

**Assessing the Impacts of a Special Safeguard
Mechanism for Developing Countries in the Doha
Development Agenda**

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Abstract

The agricultural negotiations in the World Trade Organization's (WTO) Doha Development Agenda (DDA) are calling for a specific Special Safeguard Mechanism (SSM) for developing countries that will protect agricultural producers from import surges or price declines, and could potentially add stability to domestic markets. While most of the parameters of this SSM have been decided upon, the DDA negotiations faltered on the issue of whether or not developing nations should be allowed to exceed their pre-Doha bound tariff rates when invoking the SSM. For developing countries, tariffs on agricultural products are an important policy tool to support domestic prices and protect their smallholder producers from global market shifts. Tariffs, however, distort world prices and create global welfare losses. The purpose of this thesis is to assess the impacts of the SSM on global prices and welfare using a non-spatial, synthetic, stochastic, global, partial equilibrium model of the world soybean market. The SSM is assessed in concert with the currently proposed DDA tariff cutting formulas since the additional duties allowed under the SSM are proportional to prevailing bound tariff levels. This study asserts that the SSM actually decreases global price and welfare stability, decreasing world prices of the commodities on which an SSM is placed, though positively affects tariff revenues for those particular commodities. While the SSM may offer a short-term solution for developing countries, its long-term outlook as a price stabilization tool is a not credible argument.

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List of Abbreviations

Key Terms

1. AoA: Uruguay Round Agreement on Agriculture
2. APU: Argentina, Paraguay, Uruguay
3. CAP: Common Agriculture Policy (European Union)
4. DDA: Doha Development Agenda
5. EEC: European Economic Community
6. GTAP: Global Trade Analysis Project
7. LDC: Least-Developed Country
8. MFN: Most-Favored Nation
9. NTB: Non-Tariff Barrier
10. PSD: Production, Supply and Distribution
11. RAM: Recently Acceded Member
12. SPS: Sanitary/Phyto-Sanitary Measures
13. SSG: Special Agricultural Safeguard (From the Uruguay Round)
14. SSM: Special Safeguard Mechanism (From the Doha Round)
15. SVE: Small and Vulnerable Economy
16. TRQ: Tariff-rate Quota
17. URAA: Uruguay Round Agreement on Agriculture

Organizations

1. GATT: General Agreement on Tariffs and Trade
2. FAO: Food and Agriculture Organization of the United Nations
3. OECD: Organization for Economic Cooperation and Development

4. USDA: United State Department of Agriculture
5. WTO: World Trade Organization

1. Introduction

The purpose of this introductory chapter is to outline the background of this thesis, by creating the context from which General Agreement on Tariffs and Trade (GATT) and World Trade Organization (WTO) negotiations were conducted and the state of the current Doha Development Agenda (DDA) negotiations. The objectives of the thesis are also presented including a description of the problem statement. The motivation of this thesis topic is described to provide perspective on the issues facing the WTO negotiations, particularly the stalemate in the current agricultural negotiations concerning the issue of the *Special Safeguard Mechanism* (SSM) for use by developing countries. The chapter concludes with an outline of thesis.

1.1. Background

The Uruguay Round was the seventh round of trade negotiations under the GATT, formed in 1949 following the Second World War, with the goal of reducing world tariff levels. By the 1980s, the previous GATT negotiations had made significant progress in terms of reducing tariff protection on most manufactured products. However, as a result of high distortions created by government policy and the sensitive nature of agriculture in developing countries, agriculture trade remained absent from the multilateral negotiations until the conclusion of the Uruguay Round (UR) and the establishment of the World Trade Organization (WTO) in 1995. When the seventh round of negotiations finally began in 1986 after four years of disagreement on the structure of the agenda in Punta del Este, Uruguay, the UR reviewed all previous commitments to the GATT and resolved most of the remaining trade issues. While one of the main accomplishments of the UR was the incorporation of agriculture into the disciplines of the GATT governing world trade, progress was also made on a number of other issues

including rules for settling disputes, provisions governing intellectual property rights and textile trade policy as part of a newly formed UR agenda.

While the first few years of the round progressed, creating the first body with the power to review and monitor GATT Member countries' commitments, the Trade Policy Review Mechanism, agriculture trade had yet to be discussed. As the negotiations continued, the United States and the European Community took a major step forward in 1992 when they agreed to what became known as the "Blair House Accord," building off a 1991 document entitled the "Dunkel Draft", that established an agreement eventually leading to the signing of the UR. Foremost among the Blair House Accord agreement was the extent to which domestic support (specifically the EC's Common Agriculture Policy and US' deficiency payments and land set-aside programs) would be subject to trade reforms (Healy, Pearce, and Stockbridge, 1998).

When the Uruguay Round was signed, agriculture received its own special heading entitled the Agreement on Agriculture (AoA). The major policy outcomes of the AoA were grouped under three pillars which continue to form the basis of the current DDA negotiations: (i) Market Access; (ii) Domestic Support; and (iii) Export Subsidies (WTO, 2010b). The first, and perhaps most important pillar, is market access. Three important components of the market access pillar concern tariffs, tariff-rate quotas (an instrument that operates as a traditional tariff until imports reach a set quota level, at which time the tariff is increased, often to a rate that discourages further importation of that good) and the SSM. These instruments form the basis of this thesis, particularly with regard to the SSM and the contemporaneous tariff reduction commitments currently being negotiated and their effects on developing country agricultural markets. The other two pillars, domestic support and export subsidies, also relate to the market

access pillar in that tradeoffs on these forms of trade distortions can affect the ambitions of Members' attitudes towards tariff reductions.

The UR was a major stepping-stone in the reform of agricultural trade. Not only was agricultural brought under the disciplines of the GATT for the first time, the round was able to secure a comprehensive set of tariff reduction commitments and decrease the trade distorting effects of non-tariff barriers¹ (NTBs) through by obligating members to convert their non-tariff barriers into bound tariff-equivalents in a process termed “tariffication” (Sharma, 2000)². Tariffs were then capped at a certain level, with the goal of further reducing these tariffs over time in subsequent negotiations. While many agree that it did little to liberalize agricultural trade (Meilke, Rude, Burfisher and Bredahl, 2001) the UR created a transparent framework that paved the way for future reform.

Among the many provisions of the AoA, Article 5 introduced a Special Agricultural Safeguard (SSG) to offset the volatility inherent in agricultural markets. The SSG is based on a price and volume trigger that prescribes additional duties in times of depressed import prices or surges in import volumes. In many respects the SSG was introduced to provide additional policy flexibility when Members changed the “instruments of protection” they used to insulate domestic industries from import competition. That is, the SSG arose as a compromise instrument to circumvent the uncertain volatility Members might face when converting their non-tariff barriers into bound tariff-equivalents through the tariffication process. As discussed below, however, a

¹ Examples of non-tariff barriers include: import quotas or import licenses, variable levies, price band systems

² The *ad valorem* tariff equivalent (T_{eq}) of a non-tariff barriers (NTB) is determined by comparing the difference between domestic producer prices (P_d) and world prices (P_w): $T_{eq} = (P_d - P_w) / P_w * 100$ (Sharma, 2000). Members were afforded considerable flexibility when calculating T_{eq} since the choice of how high P_d was in relation to P_w was left to the discretion of individual Members. Josling (1999) notes that the lack of discipline governing the conversion of NTBs to bound tariff equivalents has led to a host of “dirty tariffication” issues.

number of issues arose concerning the design and implementation of the SSG, particularly in the case of developing countries.

The concept of a safeguard is not new, although a safeguard specific to agriculture is. All WTO Members have had access to the general safeguard provisions under Article XIX, introduced in the original GATT negotiations, that can be applied to any designated tariff lines so long as Members prove injury and provide compensation when it is used. However, developing countries remain concerned about the use of general safeguards because proving injury and providing compensation is often beyond their technical capacity. For this reason the SSG created in the UR has considerable appeal to developing countries because it is an automatic mechanism that does not require an injury test nor the provision of compensation when it is used. The only requirement for SSG use was participation in the tariffication process and the placement of an SSG symbol in Members' schedule of commitments so that exporters knew what products may be potentially affected by additional safeguard duties (WTO, 1994).

The price-based SSG prescribes action in the event of a significant drop in import prices below the price trigger defined as the average Most Favored Nation (MFN) import price level over the 1986-1988 period. If these conditions are met, eligible Members have the right (but not the obligation) to apply an additional SSG duty that is an increasing function of the severity of the import price drop. The volume-based SSG prescribes action in the event of a significant rise in import volumes above the volume trigger defined as the average quantity of imports over the preceding three years for which data are available adjusted by a multiplicative factor that depends on the share of imports in domestic consumption plus the absolute volume change in domestic consumption of the product compared to the previous year (Ruffer and Vergano, 2002; Grant and Meilke, 2011 *Forthcoming*). The multiplicative adjustment factor (and therefore the

overall volume trigger level) is higher the smaller is imports as a share of domestic consumption thus making it more difficult to trigger the volume SSM if imports do not make up a large share of total domestic consumption. The additional duty allowed under the volume trigger does not depend on the severity of imports and is fixed at one-third of a country's normally applied tariff rate.

While the SSG was an important compromise instrument as a means to encourage tariffication, many developing countries chose to forgo the tariffication process in favor of creating higher ceiling tariffs (also known as ceiling bindings)³ (Wolfe, 2009). This is because many developing countries did not apply NTBs prior to the UR. However, tariffication is one of the prerequisites for SSG use and since many developing and least-developed countries opted to create ceiling bindings instead, they effectively eliminated their ability to use the SSG. Thus, the SSG, which was intended for aiding agricultural adjustment in countries heavily dependent on agriculture, including many developing and low-income countries, was not even an option (Finger, 2009). The fact that many developing countries do not have recourse to the SSG did not go unnoticed in framing the negotiations of the DDA. In 2003, Sri Lankan Ambassador K. J. Weerasinghe pointed out that under the URAA, most developing countries are unable to make use of the special agricultural safeguard and “this is an inequity that must be corrected.” (Third World Network, available at: <http://www.twinside.org.sg/title/twninfo102.htm>)

Six years after the implementation of the URAA commitments, the Doha Development Round of negotiations began in 2001. Because the Doha Development Agenda is focused on “development”, developing countries hold an increasingly larger voice in multilateral trade

³ Ceiling bindings were an option for developing countries who were offered a binding of maximum tariffs on agricultural products should they have chosen to forego tariffication, the process required for developed countries, giving developing countries more flexibility in their tariff structures since these bindings did not have to be based on a tariff equivalent formula as with tariffication, and allowing for more bargaining power in later negotiations (Sharma, 2000).

negotiations compared to previous rounds led by the G-33 – a prominent group of now 46 developing country Members led by Indonesia. Concerned over their inability to use the UR SSG, developing countries have tabled numerous proposals calling for a new safeguard instrument specific to developing countries termed the *Special Safeguard Mechanism* (SSM). If the SSM is successfully negotiated it will become the third safeguard created by the WTO and the fifth instrument categorized under the umbrella of contingent protection (anti-dumping duties, countervailing measures, WTO general safeguards, the SSG and the proposed SSM). The SSG is specific to agriculture while the SSM will be specific to developing countries. When the DDA negotiations began in 2001, a special agricultural safeguard with specific relevance to developing countries was considered an integral, albeit vaguely outlined, part of the agriculture modalities. Nevertheless, seven years after the commencement of negotiations, and despite numerous revisions from Chairperson Crawford Falconer, the July 2008 ministerial meetings ended in deadlock, as no negotiating bodies could reach a compromise on the structure and terms of the SSM.

Wolfe (2009) argues that the failure to resolve the SSM issue is deep-seated, resulting from negotiators failure to agree, early on, on the principles and purpose of the SSM. He characterizes this divide as to whether “the SSM should be designed to deal with market disruptions resulting from Doha Round liberalization; or should it respond to any market disruption (whether or not due to imports)” (Wolfe 2009, p. 531). In her July 30, 2008 Press Briefing, U.S. Trade Representative, Susan Schwab cited one of the fundamental issues for the United States arising from the debate over the SSM as, under, “what circumstances should a country be able to go above its pre-Doha bindings.” In the case of Soybeans, at 140 (or a 40% increase in soybean imports over the average), “China could have used this mechanism in eight

out of ten years to raise their tariffs above bound rates.” This highlights another of the U.S.’s concerns of the SSM: the frequency that the SSM may be applied. In other words, the U.S. maintains that the SSM should only be utilized in times of potential “serious injury” to domestic agriculture producers, rather than as a common trade restriction measure, although defining what constitutes “serious injury” is far from clear at this point.

These issues assumed center stage during the nine day WTO Ministerial meeting in July 2008. With no prior agreement on the purpose of the SSM, Wolfe (2009) argues that it was not surprising that the negotiations broke down on the details: how it would work; the commodities it would cover; how it would be triggered; the approved remedies; and what its transparency requirements would entail. On the fifth day of the Ministerial meeting, WTO Director General Lamy gathered the representatives of the G-7 together and presented them with a one page “compromise” on the key negotiating issues of the SSM as an eleventh-hour attempt to save the DDA agricultural negotiations. Only one representative at the meeting rejected the compromise package outright, Kamal Nath of India. Nath’s chief concern related to one line in the document circulated by Pascal Lamy which set restrictions on the process by which developing countries could exceed their UR bound tariffs when the SSM is triggered (Blustein, 2008, p. 266). Lamy’s compromise suggested that before developing countries would be allowed to raise tariffs (inclusive of SSM duties) above their UR bound rates, the volume of imports would have to exceed 140 percent of the volume trigger. With irreconcilable differences on this very issue, on Tuesday, the ninth day of the Ministerial, Lamy announced: “...the Round has broken down...differences on the SSM are irreconcilable...” (Blustein, 2008, p. 275).

1.2. Problem Statement

Though it has been widely accepted that an agricultural safeguard for developing countries will be a necessary provision as part of an acceptable agriculture package in the Doha Development Agenda (DDA), consensus, especially between developed and developing country groups, was never reached. Of major debate was whether and to what extent developing economies should be allowed to breach pre-Doha bound tariff rates. Agriculture plays a more central role in developing countries by providing income generation, food security and can facilitate rural development and growth. The SSM, as with any trade policy mechanism, has particular interests for both exporting and importing nations in that agriculture exporters would face increased barriers to trade when an SSM is enacted, and agriculture importing nations would have the power to more closely regulate the agriculture products entering a country when those products pose a threat to domestic producers as long as the SSM criteria for implementation are met. Many importing nations, especially developing country importers, believe the SSM is vital to protecting agriculture producers as part of their economic development. From the perspective of exporting countries, however, a safeguard that covers all agricultural tariff lines, in all developing country Members needs to be designed conservatively if liberalization of agricultural markets is the ultimate goal.

Given that the SSM will form an acceptable part of an agricultural package for low-income countries in the DDA, it is important to evaluate its impact. An SSM has the implied objective of market stabilization since it is designed to circumvent sharp price decreases or rapid increases in imports. Thus, the potential effects of an SSM must be examined from the perspective of importers, as a stabilization tool, and from the perspective of exporters as a possible trade-distorting impediment to market access. This thesis will evaluate how and to what

extent the recently proposed SSM will stabilize developing country imports and domestic prices as well as its effect on economic welfare in developed countries.

1. How often will the SSM prescribe action and what is the size of the additional SSM duties triggered?
2. Does the SSM have the capacity to stabilize domestic markets in developing nations?
3. How costly is an SSM on agricultural exporters compared to a situation in which trade is liberalized but without recourse to the SSM?

These questions have important policy implications. While many WTO representatives debate the basic discord between Members, the overall source of dispute stems from arguments as to whether the SSM is a necessary source of temporary protection to allow adaptation and growth for small and subsistence farmers in developing countries, or a tool of trade distortion and long-term protectionist policies contradicting the spirit of the WTO. However, exporting Members may accept a higher tariff in the form of an SSM if this provision ensures deeper tariff cuts that would otherwise be the case in the negotiations. Exporters would then face lower tariff duties the majority of the time when the SSM is not being used and increased liberalization in the long run. Should this outcome occur, it could enable countries on both sides of the debate to gain through lower tariff rates while developing country would still retain the right to protect domestic producers with an SSM in times of need.

Given this history of dispute, there are a number of issues surrounding the design and implementation of the SSM that supports the need for further economic research. Much analysis is necessary to describe the impacts, potentially both positive and negative, of the proposed SSM to facilitate renewed negotiation. However, very little empirical work has been put forth to

evaluate the impact of the SSM on developed and developing country markets, as well as global economic welfare.

1.3. Objectives

The objectives of this study are:

1. To assess the impact of the DDA tariff cutting formulas on price stability and economic welfare;
2. To determine how prices and import volumes (domestic and world) are affected by including an SSM provision for developing countries when it is combined with the DDA tariff cuts;
3. To assess whether the SSM can stabilize import prices and volumes in developing country markets;
4. To quantify the economic cost of the SSM when it is combined with the DDA proposed tariff cuts;

To what extent the SSM will help developing countries stabilize imports and prices in domestic markets is not clear. Moreover, because of its technical nature, assessing the impacts of the SSM is clearly an empirical issue that hinges on several things:

- The volume and price trigger levels

The frequency with which the SSM will be triggered in developing countries and whether the price or volume SSM is used

- The size of the additional duties triggered by the price and volume SSM
- The size of the DDA bound tariff cuts since the volume-based SSM duties are tied to bound tariff rates

Because of the complexity of the SSM rules, a case study approach is adopted focusing on the world soybean market to provide a quantitative assessment of the SSM that has proved to be an integral part of the agricultural negotiations and has attracted some of the most vocal countries in the negotiations: the United States, Brazil, China and India. Not only are soybeans an important U.S. export commodity, the U.S is the leading exporter of soybeans in the world, followed closely by Brazil, which surpassed the U.S. in 2005 as the top exporter (USDA, 2009). These two countries exported approximately four times the volume of soybeans than the other top five exporters, Canada, Paraguay and Argentina, combined, on average between 2005 and 2007. Also, as referenced by Schwab, 2008, China is the largest importer of soybeans in the world. The other top five importing countries combined bring in less than China alone over the same three-year period.

Figure 1 shows the net imports of soybeans in 1,000 metric tons for years 2005 to 2007 and the average of these three years for the top five net importing countries. As this figure shows, China's net imports of soybeans show an increasing trend with net imports rising 35% from 2005 to 2007 while the European Union (EU), Japan, Mexico and Taiwan remain at comparable levels over the three years. China imports more soybeans during each year than the other four countries combined. As we will see, this simple fact turns out to be quite important in terms of the models results.

From an exporter perspective, the U.S. continues to increase its production and exportation of soybeans though its share in global soybean trade is decreasing (Figure 2). United States production, domestic consumption and net exports of soybeans (in 1,000 metric tons (mt)) over a 40-year period have increased steadily. However, despite increases in overall production the U.S. share in global exports has been falling (Figure 2). While the U.S. continues to increase

oilseed exports (volume shown here in million metric tons), the United States' global share of exports in all three commodities, oilseeds, oilseed meal and oil.

Figure 1: Top Five Net Importers of Soybeans

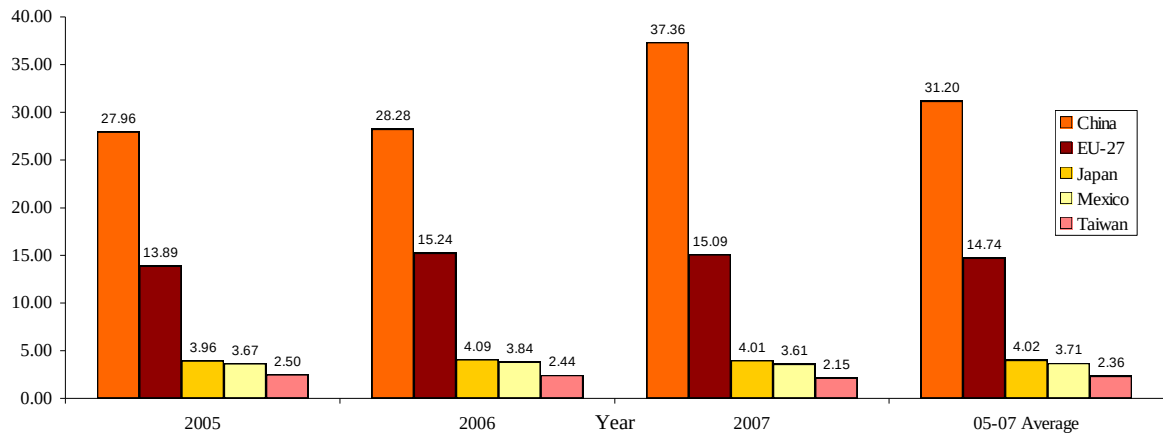
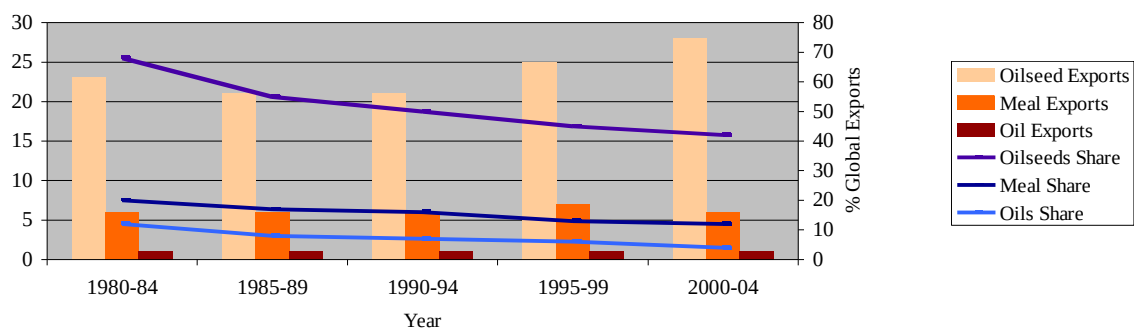


Figure 2: U.S. Oilseed and Oilseed Product Exports: Volume & Share of Global Trade



1.4. Thesis Outline

The structure of this thesis is as follows. Chapter two contains a review of the existing literature. Relevant publications are examined, and a series of case studies that highlight the possible circumstances surrounding the debate over exceeding pre-Doha bound tariff rates under the SSM are discussed. Chapter three outlines the conceptual framework of a two-country partial

equilibrium framework. Chapter four discusses the methodology and data used in this study, and Chapter five summarizes and discusses the results. The final Chapter concludes this thesis with possible policy implications and discusses future research paths.

2. Literature Review

The following chapter provides a review and examination of the existing literature surrounding the GATT and WTO negotiations, as well as the creation of the SSG and SSM. This review is organized into six sections. Section 2.1, considers multilateral negotiations up to the Doha Development Agenda. Section 2.2 introduces the Doha Development Agenda and the agricultural trade negotiations. The third and fourth sections of this chapter (2.3) reviews the formal structure of the SSG and SSM and the qualitative and quantitative literature assessing the potential effects of this instrument. Given this information, a closer look at how and why the negotiations broke down is examined in section 2.5 of this chapter. Finally, the concluding remarks are offered in section 2.6.

2.1. Progression of Multilateral Negotiations and the GATT

Trade liberalization has been the focus of both the GATT and the WTO in each round of trade negotiations beginning in 1948. Prior to the 1986 Uruguay Round (UR), negotiations focused primarily on non-agricultural market access, where trading partners outlined individual tariff reductions for specific items and the principles by which international trade would function. Multilateral negotiations intensified between the GATT's initial rounds (see Table 1) and the Tokyo Round in 1973, at which point the GATT shifted the focus to reducing non-tariff barriers such as quotas, export taxes and dumping, countervailing measures, but little progress was made in the way of agriculture product tariffs (Baldwin, 2009). A timeline of the GATT negotiations is presented in Table 1 that summarizes the negotiations and the increase in

Table 1: Timeline of GATT and WTO Negotiations

Round	Years	Major Areas of Negotiation
Geneva	1947	Tariff Reduction Creation of the GATT
Annecy	1949	Tariff Reduction
Torquay	1951	Tariff Reduction
Geneva	1956	Tariff Reduction
Dillon Round	1960-1961	Tariff Reduction
Kennedy Round	1964-1967	Tariff Reduction Anti-Dumping Regulation
Tokyo Round	1973-1979	Tariff Reduction Non-Tariff Measures "Framework" Agreements
Uruguay Round	1986-1994	Tariff Reduction Non-Tariff Measures Rules Services Intellectual Property Dispute Settlement Textiles Agriculture Creation of WTO- 1995
Doha Development Round ⁴	2001-present	Agriculture Services Market Access for NAMA Goods Intellectual Property Rights Foreign Direct Investment Competition Policy Trade Facilitation WTO Rules Dispute Settlement Environment Electronic Commerce Small Economies Debt & Finance Technology Transfer Technical Cooperation & Capacity Building Least-Developed Countries Special and Differential Treatment

⁴ As outlined in the WTO Ministerial Declaration (WTO, 2001).

the number of topics covered over time. Noteworthy is the fact that agriculture topics were not on the negotiating table until the Uruguay Round in 1986 (WTO and Josling, Tangermann and Warley, 1996). Josling, Tangermann and Warley (1996) provide an optimistic, qualitative analysis of the history of the GATT with its specific relationship to agriculture trade in their book, “Agriculture in the GATT”. As mentioned above, any attempt at reforming agriculture trade rules was futile even though the pervasive existence of world agriculture trade distortions was recognized and even analyzed in 1958 by the Haberler Report in which domestic agriculture protectionist policies were addressed. However, developed countries, including the newly formed European Economic Community (EEC), continued to push agriculture reform out of negotiations by either omitting agriculture trade altogether or including exceptions for agriculture in most other multilateral trade negotiation texts.

