Those who do not study history are doomed to repeat it. Thus, before launching into a discussion of contemporary events, I want to review three dates in history that are relevant today. They are 1934, 1954, and 1994: 85 years ago, 65 years ago, and 25 years ago.

In 1934 the U.S. Congress passed legislation that repealed the Smoot-Hawley Tariff Act of 1930. Everyone in this room knows what Smoot-Hawley did--it took a bad economic downturn that started with the stock market crash in 1929 and made it worse. Some economists go so far as to say Smoot-Hawley turned a bad recession into the Great Depression. One thousand economists urged President Hoover not to sign the Smoot-Hawley Tariff Act, but he did, and in the next four years world trade fell by two-thirds, including U.S. exports. U.S. tariffs rose from the previous average of 40% ad valorem to 60% ad valorem, and our trading partners retaliated with similar measures. There is no question that this contributed to the Great Depression.

In passing the Reciprocal Tariffs Act of 1934, the Congress did two important things. First, it repealed Smoot-Hawley, and second, it delegated to the President authority to set tariffs via reciprocal negotiations with foreign trading partners. The Department of State led these negotiations but the new law required consultations with USDA, and in fact my old employer, the Foreign Agricultural Service, or FAS, was the USDA agency that led negotiation of agricultural import tariffs. By the end of 1935 agreements had been signed and ratified with Cuba, Belgium, Haiti, and Sweden. By the end of fiscal year 1937 16 countries had concluded agreements with the United States on reduced agricultural tariffs, including Brazil, Colombia, Costa Rica and El Salvador As of 1939, 20 countries had signed on, including the United Kingdom, our largest historical export market, along with Argentina.

Now let's fast forward past World War II to 1954. In that year, the Congress acted on a couple of recommendations FAS had begun making in the previous five years, that the agency not merely engage in analysis of overseas agriculture, but also take a direct role in export market promotion of agricultural commodities. One FAS leader, Fred Rossiter, had testified to the Congress in 1950 that foreign markets for American agricultural products rested "on a very weak foundation because [in 1949] about 60 percent of those exports where paid for with [Economic Cooperation Authority] and military funds." At the same time, USDA had over three billion dollars tied up in surplus commodities and nowhere to sell them. Thus the Congress passed two pieces of legislation. One was P.L. 83-690, which returned the agricultural attaches from State Department, where they had been parked during World War II, back to the Agriculture Department. The second was P.L. 83-480, better known simply as P.L. 480, which authorized export sales for local currency. In addition, in 1954 FAS created the Foreign Market Development program, colloquially known as the "cooperator program". The National Cotton Council was the first FAS cooperator, and it was quickly joined by several other commodity groups in a first-of-its-kind public-private partnership based on cooperation, not government contracting, to promote export sales.

The intent was clear, to shift away from subsidized government sales of surplus commodities toward commercial sales. It took about thirty years, but by 1986, when I went overseas to Moscow for FAS, our export sales of grain to the USSR were wholly in private hands, at least on our side of the Atlantic. By the time I went back to Moscow for a tour of duty in 2003, all agricultural trade between Russia and the United States was in private hands, and globally U.S. government-supported sales amounted to a few tens of millions of dollars out of tens of billions of dollars of ag trade.

Now let's jump to 1994. In that year, 60 years of trade negotiations came to fruition with conclusion of the Uruguay Round and ratification of the World Trade Organization agreements, including the SPS Agreement and the Agreement on Agriculture. This was groundbreaking. In that same year, then-House Ag Committee Chairman Pat Roberts sponsored a Farm Bill he called "Freedom to Farm", which decoupled farm subsidies from current production in order to comply with the new WTO rules. Trade-distorting farm subsidies, the so-called "amber box", were capped at $19.1 billion per year, and in most years were significantly lower.  U.S. farm support appeared to be on track to rely on commercial sales, not handouts, with safety nets in place to protect producers from catastrophes.  We know why the safety net is needed: the high barrier to entry into farming due to high land and capital costs.  We don't want to see farms go out of business because of one or two bad years, hence the safety net.

After 1994, for the next two decades U.S. farm exports exploded.  In 1994, total U.S. agricultural exports amounted to $43.5 billion.  I remember those days well--in 1995, our new FAS administrator, Gus Schumacher, began exhorting us to push exports to $60 billion.  We thought he was nuts.  In 2018, U.S. ag exports hit $140 billion.  That's over three times the level of the last year before the WTO came into existence.

