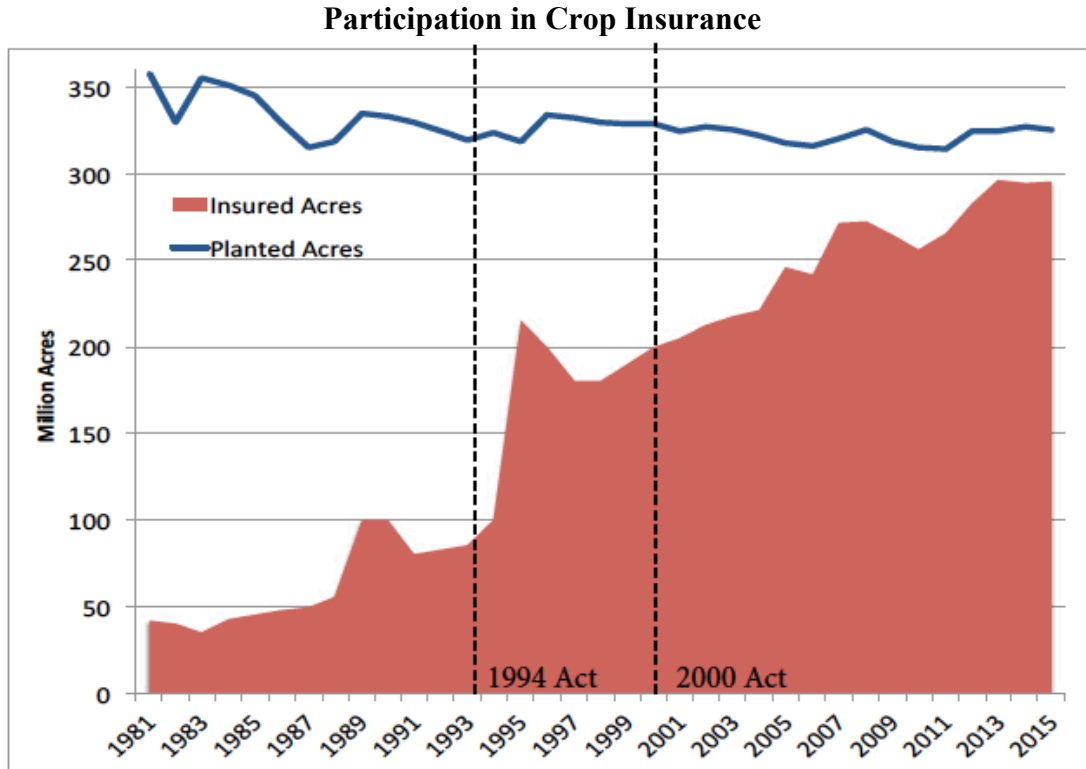
¹⁹⁷ *Ibid*.



Source: USDA, Risk Management Agency.

Put another way, Federal Crop Insurance now insures 90 percent of all U.S. planted acres.¹⁹⁸ As the graph, below, illustrates, the Federal Crop Insurance Act of 1980 (which enlisted the private sector to sell and service crop insurance), the Federal Crop Insurance Reform Act of 1994 (which offered minimum coverage on a broad scale and made higher coverage levels more affordable), and the Agricultural Risk Protection Act of 2000 (which increased affordability of higher coverage levels and enhanced coverage, including revenue coverage developed by Kansas State University professor Art Barnaby) are responsible for the success of Federal Crop Insurance.

¹⁹⁸ Ibid.



