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AGRICULTURE: THE IMPLICATIONS OF CURRENT WTO NEGOTIATIONS FOR ECONOMIC TRANSFORMATION IN DEVELOPING COUNTRIES

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LIST OF ACRONYMS

ACP	African, Caribbean and Pacific
AMS	Aggregate Measurement of Support
ATPC	African Trade Policy Centre
C-4	Cotton 4
EU	European Union
FAO	Food and Agricultural Organization
GDP	Gross Domestic Product
ICTSD	International Centre for Trade and Sustainable Development
LDC	Least Developed Country
NTB	Non-Tariff Barrier
OECD	Organisation for Economic Co-operation and Development
PSE	Product Support Estimate
SSM	Special Safeguard Mechanism
UR	Uruguay Round
US	United States
TWN	Third World Network
WDI	World Development Indicators
WTO	World Trade Organization

EXECUTIVE SUMMARY

This paper examines a selection of current issues related to domestic support in agriculture that remain central to the WTO negotiations, focusing on (1) proposals to substantially reduce trade-distorting domestic support and special and differential treatment; (2) calls for restrictions on the concentration of product-specific support; (3) efforts to find a permanent solution to the problem of spending caps for public stockholding; and (4) the right to recourse to a special safeguard mechanism (SSM) for developing countries to temporarily protect domestic producers from surging imports. Our main focus is the implications of WTO negotiations in these areas for economic transformation in developing countries.

Key policy-relevant findings of the paper include:

- A global reduction in agriculture domestic support would raise global efficiencies, but a reduction in the existing aggregate measurement of support (AMS) may not have major immediate effects on global prices (in part because bound levels are higher than current support levels). There are also many different providers of support, and gainers and losers from elimination are diverse, depending in part on trade structures.
- Relaxation of disciplines on public food stockpiling using administered prices is likely to increase production by inefficient producers in stockpiling countries, which in turn may affect producers in other developing countries. Public stockpiling based on free market prices is less distortionary and an appropriate level of stockpiling depends on each country's trade off between security of sufficient stocks to deal with uncertainty and opportunity costs of holding food stocks.
- Extension of the agriculture special safeguard to all WTO members without introducing limits on its use risks bringing in a permanent increase in agricultural protection.

The paper concludes that the action of protectionist policies in many countries limits structural change.

On domestic support, there is an opportunity during the current negotiations to introduce further disciplines and reduce actual levels of domestic support. This will make exports from developing countries more competitive in key international markets. The reduction of domestic support will have significant effects on international prices only if reductions on the bound levels of the AMS are sufficiently large to reduce applied levels.

Given the importance and sensitivity around public stockpiling, stockpiles in certain commodities (e.g. rice) have a significant distortionary effect on world prices. The relaxation of disciplines in this regard could lead to more generalised use of these types of measures, which might offset the effect generated by the reduction of domestic support measures. This suggests the most realistic solutions are those that aim to guarantee the continuation of current use by existing users while ensuring their future use is limited.

The proposed SSM, on the other hand, is particularly dangerous. As has occurred with the existing special safeguard, the SSM may lead to permanent activation of the triggers, effectively banning imports. This will lead to increasing inefficiency and low productivity in domestic markets. Therefore, as is the case for any protective measure, the new SSM is likely to damage rather than enhance economic transformation opportunities for developing countries. Efforts should be made to limit and eliminate the existing special safeguards rather than introduce a new one.

1. INTRODUCTION

While much of the focus in the economic transformation literature is on promoting structural transformation by shifting labour and other resources away from low-productivity agricultural activities and towards higher-productivity manufacturing and services, we should not overlook the specific role of the agriculture sector in economic transformation. Developing countries with significant land resources can look to raise agricultural productivity (which itself can help drive poverty reduction in low-income countries in the short to medium term) and develop agro-processing capabilities to promote economic transformation (Balchin et al., 2017). Moving from the production of primary agricultural products to develop capabilities in higher value-added agro-processing activities increases agricultural productivity and income. Within-sector productivity changes in agriculture and diversification into agro-processing can help developing countries generate a base of capabilities – including skills and productive capacity – necessary to eventually shift resources to other higher-productivity sectors.

But trade- and market-distorting domestic support and subsidies in agriculture in developing countries and their export markets – including market price support measures, direct production subsidies and input subsidies – can undermine many of these potential gains and harm progress toward economic transformation. Subsidies provided to farmers depress global prices and make it difficult for agricultural exporters to compete against the farmers benefiting from such subsidies.

Regulating and reducing trade-distorting domestic support in agriculture has ostensibly been an objective of the World Trade Organization (WTO) since the Uruguay Round (UR). The WTO Agreement on Agriculture has included new disciplines on domestic support, alongside commitments to tackle export subsidies, reduce tariffs and eliminate non-tariff barriers (NTBs) affecting agricultural trade. As part of the Agreement, domestic support was bound and subject to reduction commitments, with developed countries expected to reduce such support by 20% over six years; developing countries were given a period of 10 years from the end of the UR in 1994 to cut their support by 13%. WTO members – excluding least developed countries (LDCs), which were exempted – were encouraged to adopt domestic support policies that had minimal (or no) effects in distorting production and trade, which, in turn, would be exempt from any reduction commitments (Glauber, 2016).

When the Doha Round was launched in 2001, agriculture was explicitly identified as an area of unfinished business, and tightening disciplines on domestic support was part of the in-built agenda for negotiations. Moreover, the low international prices prevailing at that time and the high values of the bound aggregate measurement of support (AMS) left members with substantial room to increase distorting domestic practices such as price support mechanisms. Consequently, negotiations aimed to further reduce the bound AMS and also move toward a more general definition of what constituted a distorting practice.

Current entitlements to use trade-distorting subsidies mostly favour farmers in developed countries. This is because, when establishing limits on the future use of subsidies, the WTO Agreement on Agriculture factored in the historical use of trade-distorting support. At the time of the UR, many developing countries provided no AMS and, hence, saw their total AMS bound at zero. The lack of equality in the limits on permitted trade-distorting domestic support is a key point of contention for many developing countries.

There has been progress in some areas toward reducing the incidence of trade-distorting support in agriculture, primarily explained by a rise in international prices that deactivated many of the support mechanisms, especially those that were price-related.¹ Overall, trade-distorting domestic support, represented by total AMS, has declined over the past two decades (Brink, 2014). Domestic reforms in

¹ International prices have been above the predefined intervention prices in many support mechanisms, effectively deactivating them.

large subsidising countries such as Japan and the United States (US) and within the European Union (EU) have facilitated reductions in applied domestic support to well below the bound levels set in the UR, and domestic support to agriculture has generally declined across Organisation for Economic Co-operation and Development (OECD) countries, especially since the early 2000s (Glauber, 2016; Greenville, 2017).² The greater part of the domestic support payments in the EU is now decoupled from production, instead taking the form of income support payments, and is reported by the EU to the WTO under the Green Box as minimally trade-distorting (Matthews et al., 2017; Scott, 2017). Matthews et al. (2017) estimate that producer support as a share of gross farm receipts in the EU fell from 39% in the period 1986-1988 to 19% in 2012-2014. Agricultural subsidies in the EU, Japan and the US have declined by between 6% and 15% over the past decade (Illescas, 2017).

Even so, overall levels of domestic support are still high in many countries (Greenville, 2017; Illescas, 2017). Agricultural producers in developed countries such as Iceland, Japan, Korea, Norway and Switzerland still rely heavily on market- and trade-distorting support. Moreover, there is a clear trend of rising levels of domestic support in several large emerging economies, evident in substantial increases in the subsidisation of agricultural producers in Brazil, China, India, Indonesia, Thailand and Turkey since the early 2000s (DTB Associates, 2014; Illescas, 2017; Scott, 2017). In certain instances, this support has contributed to large increases in production, generating substantial exportable surpluses. Domestic support to agriculture in China, in particular, has increased rapidly in recent years, mostly in the form of growth in market price support. One estimate suggests China's total support reached a value of \$340 billion in 2015, more than four times the total level of support provided by the US and three times that provided in the EU, and accounting for as much as 80% of combined emerging market and developing economy subsidies (Illescas, 2017).

