



Cordell Hull Institute

Trade Policy Analyses

Vol. 8, No. 6

March 2006



On March 31, 2006, as the Doha Round negotiations continued to struggle over modalities for negotiations on agriculture, and preparations for the next U.S. Farm Bill were beginning in Washington, DC, the Cordell Hull Institute held a Trade Policy Roundtable meeting on the Reform of U.S. Farm Policy and the WTO System.

The meeting was held in the Washington office of Hogan & Hartson, attorneys-at-law, located in the I.M. Pei designed Columbia Square Building (pictured here).



Reproduced here is the paper **Russell L. Lamb** (above) presented.

About the Author

Russell L. Lamb, until recently Managing Associate for Economic

2007 U.S. FARM BILL...

Reform of U.S. Farm Policy in an Integrating World Economy

Russell L. Lamb

THE Doha Round of multilateral trade negotiations has put agriculture front and center in international trade. The insistence of developing countries for unfettered access to the wealthy food consumers in the U.S. and Europe, not to mention other developed nations, has run up against entrenched farm lobbies seeking to protect the preferential access to domestic consumers they currently enjoy. The role for agriculture in guiding the future of the international trading system have never been greater, and U.S. farmers appear to have little interest in giving up either domestic subsidies or domestic market protections. The U.S. farm economy has undergone profound changes in market organization, with consolidation shifting a greater share of agricultural production to larger and lower-cost producers. Along with consolidation, new forms of ownership and control have linked the farm more closely to the family dinner table. There is a New Farm Economy in the twenty-first century fundamentally different from its predecessors.

Introduction

While agricultural production and markets have changed, U.S. farm policy has not kept pace. Designed in an era of small family farms scattered across a remote rural America, where most farmers struggled to earn a livelihood that placed them in the lower end of American households in terms of income and wealth, farm policy doesn't reflect the vibrant farm economy. Farm policy impedes the market forces driving innovation and efficiency and places the interest of agricultural producers in direct opposition to the broader interest of American consumers in achieving freer trade and global integration. As the push for greater global integration intensifies, there is more reason to get government out of the farm marketplace.

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In 1997-99, Dr Lamb was a Senior Economist at the Federal Reserve Bank of Kansas City; and in 1994-96 he was an Economist at the Federal Reserve Board.

Dr Lamb has produced numerous articles and papers on U.S. economic policy, the economic outlook and commodity markets for energy and agriculture.

About the Meeting

The meeting was chaired by **Clayton Yeutter**, a former U.S. Secretary of Agriculture, who was earlier U.S. Trade Representative.

Besides Dr Lamb, other speakers were **Mark Drabenstott**, a vice president, and director of the Center for the Study of Rural America, at the Federal Reserve Bank of Kansas City, and **Will Martin**, lead economist (trade policy) at the World Bank, Washington.

Daniel T. Griswold, the director of the Center for Trade Policy Studies at the Cato Institute, also spoke at the meeting. Discussion was initiated by **James Grueff**, a former USDA negotiator and now a partner at consultants Decision Leaders Inc., as well as **Emily Byers**, of the Bread for the World Institute, **Claude Barfield**, of the American Enterprise Institute, and **Kimberly Ann Elliot**, of the Institute for International Economics and the Center for Global Development.

To give these market forces free reign, farm policy must help the least efficient farmers exit agriculture. Many suburban and urban Americans, even those who are generations removed from farming, identify with rural America and believe farmers deserve some form of government assistance. Government interference in farm markets will continue unless the general public and a wide range of current farmers support reform. A transition policy to a new market-forces era in U.S. agriculture is needed.

In this paper, I first discuss the changes that are bringing about the New Farm Economy. I then discuss why farm policy is outdated and how a policy that frees market forces to guide agriculture would be beneficial to both producers and consumers. Finally, I outline a policy that deals with the excess number of farmers and moves toward a market-forces policy.