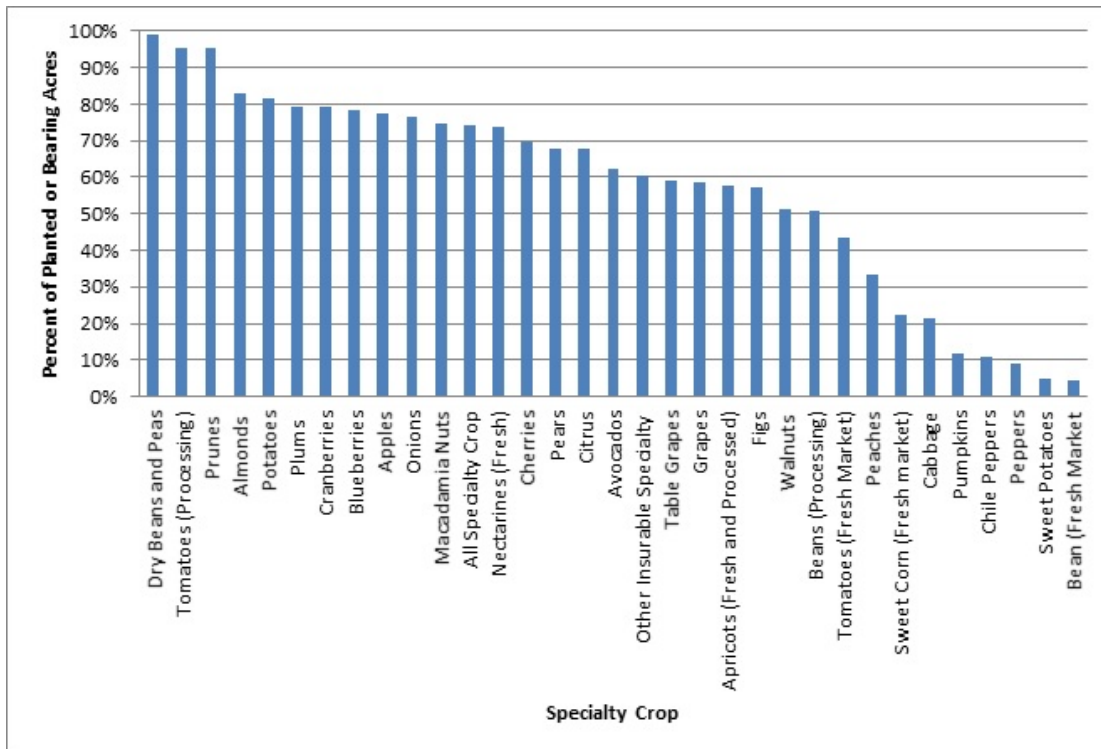
Source: National Crop Insurance Services

Moreover, unlike the disaster programs from the 1970s that covered only a few row crops, Federal Crop Insurance today covers approximately 130 commodities, including significant coverage of fruits, vegetables, and other specialty crops.¹⁹⁹ In fact, measured in terms of liability protection in place, almonds, nursery crops, grapes, orange trees, and apples rank among the top 10 insured commodities today.²⁰⁰ While there is still work to be done in ensuring access to quality coverage for farmers of specialty crops, significant inroads have certainly been made, as the illustration below demonstrates.

¹⁹⁹ Hungerford, Ashley, Mesbah Motamed, and Jerry Cessna. "Managing Agricultural Risk Under Different Scenarios: Selected 2014 Farm Act Programs." USDA ERS. 6 Feb. 2017. <https://www.ers.usda.gov/amber-waves/2017/januaryfebruary/managing-agricultural-risk-under-different-scenarios-selected-2014-farm-act-programs/>. Web. 06 July 2017.

²⁰⁰ See note 190, *supra*.

Percent of Specialty Crop Acres Insured in 2015



Source: USDA, Risk Management Agency and National Agricultural Statistics Services.