In this paper, we examine a selection of current issues related to domestic support in agriculture that remain central to the WTO negotiations, focusing on (1) proposals to substantially reduce trade-distorting domestic support and special and differential treatment; (2) calls for restrictions on the concentration of product-specific support; (3) efforts to find a permanent solution to the problem of spending caps for public stockholding; and (4) the right to recourse to a special safeguard mechanism (SSM) for developing countries to temporarily protect domestic producers from surging imports. Our main focus is the implications of WTO negotiations in these areas for economic transformation in developing countries.

2. BACKGROUND

2.1. Trade-distorting domestic support subsidies

Table 1 lists the top 10 countries (considering the EU member states collectively) with the largest current total AMS, ordered by total AMS as a percentage of gross domestic product (GDP), based on the most recent totals reported via WTO notifications (considering only notifications made from 2010 onward). Iceland, Switzerland, the Ukraine and Norway have the highest total AMS relative to their GDP level. The EU (more than \$7.9 billion), Japan (nearly \$5.7 billion), the US (more than \$3.8 billion), Switzerland (more than \$2.7 billion) and Norway (more than \$1.3 billion) have all reported annual total AMS exceeding \$1 billion in recent years (see Figure 1). However, in most cases these current totals are well below the annual bound total AMS commitment levels. Of the top 10 countries with the largest current total AMS, only the Ukraine and the Philippines are classified as developing economies, which underscores the reality that it is mostly developed countries that are reporting large total AMS. But it is important to interpret these figures with caution, recognising issues with late or inadequate reporting of AMS by WTO member states.

² When measured as a percentage of farm-gate receipts, the average levels of domestic support in OECD and selected emerging economies declined from 32% in 2000 to 17% in 2014 (OECD, 2015).

Table 1: Top 10 countries (and customs unions) with the largest current total AMS by total AMS as a share of GDP, most recent year notified (since 2010 only)

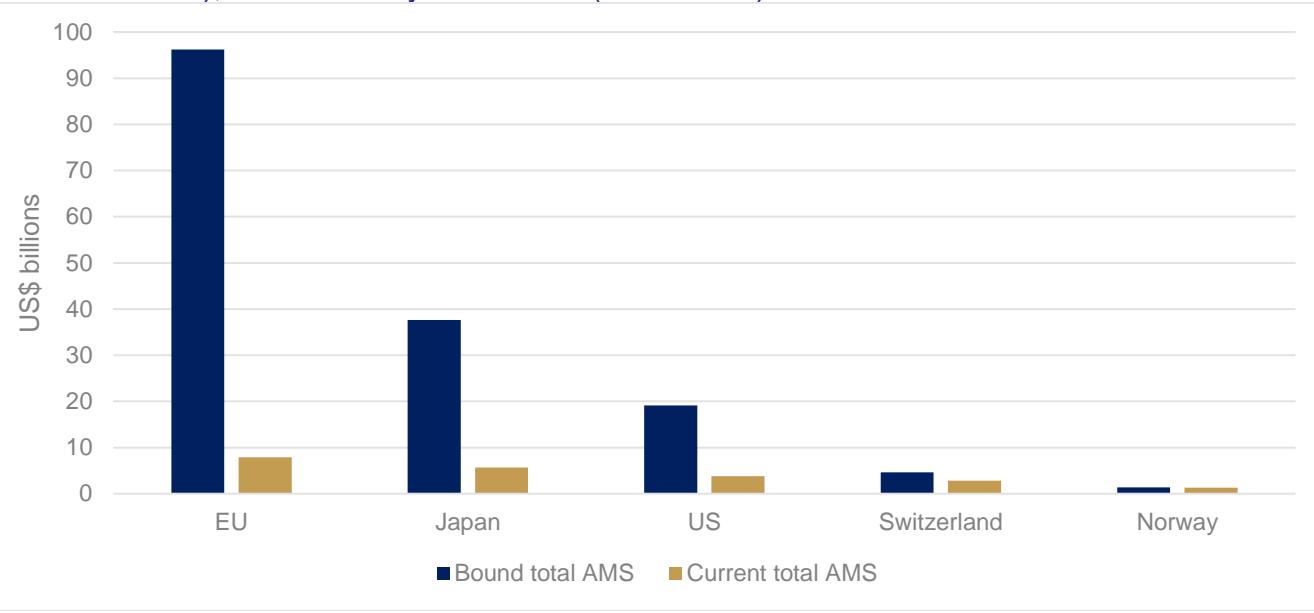
Rank	Country/ customs union	Year of most recent notification	Annual bound total AMS commitment level (US\$ billions) [†]	Current total AMS (US\$ billions) [‡]	Total AMS (% of GDP [§])	Developed/ developing country*
1	Iceland	2015	0.2	0.2	1.01	Developed
2	Switzerland	2013	4.6	2.8	0.45	Developed
3	Ukraine	2012	0.4	0.6	0.42	Developing
4	Norway	2015	1.4	1.3	0.29	Developed
5	Israel	2014	0.6	0.7	0.24	Developed
6	Japan	2014	37.6	5.7	0.10	Developed
7	Philippines	2010	n/a	0.2	0.08	Developing
8	EU	2013-2014	96.2	7.9	0.05	Developed
9	Canada	2013	4.2	0.5	0.03	Developed
10	US	2014	19.1	3.8	0.02	Developed

Source: [†] Authors' calculations based on WTO notifications (made from 2010 onwards only). [‡] WDI data (GDP in constant 2010 US\$) are used for the calculations of total AMS as a percentage of GDP. Exchange rates are historical annual averages obtained from www.oanda.com (except in cases where the US\$/local currency exchange rate was already reported in the notification itself). * Developing countries are defined as low-, lower-middle- and upper-middle-income economies based on the World Bank's classification as of August 2017.

Notes: (1) The total AMS figures are taken for the most recent year for which the relevant country submitted a notification concerning domestic support to the WTO (based on a search of notifications made from 2010 onward); (2) the Philippines does not have a bound total AMS; (3) the exchange rates used to convert local currency figures to comparable US\$ totals are averages for the year; (4) in cases where financial years differ from calendar years, the average of the exchange rate across the two years in which the financial year falls is used in the calculations; (5) the equivalent average is used in the same instances for the GDP figures.

Figure 1 provides a visual reproduction of the US\$ values for the actual and bound AMS levels of the top five most trade distorting listed countries in Table 1. This emphasises just how large the bound AMS commitments are for the EU, Japan and the United States in particular and also how large the gap is between these bound levels and the actual AMS for these countries. The latter highlights the importance of preventing further increases in actual AMS for the countries that enjoy substantial leeway to raise subsidies and still fall well within their bound limits.

Figure 1: Bound total AMS commitment and actual AMS for top five most trade countries (and customs unions), most recent year notified (since 2010)



Source: Authors' calculations and elaboration based on WTO notifications (made from 2010 onwards only).

2.1.1. Green Box subsidies

In order to qualify for the Green Box, subsidies must not distort trade or, at most, must cause minimal distortion. Only government-funded subsidies can be included in this category, and these are not permitted to involve price support. Green Box subsidies are exempt from reduction commitments and permitted without limits.

Table 2 shows the top 10 countries providing domestic support via the Green Box when expressed as a percentage of GDP, considering only each country's most recent notification to the WTO (since 2010). Green Box payments as a share of GDP in several developing countries – Colombia, China (both 1.3%), Viet Nam (1.2%), Jordan (1.2%) and India (0.9%) – exceed those provided by the US (0.8%) and the EU (0.5%). Two low-income African countries, Madagascar and The Gambia, also provide significant Green Box support relative to their overall GDP.

Table 2: Top 10 countries by value of Green Box subsidies as a percentage of GDP, most recent year notified (since 2010 only)

Country	Year of most recent notification	Total value of Green Box subsidies (US\$ millions)	Value of Green Box subsidies (% of GDP)
Colombia	2013	445.7	1.34
China	2010	79,081.4	1.30
Viet Nam	2013	1,596.4	1.17
Jordan	2014	341.2	1.16
India	2013-2014	18,361.8	0.89
Peru	2014	1,534.2	0.85
US	2014	124,483.0	0.77
Switzerland	2013	4,122.9	0.68
Madagascar	2012	59.1	0.65
The Gambia	2012	6.2	0.61

Source: Authors' calculations based on WTO notifications (made from 2010 onwards only) and WDI GDP data (reported in constant 2010 US\$).

