KEY FINDINGS

- Developed country farm support policies—including high tariff and support prices—that insulate producers from market prices often lead to overproduction and depressed global prices.
- Low-income farmers lose when they compete against subsidized production, and developing countries may face increased malnutrition, food insecurity, and adverse consequences for rural development.
- Postwar support levels were high, but the 1994 Uruguay Round of trade negotiations drove substantial reforms that lowered OECD support levels and shifted policies toward less distortionary mechanisms.
- Despite this progress, removing support policies has proven politically difficult, and total support remains high at over US$228 billion as of 2016.
- Currently, less than half of OECD support is linked to production, but reform has stagnated, and some distortionary forms of support such as subsidized insurance are expanding.

- Recent policy discussions in the United States and European Union suggest that past reforms may be weakened, and large emerging economies—Brazil, China, India, and Indonesia—are increasing distortionary forms of farm support, including input and investment subsidies.
- The real beneficiaries of reforms to farm support are those who are most vulnerable—poor producers in developing countries.

KEY RECOMMENDATIONS

- Further reduce agricultural distortions in global markets to allow developing-country producers to capitalize on their comparative advantages in order to improve incomes and reduce rural poverty and malnutrition.
- Avoid adopting agricultural subsidy policies, given how difficult it is to remove them.
- Pursue reforms of domestic farm support even in the absence of multicountry agreements since these reforms have multiple benefits.
The failure of World Trade Organization (WTO) members to reach agreement on reforming domestic agricultural support at the 2017 Ministerial Conference in Buenos Aires is a reminder of how difficult it is to convince countries to give up harmful farm subsidies. Despite progress made over the past 25 years in reducing farm support among developed countries, support remains high, particularly for specific commodities. Total support in the countries of the Organisation for Economic Co-operation and Development (OECD) exceeded US$228 billion in 2016 and, if support policies in major emerging markets such as China, Indonesia, and Russia are included, support levels topped US$508 billion.1

Policy reforms put in place just prior to and following completion of the 1994 Uruguay Round of trade negotiations were instrumental in lowering the level of support in OECD countries from 33.4 percent of gross farm receipts in 1992 to 18.8 percent in 2016.2 Not only did the levels of support decline, but countries changed the type of support provided to producers, moving from policies linked to production and input use to less distorting forms mostly not tied to production. Yet over the last decade, reforms in OECD countries have largely stagnated, and as commodity prices have fallen, support levels have risen marginally.

More concerning is the fact that recent policy discussions in the United States and the European Union (EU) raise the possibility that some of the reforms of the past 25 years may be weakened in ways that could relink payments to production. In the United States, new policy instruments such as revenue insurance and margin-protection insurance blur the notion of providing a safety net in the event of yield loss with providing price and revenue support for producers. In the EU, concern over the effects of full decoupling on rural activity has resulted in policies that allow member states to partially recouple payments to production. And, in large emerging economies, support levels have risen significantly over the past 10 years.3

Domestic farm policies tend to be costly—in terms of costs either to consumers in the form of higher prices or to taxpayers, and often to both. Of greater concern is the potential impact of farm policy outside a country’s borders. Policies that insulate producers from market prices often lead to overproduction that ends up on world markets and depresses prices. Low-income farmers in poor developing countries are the real losers, as they are forced to compete against subsidized production, often from countries with far higher average incomes. Lower prices mean lower incomes, which can substantially increase rural
poverty. The long-term effects of farm subsidies on developing countries are particularly pernicious, as depressed farm income can reduce production incentives. Reductions in production in turn can increase malnutrition and food insecurity, with adverse consequences for rural development.

What follows is a review and analysis of the broad trends in agricultural policy reform over the past 25 years. While the focus is primarily on the large subsidizing OECD countries including those of the EU, the United States, and Japan, implications are drawn for emerging economies as well, many of which have recently begun to implement production-distorting policies to support their agriculture sectors.

**MUCH PROGRESS, MORE NEEDED**

For many OECD countries, agriculture-sector support was introduced in the mid-20th century or earlier and expanded following the Second World War. In the United States, support in the form of high tariffs was provided to producers of export commodities as early as the late 1700s. However, most of the “modern” US price and income support programs have their roots in the New Deal programs of the 1930s that were initially established on a temporary basis to address the economic depression and perceived inequalities between the income of farm and nonfarm households. Some 85 years later, those “temporary” programs or their successors remain in place. While many European countries established agricultural policies (including tariffs) long before the formation of the EU, the EU Common Agricultural Policy dates to the 1960s. By the late 1980s, the average level of domestic farm support provided by OECD countries exceeded 36 percent of the value of gross farm receipts, and a number of countries (Iceland, Japan, Norway, Switzerland) provided support averaging 60 percent or higher.