Liability Protection in Force is Significantly Higher

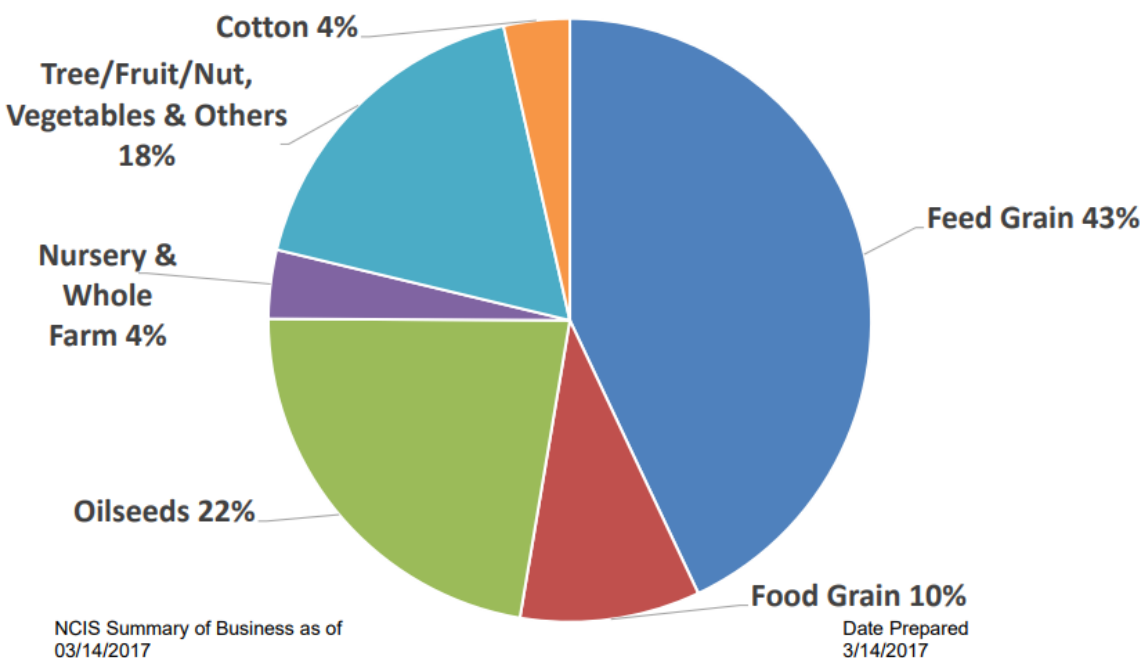
Total liability protection in place has also climbed dramatically, standing at \$100 billion in 2016.²⁰¹ This is up by more than \$65 billion from where it stood the year the Agricultural Risk Protection Act of 2000 was enacted into law and up over \$86 billion from 1994 when the Federal Crop Insurance Reform Act became law.²⁰² The illustration below shows liability protection in force by commodity.

²⁰¹ USDA, Risk Management Agency. Summary of Business Report for 2014 thru 2017. <http://prodwebnlb.rma.usda.gov/apps/SummaryofBusiness/HistoricalReports>. Web. Accessed July 6, 2017.

²⁰² USDA, Risk Management Agency. Liability and Premium, Reinsurance Years 1992-2012. March 2013.

Liability By Major Crop, 2016

Total: \$100 bil.



These achievements are certainly critically important to U.S. farmers and ranchers and their lenders, a vast number of whom require producer customers to buy crop insurance in order to obtain loans. But, as previously discussed at a top line level, Federal Crop Insurance has also come at a value to U.S. taxpayers. If one scratches beneath the surface a little bit, the underpinnings of this fiscal success becomes clearer.