As farmers came to depend more and more on export sales as well as growth in domestic consumption, reliance on farm subsidies generally trended down, notwithstanding the price crashes in the early 2000s.  China emerged as our largest customer.  China has 1/5 of the world's population but only 1/10 of its arable land, so China has to import from somewhere, and we were very aggressive.  China was followed by NAFTA members Canada and Mexico, in that order.

So where are we now?  A month ago, the non-partisan Congressional Research Service projected that the U.S. aggregate measurement of support reported to the WTO in 2019 would reach $27.4 billion, up from $13.6 billion five years earlier:

| WTO classification | Actual | | | | Projected | |
|---|---|---|---|---|---|---|
| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| Product-specific (PS) AMS | 8,088 | 9,006 | 8,634 | 8,792 | 18,249 | 8,477 |
| Non-product-specific (NPS) AMS | 5,553 | 8,179 | 7,405 | 7,686 | 5,160 | 18,920 |
| **AMS (prior to exemptions)** | **13,620** | **17,185** | **16,039** | **16,478** | **22,510** | **27,397** |
| **Source:** Randy Schnepf, *U.S. Farm Support: Compliance with WTO Commitments*, October 4, 2019, R45940 | | | | | | |

In other words, between 2014 and 2019, the aggregate measurement of support would better than double. The reason is infusion of $12 billion in 2018, billed as a "one-time, temporary" measure to support farmers during the trade war, followed by the infusion this year of another $16 billion, including $14.5 billion in direct payments plus $1.4 billion in surplus commodity purchases. By the way, in 2018, soybeans got 82% of the payments, or about $7 billion. Back to the future! We are relying on government handouts, again, something we had decided to move away from 25 years ago.

How did this happen?

We picked trade wars with our best trading partner, plus a few other very good partners. I was in Mexico for FAS, promoting U.S. exports, from 2008 to 2011, and my goal was to beat Canada to take second place. I knew beating China, with its population of over a billion, would be impossible. But now it has happened, oddly enough.

China reciprocated against imposition of punitive U.S. tariffs on Chinese goods with retaliatory tariffs on 800 agricultural products accounting for 99% of U.S.

agricultural exports to that country. China fell from the top market for U.S. farm products to number three. Some Illinois commodities were hit: the tariff on soybeans went from 3% to 28%, on sorghum from 2% to 27%, on hams from 20% to 70%.

Exports to Mexico got hammered. Mexico is our number two market for pork products, and 20% ad valorem tariffs were imposed on pork. Prior to that, under NAFTA, the tariffs were zero. Pork exports to Mexico fell 14% from 2017 to 2018, and another 11% so far this year compared to 2018. Contrary to what some might think, speaking as someone who was in the trade policy trenches for over 30 years, trade wars are not easy to win.

But trade volumes are not the only story. I was taught in one of the classes here at the U of I that prices embody all known information about a market. Pat Westhoff at the Food and Agriculture Policy Research Institute studied the impact of the trade war on prices with a very limited model. He studied the impact on agricultural prices of China's retaliatory tariff on soybeans. He did not include in his study the impact of the other 799 tariffs China imposed on U.S. ag exports or of trade wars with other countries. He found that this single retaliatory tariff alone caused a drop of soybean prices of 8.7%, for soybean meal of 6.2%, for soybean oil of 0.8%, and for hogs of 1.1%. The financial impact of this one retaliatory tariff, just on soybeans, was $4 billion. That $4 billion, by coincidence, almost equals the $4.4 billion the Farm Bureau estimates we lost by not joining the Trans-Pacific Partnership.  The losses just keep growing.

USDA's own analysis, conducted in order to calculate 2019 subsidy levels by commodity, showed a 14-cent-per-bushel impact for corn, $1.69 per bushel for sorghum, $2.05 for soybeans, 41 cents for wheat, and $11 per head for hogs.  I should mention that the National Association of Wheat Growers disputes the 41-cent-per-bushel figure for wheat; the Wheat Growers peg it at 75 cents.

The Congressional Research Service estimated the impact of China's retaliatory tariffs in dollar terms.  Quote: "U.S. agricultural and food exports to China in FY2018 amounted to $16.3 billion, a decline of about 25% from FY2017...It is unclear when, or even whether, U.S. agricultural and food products would regain their market share if China were to remove its retaliatory tariffs...After China hiked its tariffs on U.S. soybeans in early July 2018, U.S. exports to China essentially halted."  As for the price impact, the American Soybean Association estimated soybean prices fell 20% in 2018 due to reduced buying from China.  Soybean exports to other countries rose, but not enough to make up the difference.