Note: We use the data on total Green Box payments for the most recent year in which such subsidies were notified to the WTO by each country. Where necessary, these payments are converted to common US\$ using exchange rates, taken as averages for the year, obtained from www.ofx.com and, where not listed on www.ofx.com, from www.xe.com. In cases where financial years differ from calendar years, the average of the exchange rates in each of the two years is used.

2.1.2. Blue Box Payments

Whereas Amber Box domestic support measures are considered to distort production and trade, measures in the Blue Box entail conditions that require farmers to limit production. The aim of this is to reduce distortion. There are currently no limits on expenditure via Blue Box subsidies. Even so, based on data in the WTO Agriculture Information Management System on production-limiting programmes (available for the period 1995-2011), only a small number of countries have notified the WTO of the use of Blue Box measures since 2000 (see Table 3).

Table 3: Total value of Blue Box notifications to the WTO by country, 2000-2011

Country/customs union	Year of notifications (since 2000 only)	Total value of Blue Box notifications (US\$ millions)
EU	2000-2009	173,354.6
Norway	2000-2011	9,521.7
Japan	2000-2009	5,622.2
Croatia	2001-2005	768.8
Czech Republic	2000-2003	74.4
Estonia	2000-2003	49.5
Slovakia	2000-2003	46.4
Slovenia	2000-2003	1.3

Source: WTO Agriculture Information Management System.

Note: The country notifications are reported to the WTO in the local currency. We convert these figures into common US\$ equivalents using annual average exchange rates obtained from www.oanda.com

2.1.3. Product-specific support subsidies

To provide an indication of the products subsidies affect most, Table 4 lists the agricultural commodities receiving the greatest support (calculated as the sum of the annual monetary value of gross transfers via market price support³ and producer single commodity transfers⁴) in 2016 across 35 OECD countries, six non-OECD EU member states and 11 emerging economies (Brazil, China, Colombia, Costa Rica, Indonesia, Kazakhstan, the Philippines, Russia, South Africa, Ukraine and Viet Nam). A substantial amount of market price support and producer transfers provided across these countries is concentrated in only a few products – the value of gross transfers to support rice, pig meat, milk, beef and veal and wheat alone totals nearly \$300 billion. Moreover, support to these five product groups accounts for nearly three quarters of the \$406 billion in total gross transfers via market price support or producer single commodity transfers provided to the top 10 most subsidised agricultural products listed in Table 4.

The concentration of support in particular products implies subsidies affect certain developing countries more heavily (Section 4 discusses this further). The final two columns in Table 4 highlight the largest developing country exporters by (1) gross value and (2) the share of each country's total commodity exports for each of the most heavily subsidised products. As just one example, Cambodia, India, Myanmar and Pakistan are major exporters of rice – the product benefiting the most in gross value terms from market price support and producer single commodity transfers. For some lower-middle-income economies (Cambodia, Myanmar and Pakistan) and low-income economies in Africa (Niger and Rwanda), rice constitutes a significant share of total exports.

³ Market price support reflects the value of gross transfers from consumers and taxpayers to agricultural producers stemming from policy measures that create a gap between domestic producer prices and reference prices for a particular agricultural commodity at the farm-gate level (OECD, 2000).

⁴ Producer single commodity transfers represent gross transfers from consumers and taxpayers to agricultural producers that are contingent on the producer producing a designated commodity in order to receive the transfer.

Table 4: Top 10 agricultural products most affected by subsidies (market price support and producer single commodity transfers), by total US\$ value of gross transfers across OECD countries and selected non-OECD EU member states and emerging economies, 2016

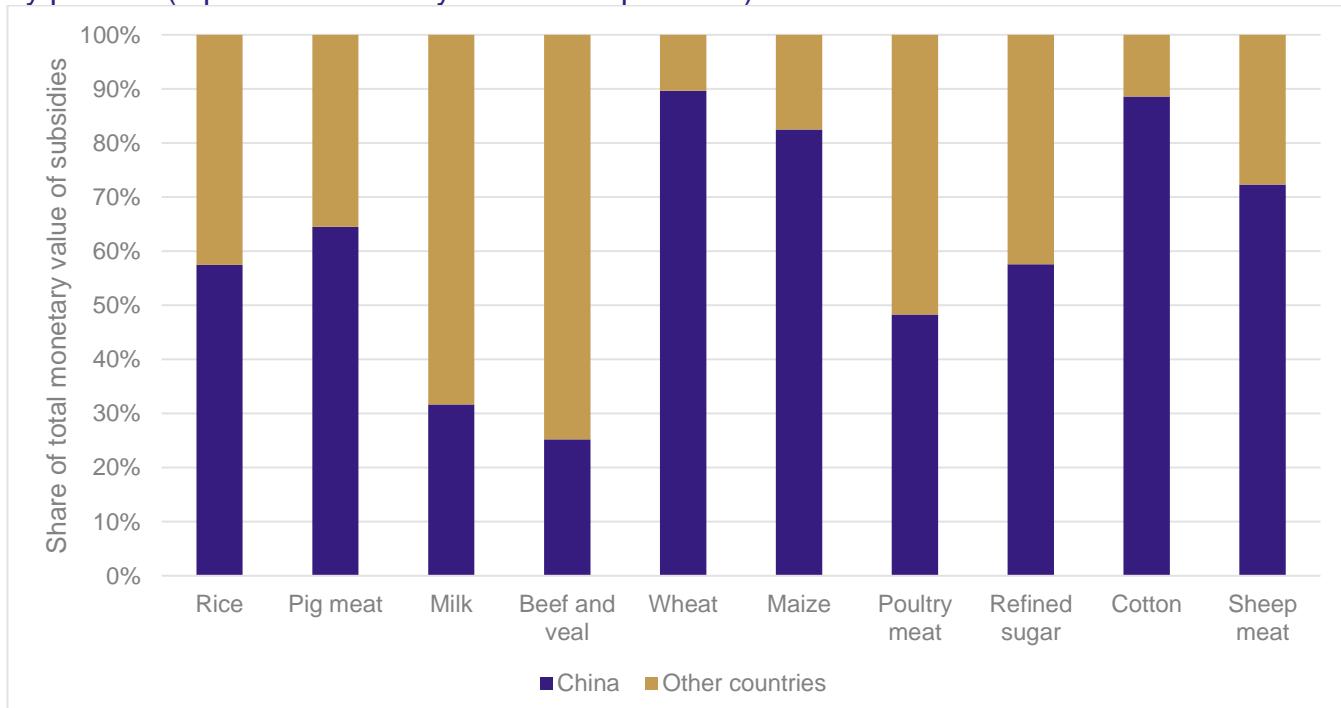
Product	Sum of total value of market price support and producer single commodity transfers (US\$ billions)	Top subsidising countries (total US\$ value of gross transfers)	Top 5 developing country exporters of the product (total US\$ value of exports, 2016)	Top 5 developing countries with largest shares of product in total commodity exports (2016)
1 Rice	88.1	China (\$50.6 bn) Japan (\$20.3 bn) Philippines (\$8.9 bn) South Korea (\$6.5 bn) Colombia (\$1.6 bn)	1. India 2. Pakistan 3. Myanmar 4. China 5. Cambodia	1. Niger (14.5%) 2. Pakistan (8.3%) 3. Myanmar (3.8%) 4. Rwanda (3.3%) 5. Cambodia (3%)
2 Pig meat	61.7	China (\$39.8 bn) South Korea (\$7.8 bn) Japan (\$7.3 bn) Russia (\$3.9 bn) Philippines (\$2.4 bn)	1. Brazil 2. Mexico 3. Chile 4. China 5. Romania	1. Brazil (0.7%) 2. Chile (0.6%) 3. Croatia (0.2%) 4. Mexico (0.1%) 5. Serbia (0.1%)
3 Milk	55.3	China (\$17.5 bn) Russia (\$9.1 bn) United States (\$8.9 bn) Japan (\$6 bn) Canada (\$4.2 bn)	1. Belarus 2. China 3. Uruguay 4. Argentina 5. Malaysia	1. Uruguay (5.4%) 2. Belarus (2.7%) 3. Togo (2.4%) 4. Costa Rica (0.9%) 5. Argentina (0.6%)
4 Beef and veal	50.4	Turkey (\$15 bn) China (12.7 bn) EU (\$11.2 bn) South Korea (\$3.1 bn) Japan (\$2.9 bn)	1. Mexico 2. Brazil 3. Argentina 4. Paraguay 5. Belarus	1. Paraguay (6.1%) 2. Belarus (1.3%) 3. Argentina (1%) 4. Botswana (0.7%) 5. Pakistan (0.7%)
5 Wheat	41.5	China (\$37.2 bn) EU (\$4.3 bn) United States (\$0.8 bn) Brazil (\$0.4 bn) Japan (\$0.3 bn)	1. Russia 2. Argentina 3. Romania 4. Bulgaria 5. Kazakhstan	1. Moldova (4.7%) 2. Argentina (3.2%) 3. Bulgaria (2.9%) 4. Romania (2%) 5. Kazakhstan (1.9%)
6 Maize	39.4	China (\$32.5 bn) Brazil (\$2.4 bn) Viet Nam (\$2.3 bn) United States (\$2.2 bn) Colombia (\$0.5 bn)	1. Argentina 2. Brazil 3. Russia 4. Romania 5. Mexico	1. Argentina (7.3%) 2. Paraguay (4%) 3. Serbia (2.5%) 4. Moldova (2.2%) 5. Brazil (2%)
7 Poultry meat	32.3	China (\$15.6 bn) EU (\$10 bn) Turkey (\$2.7 bn) Philippines (\$1.4 bn) South Korea (\$0.7 bn)	1. Brazil 2. China 3. Turkey 4. Argentina 5. Belarus	1. Brazil (3.3%) 2. Belarus (0.9%) 3. Bulgaria (0.6%) 4. Georgia (0.5%) 5. Argentina (0.4%)
8 Refined sugar	16.5	China (\$9.5 bn) Viet Nam (\$2.2 bn) United States (\$1.8 bn) Russia (\$0.9 bn) Japan (\$0.5 bn)	1. India 2. Egypt 3. Myanmar 4. Niger 5. Croatia	1. Niger (0.13%) 2. Egypt (0.03%) 3. Mauritius (0.03%) 4. Myanmar (0.02%) 5. Senegal (0.01%)
9 Cotton	11.4	China (\$10.1 bn) United States (\$0.7 bn) Turkey (\$0.4 bn) Brazil (\$0.2 bn)	1. China 2. India 3. Pakistan 4. Turkey 5. Brazil	1. Benin (45.6%) 2. Pakistan (17%) 3. Mali (9.3%) 4. Togo (7.4%) 5. Niger (3%)
10 Sheep meat	9.4	China (\$6.8 bn) EU (\$2.1 bn)	1. India 2. Ethiopia	1. Ethiopia (5.7%) 2. Armenia (0.6%)