2.1.1. The Uruguay Round and Market Access

It was not until the UR that true progress was made on multilateral agricultural trade negotiations. As described above, the URAA focused on three headings (i) Market Access, (ii) Domestic Support and (iii) Export Subsidies. Negotiation commitments were structured under these three headings in schedules that outlined reduction commitments according to countries’ development status. During the Uruguay Round the approach to tariff cuts was later termed, “The Uruguay Round Approach.” This approach used an average of 36% cuts over six years, or 6% a year. Because the average cuts were 36% on all tariff lines, countries were given flexibility in the actual tariff reductions on individual tariff lines (WTO, 2003b). In order to more fully understand how the URAA may affect trade negotiations in the future, Sharma, Konandreas and Greenfield (1996) provide a clear assessment of its outcomes in terms of agricultural prices and incomes. Five models are considered in their review: the Agriculture Trade Policy Simulation

Model (APTSM) (UNCTAD, 1995), the Rural-Urban North-South Model (RUNS) (Goldin and van der Mensbrugghe, 1995), the WTO model (FMN) (Francois, McDonald and Nordstrom, 1995), the Multi-Regional Trade Model (MRT) (Harrison, Rutherford and Tarr, 1995) and the FAO World Food Model (WFM) (FAO, 1995). The review includes an overview of the parameters for each model, where two of these models (APTSM and WFM) are multi-commodity, partial equilibrium models and three are general equilibrium models (RUNS, FMN and MRT) that also include non-agricultural sectors in the simulation, whereas APTSM and WFM simulate only agriculture. A summary of the main features of the five models is provided by Sharma, Konandreas and Greenfield (see Table 2).

Table 2: Main Features of the Models Reviewed

Model	Model Structure		Uruguay Round Commitment Modelled			
	Sector/Commodity Coverage	Country/Region Covered	Tariff Reduction	Minimum Access	Export Subsidy	Domestic Support
ATPSM	PE ^a 12 groups of food commodities	145 separate countries	Yes- per URAA Schedules (1986-1988 base)	Yes	Yes	Yes
WFM	PE 12 groups of food commodities	130 separate countries 10 country aggregates	Yes- per URAA Schedules (1986-1988 base)	Yes	Yes	No- assumed to be non-binding
RUNS	GE ^b 15 agricultural, 5 non-agricultural commodities	22 regions incl. 10 separate countries	Yes- but with reductions from 1991-1993 & 1982-1992 bases	Ignored	Yes	Yes- input subsidies based on PSEs ^c
FMN	GE 19 sectors with 4 agricultural commodities	13 regions incl. 4 separate countries	No- assumed prohibitive	Yes	Yes	No- assumed to be non-binding
MRT	GE 22 sectors with 7 agricultural commodities	24 regions incl. 17 separate countries	Yes- reduced as RUNS above	N/A	Yes- value only limits	Yes

Source: Sharma, Konandreas and Greenfield (1996)

^{a/} Partial Equilibrium

^{b/} General Equilibrium

^{c/} Producer Subsidy Equivalent

$PSE = m + d + i$

where

m = market price support

d = per unit total direct payments

I = per unit total indirect payments

The primary effect measured when comparing these models is the change in world market price at the end of the implementation period (either 2000 or 2002 depending on the model). While the APTSM and WFM models predict general price increases across the board for agricultural products, the RUNS model has far more mixed results, with many agricultural products facing negative world market price effects from implementation of the Uruguay Round; a result argued by the creators of the RUNS model (Goldin and van der Mensbrugghe) that is due to the shift in consumption away from agricultural goods to industrial goods as trade liberalization occurs in multiple sectors leading to a relative decline in agricultural prices. Sharma, Konandreas and Greenfield argue that the technical differences in model specification, including differing base and projection years, country and commodity aggregation or disaggregation, varying supply and demand elasticities, and incorporation of URAA components are possible factors in the model discrepancies.

Regardless of their technical differences, the most important factor driving model results, at least in terms of market access, is the level of pre-existing tariff distortions. As Sharma, Konandreas and Greenfield explain, base tariff rates differed in many cases from those estimated for the period of implementation largely because some studies use bound tariffs as the effective applied tariff while other studies include the more appropriate applied rates that are reduced only if the bound tariff reduction forces a reduction in a country's applied rate. The authors of this paper maintain that any of the five models' approach to the tariff reductions and base tariffs may be considered appropriate, however reconciliation of these models is made difficult and discrepancies exist as a result.

Three general equilibrium models (RUNS, FMN and MRT) that Sharma, Konandreas and Greenfield analyzed provide assessment on the income or welfare effects of the URAA, with the

FMN and MRT models disaggregating economic sectors to show the specific effect of the agricultural sector reforms on welfare. Again, each model shows varying results based on the level of aggregation of commodities and country regions. At higher levels of commodity and regional aggregation, the agriculture effects on welfare are less pronounced. Still, some similarities occur regarding the effects of URAA agricultural reforms on overall economy income gains in Australia and New Zealand, as well as Canada and Latin America in both the FMN and MRT general equilibrium models. Of note is the URAA agricultural reforms' negative effect on welfare for transition economies, such as the former Soviet Union countries, and Africa. Because of these variations in both market price and income effects from the URAA, the authors hesitate to draw any policy conclusions and recommendations. Nevertheless, Sharma, Konandreas and Greenfield's paper provides significant recommendations from which to structure a review of international agriculture trade reform.

2.1.2. The Uruguay Round: Export Competition and Domestic Support

More significant in terms of trade liberalization were the UR constraints imposed on export subsidies and domestic support. With respect to domestic support, a system of colored "boxes" is used to categorize support policies based on their potential to distort trade. Tiered levels of domestic support policies begin at "green", or minimally trade distorting policies (research, environmental payments and natural disaster assistance (Nello, 2007)) followed by the "Blue" box policies which are reserved for subsidies that are tied to programs that limit production, and then "amber" box policies which are deemed to be trade distorting and are subject to reduction commitments. Blue box support is defined as any policy that would normally be categorized in the amber box, but is placed in the blue box because the support policy also requires producers to limit production. This system was instated with the signing of

the Blair House Accords in 1992. In effect, the EU and U.S. successfully contained the majority of domestic support policies within acceptable GATT limits by abiding by the box categorization strategy.

Under the URAA, 25 countries agreed to reduce their use of export subsidies⁵, and notify the WTO each year regarding what commodities would qualify for an export subsidy (Nello, 2007). The provisions for reducing export subsidies included reducing the volume of subsidized exports by 21% over six years using 1986 to 1990 as a base period, and reducing the value of the subsidies by 36% over six years using 1986 to 1990 as the base period⁶ (Leetmaa and Ackerman, 1998). The European Union held the largest share of export subsidies of all the countries involved at 90% of the total value of export subsidies between 1995 and 2001 (Nello, 2007). By and large, the commitments outlined above were met during this implementation period, however as both Leetmaa and Ackerman and Nello note other domestic policies, such as the EU's Common Agriculture Policy (CAP), and relatively high agriculture prices, particularly for grains, coupled with a base period (1986-1990) that saw considerably lower prices, made implementation relatively unproblematic. Concerning this area of the trade agreements, WTO member countries agreed to eliminate the use of export subsidies by 2013 in the subsequent round of negotiations, i.e. the Doha Development Agenda (Nello, 2007).

2.2. From Uruguay to Doha

With the URAA, agriculture trade reform was finally brought under the auspices of the GATT/WTO (Josling and Tangermann, 1999). However, developing countries were held largely

⁵ The WTO defined export subsidies as direct export payments by governments to firms, industries or producers of agricultural products contingent on export performance, sales or gifts of government stocks at prices lower than acquisition prices, export payments financed through government action, subsidies to reduce export marketing costs, and subsidies on goods incorporated into export products (Leetmaa and Ackerman, 1998).

⁶ For developing countries, the reduction in the volume of subsidized exports was 14% over 10 years, and the reduction in value of the export subsidies was 24% , also over a 10 year period.

in the background of previous GATT agreements despite their increasing share of GATT/WTO membership (Krueger, 1999 and Page, 2002). The “Doha Development Agenda,” has been called a development round for precisely this reason: developing countries will form an integral part of the negotiations both in terms of their commitments and in terms of the special needs of their economies. Much of this is stated in the second paragraph of the November 2001 Ministerial Declaration,

“We shall continue to make positive efforts designed to ensure that developing countries, and especially the least-developed among them, secure a share in the growth of world trade commensurate with the needs of their economic development. In this context, enhanced market access, balanced rules, and well-targeted, sustainably financed technical assistance and capacity-building programmes have important roles to play” (WTO, 2001).

Developing countries have a separate set of interests in international trade agreements than most of their developed country counterparts given their stage of development and the dependence of their standard of living on agriculture. Page (2002) assesses the incentives for developing countries to participate in multilateral negotiations, and reports the outcomes of past GATT agreements for the less developed country members. Page argues that developing countries have more at stake in signing international trade agreements, where their interests may not necessarily be supported.

2.2.1. Assessments of the Doha Development Agenda

Fabiosa, et al. (2005) consider the DDA’s impacts on developing economies with respect to agricultural markets liberalization. They use the Food and Agricultural Policy Research Institute (FAPRI 2002) partial equilibrium model in two policy scenarios: 1) removal of all domestic farm support programs and border measures, and 2) removal of border measures only. The authors assess the impact of these policies on trade flows, prices and market equilibrium on developing countries. General results from the model scenarios report varied degrees of world price increases depending on the product under consideration and the initial level of border

policies and domestic support. Higher value products such as dairy, sugars and oils see world price increases varying from 10% in oils, 30% in the case of dairy products and a 60% increase in the world price of sugar. For soybean commodities specifically, the price of soybeans was 10.95% higher in scenario (1) than scenario (2). Soybean oil also saw a price increase of 13% when considering full trade liberalization compared to just liberalizing border policies. In general, Fabiosa et al. (2005) report greater world price increases when trade liberalization includes domestic support compared to when it doesn't.

Meilke, Wensley and Cluff (2001) analyze oilseed trade (soybeans and rapeseed) in reference to a zero-for-zero approach to trade liberalization, where all tariffs, export taxes and subsidies for a particular sector are reduced to zero, and its possible outcomes for the United States and Canada. As we will see, this particular study is important because the modeling framework in this study extends that of Meilke Wensley and Cluff (2001) to a stochastic setting suitable for analyzing the effects of an SSM. Oilseed markets are more complex because it is a multi-product industry. One country may possess the natural resources suitable to growing beans, but lack the industrial capacity to process the beans into meal and oil. Conversely, a country may have the industrial structure to process raw beans but lack arable land necessary to grow soybeans. In addition, even if a country is a large producer and processor of raw beans a country's domestic demand for crush, livestock proteins in soybean meal or industrial demand for soybean oil may be large enough such that the country is a net importer of all three products.

Meilke, Wensley and Cluff first provide an analytical framework for a typical two-country model with international trade. The authors then use the OECD's AGLINK model to evaluate the effect of tariff removal. Overall, the world price of all three products, seed, oil and meal, increased when border measures were removed. However, importers that had previously

used high border protection measures, notably high tariff rates, saw their domestic prices decrease. This is because these countries faced relatively larger tariff reductions for which the world price increase could not compensate, resulting in an overall decrease in domestic prices. Other notable effects from trade liberalization include increased revenues of oilseed producers and crushers (those who process seeds to meal and oil), in almost all countries considered except with the exception of the Rest of the World (ROW) region. While the results on various countries and country groups varies given their status as oilseed producers/processors, this study concludes that North American producers and processors would greatly benefit from a zero-for-zero form of trade liberalization.

2.2.2. DDA Effects on Welfare

In discussing how developing countries may fair from increased trade liberalization, Susan Nello (2007) presents a summary of possible scenarios that may lead to economic welfare increases, though as she points out, trade liberalization may not necessarily have the same economic effects in developing countries as that which occurs in developed nations. Nello (2007) constructs a table that provides a brief overview of 12 previously completed studies, ten of which used the Global Trade Analysis Project (GTAP) Model⁷. Direct comparison is again difficult because each study varied in their definition of the baseline and subsequent policy experiments. However all studies conducted with the GTAP model report that trade liberalization would have a positive effect on economic welfare, with a estimates of the welfare gains ranging from a low of U.S. \$20 billion projected by UNCTAD's 2003 GTAP study with 1997 as its base and a 50% cut in applied agricultural tariffs to a high of U.S. \$358 billion using a dynamic LINKAGE

⁷ "GTAP (Global Trade Analysis Project) is a global network of researchers and policy makers conducting quantitative analysis of international policy issues. GTAP's goal is to improve the quality of quantitative analysis of global economic issues within an economy-wide framework"
<https://www.gtap.agecon.purdue.edu/about/project.asp>. Produced by Purdue University, West Lafayette, IN

model with 1997 as the base year in the data that considered a nearly 100% reduction in domestic agricultural support and applied tariffs. Nello recognizes that trade liberalization requires adjustment from producers, with compensation provided to those that lose from trade liberalization. Nello also argues that it may not be simply tariffs that harm developing countries that participate in international trade, but other policies such as sanitary and phyto-sanitary (SPS) measures and poor domestic infrastructure.

Countries, both developed and developing do have some recourse through the DDA in order to protect sensitive and special products. Laborde and Martin (2010) outline the WTO structure for defining products as special or sensitive. Developing countries have more flexibility when it comes to the number of products designated, and how these products are treated in relation to trade liberalization. Developed countries may select products that may be classified as sensitive in up to, “4 percent of tariff lines... except for countries with over 30 percent of bindings in the top band [bound tariffs greater than 75%], or with tariffs scheduled at the six digit level, in which case this percentage can be increased by 2 percentage points” (Laborde and Martin, 2010). Laborde and Martin also describe the potential developing country Special Product designations as, “Up to 12 percent of agricultural tariff lines can be designated in this category, of which up to 5 percent would be subject to no cuts and with an average cut in tariffs of 11 percent.” Special Products are those products that may impact food or livelihood security or development, and as such may also be the types of products that may fall victim to the SSM.

Therefore, this policy can also have impacts on how tariff lines for the SSM are chosen, and special and sensitive products will be important factors in determining a countries’ willingness to compromise on relatively larger tariff reductions in the DDA framework. It is worth noting that the basic tariff reduction structure that started the DDA has continually been

amended by numerous exceptions of which the SSM and Special Products form an important component. Thus predicting the welfare gains from a comprehensive DDA package is complicated by the growing technical aspects of the modalities including the flexibility of countries to self-select sensitive and special product lines and whether and to what extent Members will make use of the SSM.

2.3. Qualitative Assessments of the Special Safeguard Mechanism (SSM)

Valdés and Foster (2003) and Ruffer and Vergano (2002) provide recommendations for the construction and language of the SSM. Valdés and Foster focus their discussion on the background justification for a developing country SSM, citing developing and transition economies' gradual shift toward trade liberalization, which increases the presence of global market forces in these regions thereby increasing the volatility of domestic markets. Because developing countries often tend to have fewer structural capabilities to deal with the variability in global agriculture markets, developing country governments must make an effort to offer protection to their producers from shifting international market forces that could have an impact on agricultural product supplies and prices.

Valdés and Foster use four commodity markets over a period of 37 years to illustrate the stochastic nature of world agriculture prices. They conclude that over time, prices become less instable but note that this instability may be transferred from the global market to domestic actors. The authors also consider the long-term effects of persistently low prices on developing countries. While it is understood that agriculture markets are cyclical, they show that lower prices persist for more months than the occasional spike to higher prices. Thus, there is need for a protection mechanism for developing countries that face world price distortions as a result of support programs in industrialized countries and cyclical downturns in agriculture prices. Valdés

and Foster's recommendations provide guidance for the design of the SSM policy. The authors note that the SSM should be based on prices rather than volume levels since prices are usually a much better predictor of producer injury. The authors conclude that,

“Developing countries have fewer fiscal resources to manage price risk and aid their farmers through domestic supports, and have fewer alternative market instruments to compensate for the higher probability of periods of low domestic prices that might result from further moves toward trade liberalization” (Valdés and Foster 2003).

Ruffer and Vergano point to three primary justifications for an SSM: 1) the ineffectiveness of the previous Special Agricultural Safeguard in protecting developing country interests, 2) the acute vulnerability of small producers in developing countries, and 3) the vulnerability of global agriculture markets to price and quantity volatility. Their recommendations for the construction of an SSM simplicity - eligible countries should have no proof of injury requirement; protection measures should be temporary and not part of longer term protectionist goals; no requirement to provide compensation when the SSM is used; and that the SSM should eligible on a specific and limited number of products.

Another review of the SSM modalities is Finger's 2009 article that examines the proposed SSM in the DDA Agriculture Agreement, and compares it with the URAA SSG, in an attempt to identify how the SSG may facilitate completion and agreement of a new SSM for developing countries. While basic rationalization and criteria for an SSM have been previously represented, Finger offers a review of the proposed structure of the SSM in the July 2008 WTO draft modalities and the proposals put forth by the G-33 that amend the draft modalities' parameters. Because the currently proposed SSM is based on mechanical formulas that dictate when a safeguard may be levied, Finger concludes that this method may trigger an SSM when it may not be needed. He stresses that the role of an SSM should be to provide a policy

management tool, rather than a protectionist tool, a distinction that is frequently debated by negotiators.

Valdés and Foster (2005) analyze the attributes of a price floor mechanism for triggering an SSM compared with other triggers based on the volume of imports. They argue that volume triggers based on a, “sharp, sudden, recent, and significant increase in imports” (Valdés and Foster 2005), is inherently flawed by the difficulty involved in qualifying all of these factors, especially in the case of low-income countries. Moreover, the line of reasoning behind a volume trigger is that an influx of imports leads to a direct decrease and destabilization in domestic prices. However, this does not apply in the case where an influx of imports is needed to offset a shortfall in domestic production, which conceivably would not change the overall supply of a commodity or its price. In this case, an SSM may be applied given the import surge, however there is no damage to either the producer income due directly to imports or as a result of lower prices. Damage could in fact occur to domestic consumers that may be faced with higher than average prices due to both the domestic production shortfall and safeguard tariff imposed on imports to cover the shortfall. In other words, the SSM will exacerbate domestic market instability when the source of the import shock was natural response to a domestic harvest shortfall!

With this in mind, Valdés and Foster therefore consider only a price trigger – one that will reflect better the longer term trends in industry costs. Valdés and Foster note that in keeping with countries’ transparency, *fob* prices would provide the most accurate prices that are not contingent on domestic pressures, and may be more attainable than *cif* prices for developing countries. As such, reference prices must be established in order to provide grounds for the price based SSM. While the authors conclude that a regression trend is the most accurate reflection of

historical price levels, opting for a more simplistic reference point, such as a simple base period may be more technically feasible for low-income countries.

One of the key arguments raised in support of creating a new SSM is the fact that developing countries were not able to use the SSG in the URAA because they did not meet the tariffication requirement. Hallaert (2005) criticizes this viewpoint by drawing on some recent evidence of members' SSG notifications to the WTO over the period 1995-2004. This study suggests that a number of transition economies have recently begun using the SSG more frequently. Hallaert (2005) finds that actual SSG use is much higher than reported use, which appears to be on the decline, because the latter is based on members' notifications to the WTO. Many WTO members, developed countries in particular, have stopped notifying their SSG use despite their obligation to do so under the URAA, or choose to notify their SSG use *ex post*, and usually with a "substantial [time] lag" (pp. 5).⁸

Bernal's 2005 paper considers how SSM products should be designated in the context of special products (SP) for developing countries. The author argues that priority should be given to those products that are vital to food and livelihood security and rural development needs. The Doha Round commitments may play a role in changing the current level of protection among developing country importers and their exporter counterparts (developed or developing). Bernal states that other commodities that may qualify for SP designation include those that are already threatened by increasing import competition and those subject to subsidies from exporters, which

⁸ A quick scan of the WTO notifications of SSG use suggests that reporting has improved since Hallaert's study although notifications are often delayed. For 2005 and 2006, eight Members eligible to use the SSG have yet to notify while 19 have yet to notify for 2008. Habitual laggards include Barbados (2002), Venezuela (1998), Czech Republic (2003), Hungary (2004), Korea (2004), Morocco (2003) and the Slovak Republic (2005), where the date in brackets is the date of their most recent notification.

increases the volatility of markets. These factors are necessary when determining how countries may designate certain products as “special” or “sensitive.”

The South Centre’s Trade for Development Program (SCTDP) (2009) prepared a report based on the most recent revision of the WTO modalities⁹ (WTO, 2008d) that includes analysis of the document’s provisions as they affect developing country interests. This paper uses a number of historical examples in which the provisions would impact individual developing countries. They use examples from Indonesian rice imports to argue that the volume trigger of even 110% of the three-year average is too high, and recommend that the trigger should be reduced by five percentage points, and the trigger levels should increase in increments of five percentage points. This however seems counterintuitive to the goals of simplicity especially when arguing from a developing country perspective. In addition, they recommend an increase in the number of tariff lines, as well as the necessity to breach the Uruguay Round bound tariffs as based on examples from Kenyan sugar imports and Cote d’Ivoire poultry production. The paper also addresses the cross-check provision that indicates that prices must also be declining for the volume SSM to be implemented, holiday periods of Volume SSM implementation¹⁰ and the exclusion of preferential trade agreements from SSM applicability, though only in passing as further restricting the SSM’s effectiveness for developing countries as all three provisions impose constraints on the duration and extent of implementation, as well as those products eligible for an SSM as is the case for the preferential trade agreement issue, since only products with MFN status are eligible for an SSM under the W7 modalities..

9 TN/AG/W/7 Published 6 December 2008.

¹⁰ Defined by the W7 modalities as period of application when the SSM may not imposed. For example, the Volume SSM may be implemented for 12 months on most products. The SSM may be employed for two full 12-month periods, but must be followed by two full “holiday” periods each of 12 months before implemented again.

Montemayor (2008) uses the May 2008 draft of the WTO modalities to gauge how countries may access the SSM and how effective this SSM would be in resolving international and domestic prices, by employing a model composed of monthly data of import volumes and prices (a proxy for individual shipments) for 27 agricultural commodities in six developing countries over six years. Montemayor looked at two characteristics of the SSM: accessibility and effectiveness, which is difficult to measure due to the range of parameters and the very definition the term itself. For the purpose of this study, the SSM is considered effective if it succeeds in raising the price to within 90 percent of the domestic price once the SSM is triggered. This study concluded that the SSM would be accessible 37.5% of the time during a given year with only 25% of that time actually affecting import prices. Moreover, in all the scenarios, the SSM was only effective in supporting prices 46% of the time. However, when tariff caps were applied to the SSM based on Doha or pre-Doha bound tariffs, Montemayor found that the SSM effectiveness was greatly diminished depending on the type of cap imposed. Still, provisions for maximum application of the SSM at 12 months for a volume SSM or on a per-shipment basis was favorable to other proposals. However, careful evaluation of this study presents concerns to other researchers. First and foremost, bound tariffs are used as triggers and gauges for the SSM, whereas in reality applied tariffs would be used. This is significant for those countries that have a gap between their applied and bound tariffs, as is the case with a number of developing countries. This greatly distorts both the accessibility and effectiveness as Montemayor measures them. Therefore, while this study should be regarded as a respectable attempt to quantify the effects of the SSM, the results are suspect, and should not be taken as a plausible account of how the SSM will behave.

2.4. Assessing the Quantitative Components of the SSM

This section reviews three simulation studies that attempt to quantify the impacts of the SSM. We differentiate these studies from those discussed above because each one develops a formal model of economic behavior in a framework that specifies supply and demand responses as well as resource allocation in the case of economy-wide models to provide equilibrium prices and measures of economic welfare. In contrast with non-behavioral simulations, these models can capture impacts of SSM application on demand, supply, imports, and domestic and foreign prices in an internally consistent framework. For example, in the case of the SSM fully structured partial and general equilibrium models show the number of times an SSM is triggered, its effects on market prices and price stability as well as the welfare effects of introducing the SSM when it is combined with proposed DDA tariff cuts. However, direct comparisons among the quantitative studies are challenging because they use different modeling frameworks as well as different price and quantity triggers for the safeguard mechanism.

The SSM is specifically designed for use by developing countries, though arguments persist over whether its role is as a domestic price stabilizer or a protectionist measure for smallholder producers or both. Grant and Meilke (2006) use a case study of wheat to assess the marginal effects of an SSM on domestic market stability and developed country exports. This study proposes a stochastic two-country partial equilibrium model to assess four scenarios that utilize the March 2003 DDA draft that includes either the Harbinson formula or the Swiss-25 formula of tariff cuts, where for each formula an SSM is first omitted and then added to the import price. The Harbinson formula is more conservative, and only cuts applied tariffs for wheat in four importing countries, whereas the Swiss-25 formula is more comprehensive, with all applied tariffs cut to 25% or less. With respect to the SSM effects, the Harbinson tariff cut scenario without an SSM shows an overall welfare gain of \$716 million, while the addition of

the SSM decreases welfare by \$146.1 million. As for the Swiss-25 tariff cut scenario, the overall gain in welfare from tariff cuts alone is larger than Harbinson at \$1.79 billion and a SSM cost of only \$133 million. The increase in overall welfare gain in the Swiss-25 scenario is understandable due to the larger tariff original tariff cuts. However, Grant and Meilke point out that the lower SSM cost is due to the fact that SSM duties are derived from the base tariff rate, and therefore are lower as applied tariffs are cut. Therefore, the authors conclude that the SSM in their simulation is only minimally trade distorting, while acting in a domestic price stabilization capacity for those developing country importers that require such a mechanism. Important in this analysis is the recognition that the need for an SSM may be increased as trade liberalization increases with progression of the Doha Round.

A 2009 review by the same authors assesses another issue surrounding dispute on the SSM: the ability for countries to breach their pre-Doha bound tariff rates when applying the SSM. This study also utilizes wheat as a case study in a global, stochastic, partial equilibrium model. In this study, tariff cuts are based on the WTO July 2008 draft modalities, with countries being able to exceed pre-Doha bound tariffs in one scenario, and the other capping the SSM at the pre-Doha bound rate regardless of the trigger. When these two scenarios are compared against the baseline of the WTO July 2008 tariff cuts, the cap at pre-Doha bound rates yields domestic price increases for 74% of developing countries, but destabilizes prices in 68% of total developing countries. Volume imports are stabilized in 87% of developing countries. In comparison with their 2006 study, Grant and Meilke show \$1.24 billion in welfare gains from trade liberalization under the WTO July 2008 draft modalities, with only a \$204 million loss due to the SSM. When countries are allowed to exceed their pre-Doha bound tariff rates, an increased percentage of countries see less stable domestic prices, but more stable imports. In allowing the

SSM to breach pre-Doha bound rate, there is an additional loss to welfare of \$19 million. These conclusions have the potential to bolster developing countries' arguments for exceeding pre-Doha bound rates when negotiations resume.