Rethinking farm policy in a New Farm Economy

In his *Notes on the State of Virginia*, Thomas Jefferson described his vision of Virginia at the founding of the Republic. Jefferson, well-known for his love of the agrarian life, noted that, "Those who labor in the Earth are the Chosen People of God, if ever He had a chosen people, whose breasts he has made his peculiar deposit for substantial and genuine virtue."¹ This idealized vision of the virtues of American agrarianism has done much to shape the popular view of agricultural production. When U.S. farm policy was crafted, the romantic view of agriculture espoused by Jefferson, and in particular its focus on the yeoman farmer, was not entirely at odds with much of rural America. Jefferson would surely not recognize agricultural production today. There is a New Farm Economy at work in America, bringing a fundamentally different structure to the production and marketing of agricultural products.

What is the New Farm Economy? The forces transforming agricultural production in the U.S. can be broadly categorized into two groups. First, *consolidation* is creating larger, more efficient farm producers, which is dramatically lowering the real cost of producing farm products. Secondly, farm producers and the food companies who process farm output are being linked ever more closely together into a *supply chain* for food products. The result of the supply chain structure – which is reinforced and enhanced by consolidation – is a more efficient coordination of farm production than ever before. Consolidation and integration of the food supply chain are changing the face of U.S. agriculture.

Consolidation, a constant in agriculture for centuries, is creating larger, more efficient farm producers in almost all segments of the farm economy. While there were almost three million farms in 1970, by 2002 the number had dropped by one-third, to just over two million (Figure 1).² And the wave of consolidation within agriculture is widespread. In the hog

Ralph Grossi, president of the American Farmland Trust, also based in Washington, commented as well on the next U.S. Farm Bill.

Trade Policy Roundtable

The Institute's Trade Policy Roundtable is sponsored by seven international law firms in Washington: Akin Gump Strauss Hauer & Feld, Arnold & Porter, Hogan & Hartson, O'Melveny & Myers, Sidley Austin, Steptoe & Johnson and Wilmer Cutler Pickering Hale & Dorr.

industry, for example, the number of farms with hogs has declined by over 90 percent since 1970, a period in which pork production expanded dramatically (Figure 2).³ The share of the cattle inventory accounted for by small or medium-sized cattle producers has dropped substantially since 1988 (Figure 3). Likewise, the share of production accounted for by smaller cattle feedlots (those with capacity less than 16,000 head) has dropped from roughly 57 percent to about 43 percent (figure 4).⁴ Similar trends hold in the meatpacking industry, where the four largest packers dominate production, accounting for roughly 80 percent of the total industry slaughter.⁵

Consolidation in agricultural production is primarily driven by the huge cost advantage enjoyed by larger production units, what economists refer to as "economies of scale in production." Economies of scale are a key feature of many sectors of the American economy, from retailing (WalMart, Target) to manufacturing (giants such as Dell or IBM in the new economy and Ford or Chrysler in the old economy). Likewise, economies of scale abound in most sectors of agriculture. For example, the largest hog producers, those with more than 1,200 breeding animals, have per unit costs of production roughly one-third less than smaller producers (Figure 5).⁶ In cattle production, the largest herds (with more than 1,000 animals) have production costs that are 30 percent lower than the smallest herds (Figure 6).

Consolidation represents only part of the story in the New Farm Economy. While these efficient, low-cost producers are capturing a greater share of the market for farm production, the marketing of farm products is changing dramatically, driven by the emerging dominance of *supply chains* for food products. A supply chain develops when a producer, called the *integrator*, gains control of the production process for each intermediate input to the final food product. Usually, but not always, the integrator is a food company (for example, Tyson or Smithfield Hams). The creation of supply chains is most straight-forward when it is achieved by vertical integration, in which a single company owns each link of the supply chain. A somewhat different strategy for developing a supply chain is through contracting, in which a company controls production processes through the use of supplier contracts.

The power of supply chains lies in achieving cost reductions through more efficient production organization while producing consumer-driven food products. Supply chains allow a much higher degree of communication across different links in the production and marketing process, allowing better use of information about consumer preferences.