Product	Sum of total value of market price support and producer single commodity transfers (US\$ billions)	Top subsidising countries (total US\$ value of gross transfers)	Top 5 developing country exporters of the product (total US\$ value of exports, 2016)	Top 5 developing countries with largest shares of product in total commodity exports (2016)
		Turkey (\$0.2 bn) United States (\$0.1 bn) Norway (\$0.1 bn)	3. Pakistan 4. China 5. Romania	3. Macedonia (0.3%) 4. Namibia (0.3%) 5. Pakistan (0.2%)

Sources: OECD Producer and Consumer Support Estimates database – Single Commodity Indicators (for data on market price support and producer single commodity transfers); UN Comtrade data for value of exports in 2016 (shares of total exports are authors' calculations).

China is particularly dominant among the top subsidising countries for the most heavily subsidised agricultural products presented in Table 4. Indeed, as Figure 2 shows, across the 35 OECD countries, non-OECD EU member states and emerging economies, China accounts for more than half of the total monetary value of gross transfers provided via market price support and producer single commodity transfers. For certain products (wheat, cotton and maize), China accounts for more than 80% of the subsidies provided via these channels.

Figure 2: China's share of total market price support and producer single commodity transfers, by product (top 10 most heavily subsidised products) in 2016



Source: Authors' own calculations using OECD Producer and Consumer Support Estimates databases.

The distortionary impact of domestic support subsidies on prices is especially high in the case of certain agricultural products. The US exported maize (14%), soybeans (11%) and rice (2%) at prices below the cost of production. According to one estimate, the price of US wheat exports in 2015 was 33% lower than the cost of production, while the equivalent gap for cotton exports from the US ranged between 8% and 49% from 2010 to 2015 (South Centre and ATPC, 2017). In turn, the US has accused China of manipulating cotton prices and subsidising its cotton producers at a level twice the world market price (Watson, 2015). Estimates for 2014 suggest China paid subsidies to cotton farmers of around \$330 per tonne of cotton harvested outside the country's top cotton producing region (Reuters, 2014). In that year, cotton growers in Xinjiang were paid the difference between the market price and a target price of

19,800 yuan (around \$3,240) per tonne (*ibid.*). These subsidies encourage overproduction of cotton, which is then sold on the world market, depressing world cotton prices. EU farm subsidies also cause similar price distortions in international markets. Based on 2013 data, price distortions in African, Caribbean and Pacific (ACP) countries created by EU subsidies amount to 10% in cereals, 23% (on average) in poultry, 200% for bovine meat and 10% (on average) for dairy (Berthelot, 2014).

2.1.4. Special and differential treatment for developing countries

Collectively, LDCs and the ACP countries are opposed to new disciplines on Article 6.2 support because they believe it is important to support their low-income and resource-poor farmers (ICTSD, 2017b). Since 2010, several countries have notified domestic support measures to the WTO that are exempt from reduction commitments under special and differential treatment development programmes. Of these, Table 5 outlines the 10 countries with the largest value of exempt measures as a share of GDP (considering only notifications from 2010 onward). Four of these countries (Botswana, Lesotho, Malawi and Senegal) are ACP countries and two (Malawi and Senegal) are LDCs.

Table 5: Top 10 countries by value of domestic support measures exempt under special and differential treatment as a percentage of GDP, most recent year notified (since 2010 only)

Country	Year of most recent notification	Value of domestic support measures exempt under special and differential treatment (US\$ million)	Value of domestic support measures exempt under special and differential treatment (% of GDP)
Colombia	2013	581.1	1.7
India	2013-2014	22,827.8	1.1
Botswana	2015-2016	55.2	0.3
Lesotho	2012-2013	8.2	0.3
Senegal	2015	40.6	0.3
Sri Lanka	2013	176.7	0.3
Indonesia	2011	1,884.4	0.2
Viet Nam	2013	205.6	0.2
Togo	2015-16	5.3	0.1
Panama	2015	46.8	0.1

Source: Authors' calculations based on WTO notifications (considering only notifications made from 2010 onwards) and WDI GDP data (reported in constant 2010 US\$).

2.2. Public stockholding

Table 6 outlines the top five countries by the value of public stockholding notified for food security purposes as a percentage of GDP (considering only notifications since 2010). The monetary values reported in the table emphasise the size of the public stockholding programmes in operation in China and India. The top five comprise only developing countries (although, outside the top five, developed economies such as Japan and Korea did also notify very large monetary outlays – \$167.2 million and \$190.8 million, respectively – on public stockholding programmes).

Table 6: Top 5 countries by value of public stockholding for food security purposes notified as Green Box measures as a percentage of GDP, most recent year notified (since 2010 only)

Country/ customs union	Year of most recent notification (since 2010)	Total value of public stockholding for food security purposes (US\$ millions)	Total value of public stockholding for food security purposes (% of GDP)	Developed/ developing country*
India	2013-14	14,792.1	0.72	Developing
China	2010	11,396.3	0.19	Developing
Philippines	2010	178.0	0.09	Developing
Viet Nam	2013	64.1	0.05	Developing
Indonesia	2011	247.6	0.03	Developing

Source: WTO notifications of Green Box domestic support (made from 2010 onward only).