Somwaru and Skully (2005) use an inter-temporal general equilibrium model (GTAP) to assess the costs and benefits of an SSM for agriculture on least developed countries (LDCs). Their basic conclusions stem from the axiom that the higher the level of trade liberalization, the increased welfare resulting from such liberalization. They run five scenarios at varying levels of liberalization from the status quo, where liberalization occurs for all other commodities, except the grains and oilseeds (the commodities assessed in this study), where current baseline tariffs are held in place, through imposition of the SSM and full trade liberalization. As expected, increasing levels of liberalization led to increased levels of welfare compared with less liberalization. Furthermore, developing countries see a greater welfare loss compared with developed countries when an SSM is imposed, however, overall, the welfare loss is only 1% of the total welfare change from full trade liberalization, suggesting that while developing countries do not see the same welfare gains to the SSM, the losses are minor, and may not affect their desire to maintain use of an SSM.

Recently, Hertel, Martin and Leister (2010) use the general equilibrium GTAP model specifically configured for agricultural markets (GTAP-AGR) to measure stochastically the effects of both the price and volume SSMs using wheat as a case study. This study differs from others in that the authors use the Armington import demand specification to model product differentiation within the wheat sector, method that models, "source-destination trade flows and prices to proxy shipment by shipment price variation" Grant and Meilke (2010). In addition, their approach considers the SSM model as a non-linear complementarity problem. Their results are

based on 2001 as a model benchmark, with SSM parameters adhering to the December 2008 WTO draft modalities. Hertel, Martin and Leister offer a number of intriguing insights based on their results. First, they note that should the SSM be employed mechanically when a trigger is reached, the effects of the SSM may actually be to destabilize world prices. Notably, the volume SSM has the greatest effects on price destabilization, as well the reduction of imports, increase in domestic prices and mean domestic production for SSM imposing countries. Furthermore, the authors argue that price volatility increases, as imports are restricted, decreasing supply in countries that may face falls harvest volume. In all, the value of wheat imports declines by as much as 50% in select regions, with a 4.7% reduction in global wheat trade. In terms of the price SSM, the effects are less pronounced, but prices are still destabilized in the majority of cases. Hertel, Martin and Leister suggest that in terms of a policy tool, the SSM must also be compared with poverty reduction goals in net food importing countries, where urban poverty must also be addressed rather than simply small-scale producers.

While much of the focus of the SSM and DDA negotiations focus on developing country importers, de Gorter, Kliaug, and Nassar (2009) examine the SSM's impacts on developing country exporters. They consider the cases of four developing country importers: China, India, Indonesia and Korea, and found that in the instance of a price trigger, where the trigger is the average monthly MFN-sourced price over the past three years, on a shipment per shipment basis, countries are able to invoke the SSM against imports from developing country exporters since their export prices are historically lower than developed country exporters. In addition, when comparing triggers based on a shipment per shipment basis compared with total imports, the percent of trade that triggers an SSM against both least-developed and developing country exporters is higher on the per shipment basis in general, and when compared to developed

country exporters. These results suggest that while developing country importers may argue for use of an SSM, developing country exporters may be more vulnerable to an SSM than developed country exporters. The extent to which developing country exporters lose from an SSM is not quantified in this study, however the existence of such a study is important when discussing the possible outcomes of an SSM. Since most studies evaluate how an SSM may impact developing country importers, the effects on developing country exporters is also an important factor in the negotiations. This is especially true given the economic structure of many developing countries, many of which rely on agriculture to contribute a large percentage to their GDPs, and where agriculture products may make up a significant percentage of exports to both developed and developing countries.

Table 3: Negotiation Timeline of the Special Safeguard Mechanism

Date	Version	Title	Main Points	Source
December-2002	Harbinson Draft 1	TN/AG/6	Must decide whether Article 5 of the URAA will be eliminated or maintained. Proposal includes: - Elimination of access to developed countries, - A reference period will be calculated to determine triggers that reflect market prices, - Transparency and notification requirements will be strengthened, - Qualifications for special products or product lines will be amended from the URAA	WTO 2002
March- 2003	Harbinson Text (Draft 2)	TN/AG/W/1/Rev. 1	As according to Article 5 of the URAA. Changes include: - No access for developed countries either at the end of the implementation period of WTO tariff reductions or within [2] years of the end aforesaid implementation period - Access to an "SSM" will be based on future technical work	WTO 2003
September-2003	Cancún Ministerial	JOB(03)/150/Rev. 2	An SSM for use by developing countries will be established with provisions to be determined.	WTO 2003
July- 2004	July Package	JOB(04)/96/Rev. 1	An SSM for use by developing countries will be established.	WTO 2004
December-2005	Hong Kong Ministerial	WT/MIN(05)Dec	An SSM is need to serve developing countries. There should be a volume trigger, however the definition of a "surge" is debatable. Also debated is establishment of a price trigger. Differences arise on how and to what extent products may be eligible for	WTO 2005

			the SSM.	
July- 2006	Falconer Draft 1	TN/AG/W/3	Developing and possibly least-developed countries will have access to the SSM. Debate remains as to the number of products eligible for the SSM and to what extent they are eligible including ineligibility for "special products." - Volume Trigger: Imports exceeding [130] percent of the volume over a [36] month preceding period or a base period of [x]-[x], whichever is greater. - Price Trigger: the c.i.f. price falls below [70] percent of the average [monthly][annual] price for the previous [3 year][36 month] period or a base period of [x]-[x], [when imports are increasing]. - Provisions also include eligibility of imports within [bound] tariff quotas, shipments en route prior to enactment of an SSM as exempt from the SSM remedy, but eligible for calculation into eligibility of an SSM, the extent to which certain products are eligible for various additional duties including seasonal products, and the total level of additional duties allowed. - The SSM shall be in place for no more than [12 months][end of the year] following enactment. - Additional duties imposed are on a per-shipment or ad valorem basis for no more than 12 months. - Members will not have recourse to measures taken according to the previous provisions.	WTO 2006
March- 2006	G-33 Proposal	JOB(06)/64	- Volume Trigger: Trigger level is equal to the average annual volume of imports in the most recent three-year period. - Price Trigger: the c.i.f. price falls below the trigger equal to the monthly reference price for the most recent three-year period For shipments enroute prior to enactment of additional duties will be exempt where imports exceed 110 percent but not 130 percent of the average import volume trigger, the max. duty does not exceed 75% of the bound tariff or 50 percentage points (whichever is higher), and where imports exceed 130 percent import volume the max. duty does not exceed 100% of the bound tariff or 60 percentage points (whichever is higher).	G-33 2006
May- 2007	Falconer 2	"Challenges"	-Two triggers: Price Trigger and Volume Trigger - The SSM vs. SSG is a political issue - The term "special" indicates that the SSM should be just that: special, i.e. not available on a regular basis - Importance of maintaining a food security, rural development premise vs. protection mechanism - Imports from preferential should not be counted in one area but not another for the purposes of determining triggers and application of remedies	WTO 2007

			- Volume trigger of 125% for the most recent three-year period is simplest measure - Argument between a 12 month implementation period and the "end of the year" lends itself to justification of the "end of the year" in order to not disrupt subsequent time periods - Price trigger- average annual price is more acceptable than average monthly price - Price remedy is the difference between the import price and the trigger price, but there are two questions: 1), "Should the price be able to fall by x per cent below the trigger before any remedy can be applied" (Falconer 2007); and 2), "Should the remedy fully or partially offset the decline in price" (Falconer 2007).	
July- 2007	Falconer 3	TN/AG/W/4	- Preferential trade that is counted into the eligibility of triggers must also fall subject to any applied remedies. - Price and volume triggers may not be applied at the same time. - Triggers must take care not to disrupt normal trading patterns.	WTO 2007
February- 2008	Falconer 4	TN/AG/W/4/Rev. 1	- SSM shall not be invoked for more than [3][8][products] in a 12-month period. - An SSM may not be imposed if an SSG under the GATT Article XIX, anti-dumping or countervailing measure, or measure under the Agreement on Safeguards is imposed. - Volume Trigger: Imports exceed [105][130] but not [110][135] percent of base imports the addition duty is [[50][20] percent current bound tariff or [40][20] percentage points whichever is [higher][lower]]. Where imports exceed [110][135] but not [130][155] percent of base imports the additional duty is [[75][25] percent current bound tariff or [50][25] percentage points whichever is [higher][lower]]. Where imports exceed [130][155] percent of base imports the additional duty does not exceed [[100][30] percent current bound tariff or [60][30] percentage points whichever is [higher][lower]]. Pre-Doha bound tariff is maximum ceiling. - Price Trigger: Equal to [70 percent of] the average monthly [MFN-sourced] price in the preceding three-year period. - Shipment-by-shipment basis. - Additional duty [50 percent] of the difference between the import price and the trigger price. - The volume SSM may be applied [until the end of the year in which it was imposed][for a maximum of [6][12] months]. - No SSM shall be applied for more than two consecutive periods. - Special provisions for least-developed countries and small and vulnerable economies.	WTO 2008
May- 2008	Falconer 5	TN/AG/W/4/Rev. 2	All tariff lines eligible, but only [3-8] products eligible in a 12-month period.	WTO 2008

- **Volume Trigger:** Imports exceed 105 but not 110 percent of base imports the addition duty is 50 percent current bound tariff or 40 percentage points whichever is higher.
Where imports exceed 110 but not 130 percent of base imports the additional duty is 75 percent current bound tariff or 50 percentage points whichever is higher.
Where imports exceed 130 percent of base imports the additional duty does not exceed 100 percent current bound tariff or 60 percentage points whichever is higher.

OR: Imports exceed 130 but not 135 percent of base imports the addition duty is 20 percent current bound tariff or 20 percentage points whichever is lower, provided the current bound tariff is not exceeded.
Where imports exceed 135 but not 155 percent of base imports the additional duty is 25 percent current bound tariff or 25 percentage points whichever is lower provided this does not exceed the mid-point between the pre-Doha and current bound tariff.
Where imports exceed 155 percent of base imports the additional duty does not exceed 30 percent current bound tariff or 30 percentage points whichever is lower provided this does not exceed the pre-Doha bound tariff.

- If the level of imports is negligible compared with domestic production and consumption, the SSM is not applicable.
- For the second option above, least-developed countries may be able to exceed pre-Doha bound tariff levels by a maximum of 25 *ad valorem* percentage points.
- The volume SSM may be applied for up to 12 months from application (seasonal products up to 6 months).

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The SSM will be available for all tariff lines in principle.

WTO
2008

- **Volume Trigger:** Imports exceed 110 but not 115 percent of base imports the addition duty is 25 percent current bound tariff or 42.5 percentage points whichever is higher.
Where imports exceed 115 but not 135 percent of base imports the additional duty is 40 percent current bound tariff or 40 percentage points whichever is higher.
Where imports exceed 135 percent of base imports the additional duty does not exceed 50 percent current bound tariff or 50 percentage points whichever is higher.

- **Price Trigger:** Equal to 85 percent of the average monthly [MFN-sourced] price in the preceding three-year period.
- Additional duty 85 percent of the difference between the import price and the trigger price.

- Least-developed countries may be able to exceed pre-Doha bound tariff levels by a maximum of 40 *ad valorem* percentage points or 40 percent of the current bound tariff whichever is higher.
- Small and vulnerable economies may be able to exceed pre-Doha bound tariff levels by an additional maximum of 20 *ad valorem* percentage points or 20 percent of the current bound tariff whichever is higher for a max. of (10-15) percent of tariff lines in any period.
- Developing countries not specified in the last two points may exceed pre-Doha bound tariffs by a max. of 15 *ad valorem* percentage points or 15 percent of the current bound tariff whichever is higher for a max. of 2-6 product lines and not for more than two consecutive periods.

* Bracketed [x] terms indicate no agreement has been reached

** Assume that any provisions outlined in previous drafts remain the same or similar unless otherwise noted in subsequent drafts or modalities

2.5. Concluding Remarks

For the Doha Development Agenda negotiations to come to a close, an agreement must be reached on the subject of a Special Safeguard Mechanism for agriculture. While the reasons for a negotiation breakdown may now be clear, both sides of the negotiation block have as of yet made little progress toward a true compromise. The issue of how the SSM is justified in the eyes of those viewing it as a protectionist measure is only one of a number of parameters that must be assessed. Developing countries must continue to make a case for an SSM in a sector known for volatility given the cyclical nature of agriculture, the possibilities of supply storages or surpluses as a result of weather patterns, and when exactly the SSM may be invoked, as it is, of course, a voluntary measure. With limited quantitative literature on the topic at present, this is an opportune time to contribute to the analysis and negotiations over the SSM. The next chapter introduces the conceptual framework and quantitative model.

3. Model Framework

Building off of this background and the previous discussion of the existing literature, the purpose of this chapter is to introduce the conceptual model and quantitative framework. The chapter is organized in four sections. Section one reviews the basic economic effects of a tariff in a partial equilibrium setting. This is followed by an introduction and discussion of the stochastic simulation model of the world soybean market, which is subsequently used to assess the potential impacts of a Special Safeguard Mechanism.

3.1. Two Country Trade

Countries have a number of reasons to restrict trade. Most often the justification for trade restrictions are to protect sectors of the domestic economy and generate revenue. Domestic sectors of the economy may need protection from trade if they are an infant industry, there is a food or national security concern, other countries have established trade distorting practices themselves, or protect otherwise uncompetitive domestic industries (Norton, 2008). Domestic trade protection in the form of tariffs, subsidies, export taxes, and other trade barriers not only insulate domestic producers from global market competition, but in the case of an SSM tariff, can also provide a source of revenue for governments. A tariff, or a tax on imports, makes it more costly for exporters to sell in the importing market (assuming costs are borne by suppliers), and in turn raise domestic prices of the good. Other than tax revenues that can be important in developing countries, an SSM tariff is inherently a producer-orientated policy. Producers of the good in question benefit from higher domestic prices caused by the tariff and if the SSM is successful in mitigating import surges, producers are protected from global market forces.

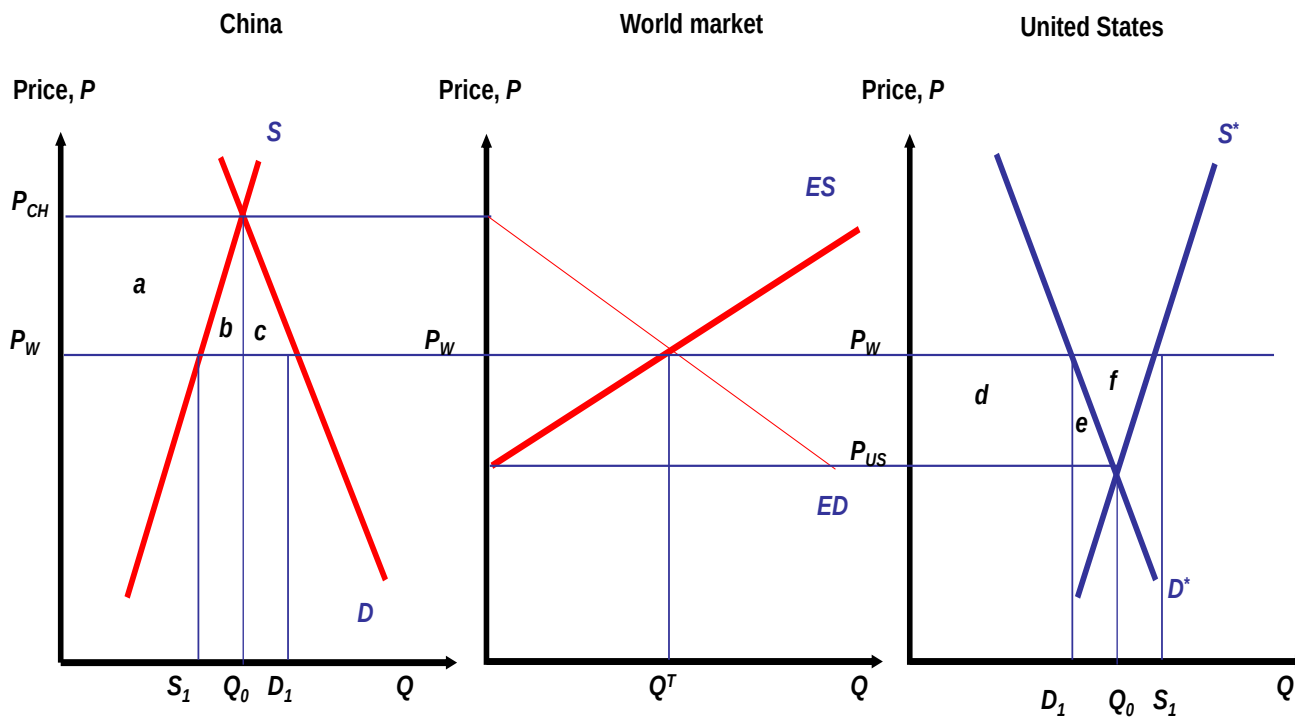
Partial equilibrium analysis is a common method used to analyze the welfare costs of trade protection. In contrast to general equilibrium analysis, which includes behavioral equations

to represent multiple sectors in an economy, partial equilibrium analysis focuses on the effects in one sector only. The implicit assumption in partial equilibrium analysis is that if there are many sectors in the economy and the sector under consideration is a relatively small component of the economy, then shocks to this sector will have a negligible effect on other sectors in the economy. Partial equilibrium analysis uses linear supply and demand curves to depict market equilibrium and measures economic welfare using standard producer and consumer surplus triangles.

The Special Safeguard Mechanism is essentially a simple tariff. It is complicated in terms of the technical rules that govern its use but relatively simple in terms of predicting the economic welfare effects of the policy. The SSM is a temporary tariff and the economics of tariffs are well known. Exporters favor their elimination while importers lower them with great reluctance despite the fact that there are often welfare gains from tariff reduction. Protection and insulation from world markets in agriculture does not come without a cost. Welfare impacts are an important measurement of market distortions both for stabilization programs and market insulation techniques.

For simplicity, consider a two-country model consisting of an importing nation (China) and an exporting country (U.S.) and a single commodity, soybean oil (Figure 3). In autarky, China produces and consumes Q_o at price P_{CH} , which balances supply and demand in the absence of trade. Similarly, the U.S. produces and consumes an amount Q_o in its market at price P_{US} . If China and the U.S. engage in free trade, the world price is that which balances the excess supply in the U.S. market and the excess demand in the Chinese market. These excess supply and demand curves are represented by the curves labeled ES and ED in the world market. P_w is the world price for which trade is balanced.

Figure 3: Single Commodity Two-Country Trade



Note:

P_{CH} = Domestic Price- China at Autarky

P_W = World Price

P_{US} = Domestic Price- U.S. at Autarky

Q_0 = Quantity Demanded and Supplied with Free Trade

S_1 = Amount Supplied by the U.S.

D_1 = Amount Demanded by China

ES = Excess Supply

ED = Excess Demand

- a = Loss to China Producers

$a + b + c$ = Consumer Surplus- China

$b + c$ = Net Welfare Gain to China

- $d - e$ = Loss to U.S. Consumers

$d + e + f$ = Producer Surplus- U.S.

f = Net Welfare Gain to U.S.

At P_W , China demands more of the good than is available at home, while the U.S. supplies more of the good than is demanded in its market. Since both countries engage in free trade each can gain from trade in the sense that Chinese consumers can now purchase soybean oil at a lower P_W relative to P_{CH} and the U.S. can produce and export more soybean oil at a higher P_W relative to

its autarky price, P_{US} . Trade is balanced because China imports an amount $D_1 - S_1$, which exactly matches $S_1 - D_1$, or the amount the U.S. is willing to export at P_W .

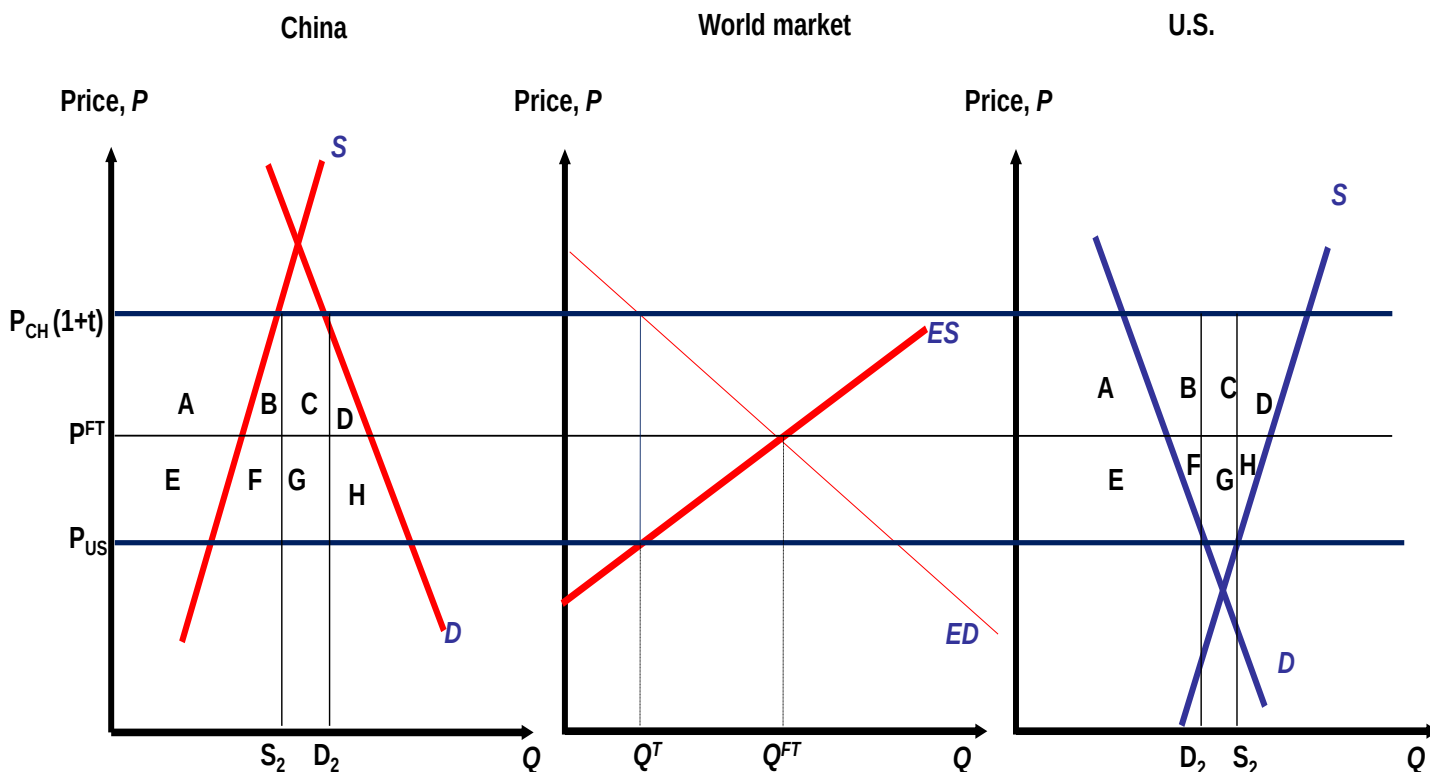
The gains from free trade are easily identified. In China, producer surplus falls by the amount of the area labeled a since prices have decreased from P_{CH} to P_W . However, consumers gain from lower prices by the amount abc . National welfare from the movement to free trade is the sum of producer and consumer surplus or the area bc . In the U.S. higher world prices results in consumers losing areas de while producers gain areas def . Thus, net welfare in the U.S. is equal to area f . Both China and the U.S. experience a net welfare gain from free trade so we can say that a move to free trade is unambiguously positive.

Because an SSM is a simple tariff applied on a temporary basis to circumvent import volume surges or price declines, the graphical exercise in Figure 3, which was a movement to free trade, can easily be extended to evaluate the effects when the importing country levies a tariff. Figure 4 serves this purpose. When China, one of the largest importers of soybean oil in the world¹¹, levies a tariff, the domestic price of soybean oil in China increases to $P_{CH}(1+t)$ where t is the tariff levied. This increase in price is then passed to Chinese producers whose prices are buffered by the higher import price, as is the case in instances where the tariff involves the use of the SSM. At this higher price, excess demand is reduced, and the United States producers now receive a lower price than was the case with either autarky or free trade, P_{US} . Therefore the amount traded is Q_T , with S_2 the amount supplied by the United States and D_2 the amount demanded by China. In this case, trade is again balanced as $D_2 - S_2$ matches $S_2 - D_2$.

¹¹ The assertion that China is a large importer is significant in that changes in trade policies are large enough to affect world market prices. This effect may also occur in the case of the SSM, where a trigger such as a dramatic shift in an agriculture product could depress prices globally and cause multiple small developing country importers to apply an SSM at once resulting in the same effects as a single larger country importer.

When the tariff is in place, the gains realized from free trade in Figure 3 are lost. Chinese consumers, who gained in the free trade scenario, now unambiguously lose when a tariff is applied. Producers in China do increase their level of surplus, as well as the Chinese government that is able to collect tariff revenue. However national welfare effects are ambiguous, and depend on the extent to which consumers lose versus the gain by producers where a sufficient tariff could increase producer surplus and tariff revenues to the extent that a tariff would have a positive effect on China welfare. In an exporting country such as the United States, consumers gain from decreased prices, however producers lose revenues because of the tariff. In addition, the exporting government does not collect tariff revenue. In this situation, the exporting country unambiguously loses when a tariff is in place. Furthermore, world welfare is decreased from a free trade scenario. As a result, the only clear beneficiaries of a tariff, including an SSM, are the importing country's producers and government. These welfare effects demonstrate why an importing country would be invested in maintaining access to the SSM, as it serves to support producers, while exporting countries would clearly oppose this policy tool.

Figure 4: Changes in Country Welfare from the Application of a Tariff



Note:

$P_{CH}(1+t)$ = Domestic Price- China plus tariff

t = tariff

P_{FT} = Free Trade Price

P_{US} = Domestic Price- U.S.

Q_T = Quantity Demanded (China) and Supplied (U.S.) with a tariff

Q_{FT} = Quantity Demanded and Supplied with Free Trade

S_2 = Amount Supplied by the U.S.

D_2 = Amount Demanded by China

ES = Excess Supply

ED = Excess Demand

- $a - b - c - d$ = Loss to China Consumers

a = Gain to China Producers

$c + g$ = China Government Tariff Revenue

$g - b - d$ = Net Welfare in China

e = Gain to U.S. Consumers

- $e - f - g - h$ = Loss to U.S. Producers

- $f - g + h$ = Net Welfare Loss to U.S.