**TRENDS IN PRICE-SUPPORT PROGRAMS**

Support policies in the postwar period ranged from high tariffs that insulated producers from international competition (for example, rice producers in Japan and the Republic of Korea) to high support prices (grain producers in the United States and the EU). High tariffs protected domestic producers from foreign competition at the expense of consumers, particularly low-income consumers who spend a larger portion of their income on food. Tariffs were often supplemented with support prices that kept domestic prices high by removing surplus production from the market. Together these programs often resulted in a large buildup of public reserves. To manage the costs, governments either sold surplus stocks in world markets at below-cost prices or attempted to manage supply by restricting planting or marketing of specific crops through mandatory supply-control programs. Agriculture was truly “a world in disarray.”

By the early 1980s, those problems came to a head. Inflationary pressures had caused both the EU and the United States to raise support prices in the late 1970s. With a strengthening dollar and large global supplies, world food prices slumped, resulting in the buildup of massive government stockpiles, as world market prices fell below high support prices. These surpluses often ended up on the world market with the support of export subsidies or in the form of concessional food aid. And while food aid recipients may have benefited from lower food prices and increased food availability, foreign producers were hurt by lower prices and, in many instances, commercial exports were displaced by subsidized sales.

Skyrocketing government outlays, massive butter and cereal mountains, and depressed world prices caused by surplus production led many countries to rethink their policies by the mid-1980s. Reform efforts were bolstered by the launch of the Uruguay Round negotiations (1986), which resulted in the creation of the WTO in 1995, and then by the new limits on domestic support and export subsidies established by the Uruguay Round Agreement on Agriculture (AoA).

In the United States, reforms introduced by the 1985 farm bill and further legislation in 1990 and 1996 reduced support prices for most commodities and gradually de-linked income support from production. As a result, planting decisions more closely reflected underlying market prices. Government stockpiles were drawn down and essentially eliminated by the early 1990s.

Over the same period, the EU substantially reformed its Common Agricultural Policy (CAP). The MacSharry reforms of 1992 lowered support prices and instituted direct income support tied to supply-limiting programs. Further reforms in 2003 decoupled income payments from production (through the single farm payment), and “cross-compliance” features were introduced, linking payments to respect of standards for food safety, environmental protection, and animal health and...
welfare (the so-called greening of the CAP). In 2013, quotas for dairy, sugar, and wine were eliminated.

As in the United States, the EU reforms resulted in sharp reductions in government stockpiles. As support prices fell below world prices and tariffs were reduced under the AoA, EU grain became competitively priced in world markets. By 1995, when the AoA was implemented, the United States and, soon after, the EU had ended use of export subsidies for most commodities, with the notable exception of dairy exports.

In the 1990s, Japan, the Republic of Korea, and Canada also reformed many of their price-support programs, in some cases replacing them with direct payment schemes. Australia and New Zealand began phasing out supports for many commodities in the mid-1980s and largely liberalized their agricultural programs by the late 1990s, bringing support levels below 5 percent of the value of production.

Together these reforms reduced OECD support levels significantly between 1986 and 2005. Figure 1 shows producer support levels as a percentage of gross farm revenue for the EU, Japan, the United States, Turkey, and the Republic of Korea, which account for about 90 percent of total support in the OECD.

**DECOUPLING SUPPORT FROM PRODUCTION**

The composition of producer support also shifted in many OECD countries from support tied to production to less distorting forms that are decoupled from production (Figure 2). Among OECD members, currently less than half of the support provided to producers is linked to production, down from almost 80 percent in the early 1990s. That means both that less support has a direct impact on what is planted, and that producers are responding more to market signals.

Yet while support declined greatly between 1986 and 2005, the rate of decline has slowed over the past 10 years and, in some cases, support levels have even increased in response to falling market prices. The policy changes de-linking production from support were largely in place by the mid-2000s, and trends since then have been flat. Moreover, some countries reversed their reforms. For example, the United States reintroduced price-based countercyclical payments in its 2002 farm bill and, in the 2014 farm bill, replaced decoupled direct payments with price- and revenue-based support programs, raising concerns about recoupling planting decisions with support.8

**FIGURE 1** Producer support as a percentage of gross farm revenue

Decoupling has raised concerns among EU member states, as planting flexibility has led farmers to switch out of less profitable crops. To address the shifts in planted area away from certain crops (or crop abandonment) and the resultant impacts on rural infrastructure (such as cotton mills), the EU currently allows member states to tie a portion of their support payments to planting requirements.