A simple example from the poultry industry shows the ability of supply chains to dramatically transform the poultry industry. U.S. consumers prefer chicken breast meat for its low fat content, but

dislike the relative dryness of the meat, preferring a seasoning that adds moisture and flavor. Poultry firms have developed pre-cut, pre-seasoned chicken strips and marinated chicken breasts pre-seasoned with Asian, Southwest or other exotic spices. The integrator (Tysons, Perdue, etc.) usually contracts broiler production to farmers, supplying both chicks and feed. The integrator develops their own genetics to maximize breast size in chickens (surely beyond the ability of small family producers), and an optimal diet controls both fat content and cost. The packaging is designed to maximize eye appeal in the meat case. The end result is a finely developed consumer product, and tight control over the process helps to keep costs low.

While supply chains have dominated some segments of agriculture for years, they are now sweeping across much the rest of agriculture as well (Figure 7). In poultry production, the supply chain structure has dominated at least since the 1960s, and vegetable production for freezing or canning has occurred largely under contract for years as well. Now pork production, and to a smaller degree crop production, are also adopting the supply chain structure. By January 2001, over 60 percent of hogs slaughtered were sold under some form of vertical integration (Figure 8). In the beef industry, a substantial share of the cattle being fed for slaughter is already committed to a certain meatpacker. Grain producers are now growing varieties with unique characteristics (like blue corn for tortilla chips) under contract with food companies.

What explains the development of supply chains? Supply chains are mutually beneficial for farm producers and downstream food companies. By exercising greater control over inputs and production processes, food companies can better control costs by controlling the characteristics of farm products. Consumer tastes in food products are reflected in farm products more quickly and efficiently. To the extent that higher prices for food products are passed down the supply chain, then farmers gain from the higher returns these new products create. In fact, consolidation itself may encourage development of supply chains. As shown in Figure 9, the use of contracting or vertical integration increases dramatically with the size of the operation. The economics of managing a vertical relationship dictate such a structure. It is simply easier to manage 100 contracts to produce 10,000 hogs than to manage 10,000 contracts to produce 1000 hogs.

Constant change was the norm in agriculture in the 19th and 20th centuries. Previous innovations changed the nature of agricultural production dramatically, especially through the use of new production technologies. The internal combustion engine resulted in huge increases in farm labor productivity in the early 20th century. Advancing from teams of horses to hundreds of "horsepower," the ability to plant, plow, harvest, and move farm products rose dramatically, resulting in larger farms with greater

output and higher incomes. The rise of genetic modification through hybridization in the mid-20th century led to vastly improved yields for most farm crops, lower costs per bushel of output and higher incomes.

The changes sweeping agriculture today, though, are fundamentally different than those of the past. As dramatic as these previous changes in agriculture were, they have had little effect on the fundamental organization of *markets* for farm outputs. Farmers across the Corn Belt continued to grow yellow corn with larger and larger tractors after hybrids replaced traditional varieties; and that corn was sold in much the same way at the end of the 20th century as at the beginning. Most importantly, transactions took place “on the spot,” that is with no advance coordination, and spot markets for commodities dominated farm marketing in the 20th century.

There is now a fundamentally different marketing channel for farm products, and spot commodity markets have largely disappeared for some farm products, such as poultry and quite nearly for hogs as well. It is not unreasonable to think that spot markets could disappear entirely for most farm outputs, as they have for intermediate inputs in many parts of the non-farm economy.

Most, if not all, participants in the food supply chain can benefit from the changes being wrought by the New Farm Economy. Food companies are able to meet the challenge of supplying an ever more demanding U.S. consumer. There is less uncertainty about prices for farm output and the marketing channel is assured, benefiting farmers. Consumers benefit from a richer variety of safer foods produced at lower cost.

Rethinking the foundations of U.S. farm policy

Given the stakes for world agriculture in a free and open trading system, there is more urgency than ever in removing barriers to the free flow of farm goods. U.S. farm policy now represents a clear hurdle to opening world markets to U.S. goods. U.S. farm policy was crafted in the midst of the Great Depression, when U.S. agriculture was dramatically different than it is today. As many U.S. farmers reeled from the double-whammy of the dust bowl and a sharp drop in demand, a large swath of the American heartland needed rescuing, and given the experimental mood of the 1930s, farm policy started with bold changes to the rural landscape. Significantly, U.S. farm policy rests on two critical assumptions about the farm economy drawn from that era. First, farm policy assumes that farm producers and rural America need income subsidies to raise living standards to levels comparable with the rest of the economy. Secondly, farm policy assumes that farm output and income are inherently volatile and unstable, and that government intervention in farm markets is necessary to stabilize farm output, prices and incomes.⁷ Today’s farm economy would

be unrecognizable to the policymakers of the 1930s. The policies they designed no longer fit America's farm economy because the problems they were designed to solve no longer exist.