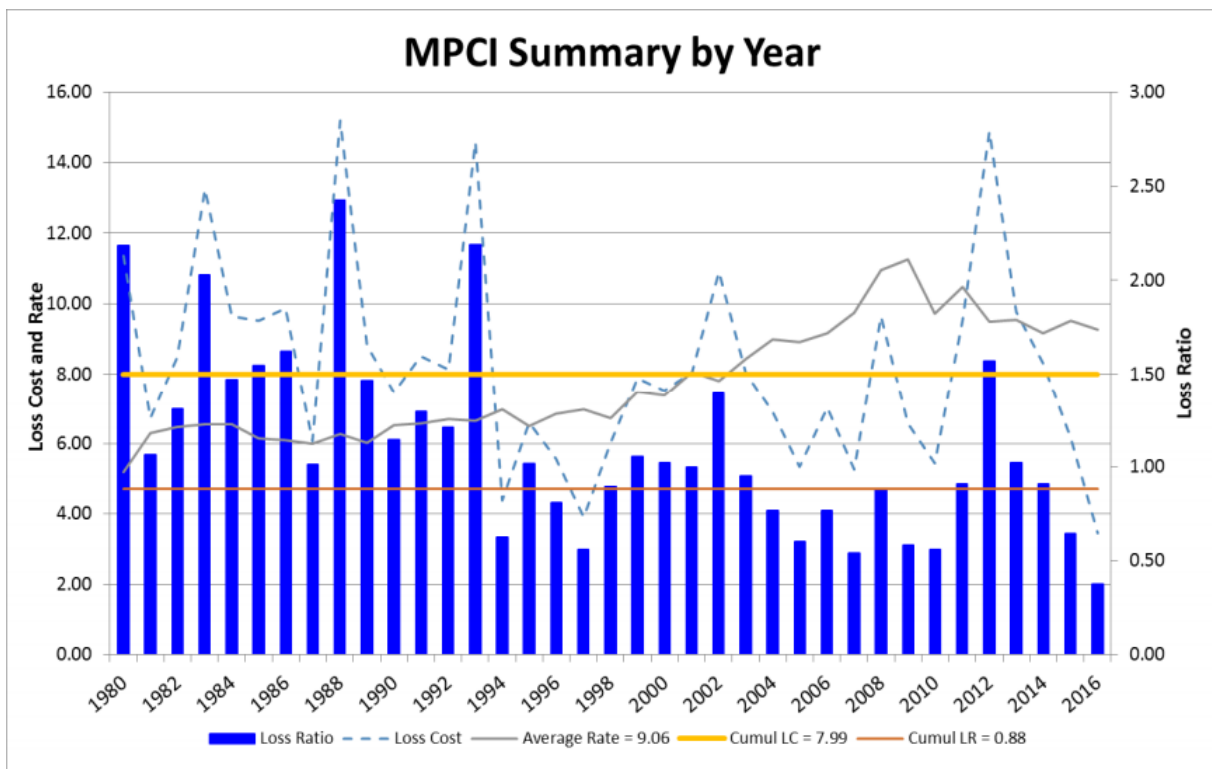
Farmers Pay Premiums, Benefit from Greater Certainty

For instance, as previously mentioned, it has been 10 years since Congress enacted an ad hoc disaster bill to address crop losses. Instead, farmers have “skin in the game”, paying an average of more than \$3.7 billion in premiums over the past 10 years, with annual premiums ranging from as high as \$4.5 billion to as low as \$2.7 billion.²⁰³ But, there are also distinct advantages for the farmer under crop insurance vis-à-vis ad hoc disaster assistance. While ad hoc relief may come without a premium, it may also be too little, too late, or it may not come at all. Congress must decide whether to offer relief, how much to offer, what if anything to offer producers of various crops from various regions meeting specific loss requirements, and regulators pick up on the decision making process where lawmakers drop off. The process involves little certainty and lots of time. Under Federal Crop Insurance, the farmer knows from the outset what kind of coverage is in force and he can expect to receive an indemnity payment within 30 days of a loss claim being finalized, due to an efficient private-sector delivery system.

Efficiencies Have Been Achieved

²⁰³ See note 190, *supra*.

The financial health of Federal Crop Insurance has improved as well with a vastly improved loss ratio in the wake of the 1994 and 2000 crop insurance laws, as the graph below illustrates. However, even when higher loss ratios from earlier years are included, the cumulative loss ratio from 1980 to 2016 is still 0.88, meaning that for every dollar of premium paid, 88 cents have been paid in indemnities.²⁰⁴ In 2016, the loss ratio was well below the 36-year cumulative number.²⁰⁵



Source: USDA, Risk Management Agency. Summary of Business, March 14, 2017.