GROWTH OF INSURANCE PROGRAMS

Another significant trend in OECD support programs is the growth of risk management programs, particularly insurance programs. In the United States, Canada, and Japan, crop insurance programs date to the late 1930s. While initially those programs were operated on a pilot basis, participation grew as government subsidies increased. At the launch of the Uruguay Round in 1986, agricultural insurance premiums for these three countries totaled about US$1.6 billion. Although many other countries established insurance programs in the second half of the 20th century, these were relatively small.9

Agricultural insurance markets have grown rapidly since 2004 (Figure 3). This expansion is attributable to (1) the rise in global commodity prices; (2) increased US government subsidies, resulting in higher coverage levels in the US market where crop insurance is the largest single program in the US farm safety net; and (3) growth of agricultural insurance in emerging economies, particularly China, whose insurance program in 2014 recorded premium volumes and liability second only to the United States.10 Upcoming reforms in the EU may expand insurance programs there as well.11 Moreover, since the late 1990s, many pilot programs using weather-based and other index insurance measures have been introduced in developing countries.12

Growth of revenue insurance products, including products that insure crop or livestock net margins (output price minus input costs), is also notable. Subsidized revenue insurance was introduced in the United States in the late 1990s and now accounts for about 70 percent of the insured liability in its crop insurance program.13 Revenue products are offered in Canada, and Japan plans to offer revenue insurance as part of its policy reform agenda announced in November 2016.

Critics point out that agricultural insurance markets are typically heavily subsidized; in the absence of subsidies, private markets have generally failed.14 But subsidized insurance has also been criticized for distorting planting decisions by encouraging production in marginal areas and influencing crop mix.
SENSITIVE COMMODITIES
Despite progress in reducing overall support levels, support for a number of individual commodities remains far above the OECD average. These so-called sensitive commodities generally benefit from high tariff protection that insulates them from world markets. Overall support levels for the United States averaged 9.5 percent of gross farm receipts for 2014–2016, but US sugar support averaged 34.2 percent over the same period. Support for beef producers averaged over 20 percent of receipts in the EU, Japan, and the Republic of Korea, while dairy support was over 40 percent of gross farm receipts in Canada, Korea, and Japan. Rice support remains particularly high in Japan and Korea (over 50 percent of farm revenues) and in the EU (almost 25 percent of farm revenues).

WTO DRIVES REFORMS
The creation of the WTO and introduction of rules and commitments on agricultural support in the AoA were a major impetus for reform of OECD farm policies. Because of these reforms to domestic programs, support levels in most OECD countries are far below their WTO domestic support bindings, that is, the level they have committed not to exceed (Figure 4). The recent low support levels suggest that OECD members could reduce the level of their support bindings by up to 65 percent, though actual levels for countries such as the United States vary with market prices and thus could increase significantly during periods of low prices.

Despite reductions in trade-distorting support, several concerns arise with the current WTO "disciplines" that govern agriculture-sector support. The current AoA caps on domestic support apply only to the aggregate level of support across all commodities and do not limit spending on individual commodities for members with bindings. Thus, despite the broad reductions seen in domestic support in OECD countries, support remains high for selected commodities.

The AoA also exempts some forms of trade-distorting support from reduction commitments. These include certain direct payments to farmers tied to production limits (so-called blue box measures); certain government assistance programs designed to encourage agricultural and rural development in developing countries; and other support that is on a small scale ("de minimis") when compared with the total value of the product or products supported (5 percent or less in the case of developed countries and 10 percent or less for developing countries).

The AoA encourages adoption of support policies that have minimal production- and trade-distorting effects, known as "green box" policies, and exempts them from reduction commitments. Critics, however,
have expressed concerns about the growth in green box spending, particularly in the areas of decoupled income support and agricultural insurance programs. Both the EU and the United States have notified the WTO of large amounts of decoupled support. In 2012/13, the EU provided notification of its Single Payment Scheme and other decoupled programs, totaling more than €32.8 billion. In 2013, the United States provided notification of direct payments totaling US$5 billion; however, the direct payment program was eliminated in the 2014 US farm bill. Recent empirical research questions whether decoupled support is truly decoupled in that it provides producers with additional income that could keep them in farming (wealth effect) or help mitigate against fluctuations in income (risk effect).  