3. NEGOTIATING POSITIONS

Addressing problematic issues related to domestic support in agriculture emerged as a clear priority in the wake of the Nairobi Ministerial Conference at the end of 2015, and recent submissions by some WTO members point to a willingness to tackle trade-distorting measures (Illescas, 2017). To date, however, little progress has been made on domestic support. Key areas of disagreement in moving forward the overall agenda on reducing trade-distorting domestic support subsidies centre on how to define what constitutes trade-distorting support as well as what sort of special arrangements or concessions should be made for developing countries (ICTSD, 2017c).

In general, developed countries such as Japan, Korea and Switzerland have adopted the most defensive positions, viewing domestic support measures as important tools for protecting their rural economies (Scott, 2017). Certain developed countries, the US in particular, are also eager to ensure developing countries are required to accept lower limits on domestic support. On the other side, some developing countries with strong agricultural interests want substantial reductions in trade-distorting domestic support (especially in the case of subsidies for products produced by small-scale farmers) and the imposition of stricter disciplines to ensure the Green Box becomes truly minimally or non-trade distorting by preventing countries from shifting more distortionary forms of domestic support into the Green Box where they are not subject to reductions (South Centre and ATPC, 2017).

Against this overarching backdrop, in this section we briefly introduce proposals and country or country group positions on three current issues related to domestic support in agriculture in WTO negotiations that are of specific interest from an economic transformation perspective in developing countries. It is important to recognise at the outset that the precise impacts of particular types of domestic support in agriculture vary across developing countries depending on the size and nature of their agriculture sectors. This gives rise to a range of contrasting views and positions among developing countries on what reforms, if any, are required to different types of domestic support in agriculture. In the sub-sections that follow we set out some of these different positions and interests.

3.1. Trade-distorting domestic support subsidies

There are currently a number of positions among WTO members on the issue of trade-distorting domestic support subsidies. Several major developing countries – including China, Egypt and India – are seeking the elimination of AMS and want an agreement on reduction commitments for minimally trade-distorting Green Box programmes in developed countries (TWN, 2017).

The ACP countries want to cap farm subsidies, arguing that imports of heavily subsidised agricultural goods adversely affect their agriculture sectors and stressing that they face unfair competition for their exports in markets where farmers benefit from large subsidies (ICTSD, 2016). Domestic support to agriculture affects these countries through two channels: (1) local producers face stringent competition from subsidised imports in domestic markets and (2) exporters must compete with subsidised products

in export markets. These countries want to cap the maximum level of Amber Box support developed countries are permitted to use (*ibid.*). The LDC group wants WTO members to agree to a limit on the sum of all trade-distorting domestic support, which its members argue should include all subsidies currently classified as Amber Box, distorting support allowed under the *de minimis* clause and production-limiting Blue Box payments (ICTSD, 2017a).

Blue Box subsidies are provided under the condition that producers limit production through, for example, the imposition of production quotas, or through requirements that farmers exclude part of their land from production. Countries currently utilising Blue Box measures argue such subsidies are less distortionary than Amber Box measures. However, opponents of the Blue Box argue support measures included in this box are only partly decoupled from production. Like any other direct payment, these payments encourage farmers to produce more intensively by providing them with a minimum income that reduces risks. Some developed and developing countries want to eliminate the Blue Box and move all measures currently included in this box into the Amber Box. These countries favour the introduction of additional disciplines during the process of phasing out the Blue Box.

The Cairns Group, comprising 20 agricultural exporting countries, are also seeking new limits on trade-distorting domestic support, alongside measures to tackle the concentration of such support in a limited number of agricultural products. The ACP countries support the broad thrust of the latter, being in favour of product-specific limits on subsidies (ICTSD, 2016). This is because a large share of domestic support is concentrated in a relatively small number of agricultural products. Earlier, Table 4 showed that rice, pig meat, milk, beef and veal, wheat and maize account for a significant share of subsidies provided through market price support and producer single commodity transfers. This is consistent with Greenville (2017), who estimates that just five sectors (rice, maize, beef, pork and dairy) accounted for 75% of total single commodity support in 2015, with much of this provided in the form of market price support. Agricultural products in these sectors are major exports for certain LDCs and/or developing countries, and the impact that the concentration of domestic support in these products has on world food market prices adversely affects producers in these countries.

Cotton subsidies have been especially targeted for criticism from developing countries. Moreover, the use of these subsidies continues to violate explicit commitments to cut subsidies from previous WTO Ministerial conferences. The West Africa cotton-exporting countries (Benin, Burkina Faso, Chad and Mali) – known as the Cotton 4 or C-4 countries – have called for reductions in cotton subsidies paid by rich countries, especially the US. These subsidies make it difficult for West African cotton farmers to compete in export markets, even though they are generally able to produce cotton at one third of the cost of their counterparts in the US (Sandrey, 2017). Consequently, the C-4 countries want an agreement on a fixed limit on domestic support for cotton (ICTSD, 2017a). Brazil and India are also pushing for cotton-trading nations to reduce domestic support for their cotton farmers (Marks, 2017).

At the other end of the spectrum, some countries are seeking greater inclusion of developing countries in domestic support disciplines. The US, for instance, has indicated it will not cut farm subsidies unless developing countries do the same. This applies particularly to certain agricultural support measures large emerging market economies utilise, such as China's market price support and cotton support subsidies (discussed earlier) and India's minimum price support for cotton and wheat. Brazil, another emerging economy, has also called for other developing countries to cut subsidies. Australia, Brazil, the EU, the US and other agricultural exporting countries want cuts to *de minimis* support⁵ and to eliminate Article 6.2, a special and differential treatment provision that exempts developing countries from including investment subsidies or input subsidies to low-income or resource-poor farmers in their AMS (TWN, 2017).

⁵ The *de minimis* provisions of the Agreement on Agriculture mean developing countries are not required to reduce trade-distorting domestic support in any given year in which the aggregate value of product-specific domestic support does not exceed 10% of the total value of production of the product in question (this threshold is set at 5% for developed countries).

A recent proposal by the EU together with Brazil, Colombia, Peru and Uruguay aims to revise domestic support disciplines by capping some trade-distorting domestic support at a percentage of the total value of agricultural production as of 2018.⁶ This is based on the principle that countries should be bound by limits on trade-distorting domestic support, with the size of the limit varying according to a country's development status. The objective of this proposal is to remove the link to existing support in place prior to the Agreement on Agriculture, although the proposal insists that existing limits on domestic support contained in the Agreement be respected (Matthews, 2017).

An important issue for negotiation is the size of the cap on trade-distorting domestic support. Two alternative options are proposed for recognising special and differential treatment for developing countries, with the suggestion that these countries could either benefit from a *permanent* right to a 2 percentage point higher limit on trade-distorting domestic support or enjoy a higher limit for a *transitional* period only (after which the limit would be the same as that facing developed countries). LDCs would not be subject to any limits on subsidies, so as to aid the development of their farming sectors. Under the proposal, developing countries would still be exempt from including investment subsidies or input subsidies to low-income or resource-poor farmers in their AMS (meaning the current allowance for these types of subsidies via Article 6.2 would be maintained).

An agreement on the proposal could reduce the amount of money allocated in subsidies to stabilise markets, including EU crisis payments (Marks, 2017). However, certain subsidies, such as coupled payments, would not be affected. Within the EU, for example, these coupled payments provide direct support to the beef and milk sectors, both of which are important in certain developing and emerging economies. Brazil, China, India, South Africa and Turkey, for instance, are all major producers of beef along with Kazakhstan and Pakistan. Brazil, China and India are also among the top milk-producing countries in the world, and milk production in some other developing countries is increasing rapidly.