One of the primary objectives of the Agricultural Risk Protection Act of 2000 was the strengthening of program integrity and the groundwork laid back then continues to pay off. According to the Risk Management Agency, which administers Federal Crop Insurance, the improper payment rate stood at just 2.02 percent in fiscal year 2016, roughly half the government-wide average.²⁰⁶ Despite this considerable success, efforts are ongoing, including work on improved or expanded training, monitoring, data mining, and spot checks, in order to prevent fraud, waste, or abuse.

Policy and administrative changes to Federal Crop Insurance since 2008 have also contributed to greater efficiencies. These policy changes achieved \$17 billion in total taxpayer

²⁰⁴ Ibid.

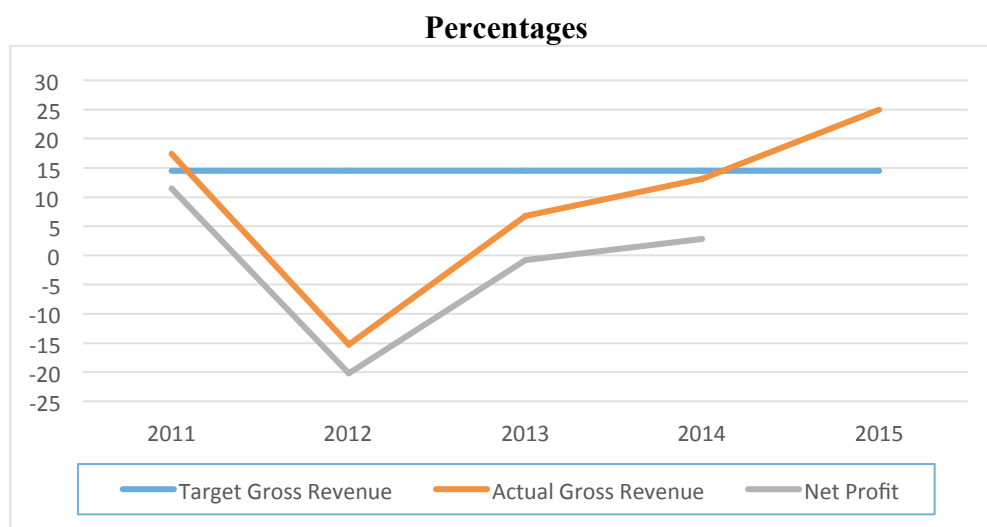
²⁰⁵ Ibid.

²⁰⁶ USDA. USDA's Fiscal Year 2016 Compliance with Improper Payment Requirements. May 2017. <https://www.usda.gov/oig/webdocs/50024-0011-11.pdf>. Web. Accessed July 12, 2017.

savings over the last 9 years.²⁰⁷ These cuts have had significant impacts, primarily on the private sector.

The graph below illustrates the margins of crop insurance companies, which over the past 6 years have been thin and even negative, explaining not only the reduced number of companies writing insurance but also significant consolidation occurring within the industry.

The Reality of Crop Insurance Company Financials



Source: National Crop Insurance Services

Administrative and operating expense reimbursements used by companies to help pay the cost of the sales and servicing of policies, including thousands of agents and loss adjustors, have also been cut by an average of about 30 percent over the past 6 years, again as a result of the 2011 contract.²⁰⁸

Crop Insurance Is an Effective Safety Net for Midsized Farmers

While the Heritage Foundation and other critics of Federal Crop Insurance suggest crop insurance benefits larger farmers at the expense of small and midsized farmers, the data do not support this conclusion. According to the Economic Research Service (ERS), “[the] combined findings for the relationship between wealth and insurance – for both non-limited-resource and limited-resource farmers – support the theory of crop insurance as an effective risk management tool for low- to middle-income farmers...[with] middle-income and limited-resource farmers...[appearing] more likely to purchase [crop insurance]” compared to high-wealth households.²⁰⁹ Adds ERS: “Risk-averse individuals care about both their income level and income variation [but] they would be willing to trade some income for less risk.”²¹⁰

²⁰⁷ See note 92, *supra*.

²⁰⁸ USDA, Risk Management Agency. A&O Expense Reimbursement Update 5/17. RY 2011 – RY 2016.