- $b - d - f - h$ = Loss to World Welfare

3.2. A Quantitative Model of the World Soybean Market

The soybean market is an interesting case study to investigate the potential effects of an SSM. Following the breakdown in negotiations, Ambassador Susan Schwab (2008) conducted a press briefing that referenced the importance of soybeans in the dispute over agriculture trade negotiations. As mentioned earlier, the main stumbling block between developed and developing negotiators was the question of whether or not countries would be allowed to breach their pre-Doha bound tariff rates. As Schwab mentioned, this is a question as to whether countries could potentially increase their tariff rate through the use of an SSM to levels held at the end of the Tokyo Round in 1979.

According to the press briefing, the U.S. had reached a compromise point of 140 or a 40% import surge over the three-year moving average of imports. India, however, felt that that level was too high, where injury could occur at much lower levels, specifically at 115 or a 15% surge. Schwab uses the soybean market to exemplify the ramifications of compromising on such a point. Schwab states that, “If you look at Chinese imports of soybeans over the last ten years, at 140, China could have used this mechanism in eight out of ten years to raise their tariffs above bound rates.” This is an important point in the argument over whether or not the SSM is a protectionist measure for developing countries to impose or a last-resort mechanism to protect small producers from serious risks related to trade liberalization.

Oilseeds can be marketed either as whole beans or processed products. Soybeans, in particular, are processed into meal, most often used as livestock feed and oil for human food consumption, although both products are also used for industrial use. A biological relationship exists in the crushing of beans into meal and oil. When processed, soybeans yield extraction rates of approximately 19% oil, 79% meal and 2% waste (Ash, Livezey and Dohlman, 2002). Thus, as

we will see, production of oil and meal is a fixed transformation of the availability of soybeans for crushing which can be sourced from domestic supply or imported. The crush is the extraction rate multiplied by the available quantity of soybeans, which is a function of the crushing margin.

This study extends the framework of Meilke, Wensley and Cluff (MWC, 2001) to a stochastic setting to assess the impact of an agricultural SSM. The model developed below is a global, partial equilibrium model of the world soybean complex. As discussed shortly, the behavioral parameters of the model are drawn heavily from MWC (2001) and other database sources. The following model describes the representative oilseed production and consumption structure for 34 countries averaged over the 2005-2009 baseline (Table 4). Oilseeds and their products are homogenous in quality, and all countries are assumed to be price takers in the model. Let S denote soybeans, and M and O denote soybean meal and oil, respectively. In what follows, Q denotes production, D represents demand, K denotes the crushing extraction rate, ER denotes the exchange rate, and P denotes price.

Ignoring for the moment the random error terms, ε_1 and ε_2 , equations (1) through (16) represent a typical net importing country in the model¹². Equations (1), (5) and (8) are the domestic price linkage equations for soybeans, meal and oil, respectively, which, in a perfect price transmission framework, are expressed as the world price (P^W) adjusted for the exchange rate (ER) and the applied tariff rate (t^{AS} , t^{AM} , t^{AO}). Tariff rates are specific to each commodity since rates can and do vary across the three oilseed products (beans, meal, and oil). A minimum statement is affixed to the tariff rates in each commodity to emphasize the fact that as tariffs are reduced according to the DDA formula, the reduction in a country's bound tariff (t^{BFS} , t^{BFM} , t^{BFO}) may be enough to force a reduction in its applied rate.

¹² The model equations are assumed to represent a country that is a net importer of all three products (beans, meal and oil) although this is not always the case in the quantitative model.

Table 4: Soybean, Meal and Oil Model

Variable	Equation
1) Domestic Price Link, Soybean	$P_1^S = P^{WS} * (ER_1 + \varepsilon_1) * (1 + MIN(t_1^{AS}, t_1^{BFS}))$
2) Soybean Supply	$Q_1^S = \alpha_1 + \beta_1 * P_1^S + \varepsilon_2$
3) Soybean Demand (Food)	$D_1^{Food^S} = \alpha_2 + \beta_2 * P_1^S$
4) Soybean Demand (Crush)	$D_1^{Crush^S} = \alpha_3 + \beta_3 * [K^M * P_1^M + K^O * P_1^O - P_1^S]$
5) Domestic Price Link, SB Meal	$P_1^M = P^{WM} * (ER_1 + \varepsilon_1) * (1 + MIN(t_1^{AM}, t_1^{BFM}))$
6) SB Meal Supply	$Q_1^M = K^M * D_1^{Crush^S}$
7) SB Meal Demand	$D_1^M = \alpha_4 - \beta_4 * P_1^M$
8) Domestic Price Link, SB Oil	$P_1^O = P^{WO} * (ER_1 + \varepsilon_1) * (1 + MIN(t_1^{AO}, t_1^{BFO}))$
9) SB Oil Supply	$Q_1^O = K^O * D_1^{Crush^S}$
10) SB Oil Demand	$D_1^O = \alpha_5 - \beta_5 * P_1^O$
11) Net Trade, Soybean	$NT_1^S = (BS_1^S - ES_1^S) + Q_1^S - D_1^{Food^S} - D_1^{Crush^S}$
12) Net Trade, Soybean Meal	$NT_1^M = (BS_1^M - ES_1^M) + Q_1^M - D_1^M$
13) Net Trade, Soybean Oil	$NT_1^O = (BS_1^O - ES_1^O) + Q_1^O - D_1^O$

If this is the case, the model chooses the lower of the new bound rate prescribed by the DDA cuts or its current applied tariff. Exporting countries, follow the same structure as importing countries, however price linkage equations do not contain an adjustment for tariffs.

The quantity of soybeans produced (Q^S) (equation 2) and the demand for soybeans as food (D^{Food}) (equation 3) are expressed as a function of the domestic price of soybeans (P^S). Similarly, the demand for meal (m) and oil (o) are also a linear function of their respective prices (P^m and P^o) (equations 7 and 10), whereas the quantity of meal and oil produced is dictated by a fixed proportions technology of the availability of crush (D^{Crush}) (equations 6 and 9). That is, if crush demand is equal to 100 metric tons, the quantity of meal (Q^M) and oil (Q^O) produced is 78 and 18 since, with minor variations in the baseline data, K^M and K^O are fixed at 0.78 and 0.18. The crush equation (4) serves as the price and quantity link between farm-level bean production and the meal and oil markets. With the familiar assumption of fixed proportions technology of meal and oil production and price-taking assumptions in oilseed crushing to describe the

crushing cost, as the margin increases (decreases), the demand for crush seeds increases (decreases). A change in the crush demand affects seed demand and products supply simultaneously. Prices adapt accordingly to re-establish equilibrium. It is worth noting that the application of an SSM tariff in the meal and oil markets will lead to shifts in the demand for crush.

Finally, net trade (NT), equations (11), (12) and (13), is determined by the difference between beginning (BS) and ending stocks (ES) for each commodity, which are held fixed in this model, and the difference in quantity supplied (Q) and demanded (D). The model is closed by forcing to zero, the sum of net trade in all three commodities.

In order to simulate the operation of the SSM, 1000 pseudo-random error terms are drawn from a distribution of soybean production for each country that has positive supply values over the baseline period. Random shocks to a country's soybean production will generate random net imports potentially triggering the volume-based SSM. Further, random supply shocks to supply affects equilibrium at the bean level. Because crush demand is an important component of this equilibrium, random shocks to bean production will also work their way through the system via the crush equation. Simulating the operation of the price-based SSM is more difficult since this mechanism is applied on a country-specific basis. Imports, however, are not source-differentiated in this model. Thus, in order to introduce some country-specific price variation, the model draws 1000 pseudo-random error terms from a distribution of each country's monthly historical exchange rate data. In this way, some countries will be triggering the price-based SSM while others are not depending on the size of the exchange rate random error draw. In terms of the model in Table 4, ε_1 represents the country-specific random shock to exchange rates, and ε_2 represents the country-specific random shock exchange rates.

3.3. Tariffs and the SSM

Tariffs and the potential of an additional SSM duty are the primary policies considered in this study although an adjustment is made to handle the U.S. Loan rate price of soybeans as discussed below. The DDA modalities provide guidance for reductions to bound tariff levels. We are interested in the cost and stability implications of the SSM rules contained in Chairman Crawford Falconer's December 2008 (Revision 4 (Rev. 4)) when it is used in conjunction with Rev. 4 tariff cuts. Table 5 illustrates the proposed tariff cuts currently being negotiated in the DDA. Notice that Rev. 4 contains a

Table 5: Tiered Formula for Tariff Reductions

Development Status	Final Bound or <i>ad valorem</i> equivalent	Reduction (%)
Developed Country (over five years)	>0 and ≤20%	50
	>20% and ≤50%	57
	>50% and 75%	64
	>75%	66 OR 73
	* Minimum average cut on final bound tariff = 54%	
Developing Country (over eight years)	>0 and 30%	33.33
	>30 and ≤80%	38.00
	>80 and 130%	42.67
	>130%	44 OR 48.67
	* Maximum average cut = 36%	
Small, vulnerable economies (SVEs)	>0 and 30%	23.33
	>30 and ≤80%	28.00
	>80 and 130%	32.67
	>130%	34 OR 38.67
	* Same as Developing countries with a 10 <i>ad valorem</i> percentage point reduction	

harmonization element where the proposed tariff cut is increasing in the level of the initial bound tariff. That is, deeper cuts are made to bound tariffs the greater is the initial bound tariff. This turns out to be quite important because deeper cuts to bound tariffs will result in smaller

additional volume-based SSM duties since the volume SSM remedies are a function of the existing bound tariff levels. In the tariff cutting formula of Rev. 4, developed countries face four tiers subject to a minimum average cut of 54 percent as illustrated in Table 5: less than or equal to 20 percent; greater than 20 percent but less than or equal to 50 percent; greater than 50 percent but less than or equal to 75 percent; and greater than 75 percent. The tariff cuts in these bands correspond to 50, 57, 64, and 66 or 73 percent respectively (WTO, 2008d). Developing countries have tiers of zero to less than or equal to 30 percent; greater than 30 percent but less than or equal to 80 percent; greater than 80 percent but less than or equal to 130 percent; and greater than 130 percent. Developing country tariff cuts are two-thirds of the developed country cut within the respective bands. Least-developed countries are not required to make tariff cuts and there are other special and differential treatments for small vulnerable countries and recently acceded members (RAM) (see WTO, 2008d).

The 6 December 2008 Revised Draft Modalities for Agriculture (WTO, 2008d) contained in Chair of the Agricultural Committee's attempt to summarize the current state of the negotiations. His frustration with the SSM discussions was apparent in his preamble:

“On the SSM, we have made some progress. It is uneven, it is fragile, it has never been consolidated into a single structure. All previous informal efforts have failed. So, this is the first time this particular structure has seen the light of day. It is not, therefore ready for inclusion in the text per se because it is utterly untested.” (p.3)

Little progress has been made since late 2008, so Rev. 4 and Working Paper 7 (henceforth W7) (WTO, 2008c and 2008d) remain the best guide to the final outcome of the SSM negotiations. We note that the SSM parameters contained in Rev. 4 were copied verbatim from the 10 July 2008 Revision 3 (Rev. 3, WTO, 2008e) modalities indicating no progress or movement since the break-down of the talks that summer. Because the issue of breaching pre-Doha bound tariffs continued to be a contentious issue after Rev.

3 was tabled, in addition to Rev. 4, the chairman (Ambassador Crawford Falconer) tabled a separate document (W7) (WTO, 2008d) that attempted to forge a compromise on the so called “above the bound rate” issue.

It has been agreed that the SSM will contain both price and volume triggers and either of these triggers can be used to invoke the SSM. However, in the event that both triggers are breached, the price and volume SSM may not be applied simultaneously. Moreover, it needs to be stressed that the SSM is a voluntary mechanism – just because a country has the right to apply an SSM duty whenever the mechanical triggers indicate does not mean that it will invoke the mechanism. Table 6 below outlines the parameters of the SSM as contained in Rev. 4, W7, and the existing UR SSG.

A safeguard is a temporary tariff, in addition to a country’s MFN applied tariff, that gives low-income countries additional policy flexibility to circumvent rapid import surges or sharp price declines. Two trigger levels (price and volume) determine when the safeguard can be applied. For the volume SSM, the calculation of the volume trigger is a rolling average of the most recent three year period for which import data are available. Note that W7 did not make any changes to the calculation of the volume trigger – the three-year rolling average seems to represent an area of consensus. The volume trigger of the SSG is more complex and will be described shortly.

With respect to the volume SSM contained in Rev. 4 (see Table 5), the import surge (M) must be greater than 110% of the volume trigger before additional safeguard duties can be applied. Because the three year average of the volume trigger of the SSM is centered two years prior, it is important to note that a steady five percent increase in imports is enough to define a 110% surge in imports. Thereafter, the additional SSM duties are increasing in the severity of the

import surge. Import surges greater than 110% but less than 115% trigger additional duties of 25% of a country's bound tariff (t^b) or 25 percentage points, whichever is higher. If M is greater than 115% but less than 135%, the additional SSM duty is 40% of a country's bound tariff or 40 percentage points, whichever is higher. Finally, for M greater than 135% the volume SSM triggers an additional duty equal to one-half of a country's bound tariff or 50 percentage points, whichever is higher. Regardless of the extent of the surge in imports, Rev. 4 does not permit Members to breach their pre-Doha bound tariffs when the SSM duty is added to its MFN applied tariff.

Working Paper 7 of the December draft modalities ("above the bound rate") (WTO, 2008d) contains additional constraints on the application of the SSM. Breaching pre-Doha bound tariffs requires an import surge (M in Table 5) greater than 120 percent of the volume trigger before augmented applied tariffs inclusive of SSM duties can go "above the bound rate". For example, imports greater than 120 percent but less than or equal to 140 percent would allow Members to exceed their pre-Doha bound tariffs by one-third of a country's bound tariff or 8 percentage points, whichever is higher. For imports beyond 140 percent of the volume trigger, Members can exceed their pre-Doha bound tariffs by up to one-half of a country's bound tariff or 12 percentage points, whichever is greater.

In comparison to the SSM the volume-based SSG is more complicated, in terms of the trigger level, because data on domestic consumption are required. However, the remedy allowed under the volume SSG is straightforward because it is fixed at one-third of a country's normal applied tariff (lower half of Table 5). Thus, in contrast to the SSM, the remedy allowed under the volume SSG is not a function of the severity of the import surge. The SSG volume trigger level

is defined as the average quantity of imports over the preceding three years for which data are available (M_{AV}) adjusted by a multiplicative

Table 5: Special Safeguard Mechanism (SSM) Price and Volume Triggers

The Special Safeguard Mechanism (SSM)			
Modalities based on December Draft (TN/AG/W/4/Rev.4)			
Volume-Based SSM		Price-Based SSM	
Import Surge (M)	Remedy	Price Fall (P ^M)	Remedy
M ≤ 110%	No Remedy		
110% < M ≤ 115%	Max{1/4*t ^b , 25% Points}		
115% < M ≤ 135%	Max{2/5*t ^b , 40% Points}	P ^M < 0.85*PT	0.85*{PT/P ^M - 1}
M > 135%	Max{1/2*t ^b , 50% Points}		
Working Paper 7			
“Above the Bound Rate” SSM Revisions (TN/AG/W/7)			
Volume-Based SSM		Price-Based SSM	
Import Surge (M)	% Above Bound Rate	Price Fall	Remedy
M < 120%	May not exceed bound rate		
120% < M <= 140%	Max{1/3*t ^b , 8% Points} ^a	No Guidelines Tabled for Price SSM “Above Bound Rate”	
M > 140%	Max{1/2*t ^b , 12% Points} ^a		
The Special Agricultural Safeguard (SSG)			
Article 5 of URAA			
Volume-Based SSG		Price-Based SSG	
Volume Trigger Level	Remedy	Price Fall	Remedy
M _{AV} *1.25 + Y _{t,t-1} if: SHR ≤ 10%		0.9*PT < P ^M ≤ 0.6*PT	0.27*(PT/P ^m) - 0.3
		0.6*PT < P ^M ≤ 0.4*PT	0.39*(PT/P ^m) - 0.5
M _{AV} *1.10 + Y _{t,t-1} if:10% ≤ SHR ≤ 30%	1/3*t ^a	0.4*PT < P ^M ≤ 0.25*PT	0.47*(PT/P ^m) - 0.7
M _{AV} *1.05 + Y _{t,t-1} if: SHR > 30%		P ^M ≤ 0.25*PT	0.52*(PT/P ^m) - 0.9

Source: WTO (2008b, 2008d); Ruffer and Vergano (2002).

Notes: M denotes the import surge beyond the volume trigger of the SSM; P^M is the *cif* import price of the product; t^b (t^a) denotes the current bound (applied) tariff; PT is the price trigger level; $Y_{t,t-1}$ is the annual absolute volume change in domestic consumption of the product used in the calculation of the volume trigger of the SSG; and SHR is the share of imports in domestic consumption during the three preceding years in the case of the volume-based SSG. ^a Additional constraints on above the bound rate remedies apply. First, remedies shall not normally be applicable unless domestic price is falling if verifiable. Second, once the SSM is triggered above the bound rate, it may be applied for a maximum of 4 or 8 months and shall not be re-applicable thereafter until an equivalent period has lapsed. Third, above the bound rate SSM duties will apply to 2.5% of tariff lines. Finally, there will be a two-year review of the operation of the SSM for seasonal and perishable product lines.

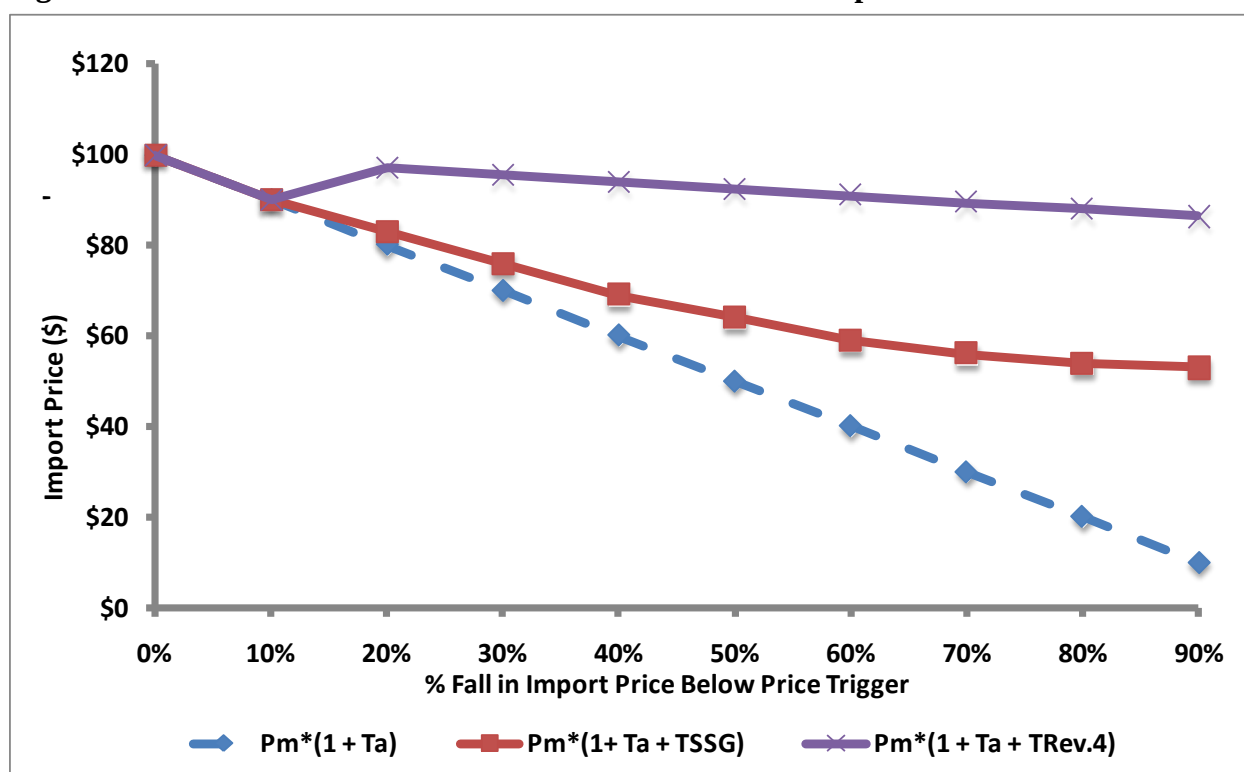
factor that depends on the share of imports in domestic consumption (SHR) plus the absolute volume change in domestic consumption of the product compared to the previous year ($Y_{t,t-1}$).

As noted, M_{AV} is scaled up by 125, 110, and 105 percent if SHR is less than or equal to 10 percent, greater than 10 percent but less than or equal to 30 percent, and greater than 30 percent, respectively. It is easy to see then that the volume trigger level of the SSG will be harder to breach the lower is the import penetration ratio (i.e., imports as a share of domestic consumption (SHR)).

Next, we turn to a discussion of the price-based safeguard in Table 5. The SSG price trigger is equal to the average reference price for the period 1986-1988. A fixed reference price has some advantages in terms of transparency but quickly becomes dated, so in the SSM the price trigger is defined as the average of the most recent three year monthly *cif* import prices. Although the price SSM does not allow full compensation for the percentage drop in prices below the price trigger, such as that contained in the original G-33 SSM proposal (WTO 2006), remedies allowed under the price SSM and SSG are an increasing function of the drop in import prices (P^M in Table 5). Under the price SSM, import prices must fall more than 15 percent below the price trigger (PT in Table 5) before the SSM is accessible and then the SSM remedy allows developing countries to compensate for up to 85 percent of the fall in the import price below the trigger level. The price SSG remedy depends on how far import prices decrease (table 2). Four bands define the extent of the import price drop.

Figure 5 illustrates the operation of the price-based SSM and SSG. To keep things simple, assume that the price trigger is \$100 in figure 1. Under Rev. 4, import prices must fall by more than 15 percent below the trigger level (\$100), to \$85, before additional SSM duties are triggered. The horizontal axis in figure 5 measures the hypothetical percentage fall in import prices below the trigger level and the dashed line plots the behavior of import prices if no safeguard action is permitted. The other two lines trace out the behavior of import prices when additional SSM and SSG duties are added to applied tariffs. Rev. 4 compensates for 85 percent of the price drop as long as prices drop by 15 percent or more. Thus, behavior of import prices under the SSM is a linear decrease beyond a 15 percent fall below the trigger level. Conversely, the SSG permits higher additional duties the greater the fall in import prices below the trigger, but never allows for the extent of compensation provided by the SSM. For example, if import prices fell to \$80, the percentage fall in the import price below the trigger is 20 percent ($80/100 - 1 = 0.2$). Under the SSG, this price drop would fall in the first band ($0.9 \cdot PT < P^M < 0.6 \cdot PT$) and the SSG remedy would be 3.75 percent ($0.27 \cdot 100 / 80 - 0.3 = 0.0375$). By comparison, the price-based SSM remedy would trigger a much larger additional duty equal to 21.25 percent ($0.85 \cdot (100/80 - 1) = 0.2125$). If import prices fell to \$60, a 40 percent drop in import prices below the trigger, the SSG remedy would be 15 percent ($0.39 \cdot 100 / 60 - 0.5 = 0.15$) and the SSM remedy would be a 56.7 percent tariff ($0.85 \cdot (100/60 - 1) = 0.567$).

Figure 5: Effects of the SSG and Revision 4 SSM Duties on Import Prices

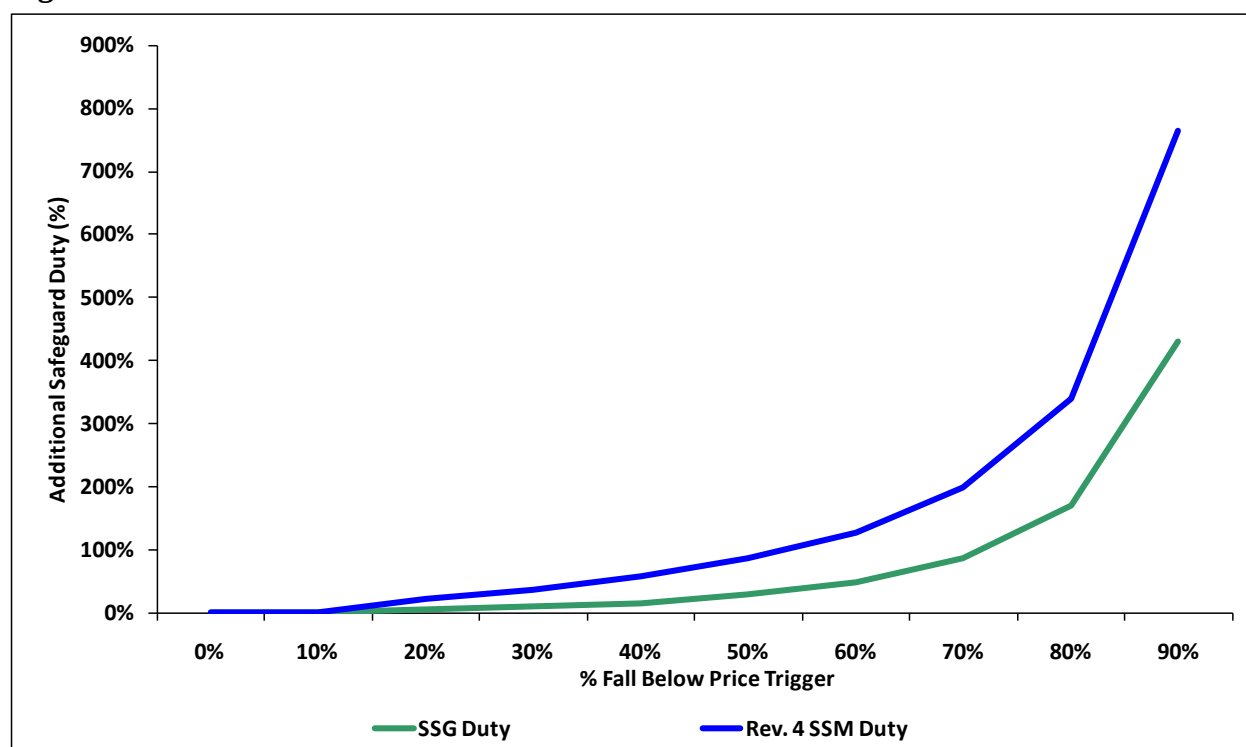


Notes: The normal applied Most Favored Nation tariff is denoted as T_a ; TSSG denotes the Uruguay Round additional price-based safeguard duty and TRev.4 denotes the additional SSM duty according to the most recent modalities contained in Revision 4 (WTO 2008c).