Why did we start a trade war in the first place?  To rescue the U.S. steel industry by imposing protectionist tariffs on imported steel.  What has been the outcome? Since the tariffs were imposed, steel prices have fallen by about half, from $800 to $400 per ton, due to the slowdown in both U.S. and global growth.  And U.S. steel mills have begun to close. Last month Bayou Steel Group in Louisiana filed for Chapter 11 bankruptcy. It depended on imported scrap to smelt steel, and the higher tariffs killed it. Bayou Steel is closing its plants in Louisiana and Tennessee. In September, AK Steel reaffirmed that by the end of this year it will close the Ashland Works plant in Kentucky for good. Last June, U.S. Steel shut down a blast furnace near Detroit as well as one in Gary, Indiana.

If you look at projections of the Bureau of Labor Statistics, iron and steel industry employment is forecast to fall from just under 83 thousand workers last year to 70 thousand by 2028. Higher steel tariffs will not save those lost jobs.

But this is all tactical thinking. What are the strategic consequences of undermining the WTO, trade liberalization, and six decades of work between 1934 and 1994 to assure that Senator Reed Smoot and Representative Willis Hawley would never come back to haunt us?

First, by undermining the WTO, we undermine the Dispute Settlement Body and its mechanisms for leveling the playing field. The United States has not sought anything more than a level playing field via enforceable rules--if you play square, we will play square. By undermining the WTO, we risk a return to a previous era of undisciplined subsidies, unfair competition, and greater market uncertainty.

Second, by picking unwarranted fights with our best customers and imposing punitive, ineffective tariffs, we both drive them into the arms of our competitors and reduce market efficiency, and therefore both profits and income. Are we really prepared to lose the gains from trade liberalization? The Peterson Institute has calculated that U.S. GDP per household was $18,131 higher in 2016 due to policy liberalization and improved trade infrastructure. That's roughly one-third of median household GDP. In 2015, international trade accounted for 58% of the world's gross output, making it not only the largest component of global output, but making it larger than all other sectors put together. Just how badly do we want to lose one-third of American prosperity?

Third, we are jacking up subsidies in a period of record budget deficits. In FY2019 we hit a record budget deficit of $984 billion, just short of a trillion dollars.

Perhaps I am biased because I spent 32 years in USDA's Foreign Agricultural Service promoting farm exports on a shoestring budget, but I believe firmly it is better to make money by selling products to people who want to buy them than to tax American citizens or borrow from China to fund a nearly trillion-dollar deficit partially in support of higher farm subsidies.

Let me now shift gears to discuss policy more broadly.

One of the hallmarks of trade liberalization has been reliance on sound science, both hard science and social science. Hard science is embodied in the WTO Agreement on Sanitary and Phytosanitary Measures, which involves biology, botany, entomology, veterinary and human medicine, plant pathology, risk analysis, and epidemiology. Social science is embodied in the Agreement on Agriculture, for it addresses economic, political, and financial aspects of agricultural trade.

In the course of 32 years as a USDA employee, I never before witnessed an Administration's turning its back on sound science they way this one has. Now, not all previous Administrations were angels. Ask the Mexicans how long it took to gain access to the U.S. market for Mexican avocadoes. That was a long fight simply because California avocado growers had enough political muscle to keep the competition at bay--and that battle was bipartisan on the U.S. side. The Obama Administration was scarcely pristine. I had to deal, while serving in Mexico City, with Mexico's retaliatory tariffs when the United States refused to abide by an agreement allowing Mexican trucks on U.S. highways. The total number of trucks involved was 13, but we banned them in violation of a NAFTA dispute judgment that was already on the books. And then there was the Obama Administration's county-of-origin labeling, or COOL, one of our biggest trade policy blunders. We lost that case in dispute settlement and lost again on appeal, and frankly the outcome of that dispute was never in doubt. We knew we were wrong, and were violating our own principles of sound science. COOL was 100% pure folly.

But the anti-science leanings of this Administration simply boggle the mind. Look at FDA, which is being hammered. Look at the assault on the National Weather

Service, which was overruled in a hurricane forecast by non-experts for purely political reasons.