Farm policy rests on a belief that farmers need subsidies in some form to enjoy the same standard of living as other Americans. Income support is a key ingredient in farm policy that has been present in every piece of farm legislation from the beginning. Initially, the government purchased excess supplies of farm products to boost prices, without direct payments to farmers. Eventually this approach proved unwieldy as farm production expanded in response to higher prices for farm products and inventories of farm products swelled in response to the government's role. In fact, farm inventories themselves proved to have a depressing effect on farm commodity prices by the 1980s. The "Payment-in-Kind" or PIK program in the 1980s illustrates well the irrationality of farm subsidies at the time. PIK sought to ease the burden of carrying government stockpiles by paying farmers "in kind" with their own products in exchange for not growing most of their crop. Eventually direct payments to farmers based on historical production was used to boost farm (and more generally rural) incomes.⁸

The "Freedom to Farm" legislation passed in 1996 attempted to "wean" farmers from dependence on subsidies. It featured direct payments to farmers with payments set to reflect historical production patterns rather than actual output, thus eliminating most payments tied directly to current production. When commodity prices fell in the late 1990s (as discussed further below), Congress responded with supplemental "emergency" aid that boosted subsidies to new highs. By 2002 policymakers were weary of repeated farm "emergencies" and changed course on farm policy again, reverting to subsidies tied to target prices for crops, the same policy that dominated farm policy before the 1996 legislation.

With the changes in the farm economy, the landscape looks vastly different today. While farm incomes lagged those in the rest of the economy in the 1930s, the data now tell a different story. The average farm operator household earned about \$65,800 in 2002, or roughly \$8,000 more than the average non-farm household. Farm households are on average wealthier than non-farm households as well. In 2002, the average net worth of farm operators was roughly 65 percent greater than that of the average U.S. household.⁹ Subsidies are no longer needed to raise farm incomes or living standards.

A second assumption underlying U.S. farm policy has been that government needs to manage the supply of farm commodities to deal with "instability" in agriculture. Government intervention was a way to keep farm prices "stable" and farmers out of bankruptcy. Historically, farm prices and farm income proved volatile primarily

for two reasons. Sharp, unpredictable movements in supply and demand for farm products pushed prices up and down dramatically. In the First and Second World Wars, U.S. farm production rose to offset falling production in Europe, boosting farm prices and incomes. After both wars, European farm output recovered, supplies soared and prices fell, resulting in the farm collapse of the 1920s and the farm slump of the early 1950s.¹⁰ Weather-induced supply shortfalls like the late 1980s drought and the 1995 flood often resulted in declines in crop production as well. These "shocks" in demand and supply for farm products were largely beyond farmers' control. Many believed that government intervention could prevent sharp swings in farm output, prices, and income.¹¹

In addition to demand and supply shocks, advances in farm productivity have periodically led to excess supply, plunging commodity prices, and to farm bankruptcies. Farm output rose sharply and prices fell dramatically with the spread of mechanization in the 1930s. Advances in hybridization in the 1960s helped push yields on many crops up sharply in a short period of time. Some argued that because fixed costs were so large in agriculture, farm production was unable to respond to price declines quickly enough to avoid recurring farm crises. Government intervention was supposed to lend stability to farm markets by managing supply, cutting production when stockpiles (which the government initially held itself) were high and allowing production to rise as stocks fell.

Government programs have performed poorly at dealing with instability in agriculture. Supply management requires government policymakers to forecast demand and supply far in advance, a task that has proven nearly impossible. Farm subsidies have compounded the problem of overproduction arising from increases in farm productivity, resulting in more volatility rather than less. Finally, the 1996 farm policy reform may have added to the uncertainty by inviting special legislative initiatives each year, ultimately leading to a dramatic course-shift in farm policy.