Working Paper 7 of the December draft modalities (WTO, 2008d) did not mention additional criteria for the price-based SSM to go “above the bound rate”. However, this is not to say that price SSM duties do not have the potential to exceed pre-Doha bound tariffs. Figure 6 traces out the potential size of the additional SSG and SSM duties when we allow a hypothetical import price to fall by up to 90 percent below an exogenous trigger level. Interestingly, if the decline in import prices is large enough, both safeguard instruments (SSG and SSM) could potentially go “above the bound rate” when the safeguard tariff is added to current MFN applied rates. For example, if import prices were cut in half (i.e., fell by 50 percent) below the previous three year rolling average of import prices (i.e., the price trigger), an 85 percent additional SSM duty would be accessible under the Rev. 4 modalities. This is more than double the 28 percent safeguard tariff that would be permitted if the SSM mirrored the SSG. While import prices may

not fall by 50 percent or more, it is not out of the realm of possibility. One only has to recall the recent surge in commodity prices in 2008, followed by an equally severe pullback in prices the following year.

Figure 6: Additional Price-Based SSM and SSG Duties



Clearly, the design of an agricultural safeguard mechanism is important. Given its technical nature, perhaps it is of little surprise that the WTO talks hung up on this instrument especially considering negotiators had given the SSM little thought before turning to a discussion of its elements. Subsequent discussion over the SSM - namely W7 (WTO, 2008d) - has thus turned to other market-based conditions that may be required as part of an acceptable agricultural safeguard mechanism for WTO Members:

- **Pro-Rating:** This market test is based on the premise that the volume trigger calculations should be based on normal trade growth not including periods in which the SSM was invoked. If the volume SSM was imposed in the preceding three year

average of imports and the current year trigger (VT_t) following invocation of the SSM is less than the previous year's trigger (VT_{t-1}) then VT_{t-1} is retained. This guarantees that the resulting trigger will always be greater than or equal to the previous period's volume trigger. In other words, without the pro-rating provision policy makers could continually drive down the trigger level by repeated SSM use.

- **Cross-Checking:** This market test applies to the volume and price triggers. In the case of the volume trigger, a cross-check with domestic and import prices would be required to ensure that these prices are falling in response to import surges (WTO 2008d). In the case of the price SSM, Members would be required to monitor the volume of imports of the product concerned such that the price SSM would not be allowed if the volume of imports of the product is “manifestly” declining (WTO 2008b).
- **Duration and “Holiday” Periods:** *Duration* proposes various restrictions on the length of time an SSM can be in force. *Holiday periods* are proposals to limit the re-imposition of an SSM to the equivalent length of time of the previous imposition of the SSM (a “holiday” period).

3.4. Expected Outcomes in a Stochastic Framework

A basic supply and demand model for world trade can illustrate how world and domestic prices are affected by changes in trade policy. The following model of a single exporter (United States) and a single importer (China) shows the expected outcomes from changes in prices in both a free trade situation and trade with tariffs:

$$(A) D^{US} = a - bP^w$$

$$(B) S^{US} = c + dP^w + \varepsilon_i \quad \text{where } (\varepsilon_i \sim N(0, \sigma_i^2))$$

$$(C) D^{CN} = e - fP^d$$

$$(D) S^{CN} = g + hP^d + \varepsilon_2$$

$$(E) S^{US} + S^{CN} = D^{CN} + D^{US}$$

$$(F) P^d = \gamma P^W$$

$$(G) \gamma = \begin{cases} 1+t^a, \\ 1+t^a+t^{SSM} \end{cases}$$

where demand (D^{US} or D^{CN}) and supply (S^{US} or S^{CN}) are functions of price, and γ is any pricing policy such as a tariff (t).

In a free trade scenario ($\gamma=1$, $t^a = 0$, $t^{SSM} = 0$), the expected value of the world price ($E[PW]$) is:

$$(H) E[PW] = \frac{e - g + a - c}{d + b + f + h}$$

and the variance of world price is shown as:

$$(I) Var[PW] = \frac{\sum_{i=1}^2 \sigma_i^2}{(d + b + f + h)^2}$$

When a tariff (t^a), and possibly an SSM tariff (t^{SSM}) is added, the expected value of the world price, and variance of both world and domestic price then become:

$$(J) E[PW] = \frac{e - g + a - c}{d + b + \gamma(f + h)}$$

$$(K) Var[PW] = \frac{\sum_{i=1}^2 \sigma_i^2}{(d + b + \gamma(f + h))^2}$$

$$(L) \text{Var}[PD] = \frac{\sum_{i=1}^2 \sigma_i^2}{(d + b + \gamma(f + h))^2} = \gamma^2 \text{Var}[PW]$$

The key difference is the addition of the trade policy variable (γ) as demonstrated by Table 6.

When $\gamma > 1$, the expected value and variance of world price falls since γ appears in the denominator. However, the variance of domestic prices increases by a factor γ^2 . The more complicated part of the story comes when we assess a reduction in tariffs as proposed in the current DDA coupled with the addition of a safeguard duty. When assessing the impacts of a reduction in tariffs (when $\gamma = 1 + t^a$), γ will decrease, thereby increasing the expected value and variance of the world price (equations J and K) so long as the reduction to bound tariffs is enough to force a reduction in applied rates (t^a). However if an SSM duty is applied while tariffs are reduced and the SSM duty is large enough to counteract the reduction in tariffs, the expected value and variance of world prices may fall. In other words, when tariffs are reduced and no SSM is applied, the expected value and variance of world prices increase but if an additional SSM duty is triggered that is large enough to increase γ beyond its initial level, the expected value and variance of world prices may fall. A similar, but opposite story holds for the variance of domestic prices.

Table 6: Expected Price Effects of a Tariff and SSM

	Tariff Reduction $\gamma = 1 + t^a$	Tariff Reduction Plus SSM $\gamma = 1 + t^a + t^{SSM}$
γ	↓	↑ or ↓
E[PW]	↑	↑ or ↓
Var[PW]	↑	↑ or ↓
Var[PD]	↓	↑ or ↓

4. Data Description

The following chapter includes data sources for the study, and outlines the Special Safeguard Mechanism stochastic stimulation. The first section outlines the stochastic elements in the model, incorporated in the equations for soybean production and exchange rates. Sections two and three define the autarky calculation and United States soybean domestic pricing policies as they impact the model. The fourth section outlines the structure of the SSM as it is defined by the model. Finally, the simulation scenarios considered in this study are defined in the last section.

The supply-use balance tables are retrieved from the USDA's online production, supply, and distribution (PSD) database.¹³ Exchange rates expressed as local currency per United States dollar are taken from the USDA's agricultural exchange rate database.¹⁴ In some cases, World Bank exchange rates are used when the data for individual countries in the USDA dataset was incomplete or missing. Most favored nation applied and bound tariff rates are taken from several sources. First, the WTO's tariff profile dataset is used for the majority of WTO member countries. However, a number of countries had missing tariff information. Thus, we relied on two alternative sources: the Market Access Maps dataset developed by the Centre d'études prospectives internationale (CEPII) and the Agricultural Market Access Database (AMAD).¹⁵ Commodity market prices were supplied by the Economic Research Service, USDA. Price elasticities were from multiple sources, including: the FAPRI Elasticity Database, Food and

13 Available at: <http://www.fas.usda.gov/psdonline/>

14 Available at: <http://www.ers.usda.gov/Data/ExchangeRates/>

15 CEPII is an independent research institution situated in Paris, France. CEPII's datasets can be accessed (with subscription in certain cases) at: www.cepii.org. The AMAD database is freely available at: www.amad.org.

Agriculture Policy Research Institute (FAPRI, 2010)¹⁶, Meilke, Wensley and Cluff (2001), the ERS International Food Consumption Patterns Data Set (U.S. Department of Agriculture, 2010)¹⁷, and the Agriculture Trade Policy Simulation Model (United Nations Conference on Trade and Development (UNCTAD), 2010). Finally, information on the U.S. loan rate program was obtained from the 2002 Farm Bill: Title I Commodity Programs.¹⁸

4.1. Stochastic Simulation

In the case of the production equation of the model, random errors are derived from a regression of the computed intercept term given the baseline prices, production and the supply elasticities. In this way we remove the time trend from the data and we are left with variation around a technology driven trend. The regressions cover the sample period 1995 to 2007. Because technology, weather patterns and geographic specific factors can be common across regions of the world, we group countries into continents thereby revealing any trends due to climate or weather phenomena that may affect soybean production during production seasons. These random errors were then used to calculate the variance-covariance matrix that, along with a zero mean, generates 1,000 multivariate normal pseudo random error terms that are affixed to the production equations in the model.

For the prices, generation of the random errors was based on monthly exchange rate data from 2005 to 2007. Prices are also regressed on time. The covariance matrix of each continent group is calculated and a mean matrix vector is included as $nx1$, where n = the number of countries in a continent group, to establish the mean of the residuals about which the pseudo-random errors will be generated. In order to generate a reproducible set of 1000 random numbers

16 Available at <http://www.fapri.iastate.edu/tools/elasticity.aspx>

17 Available at <http://www.ers.usda.gov/Data/InternationalFoodDemand>

18 Available from the USDA at <http://www.ers.usda.gov/Features/Farmbill/titles/titleIcommodities.htm>

for each continent grouping, arbitrary positive integer seeds are set in the model code, creating pseudo-random errors for the subsequent simulation.

4.2. Calculation of Autarky in Stochastic Simulation

In the event of a sufficient price shift in the stochastic model, a net importing (net exporting) country may become an net exporting (net importing) country depending on the size of the shock and baseline values. To compensate for this, each country's autarky price must be calculated and added to the model in order to bind trade; that is, to hold countries as either net importers, net exporters or an autarkic situation. Given the interconnected nature of Soybean, Soybean Meal and Soybean Oil trade, autarky must be calculated for each and is an endogenous calculation that is coded into the model. The derivation from the model based in Table 4 is as follows:

Soybean Autarky begins with setting the Soybean Net Trade Equation (11) equal to zero:

$$(14) \quad 0 = (BS^S - ES^S) + Q_1^S - D_1^{CRUSH^S} - D_1^{FOOD^S}$$

Then supply and demand equations are substituted in:

$$(15) \quad 0 = (BS^S - ES^S) + (\alpha_1 + \beta_1 * P_1^S + \varepsilon_1) - (\alpha_2 + \beta_2 * P_1^S) - (\alpha_3 + \beta_3 * (K^M P_1^M + K^O P_1^O - P_1^S))$$

Rearranging terms produces equation (16):

$$(16) \quad P_1^S (\beta_1 + \beta_2 + \beta_3) + (\alpha_1 + \varepsilon_1) = (ES^S - BS^S) + \alpha_2 + \alpha_3 + \beta_3 (K^M P_1^M + K^O P_1^O)$$

Finally, solving for the import price of soybeans gives the autarky equation:

$$(17) \quad P_{1AUT}^S = P_1^S = \frac{(ES^S - BS^S) - (\alpha_1 + \varepsilon_1) + \alpha_2 + \alpha_3 + \beta_3 (K^M P_1^M + K^O P_1^O)}{(\beta_1 + \beta_2 + \beta_3)}$$

Soybean Meal Autarky begins with setting the Soybean Meal Net Trade Equation (12) equal to zero:

$$(18) 0 = (BS^M - ES^M) + Q_1^M - D_1^M$$

With soybean meal supply and demand equations substituted to produce:

$$(19) 0 = (BS^M - ES^M) + K^M (\alpha_3 + \beta_3 (K^M P_1^M + K^O P_1^O - P_1^S)) - (\alpha_4 - \beta_4 P_1^M)$$

Likewise, rearranging terms produces equation (20):

$$(20) P_1^M (K^M \beta_3 K^M + \beta_4) + K^M \alpha_3 + K^M \beta_3 K^O P_1^O = (ES^M - BS^M) + K^M \beta_3 P_1^S + \alpha_4$$

Solving for the import price of soybean meal leaves the autarky price:

$$(21) P_{1AUT}^M = P_1^M = \frac{(ES^M - BS^M) + K^M (\beta_3 P_1^S - \alpha_3 - \beta_3 K^O P_1^O) + \alpha_4}{(K^M \beta_3 K^M + \beta_4)}$$

Soybean Oil Autarky is derived in the same fashion as soybean meal, beginning with the net trade equation (13) and setting it equal to zero:

$$(22) 0 = (BS^O - ES^O) + Q_1^O - D_1^O$$

Substitutions of the supply and demand equations result in equation (23):

$$(23) 0 = (BS^O - ES^O) + K^O (\alpha_3 + \beta_3 (K^M P_1^M + K^O P_1^O - P_1^S)) - (\alpha_5 - \beta_5 P_1^O)$$

When terms are rearranged,

$$(24) P_1^O (K^M \beta_3 K^M + \beta_5) = (ES^O - BS^O) + K^O \beta_3 P_1^S - K^O \alpha_3 - K^O \beta_3 K^M P_1^M + \alpha_5$$

And solving for the import price of soybean oil results in the autarky price:

$$(25) P_{1AUT}^O = P_1^O = \frac{(ES^O - BS^O) + K^O (\beta_3 (P_1^S + \varepsilon_{1t}) - \alpha_3 - \beta_3 K^M (P_1^M + \varepsilon_{2t})) + \alpha_5}{(K^O \beta_3 K^O + \beta_5)}$$

These derivations show that each commodity is dependent on the other two markets, specifically through the soybean demand for crush equation (4), demonstrating the effectiveness of simply applying stochastic elements to soybean production and price alone.

4.3 U.S. Domestic Price Policies

The United States is the only country for which domestic support policies are considered. In the case of soybeans, a loan rate price is used as a threshold under which the domestic price received by U.S. soybean farmers cannot drop, and has the same economic impact as a direct subsidy. For the years under the 2002 Farm Bill, that price is \$5.00 per bushel (Ash, Livezey, Dohlman 2002) that translates to \$183.70 per metric ton. Prior to 2002, the 1996 Farm Bill maintained a loan rate that was 85% of the previous five-year average price excluding minimum and maximum prices, with a minimum loan rate of \$4.92/bu and \$5.25/bu maximum (ERS, USDA 1996). Between 2002 and 2007, the U.S. farm price has averaged \$249.83/mt, making the loan rate price unnecessary. However in a stochastic framework the loan rate may be triggered should prices fall below \$183.70/mt (NASS 2010). These high domestic prices indicate that historically the loan rate price was not employed. However, given the possibility that market prices could drop during model simulation, it is important to incorporate this threshold into the model. This is achieved by modeling the following equation for U.S. soybean price:

Farm price is calculated by subtracting the difference between the 2002-2007 average world price and farm price:

$$(26) P_{US}^{FS} = P_W^S - 73.70$$

where P_{US}^{FS} is the Farm Price of Soybeans for the United States, and P_W^S is the soybean world price.

The loan rate price, which is exogenous, is then incorporated into the model by the following equation:

$$(27) P_{US}^{LOAN} = IF(P_{US}^{LS} > (P_W^S - 73.70)) THEN ((P_{US}^{LS} - (P_W^S - 73.70)) * Q_{US}^S) ELSE (0)$$

where P_{US}^{LS} is the loan rate price.

In this way, the loan rate price is taken when the farm price drops below it.

4.4 Details on the SSM Simulation

From here, the SSM was built into the model. SSM triggers were established using the rules outlined in Table 5. The price trigger (28) for each country is calculated as the average *c.i.f.* import price over the most recent three-year period. The level at which the SSM is triggered for each country is 85 percent of this price. The volume trigger is a rolling average of imports in the previous three-year period. For the volume-based SSM, three levels of remedies can be applied based on how far import levels exceed this volume trigger. The minimum level at which a volume SSM can be applied is when imports exceed 110 percent of the volume trigger. When import or prices should trigger the SSM, remedies vary based on how far the price has fallen, and how far imports have exceeded the volume trigger. Countries able to utilize the SSM include any developing WTO member. Non-WTO members and developed countries do not have access to the SSM. The Price SSM is demonstrated through equation (29), while the Volume SSM was converted into a price-equivalent in order to more easily incorporate it into the model.

Price SSM:

$$(28) Trigger_{Price_i}^O = 0.85 * P^{c.i.f.} * ER_1 * (1 + t_1^{AO})$$

Where the Price SSM (*PSSM*) is triggered if the domestic price P_1 falls below the exogenous price trigger. Then the duty applied (40) to the price in addition to the standard tariff is an *ad*

valorem progression of difference between the price and the price trigger provided this tariff does not exceed the current bound tariff (T^{Bound}).

$$(29) PSSM^O = IF(P_1^O < PriceTrigger_{Price}^O) THEN (0.85 * (Trigger_{Price}^O / P_1^O - 1)) ELSE (0)$$

The volume triggers are determined by a world price equivalent trigger that acts to solve for each volume trigger as the following three trigger levels:

$$(30) VT_A^{Conversion} = \frac{(1.10 * NT_1^O - BS_1^O + ES_1^O + \alpha_5 - K^O * (\alpha_3 + \beta_3 * K^M * P_1^M - \beta_3 * P_1^S))}{(K^O * \beta_3 * K^O + \beta_5)}$$

$$(31) VT_B^{Conversion} = \frac{(1.15 * NT_1^O - BS_1^O + ES_1^O + \alpha_5 - K^O * (\alpha_3 + \beta_3 * K^M * P_1^M - \beta_3 * P_1^S))}{(K^O * \beta_3 * K^O + \beta_5)}$$

$$(32) VT_C^{Conversion} = \frac{(1.35 * NT_1^O - BS_1^O + ES_1^O + \alpha_5 - K^O * (\alpha_3 + \beta_3 * K^M * P_1^M - \beta_3 * P_1^S))}{(K^O * \beta_3 * K^O + \beta_5)}$$

$$(33) Trigger1_{Volume}^O = VT_A^{Conversion} / (ER_1 + \varepsilon_1) * (1 + MIN(t_1^{AO}, t_1^{BFO}))$$

$$(34) Trigger2_{Volume}^O = VT_B^{Conversion} / (ER_1 + \varepsilon_1) * (1 + MIN(t_1^{AO}, t_1^{BFO}))$$

$$(35) Trigger3_{Volume}^O = VT_C^{Conversion} / (ER_1 + \varepsilon_1) * (1 + MIN(t_1^{AO}, t_1^{BFO}))$$

The remedy imposed is directly related to one of these import volumes either as a percentage of the bound tariff (T^{BFO}) or as a direct percentage point addition to the applied tariff, either as 25 percent or 25 percentage points, 40 percent or 40 percentage points or 50 percent or 50 percentage points, as shown below:

$$(36) VSSM_1^O = IF(P^{WO} < Trigger1_{Volume}^O AND (P^{WO} \geq Trigger2_{Volume}^O)) THEN (MAX(0.25 * t_1^{BFO}, 0.25))$$

$$ELSEIF(P^{WO} < Trigger2_{Volume}^O AND (P^{WO} \geq Trigger3_{Volume}^O)) THEN (MAX(0.40 * t_1^{BFO}, 0.40))$$

$$ELSEIF(P^{WO} < Trigger3_{Volume}^O) THEN (MAX(0.50 * t_1^{BFO}, 0.50))$$

Where the new domestic price of a commodity is the soybean oil domestic price (13) with the addition of either the price or volume SSM to the current applied tariff, whichever is larger. As always, it is important to remember that the Price and Volume SSMs cannot be invoked at the same time, and countries will invoke the SSM that allows for the largest possible duty.

5. Results and Discussion

The following chapter is divided into several sections based on the tariff cutting scenario, the type of SSM trigger modeled, and the source of the random shock. Section 5.1 discusses the results from Scenarios (1) through (8) which cut tariffs according to Rev. 4 of the latest draft modalities (WTO 2008d). Scenarios (1) through (4) include only production shocks while scenarios (5) through (8) consider only exchange rate shocks. Section 5.2 contains the model results when we cap developing countries' applied tariffs, inclusive of SSM duties, at their URAA bound rates. Finally section 5.3 considers a more aggressive tariff cutting exercise - the Swiss formula with a coefficient of 25 – along with several SSM scenarios. Within each of these three sections, the results are broken up based on the SSM (none, price, volume or both) incorporated into the model.

Following establishment of a baseline model with current tariff rates, tariffs are cut in accordance with the Doha tariff commitments. The random error terms assigned to soybean supply (production) and exchange rate are added separately to determine the marginal effects of each element, and then included together. Then, the SSM is introduced into the model. The SSM is applied only to Soybean oil. For the purpose of this study, countries will apply the SSM whenever it is available. However, to again determine the marginal effects of the SSM, the Price and Volume SSMs are added individually as well as together. When both SSMs are including in the scenarios, we assume the country will apply the SSM, which results in the highest additional duty. Thus, the results in this thesis should be considered as an upper bound on SSM use.

The first set of scenarios incorporate Rev. 4 Doha tariff reduction commitments (Table 5) with no caps applied rates inclusive of SSM duties. The model then caps the maximum allowed additional tariff at Uruguay Round (URAA) Bound Rates (Scenario (13) below). Finally, the

third set of scenarios reduces tariffs according to the Swiss-25 tariff cut formula. A longer-run scenario is assumed since tariffs cuts are not phased in over several years.

Table 7: Model Scenarios

Scenario	Tariff	Stochastic Elements	SSM
1)	Doha Tariff Cuts	Production Errors Only	No SSM
2)	Doha Tariff Cuts	Production Errors Only	Price SSM Only
3)	Doha Tariff Cuts	Production Errors Only	Volume SSM Only
4)	Doha Tariff Cuts	Production Errors Only	Both Price and Volume SSM
5)	Doha Tariff Cuts	Exchange Rate Errors Only	No SSM
6)	Doha Tariff Cuts	Exchange Rate Errors Only	Price SSM Only
7)	Doha Tariff Cuts	Exchange Rate Errors Only	Volume SSM Only
8)	Doha Tariff Cuts	Exchange Rate Errors Only	Both Price and Volume SSM
9)	Doha Tariff Cuts	Both Production and Exchange Rate Errors	No SSM
10)	Doha Tariff Cuts	Both Production and Exchange Rate Errors	Price SSM Only
11)	Doha Tariff Cuts	Both Production and Exchange Rate Errors	Volume SSM Only
12)	Doha Tariff Cuts	Both Production and Exchange Rate Errors	Both Price and Volume SSM
13)	Doha Tariff Cuts Bound at URAA Rates	Both Production and Exchange Rate Errors	Both Price and Volume SSM
14)	Swiss-25 Tariff Cuts	Both Production and Exchange Rate Errors	No SSM
15)	Swiss-25 Tariff Cuts	Both Production and Exchange Rate Errors	Price SSM Only
16)	Swiss-25 Tariff Cuts	Both Production and Exchange Rate Errors	Volume SSM Only
17)	Swiss-25 Tariff Cuts	Both Production and Exchange Rate Errors	Both Price and Volume SSM
18)	Swiss-25 Tariff Cuts Bound at URAA Rates	Both Production and Exchange Rate Errors	Both Price and Volume SSM

Scenarios (1) and (4) serve as the baseline when only one of the stochastic elements, production or exchange rate random errors, is included in the model. Scenario (9) is the baseline when assessing the impact of the Doha Tariff Cuts when both of the stochastic elements are

incorporated into the model. Finally, Scenario (14) is the baseline for the assessment of the Swiss-25 tariff cut scenario.

5.1. Doha Tariff Cuts with Random Production and Exchange Rate Shocks

The production random error is included in the soybean production equation (2). The baseline in these scenarios is the stochastic model with only production errors with tariffs in accordance with the Doha Development Agenda commitments and no SSM. As it turns out, the price SSM is not triggered in the current version of this thesis, and as such, market changes are driven entirely by the Volume SSM. Therefore, Scenarios (3) and (4) understandably produce the same results (Table 8). Overall, soybean and soybean meal prices increase in both importing and exporting when the Volume SSM on soybean oil is imposed. Soybean prices increase by <1% for the majority of countries and world, while soybean meal prices increase by 1.92% in most countries and the world, with the exception of china, whose domestic price of soybean meal decreases by 3.32% because of its frequent use of the SSM on oil. However for soybean oil, the world price is decreased by 6.77%. These results can be explained by increased demand for the raw product soybeans as an SSM is employed on soybean oil. Countries that utilize the SSM see an increase in domestic prices; for instance China's price of soybean oil increased by 30.23% and India's domestic price of soybean oil increased by 26.13%.

The link between the three commodities, as discussed earlier, is soybean crush (equation 4). As shown in Table 9, overall, world crush of soybeans increases by 0.29%, however in soybean exporting countries (Argentina, Brazil, Canada, Paraguay and the United States) crush decreases between 6 and 16 percent as demand for whole soybeans increases.¹⁹

¹⁹ See Appendix B

With respect to net trade, Table 10, China is forced to autarky in soybean meal trade, while increasing imports of soybeans by 33.39% and decreasing soybean oil imports by 73.86%. India, on the other hand, decreases soybean imports by 96.09% and soybean oil imports by 10.05%, but increases soybean meal imports by 27.90%. United States soybean exports increased by 10.05%, while exports of soybean meal and soybean oil decreased by 23.84% and 50.69% respectively.