²⁰⁹ See note 164, *supra*.

²¹⁰ See note 60, *supra*.

Conclusion

In its report, the Heritage Foundation urges that, among other things, U.S. policymakers: (1) repeal the safety net provided by the Farm Bill's Commodity Title; (2) maintain livestock disaster assistance and Federal Crop Insurance for the "short-term" as a means of transitioning away from federal support, except capping crop insurance coverage at 70 percent yield coverage; (3) make total and unilateral concessions in the World Trade Organization; and (4) eliminate domestic trade laws. The Heritage Foundation's recommendations are drawn from conclusions frequently based on the selective use of data.

U.S. agriculture and related industries comprise greater than 5.5 percent of U.S. GDP while creating 21 million U.S. jobs. U.S. agriculture also runs a trade surplus and is responsible for the lowest grocery bills in the world. U.S. farm policy has been around since the beginning of the country and "...throughout the years a remarkably consistent public consensus has remained: that the problems inherent in farming warrant public support."²¹¹

In this paper's analysis of the Heritage Report, data are examined to gain a better understanding about the risks inherent in agriculture, the impact these risks have on U.S. farmers and ranchers, and the role of U.S. farm policy in mitigating these risks.

The data indicate that farmers' costs commonly outpace market returns, by as much as 70 percent of the time in the past 19 years. Moreover, the data indicate that without off-farm income, most farmers would be unable to pay off their farm debts. Due to tight and often negative margins, farmers who are nearing and even beyond retirement age must work longer hours than counterparts in other sectors, both on and off the farm, in order to service debt that farm income cannot cover. The Heritage Report reached different conclusions by only considering select data.

The data also indicate that even with a safety net, exit rates from farming are higher than in other businesses and that many U.S. farms are today in economic trouble even with the benefit of the farm safety net that the Heritage Foundation wishes to repeal. At least 50 percent of each category of farm size is currently reported as either in the high risk or medium risk stage.

Research indicates that in addition to higher exit rates, farmers and ranchers also experience significantly higher income volatility and lower rates of return than other businesses, with one analysis showing that the rate of return on agricultural assets exceeded the return on non-farm assets in only one of 32 years analyzed. Moreover, agriculture is a perfectly competitive market and, thus, farmers realize net returns that are near zero, which, when combined with variations in growing conditions, create a high-risk operating environment for farmers. Further, unlike other sectors, agriculture income volatility increases with farm size. These risks set agriculture apart.

²¹¹ See note 1, *supra*.

The data suggest that U.S. farm policy has been successful on a number of fronts: U.S. agricultural output has almost tripled since 1948, 21 million American jobs are owed to agriculture, agriculture constitutes 5.5 percent of U.S. GDP, U.S. consumers are paying lower grocery bills than anywhere else in the world, the United States runs a trade surplus in agriculture, soil erosion has been cut in half since 1985, U.S. farm policy adds up to about one quarter of 1 percent of the total federal budget, and most farms and ranches need farm policy. A safety net is often what stands between continuing to farm and bankruptcy, with many farmers and ranchers routinely one or two bad years away from insolvency.

According to one study of a legislative proposal that was more modest than the one the Heritage Report now recommends, “[Most] of the farms and ranches would not be able to survive the erosion in farm income in low price years without a safety net.” Unlike the Heritage Report’s proposal, the legislative proposal evaluated was offered during relatively good economic times in farm and ranch country.

The data further indicate that U.S. farmers and ranchers have had to compete on an uneven global playing field, with U.S. tariffs and domestic support among the lowest in the world. Yet, as the U.S. has opened its markets and cut domestic support, foreign trading partners have increased their already comparatively high tariffs, subsidies, and non-tariff trade barriers even in violation of their commitments under the World Trade Organization. Expert analysis of the Heritage Foundation’s proposal to make total and unilateral concessions in the World Trade Organization indicate the proposal would fail to the extent the goal is to bring about a free market in global agricultural trade.