Sudden shifts in demand and supply for farm products are an important source of instability in agriculture and form the justification for many supply-management policies. But government programs aimed at supply management required estimates of demand and supply six months or more in advance, because farm production takes place over a long period of time. The government has had little success at forecasting droughts and floods or unexpected movements in demand. In the late 1980s, the United States Department of Agriculture encouraged farmers to idle a large portion of their crop acres after several years or large crops, burgeoning inventories, and low prices. But drought in 1987-1988 resulted in falling supplies of farm commodities and weakness in the farm economy. Sudden shifts in demand proved difficult to forecast. At a time when farm prices were already high,

the 1996 legislation pumped billions of additional dollars into the farm economy. When foreign demand for U.S. farm products fell, in part as a result of the Asian economic crisis and its spread to Latin America, excess supplies of U.S. crops followed, but farmers kept right on producing at high levels.

In order for government supply management programs to work, the government must have an advantage over private markets in coordinating the activity of farm producers. But since government forecasters have no more information than private market participants (and may well have less), their inability to accurately predict shifts in demand and supply should not be surprising.

Government programs to manage supply have also been justified by consistent increases in farm productivity that lead to periods of overproduction and excess supply. Farm policy proponents (including producers themselves) argue that supply management can reduce farm output and help prevent excess supply. But supply-management efforts have been offset by farm subsidies that boosted farm output. Like any price support, government price supports for farm products had to be set artificially high to have the desired effect. In the case of agriculture, price floors were set at levels above the cost of production, guaranteeing farmers profits and leading to overproduction.

The 1996 farm program reforms were supposed to get rid of supply management and to be non-distortionary. In fact, proponents of the bill pointed out that they would meet WTO requirements for "green box" payments. The policy changes proved short-lived and ironically may have resulted in even more subsidization, when "emergency" appropriations are taken into account. The 2002 farm bill represents an unambiguous "about-face" on the part of policymakers, in essence repudiating the underlying assumption of the 1996 legislation that subsidies should go.

In fact, it is unlikely that any farm policy could be crafted that would truly satisfy the requirements of non-distortionary subsidies. Fundamentally, any subsidy is likely to confuse market signals. Even subsidies not tied to farm output or farm prices offset losses resulting from market transactions. These economic losses are really a signal that output is too high. With too many producers remaining in farming just to claim government payments, overproduction was bound to follow. In fact, low farm prices in 1999 and 2000 likely reflect the overproduction brought about by government payments.

Farm policy is now unnecessary to raise farm incomes and ineffective at stabilizing farm output. Subsidies that reflect historical production patterns and yields of farm commodities -- or worse yet, reward overproduction -- are firmly rooted in outdated views of the old farm economy. By focusing on commodities

rather than food products, policy ignores the structure of the New Farm Economy. By keeping too many producers in agricultural production, subsidies lead to excess supplies, low prices, instability and future farm crises. Moreover, farm subsidies are now an impediment to globalization, and prevent farmers in the U.S. from tapping in to more vibrant global demand, boosted by stronger economic growth across the globe.

What policy should guide the New Farm Economy?

In light of the dramatic changes in U.S. agriculture and the important benefits that could come from a more open, dynamic global food system, it's time for serious reform of U.S. farm policy. We should end farm subsidies and supply management, accommodate the dramatic market forces at work in agriculture, and open up the opportunities for U.S. farm producers. The benefits from such a *market-forces policy* for agriculture include greater innovation and efficiency in food production, cheaper food products, safer and healthier foods and higher, more stable farm incomes.

Markets have already proven their ability to lower costs and increase consumer choice in dozens of other markets where they are at work. From airline travel to telecommunications, those sectors of the economy that have moved from regulation to open markets have shown dramatic increases in consumer choice, rising efficiencies and declines in cost and price. The effect of greater competition in air travel, telecommunications and, in fact, any market where it has been tried is increasing efficiency. Consumers have benefited from loosening the beneficial forces of the market place in sector after sector of the U.S. economy.¹²

The ability of market forces to lead to lower cost and greater choice can transform the food system and agricultural production as well. As markets dominate agriculture without the interference of government subsidies, the food supply chain will be transformed into a tightly knit web of interlocking relationships, with farm producers at the center. Competition for the consumer food dollar will lead to innovation, efficiency, greater customer sovereignty and, arguably, even more global trade in agricultural products. Only those companies that deliver the foods consumers most prefer at lowest cost will survive.