Table 8: SSM Effects on Domestic and World Prices

Scenario			(3) Volume SSM Only			(4) Full SSM		
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Soybean Price	0.52	16.76	8.06	0.52	16.76	8.06
China	Ding		0.52	16.76	8.06	0.52	16.76	8.06
Colombia	Ding		0.52	16.76	8.06	0.52	16.76	8.06
India	Ding		8.08	556.73	156.27	8.08	556.59	156.24
Philippines	Ding		0.52	16.76	8.06	0.52	16.76	8.06
Thailand	Ding		0.52	16.76	8.06	0.52	16.76	8.06
Turkey	Ding		0.52	16.76	8.06	0.52	16.76	8.06
United States ^a	DC		0.66	16.76	8.06	0.66	16.76	8.06
World	n/a		0.52	16.76	8.06	0.52	16.76	8.06
Bangladesh	LDC	Soybean Meal Price	1.96	99.16	41.12	1.96	99.15	41.12
China	Ding		-3.32	-80.48	-55.82	-3.32	-80.48	-55.82
Colombia	Ding		1.96	99.16	41.12	1.96	99.15	41.12
India	Ding		1.96	99.16	41.12	1.96	99.15	41.12
Philippines	Ding		1.96	99.16	41.12	1.96	99.15	41.12
Thailand	Ding		1.96	99.16	41.12	1.96	99.15	41.12
Turkey	Ding		1.96	99.16	41.12	1.96	99.15	41.12
World	n/a		1.96	99.16	41.12	1.96	99.15	41.12
Bangladesh	LDC	Soybean Oil Price	-6.77	-14.17	-7.36	-6.77	-14.17	-7.36
China	Ding		30.23	67.46	29.41	30.23	67.46	29.41
Colombia	Ding		-6.77	-14.17	-7.36	-6.77	-14.17	-7.36
India	Ding		26.13	256.42	88.79	26.13	256.18	88.73
Philippines	Ding		-4.77	448.04	134.10	-4.77	447.92	134.08
Thailand	Ding		-1.69	-31.95	-17.51	-1.69	-31.94	-17.50
Turkey	Ding		25.11	54.55	24.32	25.11	54.55	24.32
World	n/a		-6.77	-14.17	-7.36	-6.77	-14.17	-7.36

^{a/} U.S. Farm Price of Soybeans

Table 9: SSM Effects on Soybean Crush

Scenario			(3) Volume SSM Only			(4) Full SSM		
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Argentina ¹	Ding	Soybean Crush	-11.64	-34.05	-18.79	-11.63	-34.13	-18.84
Bangladesh	LDC		-8.15	115.96	46.96	-8.15	114.82	46.57
Brazil ¹	Ding		-11.79	-32.93	-18.10	-11.79	-33.01	-18.15
Canada ¹	DC		-16.09	-38.08	-21.31	-16.09	-38.17	-21.37
China	Ding		30.92	5347.77	638.09	30.92	5348.79	638.16
Colombia	Ding		-7.72	27.48	12.91	-7.72	26.91	12.65
India	Ding		17.55	967.24	226.69	17.55	967.47	226.72
Malaysia	Ding		28.84	-73.70	-48.72	28.84	-73.70	-48.72
Mexico	Ding		32.95	31946.31	1690.15	32.96	31951.24	1690.29
Paraguay ¹	Ding		-11.03	-34.91	-19.32	-11.03	-35.01	-19.38
Philippines	Ding		-3.65	54554.20	2237.82	-3.65	54550.23	2237.74
Thailand	Ding		0.83	-31.95	-17.51	0.83	-31.94	-17.50
Turkey	Ding		24.67	2128.45	372.06	24.67	2126.59	371.87
United States ¹	DC		-6.18	-35.69	-19.81	-6.18	-35.79	-19.87
World	n/a		0.29	-13.54	-7.02	0.29	-13.54	-7.01

^{1/} Net Exporter of Soybeans

Table 10: SSM Effects on Net Trade Volumes

Scenario			(3) Volume SSM Only			(4) Full SSM		
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Soybean Net Trade	-7.58	37.65	17.33	-7.58	37.03	17.06
China	Ding		33.39	58.00	25.70	33.39	58.07	25.73
Colombia	Ding		-4.96	-0.34	-0.17	-4.96	-0.34	-0.17
India	Ding		-96.09	-97.10	-82.97	-96.09	-97.11	-82.99
Philippines	Ding		-3.44	30478.67	1648.68	-3.44	30476.58	1648.62
Thailand	Ding		0.67	-19.64	-10.35	0.67	-19.65	-10.36
Turkey	Ding		8.14	-6.58	-3.35	8.14	-6.60	-3.36
United States	DC		10.05	-0.88	-0.44	10.05	-0.88	-0.44
Bangladesh	LDC	Soybean Meal Net Trade	2.16	237.92	83.83	2.16	237.69	83.76
China	Ding		-100.00	-100.00	-100.00	-100.00	-100.00	-100.00
Colombia	Ding		0.85	199.39	73.03	0.85	199.29	73.00
India	Ding		27.90	965.67	226.45	27.91	965.91	226.48
Philippines	Ding		-0.13	444.36	133.31	-0.13	444.25	133.29
Thailand	Ding		-0.91	590.30	162.74	-0.91	590.62	162.80
Turkey	Ding		-21.37	3345.74	487.00	-21.37	3344.19	486.87
United States	DC		-23.84	-37.18	-20.74	-23.84	-37.33	-20.84
Bangladesh	LDC	Soybean Oil Net Trade	3.14	-11.83	-6.10	3.14	-11.84	-6.11
China	Ding		-73.86	-66.73	-42.32	-73.87	-66.62	-42.22
Colombia	Ding		3.30	9.68	4.73	3.30	9.64	4.71
India	Ding		-26.01	595.52	163.73	-26.01	595.82	163.78
Philippines	Ding		11.64	20628.03	1339.72	11.64	20625.81	1339.65
Thailand	Ding		-3.39	-7.11	-3.62	-1.79	-5.47	-2.77
Turkey	Ding		-38.85	436.39	131.60	-38.85	436.26	131.57
United States	DC		-50.69	1930.29	350.59	-50.68	1921.10	349.57

When the random error term is applied to countries' exchange rates on equations (1), (5) and (8), again we see that the volume SSM is driving much of the simulation results. The baseline in these scenarios is the stochastic model with only exchange rate random errors and cuts to tariffs in accordance with Rev. 4. Again, when both SSMs (Price and Volume) are employed, the volume SSM is responsible for the overall change in prices (Table 11). World prices of soybeans and meal increase by 0.45% and 2.06%, respectively, whereas world soybean oil prices decrease by 6.98%. These percentage changes are very similar to those shown when errors are only added to the soybean production equation (Table 8). The price SSM has its largest effects on the domestic prices of soybean oil in India and China with increases in domestic prices by 0.58% and 0.50%, respectively. Overall, however, the world price of soybean oil when only the price SSM is employed decreases by just 0.11%. This change is trivial to the overall decrease of 6.98% when both SSM are employed as mentioned earlier.

Net exporters of soybeans saw decreases in the overall percentage of soybean crush at the same rate for with only exchange rate random errors as compared with production random errors (Tables 15 and 12). Overall world crush of soybeans increased by 0.28% - a figure on par with the scenarios that included only production random errors.

The price SSM has more of an influence on net trade, particularly for China and India (Table 13). China's net imports of soybeans increase by 0.81%, while net imports of soybean meal and oil decrease by 2.88% and 1.74%, respectively, when only the price SSM is employed (scenario 6). India's net trade of soybeans and soybean oil decrease by 5.41% and 0.78% respectively, while net imports of soybean meal increase by 1.0%. The United States sees modest changes in all three commodities when the price SSM is employed with soybean net exports increasing by 0.23%, soybean meal exports decreasing by 0.60% and soybean oil exports

decreasing by 1.15%. While the price SSM has some effect, it is the volume SSM that has the major effect on changes in net trade as discussed below.

Unlike the scenarios with only production random errors and the volume SSM, China is not forced directly to autarky in its trade of soybean meal. China does increase soybean imports by 32.92% when both the price and volume SSM are employed. Net imports of soybean meal and oil decreased by 97.86% and 72.86% respectively, as direct imports of whole soybeans increase. In the case of India, net imports of whole soybeans decreases by 98.32%. Soybean oil net imports also decrease by 25.23%, while soybean meal imports actually increase by 25.24%.

Table 11: Effects of SSM with Exchange Rate Random Errors on Domestic and World Prices

Scenario			(6) Price SSM Only			(7) Volume SSM Only			(8) Full SSM		
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Soybean	0.00	0.08	0.04	0.46	15.54	7.49	0.45	15.62	7.53
China	Ding		0.00	0.08	0.04	0.46	15.78	7.60	0.45	15.86	7.64
Colombia	Ding		0.00	0.07	0.04	0.46	13.62	6.59	0.45	13.69	6.63
India	Ding		0.04	-1.92	-0.97	8.99	-2.35	-1.18	8.98	-2.12	-1.07
Philippines	Ding		0.00	0.07	0.03	0.46	13.46	6.52	0.45	13.53	6.55
Thailand	Ding		0.00	0.07	0.04	0.46	13.63	6.60	0.46	13.69	6.63
Turkey	Ding		0.00	0.07	0.04	0.46	14.59	7.05	0.45	14.66	7.08
United States ^a	DC		0.00	0.08	0.04	0.58	15.78	7.60	0.58	15.86	7.64
World	n/a		0.00	0.08	0.04	0.46	15.78	7.60	0.45	15.86	7.64
Bangladesh	LDC	Soybean Meal	0.00	0.28	0.14	2.06	80.38	34.31	2.06	80.40	34.31
China	Ding		0.00	0.29	0.14	-3.40	-72.12	-47.20	-3.40	-72.19	-47.26
Colombia	Ding		0.00	0.18	0.09	2.05	56.62	25.15	2.06	56.65	25.16
India	Ding		0.00	0.16	0.08	2.06	52.99	23.69	2.06	53.01	23.70
Philippines	Ding		0.00	0.21	0.10	2.06	58.26	25.80	2.06	58.28	25.81
Thailand	Ding		0.00	0.18	0.09	2.06	57.75	25.60	2.06	57.78	25.61
Turkey	Ding		0.00	0.22	0.11	2.06	66.63	29.08	2.06	66.65	29.09
World	n/a		0.00	0.29	0.14	2.06	83.98	35.64	2.06	84.01	35.65
Bangladesh	LDC	Soybean Oil	-0.04	0.51	0.25	-6.76	-18.18	-9.55	-6.51	-25.76	-13.84
China	Ding		0.60	-17.45	-9.14	29.94	67.61	29.47	29.93	68.38	29.76
Colombia	Ding		-0.02	-0.36	-0.18	-6.98	-13.88	-7.20	-6.65	-23.22	-12.38
India	Ding		0.58	-16.18	-8.45	26.57	17.52	8.40	26.55	18.03	8.64
Philippines	Ding		0.01	-1.43	-0.72	3.23	-37.04	-20.65	3.22	-37.12	-20.70
Thailand	Ding		0.00	-0.09	-0.05	-1.92	-27.74	-15.00	-1.92	-27.63	-14.93
Turkey	Ding		0.22	-8.02	-4.09	26.53	8.28	4.06	26.52	8.82	4.32
World	n/a		-0.11	3.79	1.88	-6.98	-14.09	-7.31	-6.98	-13.70	-7.10

^{a/} U.S. Farm Price of Soybeans

Table 12: Effects of SSM with Exchange Rate Random Errors on Soybean Crush

Scenario		(6) Price SSM Only			(7) Volume SSM Only			(8) Full SSM		
Country	Development Status	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Argentina ¹	Ding	-0.28	-15.31	-7.97	-11.38	-34.52	-19.08	-11.38	-35.44	-19.65
Bangladesh	LDC	-0.07	7.67	3.76	-7.73	1027.30	235.75	-7.32	1275.28	270.85
Brazil ¹	Ding	-0.28	-11.37	-5.86	-11.54	-38.34	-21.48	-11.53	-39.07	-21.94
Canada ¹	DC	-0.39	-14.60	-7.59	-15.68	-38.83	-21.79	-15.67	-39.78	-22.40
China	Ding	0.75	523.26	149.65	30.49	1307.17	275.12	30.48	1298.13	273.92
Colombia	Ding	-0.05	-3.02	-1.52	-7.59	-30.02	-16.35	-7.07	-6.77	-3.44
India	Ding	0.64	-5.70	-2.89	15.94	470.32	138.81	15.94	471.46	139.05
Malaysia	Ding	0.03	9.45	4.62	28.77	-73.93	-48.94	28.78	-73.90	-48.91
Mexico	Ding	-0.05	0.02	0.01	22.44	6711.65	725.33	22.13	6933.45	738.66
Paraguay ¹	Ding	-0.27	-14.83	-7.71	-10.79	-36.12	-20.08	-10.78	-37.00	-20.63
Philippines	Ding	0.00	1.78	0.89	7.99	5164.83	625.59	8.00	5199.04	627.95
Thailand	Ding	0.00	-0.09	-0.05	0.94	-27.74	-15.00	0.94	-27.63	-14.93
Turkey	Ding	0.20	66.87	29.18	26.16	318.51	104.57	26.16	319.95	104.93
United States ¹	DC	-0.15	-15.74	-8.20	-6.04	-37.34	-20.84	-6.04	-38.26	-21.42
World	n/a	0.00	0.05	0.02	0.28	-11.66	-6.01	0.28	-11.73	-6.05

^{1/} Net Exporter of Soybeans

Table 13: Effects of SSM with Exchange Rate Random Errors on Net Trade Volumes

Scenario			(6) Price SSM Only			(7) Volume SSM Only			(8) Full SSM		
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Soybean	-0.06	4.35	2.15	-7.19	734.67	188.91	-6.81	930.67	221.04
China	Ding		0.81	263.23	90.59	32.93	626.68	169.57	32.92	621.97	168.70
Colombia	Ding		-0.03	0.25	0.12	-4.84	-15.35	-7.99	-4.52	15.96	7.69
India	Ding		-5.41	48.32	21.78	-98.32	-72.82	-47.87	-98.32	-72.82	-47.87
Philippines	Ding		0.00	3.44	1.70	7.44	4480.88	576.82	7.44	4510.04	578.97
Thailand	Ding		0.00	-0.05	-0.02	0.78	-17.22	-9.02	0.78	-17.12	-8.96
Turkey	Ding		0.07	20.37	9.71	8.64	-29.76	-16.19	8.64	-30.42	-16.59
United States	DC		0.23	-5.52	-2.80	9.78	-5.86	-2.97	9.77	-6.21	-3.15
Bangladesh	LDC	Soybean Meal	0.02	3.67	1.82	2.00	211.76	76.57	1.86	180.85	67.58
China	Ding		-2.88	-26.03	-14.00	-97.37	-90.67	-69.45	-97.34	-90.46	-69.11
Colombia	Ding		0.01	-1.26	-0.63	0.80	50.85	22.82	0.70	34.96	16.17
India	Ding		1.00	-22.17	-11.78	25.25	386.78	120.63	25.24	387.65	120.83
Philippines	Ding		0.00	-1.25	-0.63	-0.76	-35.38	-19.62	-0.76	-35.18	-19.49
Thailand	Ding		0.00	-0.31	-0.16	-0.99	62.20	27.36	-0.99	62.23	27.37
Turkey	Ding		-0.17	-11.81	-6.09	-22.64	301.20	100.30	-22.64	303.64	100.91
United States	DC		-0.60	-18.12	-9.51	-23.22	-47.17	-27.32	-23.21	-48.07	-27.94
Bangladesh	LDC	Soybean Oil	0.02	0.71	0.35	3.11	-15.82	-8.25	2.98	-25.28	-13.56
China	Ding		-1.74	-28.79	-15.61	-72.88	-14.77	-7.68	-72.86	-12.73	-6.58
Colombia	Ding		0.02	-1.09	-0.55	3.32	-5.72	-2.90	3.13	-24.62	-13.18
India	Ding		-0.78	-31.74	-17.38	-25.24	142.03	55.57	-25.23	142.85	55.84
Philippines	Ding		-0.01	-5.06	-2.56	-18.45	1585.04	310.49	-18.45	1595.29	311.74
Thailand	Ding		-4.62	-8.62	-4.41	-4.62	-0.28	-0.14	11.26	0.71	0.36
Turkey	Ding		-0.32	-20.59	-10.89	-41.04	132.62	52.52	-41.03	134.41	53.10
United States	DC		-1.15	11.95	5.81	-50.07	63.01	27.68	-50.06	65.48	28.64

These marginal effects of soybean production and domestic price exchange rate random errors show that regardless of the source of the random shock, the overall changes on prices, crush and net trade are largely the same. The exception holds for the role that the price SSM plays when the exchange rate errors are included, although it is important to note that the price SSM has little influence on the overall changes when the volume SSM is also employed.

5.2. DDA Tariff Cuts Results and Discussion

In this scenario, Doha Tariff cuts are assessed according to the commitments outlined in Table 5. In these scenarios, both the production and exchange rate errors are in effect to provide a full stochastic model that accounts for both changes in soybean production due to outside factors such as technological changes and weather, as well as random changes in domestic prices. In the first scenario (9) the baseline is such that tariffs are held at the URAA rates, with no SSM employed. For scenarios (10), (11), (12) and (13), the base line is scenario (9) to assess the effects of the SSMs after the DDA tariff cuts have been administered.

When assessing the impacts of the Doha Development Agenda tariff cuts from URAA rates (scenario 9), as expected when tariffs are decreased, world prices are increased for all three commodities, with the largest changes experienced in soybean oil, an increase of 1.90%, where the tariffs were highest (Table 14). Soybean oil net importers that had tariffs cut under the DDA, for instance China and India, saw decreases in their domestic prices. For China, soybean meal and oil prices decreased by 1.36% and 9.58%, respectively. If we recall from Table 9, China decreased its applied tariffs on soybean oil from 9% to 6%. India saw decreases in domestic prices of soybeans and soybean oil of 0.75% and 8.64%, respectively. Table 9 shows that India decreased its applied tariffs on soybean oil from 45% to 27.9%. Also of note, the U.S. farm price of soybeans also increased when tariffs are reduced by 0.62%.

As expected from the results in section 5.1, the price SSM has no noticeable effect in the full stochastic model. The volume SSM directly influences the effects when both the price and volume are included (scenario 12). In this scenario, world prices of soybeans increase by 0.52%, and soybean meal prices increase by 2.01%, while the world price of soybean oil decreases by 6.74%, an outcome that mirrors the results in section 5.1. With respect to individual countries,

China decreases its price of soybean meal by 3.37%, but increases the domestic price of soybean oil by 30.26% when allowed to apply both the price and volume SSM. India's prices of soybeans and soybean oil both increase by 8.07% and 25.92%, respectively.

Of particular importance are the results of the effects when SSM inclusive tariffs are capped at URAA rates (scenario 13). In this situation, total price effects are curbed, and world prices even decrease for soybeans and soybean meal, when an unbound SSM led to increases in these prices. World prices for soybeans decrease by 0.49%; soybean meal prices decrease by 0.09%. Soybean oil prices also decrease, but at a lesser rate of 3.11%, rather than the 6.74% when tariffs are capped. In addition, countries such as China and India with similar or equal bound and applied tariffs also saw shifts in the changes in domestic price. India's price of soybean oil actually increased its percentage change to 29.21% from 25.92% (scenario 12). Where as China's price of soybean oil increased but at a lesser rate of only 9.20%, compared with a 30.26% increase in scenario (12).

Table 15 shows the changes in soybean crush for scenarios (9), (10), (11), (12) and (13). Where scenario (9) shows only the reduction in tariffs according to Rev. 4, overall soybean crush increases by 0.10% globally. Net exporters of soybeans also see an increase in soybean crush, with the exception of Canada. When an SSM is applied (scenarios 10, 11 and 12), once again the Price SSM has little to no effect on the crush equation, however the Volume SSM increases world crush by 0.29%. Net exporters see a decrease in their crush equation. When tariffs are capped at URAA rates, the result is minimal with respect to crush. World soybean crush increases by only 0.01%, and net exporters also see a decrease in soybean crush, but at a lower rate than when the SSM is not bound to URAA levels.

Net trade effects are presented in Table 16. Scenario (9) shows increases in net trade for the United States in soybean meal and oil of 18.64% and 37.93%, respectively, as tariffs in importing countries are cut. Conversely, U.S. soybean net exports decrease by 5.13%. Soybean oil net imports also increase in China and India at rates of 62.69% and 12.05%, respectively. The SSM scenarios maintain the trend of the volume SSM driving changes in net trade. When the SSM is employed in scenario (12), the gains in soybean oil net trade experienced by the United States, China and India under tariff cuts are lost as net trade for all three countries decrease, for the U.S. by 49.68%, China by 73.96%, and India by 25.77%. When tariffs are bound to URAA levels (scenario 13), net trade in these three countries decrease but at a lesser rate, with the exception of India, where net imports of soybean oil actually decrease by 26.97 percent.

Table 14: Doha Tariff Cuts versus Doha Tariff Cuts with an SSM

Scenario		(9) DDA Cuts- No SSM			(10) DDA Cuts- Price SSM Only			
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Soybean Price	0.48	1.00	0.50	0.00	0.03	0.01
China	Ding		0.48	1.21	0.61	0.00	0.04	0.02
Colombia	Ding		0.48	1.05	0.53	0.00	0.01	0.01
India	Ding		-0.75	-22.09	-11.73	0.00	-0.03	-0.01
Philippines	Ding		0.48	0.85	0.43	0.00	0.01	0.01
Thailand	Ding		0.48	1.10	0.55	0.00	0.02	0.01
Turkey	Ding		0.48	1.18	0.59	0.00	0.02	0.01
United States ^a	DC		0.62	1.21	0.60	0.00	0.04	0.02
World	n/a		0.48	1.21	0.60	0.00	0.04	0.02
Bangladesh	LDC	Soybean Meal Price	1.43	3.13	1.56	0.00	-0.01	0.00
China	Ding		-1.36	-0.91	-0.45	0.00	-0.01	-0.01
Colombia	Ding		1.43	2.90	1.44	0.00	0.00	0.00
India	Ding		1.43	2.93	1.45	0.00	-0.01	0.00
Philippines	Ding		1.43	2.65	1.32	0.00	0.00	0.00
Thailand	Ding		-9.43	-17.83	-9.35	0.00	0.00	0.00
Turkey	Ding		-5.16	-9.66	-4.95	0.00	0.00	0.00
World	n/a		1.43	3.79	1.88	0.00	-0.01	-0.01
Bangladesh	LDC	Soybean Oil Price	1.90	5.53	2.73	0.00	0.17	0.08
China	Ding		-9.58	-16.29	-8.51	0.00	-0.06	-0.03
Colombia	Ding		1.90	5.49	2.71	0.00	0.06	0.03
India	Ding		-8.64	-15.26	-7.95	0.03	-2.97	-1.49
Philippines	Ding		1.90	4.72	2.33	0.00	0.06	0.03
Thailand	Ding		13.38	-58.93	-35.92	0.00	0.07	0.04
Turkey	Ding		-4.63	-9.37	-4.80	0.00	0.13	0.06
World	n/a		1.90	6.31	3.11	0.00	0.20	0.10

^{a/} U.S. Farm Price of Soybeans

Table 14 Continued

Scenario			(11)			(12)			(13)		
			DDA Cuts- Volume SSM Only			DDA Cuts- Full SSM			DDA Cuts- Full SSM Bound to URAA		
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Soybean Price	0.52	13.07	6.34	0.52	13.05	6.33	-0.49	0.78	0.39
China	Ding		0.52	16.94	8.14	0.52	16.92	8.13	-0.49	-0.02	-0.01
Colombia	Ding		0.52	5.31	2.62	0.52	5.31	2.62	-0.49	-0.73	-0.36
India	Ding		8.07	157.95	60.61	8.07	157.96	60.61	8.53	168.00	63.71
Philippines	Ding		0.52	3.72	1.85	0.52	3.73	1.85	-0.49	-0.24	-0.12
Thailand	Ding		0.52	5.64	2.78	0.52	5.66	2.79	-0.49	-0.06	-0.03
Turkey	Ding		0.52	7.79	3.82	0.52	7.81	3.83	-0.49	-0.89	-0.44
United States ^a	DC		0.66	16.93	8.13	0.66	16.91	8.13	-0.63	-0.02	-0.01
World	n/a		0.52	16.93	8.13	0.52	16.91	8.13	-0.49	-0.02	-0.01
Bangladesh	LDC	Soybean Meal Price	2.00	57.44	25.48	2.01	57.43	25.47	-0.09	-0.14	-0.07
China	Ding		-3.37	-68.56	-43.93	-3.37	-68.58	-43.95	-0.09	-0.13	-0.07
Colombia	Ding		2.01	15.58	7.51	2.01	15.60	7.52	-0.09	-0.30	-0.15
India	Ding		2.00	13.20	6.40	2.01	13.22	6.40	-0.09	-0.36	-0.18
Philippines	Ding		2.00	11.36	5.53	2.00	11.40	5.54	-0.09	-0.15	-0.07
Thailand	Ding		2.01	18.32	8.78	2.01	18.35	8.79	-0.09	-0.23	-0.11
Turkey	Ding		2.01	28.08	13.17	2.01	28.08	13.17	-0.09	-0.05	-0.02
World	n/a		2.01	93.05	38.94	2.01	93.02	38.93	-0.09	-0.13	-0.06
Bangladesh	LDC	Soybean Oil Price	-6.75	-14.11	-7.33	-6.74	-14.19	-7.36	-3.11	1.37	0.68
China	Ding		30.26	65.63	28.70	30.26	65.51	28.65	9.20	28.31	13.27
Colombia	Ding		-6.75	-12.24	-6.32	-6.74	-12.81	-6.63	-3.11	-4.10	-2.07
India	Ding		25.92	78.78	33.71	25.92	78.71	33.68	29.21	220.02	78.89
Philippines	Ding		1.13	433.54	130.98	1.11	433.43	130.96	-2.65	-9.99	-5.12
Thailand	Ding		-1.75	-20.63	-10.91	-1.75	-20.73	-10.97	-0.69	3.42	1.70
Turkey	Ding		25.44	28.30	13.27	25.45	28.32	13.28	3.52	11.03	5.37
World	n/a		-6.75	-15.11	-7.86	-6.74	-15.17	-7.90	-3.11	1.03	0.51

Table 15: Doha Tariff Cuts versus Doha Tariff Cuts with an SSM Effects on Crush

Scenario			(9)			(10)		
Country	Development Status	Variable	DDA Cuts- No SSM			DDA Cuts- Price SSM Only		
			% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Argentina ¹	Ding	Soybean Crush	7.61	1.11	0.56	0.00	-0.16	-0.08
Bangladesh	LDC		4.50	15.60	7.52	0.00	-0.07	-0.03
Brazil ¹	Ding		7.59	18.24	8.74	0.00	-0.14	-0.07
Canada ¹	DC		-5.52	-3.12	-1.57	0.00	-0.24	-0.12
China	Ding		-14.63	-21.47	-11.39	0.00	-0.70	-0.35
Colombia	Ding		4.97	17.82	8.54	0.00	0.02	0.01
India	Ding		-7.49	-69.69	-44.95	0.04	-1.20	-0.60
Malaysia	Ding		2.79	5.65	2.79	0.00	-0.18	-0.09
Mexico	Ding		2.35	10.33	5.04	0.00	0.00	0.00
Paraguay ¹	Ding		7.26	9.98	4.87	0.00	-0.07	-0.03
Philippines	Ding		4.67	15.61	7.52	0.00	-0.06	-0.03
Thailand	Ding		-8.77	-70.24	-45.45	0.00	0.07	0.04
Turkey	Ding		-12.01	-44.99	-25.83	0.00	-0.02	-0.01
United States ¹	DC		3.98	1.30	0.65	0.00	-0.16	-0.08
World	n/a		0.10	-0.32	-0.16	0.00	-0.03	-0.02