Further, data indicate that U.S. farm policy as it exists today is market oriented, trade compliant, and well under budget. Planting decisions and commodity prices are determined by the market. The U.S. is spending only about one-fifth of the amount it could legally spend under WTO commitments. The Congressional Budget Office had originally projected that the 2014 Farm Bill would save taxpayers \$16 billion, not including savings from budget sequestration that would increase savings to \$23 billion. However, the Congressional Research Service now reports that the five-year savings is about \$26.660 billion, and the latest CBO projections show 10 year cost savings of \$100.8 billion. That the 2014 Farm Bill is saving taxpayers money is incontrovertible.

Latest CBO estimates project that the Commodity Title is still expected to save money relative to original estimates despite higher than expected costs of ARC and PLC due to losses stemming from a 50 percent drop in net farm income. Federal Crop Insurance is also well under budget, as is the Dairy Margin Protection Program where dairy farmers are actually paying more into the system than they are receiving. Meanwhile, U.S. sugar policy continues to operate at no cost to the taxpayer despite an inadequate agreement between the U.S. and Mexico to eliminate injury to U.S. farmers from Mexico’s illegal dumping of sugar onto the U.S. market at below Mexico’s cost of production. New, presumably more effective agreements were recently put in place and, if successful, they could maintain no cost policy into the future. U.S. wholesale and

retail customers are also paying less for sugar than counterparts in both the developed and developing world.

The legislative history of crop insurance acts approved by Congress in 1938, 1980, 1994, and 2000 indicates that lawmakers sought to increase farmer participation and expand coverage. Today, Federal Crop Insurance covers 290 million acres, or 90 percent of planted acres in the United States, and more than 130 crops nationwide, with over \$100 billion in liability protection in force. Congress passed its last ad hoc disaster program covering crop losses 10 years ago. Analysis indicates that had Congress relied on the disaster program in place for the 1988 drought to address the 2012 drought, taxpayer costs may have exceeded \$17.015 billion, much higher than crop insurance costs in that worst of all years. Analysis also indicates that farmers would not have something as basic as insurance on their crops absent Federal Crop Insurance.

The Heritage Report's crop insurance proposal would increase deductibles and reduce available coverage, reducing participation and coverage levels and jeopardizing the nearly two-fold increase in acreage insured that has been achieved since 2000. The loss of participation could, in turn, reduce the size and health of the risk pool, resulting in higher premiums for those remaining in the risk pool, setting off further declines in participation and coverage levels. Any policy change that has the effect of reducing participation or coverage levels has the potential to have this impact. The Heritage Report's proposal also hinders the ability of farmers to better market their crops through forward contracting.

Analysis indicates that farmers pay premiums year after year without receiving an indemnity, with about 19 percent of policies paying an indemnity in 2016. Since 1988, crop insurance policies have covered \$15 trillion in liability to guard against losses. During the same period of time, total premiums paid were \$136 billion and total indemnities paid to farmers came to \$116 billion. This reflects the farmers' view of crop insurance as a means of liability protection in the same way that other business owners view property and casualty lines of insurance.

Data also indicate that the Congressional Budget Office overstated the 5-year costs of Federal Crop Insurance at the time of the 2014 Farm Bill's passage by nearly \$11 billion and that between 2008 and the present, \$17 billion in budget savings have been achieved in Federal Crop Insurance, through administrative and legislative policy changes. By law, Federal Crop Insurance must be administered in an actuarially sound manner and loss ratios are down sharply, well below the 36-year cumulative number of 0.88. Improper payments are also low, standing at 2.02 percent, about half of programs government-wide. And, private sector delivery costs have been reduced sharply even as Federal Crop Insurance participation levels have doubled.

Since 1938, lawmakers have sought to maximize participation in Federal Crop Insurance. This year, crop insurance will cover 90 percent of planted U.S. acres at an estimated cost of \$3.471 billion, closely approximating the \$3.125 billion it cost 14 years ago, in 2004. The Heritage Report's recommendations would jeopardize this achievement.