Those segments of agriculture that have already been transformed by market forces have shown the greatest efficiency, innovation, growth and evolution toward a greater integration. The poultry industry has been highly successful in creating new consumer products to meet consumers' changing preferences and has been rewarded by capturing a much larger share of the U.S. food dollar. In 1970, only about 15 percent of total meat and poultry sold in the U.S. was chicken; by 2004, that share had risen to 33

percent.¹³ Ultimately, innovation in *food products* may translate to a new set of *farm products* as well, because the supply chain links the farm to the table and changes in consumer preferences will guide changes in farm output. For example, demand for leaner pork has already led breeders to produce a leaner hog for market.

As supply chains develop, they will be closely linked to greater adoption of biotechnology as well. Farm products may change dramatically as lower fat content, improved vitamin and nutrient content; even effectiveness at cancer- or disease-prevention may become embodied in farm products. Improved feed grains, oilseeds and wheat varieties may offer tremendous improvements in food quality. Supply chains have the ability to connect grain production with animal production more closely and lead to even more improvements, like feed grains that yield enhanced meat products with lower fat and higher protein levels. Nutraceutical food products have the ability to cure or prevent disease. Rice varieties enriched with high levels of vitamin A, for example, show promise of becoming a radical new tool for dealing with malnourishment in developing countries.¹⁴

In addition to an improved array of food and farm outputs, market forces will result in ever more efficient farm producers and lower food costs that ultimately benefit consumers. Markets are constantly driving producers to become more efficient in order to lower costs and increase profits. The U.S. auto industry has been forced to lower costs (and improve quality) because of competition from abroad. Retailers are constantly pushed to lower costs by competitive pressures from more efficient rivals. Markets reward efficient producers and weed out the inefficient producers. As this process plays out in farm and food markets, average costs will fall, lowering costs to consumers and potentially raising farm profits. In fact, cost savings are already a driving force behind consolidation in agriculture.

Lower costs ultimately benefit consumers through lower food costs, freeing up income for other purposes and allowing consumers to improve the quality of their diet. The benefits fall disproportionately on lower-income households who spend a higher percentage of their income on food. Producers benefit because they are able to capture some of the cost reduction as higher profits. Ultimately the effect of a more efficient farm sector will benefit U.S. agriculture as it becomes more competitive in the world marketplace.

There is even reason to think that the food supply will become safer as the farm economy evolves, since supply chains have greater incentives to enhance food safety. Just as Ford or GM pour billions of dollars into enhancing the value of the brand names for their automobiles, food supply chains will seek to enhance their brand recognition. The creation of branded food products leads to greater incentives for ensuring food safety, since

consumers would punish any brand identified with a food-safety problem. The experience of one major food company subject to a food recall due to listeria is illustrative. The company lost over 80 percent of its market value within two and a half hours of the announcement of the recall.

In addition to added incentives, food companies will have greater ability to control food safety in the New Farm Economy. Since supply chains can control each link in the production process, they will be better able to monitor food safety. The returns to research and development in food safety increase with a company's size and market share. Over time this will lead to safer methods for food processing.

Market forces may result in a less risky farm environment as well. Consumer food prices are far more stable than farm commodity prices. As the supply chain becomes more fully developed and spot markets become less prevalent, prices for farm products will likely become more stable. Food companies will plan production needs and translate these back to farm production, leading to greater stability in farm output. In a supply chain structure the downstream food company has a strong interest in ensuring the viability of farm producers. As spot markets disappear, food companies will depend critically on their input suppliers (farmers). While many farm producers may fear "dependence" on downstream processors in the New Farm Economy, food companies will in fact be dependent on farmers as well.