The Interior Department moved a climate scientist to an accounting job for writing about the impact of climate change on Alaska's indigenous communities.  EPA and Interior have removed links from their websites to climate change data.  USDA's inspector general is investigating suppression of climate change research.

Employees of USDA, State Department, and the National Park Service have been pressured into resigning due to suppression of their climate change research.  For anyone who doubts the climate change is underway, I recommend you read *Implications of Climate Change for the U.S. Army* by the United States Army War College, published last May.  The U.S. military establishment is taking it quite seriously, even if the current Administration does not.

No prior Administration has gutted Federal agencies for speaking the truth.  This Administration has deliberately gutted the Economic Research Service and the National Institute for Food and Agriculture.  NIFA administers $1.7 billion in grants to support agricultural scientific research.  Almost two-thirds of NIFA's staff appear to have declined to make the move to Kansas City--according to one press report, "73 accepted and 151 declined or did not respond."  How will NIFA operate minus two-thirds of its staff, and how long will it need to recuperate the same level of expertise and competence in evaluating grant proposals?

Then there is the Economic Research Service. ERS is a highly respected economic analysis group that generates non-partisan, well researched studies of American and foreign agriculture. On three months' notice, the employees were informed that they had a choice of moving to Kansas City from Washington, D.C., or quitting. Last August Acting White House Chief of Staff Mick Mulvaney called this forced move "an example of the administration circumventing roadblocks to firing Federal employees and 'draining the swamp'...What a wonderful way to kind of streamline government and do what we haven't been able to do for a long time." What did ERS do to deserve this? Its researchers spoke truth to power. They wrote an analysis of the impact of this Administration's trade policies on American farmers. It was not a message the White House wanted to hear, hence the reprisal. Initially, the White House sought to cut the ERS budget by almost half, from $86 million to $45 million in FY2019, but when the Congress restored funding, the Administration saw a forced move to Kansas City as a way to circumvent the Congress.

Why should you care about the fact that ERS has lost 80 percent of its staff and will have to rebuild almost from scratch? Reports are stalled, including reports on the impact of trade policy on American agriculture and farm income, the impact of food stamps, consolidation of dairy farming, drivers of the opioid epidemic, and obesity. These and other reports are used by policy makers, farmers, agribusiness people, and policy advocates to formulate decisions based on the best information and best analysis available. They will now lack much of the unbiased, science-based analysis upon which they have relied since Calvin Coolidge's Agriculture Secretary, Henry Cantwell Wallace, and Professor Henry Charles Taylor created the Bureau of Agricultural Economics in 1922. An agency that has served American agriculture for nearly a century, and served it well, and which by the way was created by a Republican Administration, has been, in the words of one anonymous ERS employee, effectively dismantled in three months, and in that person's words, "is...illustrative of the Administration's intentions to remove or neuter evidence-based research."

After what has happened to ERS and NIFA, I have to ask who's next, and what's next. There was a time in history before scientific method took hold, when governments set policy minus the analytical tools we created following the Renaissance and throughout the Age of Reason. Are we returning to an epoch before the Age of Reason, witnessing as we are the punishment of apolitical, non-partisan civil servants whose only sin is to tell the truth? I can only hope that this dawning Age of Anti-Science and Anti-Reason is both temporary and brief, and that there will be a reckoning at the ballot box when the costs of ignoring and gutting science become more obvious.

In closing I'd like to make a slightly more personal observation, based on 37 years, 10 months, and two weeks of public service, including 24 years representing my nation abroad as a commissioned officer of the United States Foreign Service, 4-1/2 years of them as an ambassador. I have lived in dictatorships that revolved around the whims of a national leader who promoted a cult of personality and made decisions based on his personal interests rather than on those of the nation he governed. I spent roughly 8 years of my life in the communist Soviet Union and Putin's Russia, and 4-1/2 years in Turkmenistan. I've witnessed with my own eyes and ears the stark difference in levels of civil liberties, overall freedom, and standard of living between such authoritarian regimes and democratic governments that, as an Illinoisan named Abraham Lincoln once said, exist "of the people, by the people, and for the people." And I have seen just how fragile democracy is, when it is taken for granted, when people in power subvert it for personal gain, when corruption is tolerated, when freedom of the press is curtailed or threatened, when disinformation becomes the norm, when the non-partisan civil bureaucracy is induced to respond not to rule of law but to the Administration's desire for regime survival. I will not stand silently to the side while our democracy is being threatened, and neither should you.

Thank you.