3.2. Public stockholding

Some developing countries are pushing for changes within the WTO to enable greater flexibility to protect marginalised communities in the face of food security concerns. Currently, developing countries receive special and differential treatment for government stockholding programmes – via a Peace Clause covering existing programmes – on the basis that such programmes support food security and subsidise food prices for the poor. These programmes are generally covered in the Green Box, and hence are not subject to reductions, although to qualify for this treatment they must (1) have no, or at most minimal, trade-distorting effects on production; (2) be provided through a publicly funded government programme not involving transfers from consumers; and (3) not have the effect of providing price support to producers.

However, while this means developing countries are not prevented from public stockholding for food security purposes, the provision of price support to producers through stockholding programmes – which involve purchasing food at minimum prices – has proven a thorny issue. Under current WTO rules, developing countries purchasing food supplies for stockholding at an administered price must include the difference between this price and an external reference price in their AMS (Matthews, 2017). Developing countries argue the way in which farm subsidies are currently calculated at the WTO is unfair and unreasonable because the reference prices utilised are out of date and do not account for the impact of price inflation in the more than two decades since the external reference prices were established in the Agreement on Agriculture (for the period 1986-1998). In some cases, this has meant developing countries have to report positive market price support as AMS even without providing any active economic price support to farmers (*ibid.*).

⁶ The proposal defines trade-distorting domestic support as that included in the Amber Box (current total AMS), product- and non-product-specific support exempted under *de minimis* limits or thresholds and Blue Box support (which would be accounted for differently on the basis that it does not have an equivalent trade-distorting effect) (Matthews, 2017).

The G-33 group of developing countries, which includes several large emerging economies (China, India and Indonesia), is pressing for a solution to the issue of spending caps for procuring and maintaining public food stocks. A decision was reached at the Nairobi Ministerial Conference to commit WTO members to engage constructively towards a permanent solution, but there has been little consensus so far (FAO, 2016; Glauber, 2016). The G-33 countries want to permit food purchases for public stockholding without limits. Specifically, they are looking to exclude developing WTO members' policies and services related to farmer settlement, land reform programmes, rural development and rural livelihood security from subsidy limits (Scott, 2017).

India is a particularly strong advocate for this position. The country's National Food Security Bill legislates for the purchase of staple foods from smallholders at guaranteed prices, after which they are sold at low prices to particular groups designated as poor (Scott, 2017). This involves the provision of price support to farmers, and should be included in domestic support calculations under current WTO rules. India currently operates significant price support programmes for wheat, rice and cotton in particular. Many other developing countries also have public stockholding programmes, including a number of African countries (Algeria, Benin, Botswana, Burkina Faso, Cameroon, Chad, Egypt, Ethiopia, Kenya, Ghana, Malawi, Mali, Morocco, Niger, Senegal, Tanzania, Tunisia, Zambia and Zimbabwe) (South Centre and ATPC, 2017).

There are concerns that these programmes generate large distortionary effects on production and global agricultural trade that have impacts on other countries. A key worry is that public stockholding programmes provide market support to agricultural producers (Glauber, 2016). In doing so, the resulting distortionary effects on agricultural markets, including in other developing countries, may undermine food security in other areas (ICTSD, 2016). The US, in particular, has raised concerns that public stockholding programmes in emerging economies are distorting other developing countries' markets (South Centre and ATPC, 2017). The US has highlighted China's domestic support measures for wheat, rice and corn as especially problematic. The Congressional Research Service (2017) estimates the level of Chinese government support exceeded WTO commitments by nearly \$100 million between 2012 and 2015, with the country's public stockholding programme playing a central role.

Some countries have also raised concerns that the G-33 countries' proposal to include public stockholding in the Green Box would lead to subsidised exports into developing country markets (South Centre and ATPC, 2017). In light of these issues, developed countries and many developing country exporters are reluctant to exclude food purchases for public stockholding from domestic support calculations.

3.3. Special safeguard mechanism

The SSM is a contingency measure enabling countries to impose restrictions – by temporarily raising tariffs – on imports to protect domestic farmers from import surges or price falls. It can be invoked when either quantity or price triggers are activated (e.g. import prices go below a certain level). This is distinct from the special agricultural safeguards currently available to a limited number of mostly developed countries. At present, only 34 WTO members who converted NTBs to tariff equivalents in the UR using the negotiated formula have the right to recourse to special safeguards (involving the imposition of additional duties above the bound levels) for products that underwent the 'tariffication' process (ICTSD, 2016). Their use has generally waned but some countries (including the EU and Switzerland) still employ them for 'sensitive' products such as dairy, rice and processed grain (Glauber, 2016). In any event, recourse to these special safeguards is not available for most developing countries (Dhar, 2016), as many of them chose during the UR not to bind their tariffs.

The design and use of the SSM is thus a key point of contention in current WTO negotiations. At the conclusion of the Nairobi Ministerial Conference in December 2015, WTO members agreed to pursue negotiations on an SSM in dedicated sessions of the WTO Committee on Agriculture (FAO, 2016). There has, however, been little consensus on the issue among WTO members so far.

Many developing countries are calling for a new SSM, which would allow developing countries to raise tariffs temporarily in the face of sudden surges in import volumes or large declines in prices that adversely affect domestic producers (ICTSD, 2017c). The G-33 countries are championing this issue.

But major agricultural exporting countries (the EU, the US and most of the Cairns Group) regard the SSM as an important barrier to agricultural trade, given the protection (albeit temporary) it affords domestic producers. Some agricultural exporters have also called for the complete phasing-out of the SSM (as Argentina, Australia, Colombia, New Zealand, Pakistan, Paraguay, Uruguay and Viet Nam proposed in November 2016). Russia has also pushed for countries to agree to eliminate the SSM. Russia asserts the measure was meant only to be a transitional tool to help countries cope with the potentially negative effects of liberalisation following the end of the UR talks in 1994 (ICTSD, 2017c). Russia also argues the SSM is unfair to newer WTO members not permitted to use the instrument under their accession terms, which include Russia itself as well as China, Kazakhstan and Viet Nam (*ibid.*). Russia has called for immediate expiry of the SSM for developed countries and gradual phasing-out over three years for developing countries.

There are also areas of disagreement related to the specifics of how the SSM should operate. These include issues related to (1) the size of the import surge necessary to trigger the SSM; (2) the size of the temporary SSM tariff that countries should be allowed to apply in the face of surging imports; and (3) which agricultural products the SSM should cover.

4. EFFECTS ON ECONOMIC TRANSFORMATION

In aggregate, liberalisation of trade in agriculture will boost efficiency in the allocation of agricultural resources both at the global level and within individual countries, resulting in increased production volumes and efficiency, raising incomes and lowering consumer prices in general (Morrissey et al., 2005). In this section, we consider the different pathways through which trade-distorting domestic support subsidies, public stockholding programmes and special safeguard measures may impact on economic transformation in developing countries. The actual impacts of domestic support measures in agriculture on different developing countries will vary, depending on the importance of agriculture in their economies, whether or not they are net food exporters or importers, their levels of development and per capita income and other factors. Section 4 explores these variations in more detail, considering potential impacts on countries or groups of countries.

4.1. Trade-distorting domestic support subsidies

As Section 2 explained, the negotiating agenda on trade-distorting domestic support subsidies in the WTO is focused largely on the level and type of AMS. High levels of AMS, mostly in developed countries, depress global prices and make it difficult for non-subsidised agricultural producers to compete in export markets and against subsidised imports in the domestic market.

Reductions in domestic support to agriculture will result in improved market access for developing countries with globally competitive agriculture sectors, enabling producers in these countries to expand their exports. This, in turn, can raise employment in agricultural exporting countries and boost rural incomes.

Higher world prices for agricultural commodities resulting from the elimination of trade-distorting agricultural subsidies will affect:

1. net trade, depending on whether developing countries are net (food) exporters or importers – major developing country exporters will benefit from increased export revenues and an improved trade balance, while net food-importing developing countries will face higher prices for imports;
2. domestic production (depending on export supply elasticity); and
3. domestic consumers (depending on budget share), with consumers in net importing developing countries, for instance, facing higher prices.