There is potential also for the world economy to benefit from the evolving structure of farm markets. Most importantly, with global trade a more stable, cheaper supply of food products can be available from a broader range of sources to meet rising demand for food in the U.S. and the rest of the world as well. Global suppliers, many in developing countries but potentially in other parts of the developed world, can benefit from a more tightly integrated food system. The potential to exploit the natural advantages of north-south trade in food products, dictated by climate and season, is tremendous. Even without the advantage of seasonal differences, the generally lower labor costs in the South suggest the potential for these producers to tap into U.S. markets.

Likewise, U.S. producers can benefit from a freer trading system. For decades, U.S. agriculture has been dependant on export markets to absorb the excess supply that flows from America's heartland. While some of the increased supply reflects over-stimulation of production by inefficient government subsidies, it is undoubtedly true that U.S. farmers produce more food than U.S. consumers can eat in a given year. In order for world markets to absorb all that the U.S. can produce, global consumers must be able to purchase U.S. products. Economists know that food demand in low-income developing countries exhibit an incredibly

strong response to increases in income, suggesting that a one percent increase in income may yield as much as a one-percent rise in food consumption, or more. So boosting incomes in developing countries plays an important role in providing markets for U.S. farmers. But for global producers to benefit from the evolving food system there must be freedom for food to travel the globe to satisfy demand wherever it arises. The evolving food system reinforces the benefits of free trade.

Ending the era of government subsidies and supply management in agriculture requires changing over 70 years of thinking in agriculture. But the benefits are tremendous: Increased efficiency and lower costs, greater variety and choice and improved food safety for consumers. Farm producers themselves, at least the efficient ones, are likely to thrive. In addition to the direct benefits of farm policy reform, the value of ending farm subsidies for global trade can not be ignored. By ending farm subsidies we can open more global markets to U.S. farm producers. Just as importantly, increasing global integration has been shown to lead to higher income growth and greater global demand, increasing the market for U.S. farm products.

Conclusion

The farm marketplace is moving rapidly toward a new structure dominated by more efficient producers with transactions coordinated by an intricate web of supply chains. But farm policy is stuck in the middle of the last century. Reforming U.S. farm policy is critical to move towards a farm economy driven by market forces and embracing a global production system. There are benefits to consumers from the evolving structure of the farm economy. The best way to harness the benefits of the New Farm Economy is to let market forces guide its evolution.

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The **mockingbird** is the state bird of Tennessee. Cordell Hull represented a district of Tennessee in the Congress of the United States, and was elected a senator from there, before becoming U.S. Secretary of State (1933-44).

Trade Policy Analyses

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¹ Thomas Jefferson, *Notes on the State of Virginia*, at page...

² U.S. Department of Agriculture, February 2000a

³ For a fuller discussion of the changing structure of hog production, see Drabenstott (1998)

⁴ For an extensive discussion of the structure of the cattle industry, see Lamb and Beshear.

⁵ For a discussion of consolidation in the meatpacking industry, see....

⁶ For a discussion, see Drabenstott at p. 89.

⁷ For excellent discussions of the historical assumption behind U.S. farm policy, see Gardner; and Bonnen and Schwiekhart.

⁸ Payments were based on acres enrolled with the USDA in farm programs (“program acreage”) and corresponding historical yields on those acres (“program yields”). While this system requires substantial record keeping, it is less likely to lead to excess supplies of farm crops.

⁹ Available online at <http://www.ers.usda.gov/briefing/Adjustments/farmhouseholds.asp>.

¹⁰ From the end of World War II throughout the late 1940’s agricultural production in Europe was quite low, so U.S. farm production helped feed Europe. Only after the Marshall Plan had stabilized European economies did European farm output recover to pre-War levels.

¹¹ Underpinning this argument is the empirical observation that supply of farm products tend to be quite price inelastic. Moreover, demand for U.S. farm products has likely grown more inelastic over time, as consumers spend a smaller share of their budgets on food. Inelastic demand and inelastic supply both act to make farm more volatile.

¹² For a more thorough discussion of how market forces can improve economic performance, see Cox and Alm.

¹³ See, U.S. Department of Agriculture, 2000 Shares are for broilers on a boneless, retail-weight basis.

¹⁴ See, for example, the discussion in Nash