^{1/} Net Exporter of Soybeans

Table 15 Continued

Scenario			(11)			(12)			(13)		
			DDA Cuts- Volume SSM Only			DDA Cuts- Full SSM			DDA Cuts- Full SSM Bound to URAA		
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Argentina ¹	Ding	Soybean Crush	-11.42	25.73	12.13	-11.40	24.68	11.66	-5.02	12.81	6.21
Bangladesh	LDC		-8.03	22.47	10.66	-8.02	21.19	10.08	-3.51	6.01	2.96
Brazil ¹	Ding		-11.57	-35.99	-19.99	-11.55	-35.86	-19.92	-5.07	-15.12	-7.87
Canada ¹	DC		-15.77	10.89	5.30	-15.74	10.19	4.97	-7.07	6.31	3.11
China	Ding		30.89	207.28	75.29	30.89	207.07	75.23	12.74	63.19	27.75
Colombia	Ding		-7.58	-13.51	-7.00	-7.56	-14.78	-7.68	-3.46	-8.02	-4.09
India	Ding		17.40	662.62	176.15	17.40	663.12	176.25	16.94	682.51	179.73
Malaysia	Ding		28.76	-84.86	-61.09	28.76	-84.88	-61.12	-0.97	-23.32	-12.43
Mexico	Ding		23.72	8720.79	839.19	23.49	8943.87	850.99	0.75	2750.21	433.87
Paraguay ¹	Ding		-10.82	8.11	3.98	-10.80	7.52	3.69	-4.79	2.28	1.13
Philippines	Ding		4.73	6176.06	692.22	4.71	6172.42	691.99	-2.37	204.56	74.52
Thailand	Ding		0.86	-20.63	-10.91	0.86	-20.73	-10.97	0.34	3.42	1.70
Turkey	Ding		25.04	217.55	78.20	25.05	216.99	78.04	4.03	20.59	9.81
United States ¹	DC		-6.06	30.80	14.37	-6.05	29.69	13.88	-2.69	13.46	6.52
World	n/a		0.29	-10.15	-5.21	0.29	-10.12	-5.20	0.01	-0.74	-0.37

^{1/} Net Exporter of Soybeans

Table 16: Doha Tariff Cuts versus Doha Tariff Cuts with an SSM Effects on Net Trade Volumes

Scenario		(9)				(10)		
		DDA Cuts- No SSM			DDA Cuts- Price SSM Only			
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Soybean Net Trade	4.14	13.28	6.43	0.00	-0.11	-0.05
China	Ding		-15.67	12.32	5.98	0.00	-0.13	-0.07
Colombia	Ding		2.85	0.24	0.12	0.00	-0.01	0.00
India	Ding		126.23	99.75	41.33	-0.28	-0.12	-0.06
Philippines	Ding		4.32	15.79	7.61	0.00	-0.08	-0.04
Thailand	Ding		-8.02	15.92	7.66	0.00	0.04	0.02
Turkey	Ding		-4.41	3.73	1.85	0.00	-0.02	-0.01
United States	DC		-5.13	-0.35	-0.17	0.00	-0.01	-0.01
Bangladesh	LDC	Soybean Meal Net Trade	-1.77	12.15	5.90	0.00	0.13	0.07
China	Ding		308.00	-21.31	-11.29	0.00	-0.17	-0.08
Colombia	Ding		-1.29	7.70	3.78	0.00	0.02	0.01
India	Ding		-11.09	-67.11	-42.65	0.06	-1.52	-0.76
Philippines	Ding		-0.46	4.91	2.43	0.00	0.00	0.00
Thailand	Ding		7.70	-83.81	-59.77	0.00	-0.02	-0.01
Turkey	Ding		14.93	-35.28	-19.55	0.00	0.02	0.01
United States	DC		18.64	2.93	1.46	0.00	-0.12	-0.06
Bangladesh	LDC	Soybean Oil Net Trade	-1.00	7.35	3.61	0.00	0.19	0.10
China	Ding		62.69	-36.53	-20.33	0.00	-0.67	-0.34
Colombia	Ding		-1.44	10.61	5.17	0.00	0.06	0.03
India	Ding		12.05	-53.91	-32.11	-0.04	-3.01	-1.52
Philippines	Ding		-9.41	12.54	6.08	0.00	0.02	0.01
Thailand	Ding		-100.00	-100.00	-100.00	2.48	2.96	1.47
Turkey	Ding		20.71	-33.98	-18.75	0.00	0.11	0.06
United States	DC		37.93	23.22	11.01	-0.01	0.16	0.08

Table 16 Continued

Scenario			(11)			(12)			(13)		
			DDA Cuts- Volume SSM Only			DDA Cuts- Full SSM			DDA Cuts- Full SSM Bound to URAA		
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Soybean Net Trade	-7.47	19.19	9.17	-7.46	17.93	8.60	-3.24	6.81	3.35
China	Ding		33.35	72.59	31.37	33.36	72.62	31.38	13.83	-3.76	-1.90
Colombia	Ding		-4.88	-0.97	-0.49	-4.86	-1.21	-0.60	-1.97	0.30	0.15
India	Ding		-95.12	-94.73	-77.05	-95.13	-94.75	-77.08	-89.98	-72.58	-47.63
Philippines	Ding		4.39	7576.65	776.16	4.37	7572.22	775.91	-2.18	267.61	91.73
Thailand	Ding		0.70	-14.73	-7.66	0.70	-14.71	-7.65	0.37	-4.63	-2.34
Turkey	Ding		8.26	1.47	0.73	8.26	1.45	0.72	1.41	-1.90	-0.96
United States	DC		9.88	-0.74	-0.37	9.86	-0.75	-0.37	3.64	0.51	0.26
Bangladesh	LDC	Soybean Meal Net Trade	2.11	84.04	35.66	2.11	83.45	35.44	1.18	-1.59	-0.80
China	Ding		-100.00	-100.00	-100.00	-100.00	-100.00	-100.00	-49.26	27.51	12.92
Colombia	Ding		0.81	6.17	3.04	0.81	5.66	2.79	0.67	-3.23	-1.63
India	Ding		27.69	584.32	161.59	27.69	584.78	161.68	26.60	593.23	163.29
Philippines	Ding		-0.58	-10.08	-5.17	-0.57	-10.16	-5.21	0.14	-16.36	-8.55
Thailand	Ding		-0.94	33.17	15.40	-0.94	33.14	15.39	-0.12	1.84	0.92
Turkey	Ding		-21.69	97.34	40.48	-21.70	97.19	40.42	-3.38	12.81	6.21
United States	DC		-23.33	56.49	25.10	-23.29	55.18	24.57	-10.71	15.80	7.61
Bangladesh	LDC	Soybean Oil Net Trade	3.13	-12.90	-6.67	3.13	-12.98	-6.72	1.43	0.77	0.38
China	Ding		-73.95	47.71	21.54	-73.96	47.48	21.44	-29.18	86.90	36.71
Colombia	Ding		3.27	-12.45	-6.43	3.27	-13.34	-6.91	1.50	-6.61	-3.36
India	Ding		-25.76	227.09	80.86	-25.77	227.37	80.93	-26.97	297.77	99.44
Philippines	Ding		-10.19	2864.38	444.46	-10.14	2862.92	444.33	7.10	65.42	28.62
Thailand	Ding		8.16	1.44	0.72	-2.89	-5.60	-2.84	1.76	2.47	1.23
Turkey	Ding		-39.39	130.02	51.66	-39.40	129.92	51.63	-6.07	20.08	9.58
United States	DC		-49.75	60.30	26.61	-49.68	59.16	26.16	-22.27	8.23	4.03

Welfare is calculated at the bean level in terms of producer and consumer surplus, and tariff revenue for all net importers. All results are reported in U.S. Dollars. Tables 20, 21, 22 23 report surplus results in terms of consumer and producer surplus, tariff revenue, individual country net welfare, and changes in stability in prices and surplus.

Table 17 presents the changes in consumer and producer surplus. In general, consumer surplus decreases and producer surplus increases for individual countries and the world, with the major exception of scenario (13) where consumer surplus increases for individual countries by no more than 0.5% and by 0.07% for the world. In this case, also, producer surplus decreases in individual countries and the world by 0.2%. Scenario (13) holds one exception to this outcome in India where consumer surplus decreases and producer surplus increases.

Consumer surplus derived from the crush equation varies between net exporters and importers of soybeans. The United States increases consumer surplus in all scenarios, from 8.12% in scenario (9) to as much as 38.65% in scenario (12). In scenario (13) the surplus expands by 27.10%. China and India have mixed results with both China and India's surplus decreasing in scenario (9), however when the SSM is applied, China's surplus actually increases by 71.34%, while India's crush surplus decreases by 11.73%.

As expected, tariff revenues (Table 18) for soybeans for net importing countries decrease in scenario (9), with total world tariff revenue decreasing by 10.06%. Moreover, when the SSM is applied, tariff revenues increase by approximately 16%, and under scenario (13) also increase by 5.12%, proving that the SSM still increases the total additional applied tariff, even when restricted to URAA rates. Interestingly, for soybean meal, world tariff revenues decrease by approximately 2.5% for scenarios (9) to 9.41% for scenario (12), and 3.76% in scenario (13). Soybean oil sees more expected results for changes in world tariff revenue, as it decreases by

7.89% under scenario (9), and increases by 2.6% in scenarios (11) and (12), and 19.01% in scenario (13).

Overall net welfare for individual countries is presented in Table 19. In scenario (9) where tariffs are reduced, net importing countries see overall decreases from losses to consumer surplus (ex. China and India), and net exporting countries, such as the U.S., see increases in overall net welfare. When the SSM is applied the reverse is seen. Net importing countries show increases in net welfare, even in scenario (13) when tariffs are capped. Net exporting countries, likewise, see a loss of net welfare in scenarios (11), (12) and (13).

Table 20 considers the extent to which prices and welfare become more or less stable as tariffs are reduced and an SSM is applied and then capped, by assessing the change in variance. A simple reduction in tariffs, as seen in scenario (9), leads to less stable prices and welfare for all commodities. When the price SSM (scenario 10) is applied, soybean meal prices actually become more stable, while all other variables lose stability. The volume SSM and full SSM scenarios (scenarios 11 and 12) lead to an increase in soybean oil price stability, while all other variables become less stable. However, when the SSM is capped at URAA rates in scenario (13), all prices and producer surplus become more stable, while consumer surplus remains practically as stable as the baseline. While these results can attempt to be explained by a number of factors, the most notable result is the act of restricting the SSM in scenario (13), which provides a stabilizing force for world soybean product prices.

Table 17: Full Stochastic Model Changes in Economic Surplus

Scenario			(9) DDA Cuts- No SSM			(10) DDA Cuts- Price SSM Only		
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Consumer Surplus	-0.39	0.61	0.30	0.00	0.03	0.01
China	Ding		-0.29	0.92	0.46	0.00	0.04	0.02
Colombia	Ding		-0.48	0.57	0.29	0.00	0.01	0.01
India	Ding		0.45	-21.52	-11.41	0.00	-0.03	-0.01
Philippines	Ding		-0.46	0.39	0.19	0.00	0.01	0.01
Thailand	Ding		-0.48	0.70	0.35	0.00	0.01	0.01
Turkey	Ding		-0.19	0.99	0.49	0.00	0.02	0.01
United States	DC		-0.14	1.07	0.53	0.00	0.04	0.02
World	n/a		-0.13	-0.01	0.00	0.00	0.00	0.00
Bangladesh	LDC	Producer Surplus				n/a		
China	Ding		0.50	2.53	1.26	0.00	0.01	0.01
Colombia	Ding		0.55	0.95	0.47	0.00	0.00	0.00
India	Ding		-0.77	23.69	11.22	0.00	-0.02	-0.01
Philippines	Ding					n/a		
Thailand	Ding		0.54	1.30	0.65	0.00	0.02	0.01
Turkey	Ding		0.58	0.98	0.49	0.00	0.00	0.00
United States	DC		0.73	1.31	0.65	0.00	0.01	0.00
World	n/a		0.45	0.93	0.47	0.00	0.01	0.01
Argentina ¹	Ding	Soybean Crush Surplus	15.79	17.04	8.19	0.00	-0.17	-0.08
Bangladesh	LDC		9.20	26.21	12.35	0.00	-0.07	-0.04
Brazil ¹	Ding		15.76	36.84	16.98	0.00	-0.15	-0.08
Canada ¹	DC		-10.72	-13.39	-6.94	-0.01	-0.25	-0.12
China	Ding		-27.11	-42.73	-24.32	0.00	-0.69	-0.34
Colombia	Ding		10.20	29.86	13.96	0.00	0.01	0.01
India	Ding		-14.62	-73.74	-48.76	0.08	-1.27	-0.64
Malaysia	Ding		5.67	11.60	5.64	0.00	-0.18	-0.09
Mexico	Ding		4.75	15.57	7.50	0.00	0.00	0.00
Paraguay ¹	Ding		15.05	26.48	12.46	0.00	-0.07	-0.03
Philippines	Ding		9.56	26.67	12.55	0.00	-0.06	-0.03
Thailand	Ding		-16.79	-75.44	-50.44	0.00	0.08	0.04
Turkey	Ding		-22.58	-57.41	-34.74	0.00	-0.02	-0.01
United States ¹	DC		8.12	9.51	4.65	0.00	-0.16	-0.08
World	n/a		-4.43	14.31	6.92	0.00	0.08	0.04

^{1/} Net Exporter of Soybeans

Table 17 Continued

Scenario			(11)			(12)		
Country	Development Status	Variable	DDA Cuts- Volume SSM Only			DDA Cuts- Full SSM		
			% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Consumer Surplus	-0.41	12.59	6.11	-0.41	12.57	6.10
China	Ding		-0.31	16.56	7.96	-0.31	16.55	7.96
Colombia	Ding		-0.52	4.73	2.34	-0.52	4.73	2.34
India	Ding		-4.79	144.99	56.52	-4.79	145.00	56.52
Philippines	Ding		-0.49	3.19	1.58	-0.49	3.20	1.59
Thailand	Ding		-0.52	-0.05	-0.03	-0.52	-0.03	-0.02
Turkey	Ding		-0.21	7.56	3.71	-0.21	7.58	3.72
United States	DC		-0.16	16.75	8.05	-0.16	16.73	8.04
World	n/a		-0.25	-0.11	-0.05	-0.25	-0.11	-0.06
Bangladesh	LDC	Producer Surplus			n/a			
China	Ding		0.53	0.31	0.15	0.53	0.30	0.15
Colombia	Ding		0.60	1.69	0.84	0.60	1.69	0.84
India	Ding		9.50	-51.41	-30.29	9.50	-51.40	-30.29
Philippines	Ding				n/a			
Thailand	Ding		0.58	5.87	2.89	0.58	5.88	2.90
Turkey	Ding		0.62	1.07	0.53	0.62	1.07	0.54
United States	DC		0.78	4.59	2.27	0.78	4.60	2.27
World	n/a		0.95	6.91	3.40	0.95	6.91	3.40
Argentina ¹	Ding	Soybean Crush Surplus	-21.52	-1.31	-0.66	-21.49	-2.07	-1.04
Bangladesh	LDC		-15.41	3.57	1.77	-15.39	2.52	1.25
Brazil ¹	Ding		-21.83	-50.03	-29.31	-21.79	-49.90	-29.22
Canada ¹	DC		-29.02	-21.22	-11.24	-28.97	-21.67	-11.50
China	Ding		71.33	425.98	129.34	71.34	425.65	129.27
Colombia	Ding		-14.59	-26.12	-14.04	-14.55	-27.09	-14.61
India	Ding		38.64	988.38	229.91	38.65	989.25	230.04
Malaysia	Ding		65.75	-74.96	-49.96	65.75	-74.99	-49.99
Mexico	Ding		54.98	11657.04	984.30	54.46	11938.82	997.22
Paraguay ¹	Ding		-20.46	-13.89	-7.20	-20.43	-14.31	-7.43
Philippines	Ding		11.96	7784.56	787.95	11.93	7782.74	787.85
Thailand	Ding		1.72	-19.22	-10.12	1.72	-19.32	-10.18
Turkey	Ding		56.36	398.54	123.28	56.38	397.72	123.10
United States ¹	DC		-11.75	15.43	7.44	-11.73	14.50	7.00
World	n/a		10.84	-4.08	-2.06	10.83	-4.10	-2.07

^{1/} Net Exporter of Soybeans

Table 17 Continued

Scenario		(13) DDA Cuts- Full SSM Bound to URAA			
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Consumer Surplus	0.40	1.17	0.58
China	Ding		0.30	0.26	0.13
Colombia	Ding		0.50	-0.25	-0.13
India	Ding		-5.07	153.84	59.32
Philippines	Ding		0.48	0.22	0.11
Thailand	Ding		0.49	-2.43	-1.22
Turkey	Ding		0.20	-0.69	-0.35
United States	DC		0.15	0.12	0.06
World	n/a		0.07	-0.01	0.00
Bangladesh	LDC	Producer Surplus		n/a	
China	Ding		-0.51	-6.70	-3.41
Colombia	Ding		-0.56	-0.79	-0.39
India	Ding		10.05	-55.45	-33.25
Philippines	Ding			n/a	
Thailand	Ding		-0.55	-0.25	-0.13
Turkey	Ding		-0.60	-1.06	-0.53
United States	DC		-0.74	-0.92	-0.46
World	n/a		-0.20	-0.43	-0.22
Argentina ¹	Ding	Soybean Crush Surplus	-9.78	1.77	0.88
Bangladesh	LDC		-6.89	-1.32	-0.66
Brazil ¹	Ding		-9.89	-23.61	-12.60
Canada ¹	DC		-13.62	-8.12	-4.14
China	Ding		27.10	107.26	43.96
Colombia	Ding		-6.80	-14.24	-7.39
India	Ding		37.59	1018.18	234.39
Malaysia	Ding		-1.94	-25.17	-13.49
Mexico	Ding		2.11	3254.93	479.22
Paraguay ¹	Ding		-9.34	-7.24	-3.69
Philippines	Ding		-4.60	224.69	80.19
Thailand	Ding		0.68	4.07	2.02
Turkey	Ding		8.23	30.51	14.24
United States ¹	DC		-5.31	7.43	3.65
World	n/a		3.76	-7.09	-3.61

^{1/} Net Exporter of Soybeans

Table 18: Full Stochastic Model Changes in Tariff Revenue

Scenario		(9)				(10)		
			DDA Cuts- No SSM			DDA Cuts- Price SSM Only		
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Soybean Tariff Revenue	4.65	18.18	8.71	0.00	0.16	0.08
China	Ding		-15.27	-34.44	-19.03	0.00	-0.16	-0.08
Colombia	Ding		3.35	8.44	4.14	0.00	0.02	0.01
Philippines	Ding		4.83	14.25	6.89	0.00	0.01	0.01
Thailand	Ding		-7.64	-71.40	-46.52	0.00	0.00	0.00
Turkey	Ding		-3.95	-13.79	-7.15	0.00	0.02	0.01
World	n/a		-10.06	-16.88	-8.83	0.00	0.01	0.00
Bangladesh	LDC	Soybean Meal Tariff Revenue	-0.36	-3.33	-1.68	0.00	-0.07	-0.04
China	Ding		2.67	-38.59	-21.64	0.00	-0.22	-0.11
Colombia	Ding		0.12	-6.27	-3.19	0.00	-0.02	-0.01
Philippines	Ding		0.96	0.36	0.18	0.00	0.00	0.00
Thailand	Ding		-31.69	32.23	14.99	0.00	0.00	0.00
Turkey	Ding		-23.96	40.51	18.54	0.00	-0.07	-0.03
World	n/a		-2.43	17.82	8.54	0.00	-0.03	-0.02
Bangladesh	LDC	Soybean Oil Tariff Revenue	0.88	-1.13	-0.57	0.00	0.16	0.08
China	Ding		177.11	-72.00	-47.09	0.00	-0.19	-0.10
Colombia	Ding		0.42	-3.41	-1.72	0.00	0.02	0.01
India	Ding		-23.86	-86.36	-63.07	0.10	-4.43	-2.24
Philippines	Ding		-7.73	43.97	19.99	0.00	-0.08	-0.04
Turkey	Ding		-16.34	-14.44	-7.50	0.00	0.01	0.00
World	n/a		-7.89	-37.81	-21.14	0.02	-0.75	-0.38

Table 18 Continued

Scenario			(11)			(12)			(13)		
			DDA Cuts- Volume SSM Only			DDA Cuts- Full SSM			DDA Cuts- Full SSM Bound to URAA		
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC		-6.99	10.53	5.13	-6.98	10.38	5.06	-3.72	-8.08	-4.12
China	Ding		34.03	4.02	1.99	34.03	4.02	1.99	13.28	56.62	25.15
Colombia	Ding	Soybean	-4.39	-6.74	-3.43	-4.38	-7.15	-3.64	-2.46	-5.59	-2.84
Philippines	Ding	Tariff	4.50	468.57	138.45	4.49	468.09	138.35	-2.71	-16.42	-8.58
Thailand	Ding	Revenue	1.22	15.97	7.69	1.22	16.00	7.71	-0.12	1.61	0.80
Turkey	Ding		8.82	34.16	15.83	8.83	34.18	15.84	0.91	4.62	2.28
World	n/a		16.82	9.94	4.85	16.77	8.81	4.31	5.12	0.27	0.13
Bangladesh	LDC		4.15	45.74	20.72	4.15	45.71	20.71	1.09	4.71	2.33
China	Ding		-28.98	1244.73	266.71	-29.00	1243.42	266.53	10.80	89.46	37.64
Colombia	Ding	Soybean	2.83	21.86	10.39	2.83	22.28	10.58	0.59	4.36	2.15
Philippines	Ding	Meal Tariff	1.43	70.43	30.55	1.44	70.46	30.56	0.05	6.24	3.07
Thailand	Ding	Revenue	1.04	8.77	4.29	1.04	8.79	4.30	-0.21	-0.53	-0.26
Turkey	Ding		-20.14	-30.44	-16.60	-20.15	-30.61	-16.70	-3.47	-21.47	-11.38
World	n/a		-9.44	162.81	62.11	-9.41	166.26	63.17	-3.76	10.33	5.04
Bangladesh	LDC		-3.83	1.97	0.98	-3.82	1.88	0.94	-1.72	10.39	5.07
China	Ding		-100.00	-100.00	-100.00	-100.00	-100.00	-100.00	-49.38	52.57	23.52
Colombia	Ding	Soybean Oil	-3.69	3.34	1.65	-3.66	-0.13	-0.06	-1.64	4.19	2.08
India	Ding	Tariff	74.86	8170.83	809.44	74.85	8174.63	809.65	72.54	11128.08	959.63
Philippines	Ding	Revenue	16.81	7004.63	742.89	16.71	7001.01	742.67	7.82	1555.30	306.85
Turkey	Ding		90.62	1724.89	327.19	90.59	1723.20	326.99	33.83	43.32	19.71
World	n/a		2.63	1494.26	299.28	2.62	1504.11	300.51	19.01	1378.00	284.45

Table 19: Full Stochastic Model Changes in Net Welfare

Scenario			(9)			(10)		
Country	Development Status	Variable	% Change	DDA Cuts- No SSM		DDA Cuts- Price SSM Only		% Change St. Dev.
				% Change Variance	% Change St. Dev.	% Change	% Change Variance	
Bangladesh	LDC	Net Welfare	1.45	2.27	1.13	0.00	0.20	0.10
China	Ding		-5.66	-0.31	-0.16	0.00	-0.05	-0.03
Colombia	Ding		0.75	1.68	0.84	0.00	0.00	0.00
India	Ding		-4.94	7.47	3.67	0.02	-0.25	-0.13
Philippines	Ding		1.48	3.28	1.63	0.00	0.00	0.00
Thailand	Ding		-17.34	-56.78	-34.26	0.00	0.00	0.00
Turkey	Ding		-2.35	6.37	3.14	0.00	0.01	0.00
United States	DC		1.35	1.48	0.74	0.00	0.01	0.01

Table 19 Continued

Scenario			(11)			(12)			(13)		
			DDA Cuts- Volume SSM Only			DDA Cuts- Full SSM			DDA Cuts- Full SSM Bound to URAA		
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Net Welfare	-4.32	3.95	1.95	-4.31	3.84	1.90	-1.96	8.46	4.14
China	Ding		10.79	-11.75	-6.06	10.79	-11.77	-6.07	4.89	1.06	0.53
Colombia	Ding		-1.38	0.69	0.35	-1.37	0.91	0.45	-0.62	-1.06	-0.53
India	Ding		16.28	-42.81	-24.38	16.28	-42.80	-24.37	16.25	-51.03	-30.02
Philippines	Ding		2.37	-32.64	-17.93	2.37	-32.75	-17.99	-0.27	-15.95	-8.32
Thailand	Ding		0.74	0.24	0.12	0.74	0.30	0.15	0.10	-3.64	-1.84
Turkey	Ding		3.07	8.98	4.39	3.08	8.96	4.38	0.84	-1.56	-0.78
United States	DC		-0.73	5.72	2.82	-0.73	5.73	2.83	-1.10	-1.06	-0.53

Table 20: Price and Surplus Changes in Stability

Scenario		(9)		(10)		(11)		(12)		(13)	
Variable		DDA Cuts- No SSM		DDA Cuts- Price SSM Only		DDA Cuts- Volume SSM Only		DDA Cuts- Full SSM		DDA Cuts- Full SSM Bound to URAA	
		Less Stable	More Stable	Less Stable	More Stable	Less Stable	More Stable	Less Stable	More Stable	Less Stable	More Stable
Prices ^b	Soybean	0.84	0.16	0.97	0.03	0.97	0.03	0.97	0.03	0.28	0.72
	Soybean Meal	0.82	0.18	0.00	1.00	0.97	0.03	0.97	0.03	0.09	0.91
	Soybean Oil	0.70	0.30	0.88	0.12	0.24	0.76	0.24	0.76	0.36	0.64
Soybean Surplus	Consumer	0.81	0.16	0.94	0.03	0.91	0.06	0.91	0.06	0.50	0.47
	Producer	0.67	0.12	0.52	0.27	0.73	0.06	0.73	0.06	0.09	0.70

^bDoes not include world prices

5.3. Frequency of SSM Triggers

The following tables show the how often each SSM is triggered out of a possible 1,000 iterations and the average additional duty available in those 1,000 iterations. Table 21 shows the values for the price SSM alone in scenarios (10), (11), (12) and (13). Table 22 includes the values for the volume SSM for the same scenarios. Each “count” variable in Table 22 is listed as Volume SSM 1, Volume SSM 2 or Volume SSM 3 to denote the three Volume SSM trigger thresholds and possible additional duties as outlined in Table 5.