In subsidising developing countries, agricultural exporters may gain from increased market access in other countries (through the channels explained above), but domestic producers may reduce production and find it more difficult to compete with imported agricultural products. This will have adverse effects on farmers' incomes in these countries. Nevertheless, in the longer term, increased production efficiency may offset these losses. In addition, if resources previously used to fund subsidies are allocated to activities that support productive efficiency in agriculture, then this can facilitate within-sector as well as between-sector productivity improvements.

4.2. Public stockholding

Public stockholding programmes provide market price support to producers, raising production of supported commodities and potentially distorting world prices in the case of certain commodities. A relaxation of the disciplines on stockholding may result in these programmes being used more generally. If, as a consequence, large production surpluses are generated for supported commodities (potentially leading to an increase in subsidised exports), this will result in lower world prices for these commodities.

Public stockholding is intended to increase domestic supply, while maintaining low consumer prices. Public stockholding distorts trade when purchases are made at prices considered 'supported' or 'administered'. These operations are restricted within agreed limits set by the Amber Box. However, there are no restrictions on how much governments can purchase at market prices and on how much they can supply cheaply or free to the poor or malnourished.

The implications for economic transformation will vary across different types of developing countries. In general, a relaxation of disciplines on public stockholding will affect:

1. net trade, depending on whether countries are net (food) exporters or importers – major developing country exporters of stockpiled commodities would be adversely affected by the lower prices for these commodities and also, potentially, through increased competition from subsidised imports into their domestic market (if stockpiling countries with large production surpluses start exporting these surpluses). In contrast, net food-importing countries would benefit from lower prices for certain imported commodities;
2. domestic production (depending on export supply elasticity) – producers of supported commodities in countries with stockholding programmes will raise production, while domestic producers of staple commodities and foods in other countries may reduce production in response to lower world prices for these commodities as well as in the face of greater competition from subsidised exports;
3. domestic consumers (depending on budget share) – domestic consumers in countries with public stockholding programmes will benefit from lower prices for staple foods, as will consumers in net food-importing countries, owing to the lower world prices for supported commodities;
4. manufacturers using stockpiled products as inputs, who face lower prices for their inputs. As international prices tend to be lower as a result of this practice, producers in both the country that practises the stockpiling and in other countries benefit. This may generate an increase in value added and employment in these activities.

Thus, the effects of public stockholding on economic transformation can be classified in terms of their efficiency and distributional impacts. On one side, the price distortion the stockpiling generates leads to an increase in production by inefficient producers in the country providing the support. At the same time, the resulting low international prices lead to a reduction in output from more efficient producers elsewhere. Consequently, global productivity tends to be lower under this scenario.

At the same time, there is a global transfer of resources between producers and consumers. The benefit enjoyed by producers in the stockpiling country (who are reliant on stockpiled products as inputs) and consumers worldwide as a result of lower prices is paid by producers in exporting countries, who receive lower prices for their exported commodities. This distributional effect may be particularly serious if the affected producers are located in less developed or poorer countries.

Any form of price support mechanism tends to be accompanied by high tariffs. As the administered price is higher than the international price, high tariffs are introduced to prevent the foreign product from being imported to benefit from the artificially high price. This ‘double protection’, which complicates calculation of the AMS (de Gorter, 2002), provides redundant protection to producers in stockpiling countries. This suggests that, in order to restore efficiency in prices, the price support mechanism and the tariffs must be eliminated.

4.3. Special safeguard measures

When triggered, an SSM acts as a barrier to trade, with higher tariffs limiting imports and raising the price of imported agricultural products. This reduces competition in these products in the domestic market and raises agricultural prices. While domestic producers will benefit initially from the resulting protection from imports, such protection ultimately leads to increasing inefficiency and low productivity among domestic producers. This renders domestic producers less competitive in export markets. Inefficiencies among domestic producers undermine opportunities for within-sector productivity improvements and thus constrain economic transformation. Consumers in the domestic market face higher prices, with negative impacts on household incomes and consumer welfare.

Producers exporting to markets in which an SSM has been triggered will also be adversely affected since the tariff raises the price of their exports of the protected commodities in the importing country. This will have negative impacts on export revenues and potentially also employment in agricultural exporting developing countries, particularly if exports to the country applying the SSM constitute a large share of overall agricultural exports. But the precise impacts will ultimately depend on which products the SSM covers.

5. IMPACT ASSESSMENT

Assessing the effects of disciplines on domestic support is not simple. Data and methodological issues complicate the analysis. First, there are significant delays in the notification of domestic support by WTO members. Table 1 showed 2014 as the latest notification year for many countries, but for others the information is older. While it is possible to identify the effect on the bound levels of the AMS, for some countries the actual level is substantially below the bound level, hence it is not possible to determine whether effective levels of support will be reduced as a result of a reduction in the bound level. The lack of current information on effective support, which depends heavily on the evolution of prices, impedes the determination of the level of ‘water’ between the bound and the actual AMS.

Meanwhile, the way the AMS is computed complicates the calculation of its protection effect. The AMS is ‘double counted’ when derived from trade policies such as tariffs (de Gorter, 2002). In the case of direct payments, calculation is relatively straightforward. However, when considering price support mechanisms, double counting may occur if the protection an existing tariff provides is not discounted from the AMS, which should include exclusively measures that constitute a transfer from the government to producers.

This issue also applies to the OECD’s Product Support Estimate (PSE), the other measure of domestic support. However, it is relatively straightforward to extract the border measure component from the PSE. Moreover, the information is more up-to-date than that presented in the WTO notifications. On the other hand, while the PSE covers all transfers to producers originating from agricultural policies, it does not distinguish among the Green, Blue and Amber Boxes, even though the latter is the only one bound and subject to reductions. These methodological and accounting issues highlight the potentially adverse effects arising from the presence of a combination of tariffs and subsidies. For an exporter in a developing country, the removal or reduction of tariffs may not be sufficient for them to start supplying a particular market if price support mechanisms are in place. Tariffs and subsidies present a case of double protection that limits trade and economic transformation opportunities.

Notwithstanding the measurement issues, it is possible to use the PSE – with market price support removed – to consider the effect that budgetary outlays have on farm income. This will provide an indication of the potential effect of their reduction on production. However, it is important to highlight that this measure may include some payments that may not be reduced because they are classified in either the Green or the Blue Boxes.

Table 7 presents the PSE and budgetary outlays to producers as percentages of the total value of production and of total farm receipts by country. The higher the value of these outlays, the higher will be the effect of their reduction on the value of production. However, the effect on prices is expected to be related directly to the magnitude of agricultural production in each country. Although incidence of budgetary outlays in Norway is very high, for example, the value of production in that country is low, which results in a relatively low impact.

Table 7: Product Support Estimate and budgetary outlays to producers, 2016

					Budgetary outlays to producers	
	Value of production (US\$ millions)	PSE (US\$ millions)	Market price support (US\$ millions)	Value of budget outlay (US\$ millions)	% of value of production	% of gross farm receipts
Australia	44,724	890	0	890	1.99	1.95
Canada	42,539	4,777	2,867	1,910	4.49	4.3
Iceland	276	222	125	98	35.51	26.21
Israel	7,741	1,361	1,128	233	3.01	2.92
Japan	78,526	41,666	33,461	8,206	10.45	9.46
Korea	38,529	20,039	17,840	2,200	5.71	5.4
Mexico	48,610	4,195	627	3,568	7.34	6.84
New Zealand	16,667	142	118	25	0.15	0.15
Norway	3,538	3,128	1,483	1,646	46.52	31.75
Switzerland	9,023	7,288	3,797	3,491	38.69	27.9
Turkey	58,625	17,182	14,240	2,943	5.02	4.78
US	355,485	33,277	6,900	26,377	7.42	6.9
EU	397,472	99,735	22,069	77,666	19.54	16.35
Brazil	148,128	7,362	3,881	3,481	2.35	2.3
China	1,404,702	212,182	153,326	58,857	4.19	4.02
Colombia	24,341	3,297	2,854	443	1.82	1.79
Costa Rica	5,185	536	522	14	0.27	0.27
Indonesia	120,273	35,969	32,891	3,079	2.56	2.49
Kazakhstan	10,568	-363	-1,219	856	8.1	7.49
Philippines	29,360	6,264	5,897	367	1.25	1.24
Russia	71,317	11,928	9,004	2,924	4.1	3.94
South Africa	16,964	401	211	190	1.12	1.1
Ukraine	26,139	-2,536	-3,214	677	2.59	2.53
Viet Nam	41,406	-1,202	-1,732	530	1.28	1.27
TOTAL	3,000,139	507,740	307,076	200,671	6.69	6.27

Source: Based on OECD data. Data for Indonesia are for 2015.