Insurance programs have also come under scrutiny for their impacts on production. These effects, while small, can be significant, particularly in terms of their impact on the crop mix when insurance is available for some crops but not others. Many of these programs are misreported as green box-compliant. Moreover, the newly developed gross revenue and net margin insurance products allow governments to protect producers against negative price and revenue movements. When premiums are heavily subsidized, the line blurs between insurance products and price and income supports, raising concerns about how such programs affect production decisions.  

Lastly, in advanced developing countries such as Brazil, China, India, and Indonesia, non–green box support has increased since 1995, though from very low levels. This support is largely in the form of input subsidies (India and Indonesia) or investment subsidies (Brazil). China’s price-support programs have grown considerably, particularly since the fall in global prices that began in 2013. Buildups in government-held grain stocks in emerging markets such as China raise questions about the long-term sustainability of such programs. China, for example, has already implemented reforms to its cotton and maize programs to reduce burdensome stockpiles.  

**CHANGES ON THE HORIZON?**  
Both the EU and the United States will soon address potential changes to their farm programs. The United States is expected to pass a new farm bill in 2018 that will guide farmers for at least the next five years. Early debate suggests that there will be little change to the
current suite of price- and income-support programs, insurance programs, or conservation measures, with two notable exceptions. First, cotton producers have proposed changes to make cotton eligible for price-based countercyclical payments again. The 2014 farm bill replaced direct and countercyclical payments for cotton with a supplemental insurance product as part of a WTO dispute settlement with Brazil, but cotton producers are dissatisfied with the insurance product and would like to replace it with a new countercyclical payment program. While the proposed program is not expected to cost any more than current programs, it could trigger additional scrutiny on the part of Brazil and potential legal action at the WTO.

Second, US dairy producers have been dissatisfied with the milk margin protection program, a quasi-insurance scheme that pays producers when milk margins fall below an elected level. Few participants participate in the program, and some have argued for replacing it with a margin insurance program currently offered under the crop insurance program. Such changes could potentially increase outlays and distort production decisions.

In the EU, there have been discussions about granting more flexibility in implementing payments at the regional level, some of which could be used to augment insurance schemes. Many member states currently offer agricultural insurance, but proposed changes in the Common Agricultural Policy would encourage the development of insurance products offering coverage levels above 70 percent and insuring revenue as well as yields.

All these reforms can be characterized as modest at best and will do little to reduce support levels. However, looming fiscal challenges for both the EU and the United States may drive more substantive reforms in the future. For the EU, Brexit will pose financing difficulties, as the departure of the United Kingdom will likely mean a net loss for CAP revenues. Similarly, recently passed tax legislation in the United States could constrain future government outlays. Farm programs have thus far been largely protected, but fiscal pressures could increase scrutiny of farm entitlements.

NEED FOR FURTHER REFORM

Substantial reforms of OECD agricultural policies have been achieved, particularly since the creation of the WTO, but recent efforts to further multilateral reforms have stalled and support levels have generally been flat over the last decade. Yet the failure of the recent WTO Ministerial Conference to agree to further reforms in domestic support should not deter countries from pursuing new reforms.

While developed countries’ agricultural policies have moved to less distorting forms of support, OECD expenditures on agriculture remain high, and many countries continue to support producers through market price-support measures at the expense of consumers, particularly low-income households. Support that insulates producers from global market prices can distort production decisions, with the burden of lower prices falling on foreign producers. And while insurance products may offer producers important ways to manage risks, highly subsidized programs providing price and revenue protection arguably act more as a price support than a safety net. That is not to say that public support for agriculture is not warranted, particularly for research and development, inspection services, or other public goods. On the contrary, such investments are critical for agricultural development. But support that distorts production and trade should be phased down and eliminated.

Perhaps the biggest lesson from the OECD experience is not to embark on the path of subsidizing agriculture in the first place. While many agricultural policies in OECD countries were put in place as temporary measures, they have been resistant to change. Although prominent examples exist of countries that have liberalized their farm policies (notably New Zealand and Australia), reforms in most OECD countries have been modest. Farm policies persist because the benefits tend to be concentrated among a limited number of producers, landowners, or other indirect beneficiaries (such as crop insurance companies and agricultural lenders) who are able to organize and lobby in favor of these policies. The costs are more widely dispersed across consumers and taxpayers, who accordingly are less motivated to organize for counterlobbying. As a result, lawmakers too often listen more to the program beneficiaries than to those who pay the price for the programs.

Ultimately, the real beneficiaries of reform are those most vulnerable—poor producers in developing countries—who are often the “mice who get trampled when elephants battle.” Reducing agricultural distortions in global markets would allow producers in developing countries to capitalize on their comparative advantages, thus improving income and reducing rural poverty and malnutrition.