The effect on the rest of the countries and on developing countries requires further discussion. First, it is necessary to define by how much domestic support will be reduced. This is an area that is still under negotiation. Second, as we mentioned earlier, the level of water in the AMS is hard to assess and the final reduction on tariffs is dependent on this. However, the effect on each country will depend primarily on the product considered.

To provide an analysis of the likely effects of the current negotiation issues at the WTO, in the following sub-sections we briefly discuss the potential impacts on developing countries of proposals to (1) reduce the levels of AMS, (2) relax disciplines on public stockholding and (3) introduce a new SSM that would

allow developing countries to raise tariffs temporarily in the face of sudden surges in import volumes or large declines in prices.

5.1. Possible impacts of reductions to the level of AMS

As Table 3 showed, the exporting developing countries with the most to gain from a reduction in domestic support for the five most heavily subsidised agricultural products are:

- Cambodia, China, India, Myanmar, Niger, Pakistan, Rwanda in the case of rice;
- Brazil, Chile, China, Mexico, Romania, Serbia as exporters of pig meat;
- Argentina, Belarus, China, Costa Rica, Malaysia, Togo, Uruguay as milk exporters;
- Argentina, Belarus, Botswana, Brazil, Mexico, Pakistan, Paraguay, given the significance of their beef and veal exports;
- Argentina, Bulgaria, Kazakhstan, Moldova, Romania, Russia in the case of wheat; and
- Benin, Brazil, China, India, Mali, Niger, Pakistan, Togo, Turkey as important exporters of cotton.

At the same time, lower subsidies will adversely affect net food-importing developing countries owing to the impact reductions in domestic support will have in terms of raising commodity prices. Based on the WTO list of net food-importing developing countries published on 23 March 2012, these countries are likely to include Antigua and Barbuda, Barbados, Botswana, Côte d'Ivoire, Cuba, Dominica, Dominican Republic, Egypt, El Salvador, Gabon, Grenada, Honduras, Jamaica, Jordan, Kenya, Maldives, Mauritius, Mongolia, Morocco, Namibia, Pakistan, Peru, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Senegal, Sri Lanka, Swaziland, Trinidad and Tobago, Tunisia and Venezuela.

In addition, new disciplines on Article 6.2 support, a special and differential treatment provision that exempts developing countries from including investment subsidies or input subsidies to low-income or resource-poor farmers in their AMS, could affect developing countries using these exemptions to help income- and resource-constrained farmers. While this would not affect all developing countries, such new disciplines would have impacts on some large emerging economies (such as India and Indonesia), together with a number of lower-middle-income countries (such as Sri Lanka, Viet Nam and Zambia) and low-income African countries (such as Malawi and Senegal). To be sure, 33 developing countries have notified the use of measures with reference to criteria in Article 6.2 since 2010.

5.2. Possible impacts of a reduction in disciplines on public stockholding

A relaxation of disciplines on public stockholding is most likely to affect producers and exporters of wheat, rice and maize. These include countries such as Argentina, Brazil, China, Myanmar and Russia.

The immediate effect, however, is expected to be minimal. This is because a permanent solution to the public stockholding debate will imply validation of a practice that is already occurring. The existing distortion generated by Indian stockpiling will not change as a result of adoption of a permanent solution.

Nevertheless, if the existing rules are upheld (e.g. if the Peace Clause currently in place is not renewed), countries that use stockpiling may need to modify or eliminate their existing price support mechanisms. Exporters of the stockpiled products are expected to benefit. However, the actual impact will depend on whether the countries that use stockpiling make reductions in other measures under the AMS to comply with its limits. As long as the product-specific limits are not violated, countries may reduce the levels of trade-distorting subsidies in other products without affecting actual support for the stockpiled product. All these unknowns make it difficult to assess the effect of stricter disciplines on public stockholding.

In particular, it is difficult to assess, based on the latest notifications to the WTO, how countries can accommodate existing stockpiling measures within the limits established by the AMS. However, information for India suggests the country could accommodate some existing stockpiling within its AMS. Out of the \$14,792 million (see Table 6) that India spent on public stockpiling in 2014, around half could be accommodated within the limits of its AMS.

Table 8: India AMS, latest notifications to the WTO

	Value of production 2014 (US\$ millions)	<i>De minimis</i> (10% of value of production)	Total market price support (US\$ millions)
Wheat	26,333	2,633.3	0
Rice	66,847	6,684.7	1,983
Total	93,180	9,318	1,983

Source: FAO and WTO notifications.

5.3. Possible impacts of introduction of a new special safeguard mechanism

The proposed SSM will adversely affect developing agricultural exporters (e.g. several in the Africa Group, Argentina, Bolivia, Brazil, Colombia, Costa Rica, Indonesia, Malaysia, Pakistan, Paraguay, Peru, the Philippines, Thailand, Uruguay, Viet Nam), which will encounter barriers (in the form of higher tariffs) to their exports in countries applying the SSM. The countries most affected will depend on what is ultimately agreed in terms of which products the SSM should cover.

In contrast, local producers in developing countries applying a SSM will benefit initially from protection against competition from imports, but in the longer term domestic agricultural exporters in these countries will become less efficient and thus less competitive in export markets.

6. CONCLUSION

Structural change (shifting resources from low- to higher-productivity sectors) and within-sector productivity growth constitute the main channels to achieve economic transformation. Transformation in the agriculture sector through upgrading existing activities and expanding into higher-value added products within the sector constitutes, for many developing countries, an immediate option to achieve economic transformation.

However, the action of protectionist policies in many countries limits this option. In addition to tariff protection, domestic support limits the competitiveness of exports from developing countries and also introduces competition from subsidised imports in their markets.

Progress on the reduction of trade-distorting domestic support in agriculture has been slow since the start of the Doha Round. However, there is an opportunity during the current negotiations to introduce further disciplines and reduce actual levels of domestic support. This will make exports from developing countries more competitive in key international markets.

The reduction of domestic support will have significant effects on international prices only if reductions on the bound levels of the AMS are sufficiently large to reduce applied levels. Although reductions on the bound AMS will introduce future discipline and limit the distorting effect of domestic support, developing countries will not benefit immediately if the actual levels of domestic support are not effectively reduced. Given that differences between the bound and the applied levels of domestic support are generally large, no immediate effects are expected in general.

The situation could be different for product-specific support; reductions to *de minimis* values may generate some effects on specific commodities. However, based on existing variation in the levels of exports and values of domestic support across developing countries, the benefits are expected to skew toward the largest and middle-income countries. The exceptions would be Benin, Burkina Faso, Chad and Mali in the case of cotton and Cambodia for rice. Ethiopia may also benefit in its exports of sheep meat.

Public stockpiling constitutes an extremely sensitive issue for many developing countries as they base their food security policies on such intervention between producers and consumers. Given the importance of this, stockpiles in certain commodities (e.g. rice) have a significant distortionary effect on

world prices. The relaxation of disciplines in this regard could lead to more generalised use of these types of measures, which might offset the effect generated by the reduction of domestic support measures. This suggests the most realistic solutions are those that aim to guarantee the continuation of current use by existing users while ensuring their future use is limited.

The proposed SSM, on the other hand, is particularly dangerous. As has occurred with the existing SSM, this may lead to permanent activation of the triggers, effectively banning imports. This will lead to increasing inefficiency and low productivity in domestic markets. Therefore, as is the case for any protective measure, the new SSM is likely to damage rather than enhance economic transformation opportunities for developing countries. Efforts should be made to limit and eliminate the existing SSM rather than introducing a new one.

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