In regards to the Price SSM, when only the Price SSM is employed (scenario 10), Table 21 suggests that India triggers the Price SSM 53 times out of a possible 1,000 iterations, however the average additional duty employed by these triggers is low. When the volume SSM is employed in the three other scenarios (11), (12) and (13), this trigger, as shown in Table 22, triggers more often, nullifying the would-be effects of the price SSM, since a country is only allowed to employ one SSM at a time, whichever allows for the highest additional tariff.

Table 22 demonstrates the nature of the volume SSM. The volume SSM triggers far more often than the price SSM for representative countries such as China, India and Turkey, often as much as 100% of the time in the case of the highest band, Volume SSM 3, for China specifically in all scenarios. For Turkey, the Volume SSM 2 (middle band) is triggered 95.1% of the time, while the remaining 4.9% of iterations the Volume SSM 3 tariff level is triggered in scenarios (12) and (13) when the volume SSM is allowed to be employed. Also of note, when the URAA Bound Rates are added as a cap on tariffs, as the case in scenario (13), the average duty triggered by the SSM for all countries employing an SSM decreases from those scenarios where the average additional duty is not capped.

Table 21: DDA Tariff Cuts Price Special Safeguard Mechanism (SSM) Results

Scenario			(10)				(11)			
Country	Development Status	Variable	DDA Cuts- Price SSM Only				DDA Cuts- Volume SSM Only			
			Value	% Change	% Change Variance	% Change St. Dev.	Value	% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	392.20	0.00	0.04	0.02	394.23	0.52	16.93	8.13
World Prices	n/a	Soybean Meal	342.66	0.00	-0.01	-0.01	349.53	2.01	93.05	38.94
World Prices	n/a	Soybean Oil	894.57	0.00	0.20	0.10	834.23	-6.75	-15.11	-7.86
Bangladesh	LDC	Price SSM	0	n/a	n/a	n/a	0	n/a	n/a	n/a
China	Ding		0	-36.38	-61.33	-37.82	0	-100.00	-100.00	-100.00
Colombia	Ding		0	-33.36	-55.59	-33.36	0	13407.73	520335.67	7114.12
India	Ding		0	-38.71	-62.61	-38.86	0	-100.00	-100.00	-100.00
Philippines	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
Turkey	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
Bangladesh	LDC	Price SSM Count	0	n/a	n/a	n/a	0	n/a	n/a	n/a
China	Ding		4	0.00	0.00	0.00	0	-100.00	-100.00	-100.00
Colombia	Ding		1	0.00	0.00	0.00	7	600.00	595.78	163.78
India	Ding		53	0.00	0.00	0.00	0	-100.00	-100.00	-100.00
Philippines	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
Turkey	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a

Table 21 Continued

Scenario			(12)				(13)			
Country	Development Status	Variable	Value	DDA Cuts- Full SSM			DDA Cuts- Full SSM Bound to URAA			
				% Change	% Change Variance	% Change St. Dev.	Value	% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	394.23	0.52	16.91	8.13	390.26	-0.49	-0.02	-0.01
World Prices	n/a	Soybean Meal	349.54	2.01	93.02	38.93	342.35	-0.09	-0.13	-0.06
World Prices	n/a	Soybean Oil	834.27	-6.74	-15.17	-7.90	866.78	-3.11	1.03	0.51
Bangladesh	LDC	Price SSM	0	n/a	n/a	n/a	0	n/a	n/a	n/a
China	Ding		0	-100.00	-100.00	-100.00	0	-100.00	-100.00	-100.00
Colombia	Ding		0	7883.87	179397.55	4136.72	0	1710.97	32655.89	1709.86
India	Ding		0	-100.00	-100.00	-100.00	0	-100.00	-100.00	-100.00
Philippines	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
Turkey	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
Bangladesh	LDC	Price SSM Count	0	n/a	n/a	n/a	0	n/a	n/a	n/a
China	Ding		0	-100.00	-100.00	-100.00	0	-100.00	-100.00	-100.00
Colombia	Ding		7	600.00	595.78	163.78	1	0.00	0.00	0.00
India	Ding		0	-100.00	-100.00	-100.00	0	-100.00	-100.00	-100.00
Philippines	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
Turkey	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a

Table 22: DDA Tariff Cuts Volume Special Safeguard Mechanism (SSM) Results

Scenario		(10)					(11)			
Country	Development Status	Variable	DDA Cuts- Price SSM Only				DDA Cuts- Volume SSM Only			
			Value	% Change	% Change Variance	% Change St. Dev.	Value	% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	392.20	0.00	0.04	0.02	394.23	0.52	16.93	8.13
World Prices	n/a	Soybean Meal	342.66	0.00	-0.01	-0.01	349.53	2.01	93.05	38.94
World Prices	n/a	Soybean Oil	894.57	0.00	0.20	0.10	834.23	-6.75	-15.11	-7.86
Bangladesh	LDC	Volume SSM	0	n/a	n/a	n/a	0	n/a	n/a	n/a
China	Ding		500	0.00	n/a	n/a	500	0.00	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
India	Ding		212	0.00	0.00	0.00	456	115.12	-87.32	-64.39
Philippines	Ding		1	0.00	0.00	0.00	96	12760.00	11128.81	959.66
Turkey	Ding		399	0.00	0.00	0.00	404	1.37	95.94	39.98
Bangladesh	LDC	Volume SSM 1 Count	0	n/a	n/a	n/a	0	n/a	n/a	n/a
China	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
India	Ding		416	0.00	0.00	0.00	11	-97.36	-95.52	-78.84
Philippines	Ding		3	0.00	0.00	0.00	221	7266.67	5655.98	658.68
Turkey	Ding		9	0.00	0.00	0.00	0	-100.00	-100.00	-100.00
Bangladesh	LDC	Volume SSM 2 Count	0	n/a	n/a	n/a	0	n/a	n/a	n/a
China	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
India	Ding		270	0.00	0.00	0.00	407	50.74	22.45	10.66
Philippines	Ding		0	n/a	n/a	n/a	103	n/a	n/a	n/a
Turkey	Ding		991	0.00	0.00	0.00	959	-3.23	340.84	109.96
Bangladesh	LDC	Volume SSM 3 Count	0	n/a	n/a	n/a	0	n/a	n/a	n/a
China	Ding		1000	0.00	n/a	n/a	1000	0.00	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
India	Ding		0	n/a	n/a	n/a	581	n/a	n/a	n/a
Philippines	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
Turkey	Ding		0	n/a	n/a	n/a	41	n/a	n/a	n/a

Table 22 Continued

Scenario			(12)				(13)			
Country	Development Status	Variable	Value	DDA Cuts- Full SSM			DDA Cuts- Full SSM Bound to URAA			
				% Change	% Change Variance	% Change St. Dev.	Value	% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	394.23	0.52	16.91	8.13	390.26	-0.49	-0.02	-0.01
World Prices	n/a	Soybean Meal	349.54	2.01	93.02	38.93	342.35	-0.09	-0.13	-0.06
World Prices	n/a	Soybean Oil	834.27	-6.74	-15.17	-7.90	866.78	-3.11	1.03	0.51
Bangladesh	LDC	Volume SSM	0	n/a	n/a	n/a	0	n/a	n/a	n/a
China	Ding		500	0.00	n/a	n/a	500	0.00	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
India	Ding		456	115.12	-87.32	-64.39	436	105.42	-56.96	-34.40
Philippines	Ding		96	12726.67	11121.22	959.30	9	1033.33	1158.62	254.77
Turkey	Ding		404	1.37	95.94	39.98	400	0.34	-100.00	-100.00
Bangladesh	LDC	Volume SSM 1 Count	0	n/a	n/a	n/a	0	n/a	n/a	n/a
China	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
India	Ding		11	-97.36	-95.52	-78.84	36	-91.35	-85.72	-62.20
Philippines	Ding		220	7233.33	5637.31	657.45	26	766.67	746.69	190.98
Turkey	Ding		0	-100.00	-100.00	-100.00	0	-100.00	-100.00	-100.00
Bangladesh	LDC	Volume SSM 2 Count	0	n/a	n/a	n/a	0	n/a	n/a	n/a
China	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
India	Ding		407	50.74	22.45	10.66	385	42.59	20.13	9.60
Philippines	Ding		103	n/a	n/a	n/a	5	n/a	n/a	n/a
Turkey	Ding		959	-3.23	340.84	109.96	1000	0.91	-100.00	-100.00
Bangladesh	LDC	Volume SSM 3 Count	0	n/a	n/a	n/a	0	n/a	n/a	n/a
China	Ding		1000	0.00	n/a	n/a	1000	0.00	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a
India	Ding		581	n/a	n/a	n/a	545	n/a	n/a	n/a
Philippines	Ding		0	n/a	n/a	n/a	0	n/a	n/a	n/a

Turkey	Ding		41	n/a	n/a	n/a	0	n/a	n/a	n/a

5.4 Swiss-25 Tariff Cuts Results and Discussion

The Swiss-25 formula for tariff reductions is a simple non-linear formula that was originally proposed during the Tokyo Round²⁰ of negotiations (WTO, 2003a). The following is the equation for deriving the applied tariff rate, where a is simply a coefficient that drives tariff reductions:

$$(48) \quad t_1 = \frac{a * t_0}{a + t_0} \quad \text{where } a = 25, \text{ and } t_0 \text{ is the applied tariff rate.}$$

The objective of the Swiss-25 tariff cutting formula is to increase the level of reduction the higher the applied tariff rate, the greater the level of tariff reduction. Table 23 illustrates this by using real applied tariff rates from representative countries.

Table 23: Impact of Swiss-25 Formula on Representative Countries

Country	% Current Applied Tariff (Soybean Oil)	% Tariff Rate after Swiss-25 Tariff Cuts $a = 25$	% Reduction
European Union	4.8	4.03	16.11
China	9	6.62	26.47
India	45	16.07	64.29

The Swiss-25 is differentiated from the Doha Development Agenda tariff cut commitments (Table 5) in that all countries are subject to the same formula for tariff reductions regardless of development status. The exception to this is Least-Developed Countries (LDCs) such as Bangladesh that are not subject to any tariff reductions in WTO negotiations, nor are Recently Acceded Members (RAMs) and Non-WTO members such as Syria.

The following scenarios are addressed in this section of Chapter 5:

²⁰ See Table 1

Table 24: Swiss-25 Tariff Cuts Model Scenarios

Scenario	Tariff	Stochastic Elements	SSM
1)	Swiss-25 Tariff Cuts	Both Production and Exchange Rate Errors	No SSM
2)	Swiss-25 Tariff Cuts	Both Production and Exchange Rate Errors	Price SSM Only
3)	Swiss-25 Tariff Cuts	Both Production and Exchange Rate Errors	Volume SSM Only
4)	Swiss-25 Tariff Cuts	Both Production and Exchange Rate Errors	Both Price and Volume SSM
5)	Swiss-25 Tariff Cuts Bound at URAA Rates	Both Production and Exchange Rate Errors	Both Price and Volume SSM

Following the structure in the previous sections, both the production and exchange rate errors are in effect in these scenarios to provide a full stochastic model that accounts for both changes in soybean production due to outside factors such as technological changes and weather, as well as random changes in domestic prices. The first scenario (14) is the baseline against which results from scenarios (15), (16), (17) and (18) are assessed. Scenario (14)'s applied tariffs are cut by using the Swiss-25 formula (equation 47) with no SSM employed, while the effects of the SSM after the Swiss-25 tariff cuts have been administered will be examined in the subsequent scenarios.

Table 25 illustrates the effects of the SSM on Prices when the Swiss-25 Tariff Cuts are in place. With respect to world prices, soybean prices change little with the additional of either the price or volume SSM, increasing at most by 0.08% with the Full SSM (scenario 17), and decreasing by 0.21% when the total additional duties are capped at URAA levels (scenario 18). These figures shifted little from the changes in price at DDA tariff levels when an SSM is applied (Table 14). The same holds true for soybean meal and oil. Soybean meal prices increased by 1.2% when the Full SSM is employed and decrease by 0.08% when prices are capped at

URAA tariff rates. Soybean oil prices show the most shift, with a decrease of approximately 7.85% with the addition of the volume and full SSM, but this change is curbed when tariffs are restricted (scenario 18), to only a decrease of 4.45%, figures that are on par with the changes experienced with DDA tariff cuts as well.

Individual countries showed mixed results when comparing the effects of the Swiss-25 tariff cuts on prices (Table 25) to that of the Doha Development Agenda tariff cuts (Table 14). China maintained similar adjustments in domestic price of all three commodities when the SSM is imposed, including when the SSM is capped at URAA rates. India, on the other hand, showed much smaller changes in prices, both positive and negative from those of the DDA. India's change in soybean prices when the Full SSM was employed was an increase of 5.3%, compared with an increase of 8.0% in Table 14. Moreover, when prices are capped at URAA rates, that increase is reduced to 1.45% from the same 8% at DDA tariff rates. In India's case, soybean meal prices in all scenarios (15), (16), (17) and (18) did not vary from the overall changes in world price. Soybean oil prices, however, showed greater fluctuation: decreasing by 27.95% when the volume SSM was employed (scenario 16), and increasing by 31.07% with the full SSM. These changes are mitigated by the addition of a tariff cap (scenario 18), and prices increase in this scenario by 19.36%.

These more modest fluctuations may be attributed to the very nature of the Swiss-25 tariff cuts as demonstrated by Table 24, where India's applied tariffs were cut at a higher rate than those of China, whose applied tariff on soybean oil is already relatively low. In this case, India's applied tariff on soybean oil is decreased by 64% to 16%, where the Doha Development Agenda only reduces the bound tariff (in this case both the bound and applied tariffs are equal to 45 per cent) by 38% to 27.9% according to the stipulations laid out in Tables 5 and 9. The effects

of the Swiss-25 tariff cuts can be seen across the board when reviewing the changes in world prices, as mentioned earlier, and can be seen that when compared with the world price effects in Table 14, the Swiss-25 tariff cuts reveal smaller percentage changes and even more stable prices as the percentage change in variance also decreased overall.

Table 26 shows the effects of the Swiss-25 tariff cuts on soybean crush. While total soybean crush in the world changes little, 0.11%, compared with a change of 0.29% when the Doha Development Agenda tariff cuts are taken in Table 15 (scenarios 11 and 12). When the Volume SSM is employed (scenarios 16 and 17), net importers such as China and India show an increase in crush of 36.41% and 29.24% respectively in scenarios (16) and (17), this change is greater than in Table 15, scenarios (11) and (12). The United States decreased its level of soybean crush by 7.81%, while other exporters, such as Argentina, Brazil, Canada and Paraguay, decreased their soybean crush by approximately 14 percent. In scenario (18), where tariffs are held to URAA rates, total world soybean crush actually decreases by 0.03%, which China and India increased their soybean crush by 22.34% and 21.80%, respectively, also greater than scenario (13), while the exporters mentioned above decreased soybean crush by nine percent.

Table 27 reports the changes in net trade with the Swiss-25 tariff cuts in place. When compared with the changes in net trade with the DDA tariff cuts (Table 16), in general, shifts both positive and negative are slightly more pronounced. When the price SSM is employed (scenario 15), the United States shows a less than 1% change in net trade of all three commodities, compared with no change in scenario (10) when a Price SSM is employed with DDA tariff cuts. China as well shows only modest shifts. India actually decreases its net trade of soybeans by 5.92% with only the Price SSM, although when the Full SSM is employed (scenario 17) with both the price and volume SSM able to be applied, the change is a reduction in soybean

trade by 93.91%. When the Full SSM is employed China's trade in soybean meal is forced to autarky, as is the case in scenarios (11) and (12) with the DDA tariff cuts. When the additional tariffs are capped in scenario (18), the effects to do vary greatly from the uncapped Full SSM (scenario 17), and show greater fluctuation from that of the DDA tariff cuts (scenario 13).

Table 25: Swiss-25 Tariff Cuts Effects on Domestic and World Prices

Scenario		(15)				(16)		
Country	Development Status	Variable	Swiss-25 Cuts- Price SSM Only			Swiss-25 Cuts- Volume SSM Only		
			% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Soybean Price	-0.01	-0.07	-0.04	0.08	10.60	5.17
China	Ding		-0.01	-0.10	-0.05	0.08	13.68	6.62
Colombia	Ding		-0.01	-0.04	-0.02	0.08	3.39	1.68
India	Ding		0.02	-0.63	-0.31	5.30	117.37	47.43
Philippines	Ding		-0.01	0.00	0.00	0.08	2.93	1.45
Thailand	Ding		-0.01	0.08	0.04	0.08	3.83	1.90
Turkey	Ding		-0.01	-0.03	-0.02	0.08	5.58	2.75
United States ^a	DC		-0.01	-0.10	-0.05	0.10	13.67	6.62
World Prices	n/a		-0.01	-0.10	-0.05	0.08	13.67	6.62
Bangladesh	LDC	Soybean Meal Price	0.00	0.26	0.13	1.20	52.45	23.47
China	Ding		0.00	0.42	0.21	-2.00	-65.81	-41.53
Colombia	Ding		0.00	0.08	0.04	1.20	12.12	5.89
India	Ding		0.00	-0.09	-0.04	1.20	11.03	5.37
Philippines	Ding		0.00	0.06	0.03	1.20	8.46	4.14
Thailand	Ding		0.00	0.03	0.01	1.20	15.51	7.48
Turkey	Ding		0.00	0.06	0.03	1.20	25.24	11.91
World Prices	n/a		0.00	0.42	0.21	1.20	83.88	35.60
Bangladesh	LDC	Soybean Oil Price	-0.12	6.63	3.26	-7.84	-19.93	-10.52
China	Ding		0.48	-40.00	-22.54	32.00	56.46	25.08
Colombia	Ding		-0.10	0.32	0.16	-3.01	71.21	30.85
India	Ding		1.29	-48.09	-27.95	31.07	40.93	18.71
Philippines	Ding		-0.12	2.56	1.27	26.83	17.94	8.60
Thailand	Ding		-0.01	-0.19	-0.09	-1.22	-18.44	-9.69
Turkey	Ding		-0.12	4.14	2.05	32.86	38.52	17.69
World Prices	n/a		-0.12	7.58	3.72	-7.84	-23.74	-12.67

^{a/} U.S. Farm Price of Soybeans

Table 25 Continued

Scenario		(17)			(18)		
Country	Development Status	Variable	% Change	Swiss-25 Cuts- Full SSM % Change Variance	% Change St. Dev.	Swiss-25 Cuts- Full SSM Bound to URAA % Change Variance	% Change St. Dev.
Bangladesh	LDC	Soybean Price	0.08	10.69	5.21	-0.21	0.39
China	Ding		0.08	13.81	6.68	-0.21	0.45
Colombia	Ding		0.08	3.44	1.71	-0.21	0.03
India	Ding		5.30	117.42	47.45	1.45	19.58
Philippines	Ding		0.08	2.94	1.46	-0.21	0.14
Thailand	Ding		0.08	3.87	1.91	-0.21	-0.08
Turkey	Ding		0.08	5.62	2.77	-0.21	-0.25
United States ^a	DC		0.10	13.80	6.68	-0.27	0.45
World Prices	n/a		0.08	13.80	6.68	-0.21	0.45
Bangladesh	LDC	Soybean Meal Price	1.20	52.46	23.47	-0.08	-0.09
China	Ding		-2.00	-65.84	-41.56	-0.08	-0.32
Colombia	Ding		1.20	12.11	5.88	-0.08	-0.26
India	Ding		1.20	11.05	5.38	-0.08	-0.05
Philippines	Ding		1.20	8.48	4.15	-0.08	-0.11
Thailand	Ding		1.21	15.51	7.47	-0.08	-0.10
Turkey	Ding		1.21	25.22	11.90	-0.08	0.06
World Prices	n/a		1.20	83.82	35.58	-0.08	-0.32
Bangladesh	LDC	Soybean Oil Price	-7.84	-19.59	-10.33	-4.45	-1.27
China	Ding		31.99	57.25	25.40	17.30	21.11
Colombia	Ding		-2.97	65.45	28.63	-3.66	-5.59
India	Ding		31.07	41.14	18.80	19.36	19.58
Philippines	Ding		26.82	18.10	8.67	13.00	14.62
Thailand	Ding		-1.23	-18.35	-9.64	-0.23	1.10
Turkey	Ding		32.85	38.88	17.85	6.17	8.02
World Prices	n/a		-7.85	-23.35	-12.45	-4.45	-1.35

^{a/} U.S. Farm Price of Soybeans

Table 26: Swiss-25 Tariff Cuts Effects on Soybean Crush

Scenario		(15)				(16)		
Country	Development Status	Variable	Swiss-25 Cuts- Price SSM Only			Swiss-25 Cuts- Volume SSM Only		
			% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Argentina ¹	Ding	Soybean Crush	-0.26	-7.13	-3.63	-14.38	-12.16	-6.28
Bangladesh	LDC		-0.17	5.53	2.73	-9.98	-22.98	-12.24
Brazil ¹	Ding		-0.26	-7.50	-3.82	-14.51	-35.68	-19.80
Canada ¹	DC		-0.03	4.11	2.04	-15.04	1035.02	236.90
China	Ding		0.61	95.53	39.83	36.41	236.32	83.39
Colombia	Ding		-0.17	-5.21	-2.64	-2.44	2997.97	456.59
India	Ding		1.66	-35.33	-19.58	29.24	2763.65	435.13
Malaysia	Ding		-0.26	-8.52	-4.35	20.36	-84.74	-60.94
Mexico	Ding		-0.16	-1.70	-0.85	52.54	221.34	79.26
Paraguay ¹	Ding		-0.24	-3.69	-1.86	-13.69	-21.28	-11.28
Philippines	Ding		-0.17	-1.56	-0.78	43.55	286.74	96.66
Thailand	Ding		0.00	-0.19	-0.09	0.67	-18.44	-9.69
Turkey	Ding		-0.10	-3.65	-1.84	32.17	283.42	95.81
United States ¹	DC		-0.14	-6.78	-3.45	-7.81	-10.56	-5.43
World	n/a		0.00	0.05	0.02	0.11	-9.28	-4.75

^{1/} Net Exporter of Soybeans

Table 26 Continued

Scenario			(17)			(18)		
Country	Development Status	Variable	% Change	Swiss-25 Cuts- Full SSM % Change Variance	% Change St. Dev.	Swiss-25 Cuts- Full SSM Bound to URAA % Change	% Change Variance	% Change St. Dev.
Argentina ¹	Ding	Soybean Crush	-14.37	-13.19	-6.83	-9.54	-2.62	-1.32
Bangladesh	LDC		-9.98	-23.58	-12.58	-6.41	-16.34	-8.53
Brazil ¹	Ding		-14.50	-35.74	-19.83	-9.59	-22.03	-11.70
Canada ¹	DC		-15.03	1022.78	235.08	-8.90	1121.00	249.43
China	Ding		36.41	235.97	83.29	22.34	44.39	20.16
Colombia	Ding		-2.35	2963.17	453.46	-6.24	494.25	143.77
India	Ding		29.24	2763.96	435.16	21.80	1270.02	270.14
Malaysia	Ding		20.37	-84.71	-60.90	-8.71	-48.40	-28.16
Mexico	Ding		52.54	221.16	79.21	37.11	108.27	44.31
Paraguay ¹	Ding		-13.68	-22.07	-11.72	-9.11	-11.80	-6.08
Philippines	Ding		43.55	286.43	96.58	20.32	692.77	181.56
Thailand	Ding		0.67	-18.35	-9.64	0.13	2.22	1.10
Turkey	Ding		32.17	283.11	95.73	6.04	23.54	11.15
United States ¹	DC		-7.81	-11.63	-5.99	-5.21	-2.98	-1.50
World	n/a		0.11	-9.38	-4.81	-0.03	-1.53	-0.77

^{1/} Net Exporter of Soybeans

Table 27: Swiss-25 Tariff Cuts Effects on Net Trade

Scenario		(15)				(16)		
Country	Development Status	Variable	Swiss-25 Cuts- Price SSM Only			Swiss-25 Cuts- Volume SSM Only		
			% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Soybean Net Trade	-0.16	3.21	1.59	-9.28	-23.08	-12.30
China	Ding		0.67	35.93	16.59	39.60	66.81	29.16
Colombia	Ding		-0.09	-1.17	-0.59	-1.38	446.13	133.69
India	Ding		-5.92	-1.05	-0.53	-93.90	-90.60	-69.33
Philippines	Ding		-0.16	-3.06	-1.54	40.47	347.67	111.58
Thailand	Ding		0.00	-0.07	-0.04	0.58	-12.48	-6.45
Turkey	Ding		-0.03	-0.91	-0.46	10.37	4.63	2.29
United States	DC		0.22	-0.91	-0.46	12.78	-0.35	-0.18
Bangladesh	LDC	Soybean Meal Net Trade	0.06	10.50	5.12	3.09	42.57	19.40
China	Ding		-1.85	-30.74	-16.78	-99.99	-99.97	-98.24
Colombia	Ding		0.02	-0.68	-0.34	0.00	42.08	19.20
India	Ding		2.80	-49.26	-28.77	49.67	1903.64	347.62
Philippines	Ding		0.01	0.58	0.29	-2.29	5.22	2.58
Thailand	Ding		0.00	-0.51	-0.25	-0.57	28.92	13.54
Turkey	Ding		0.08	0.21	0.10	-25.20	126.02	50.34
United States	DC		-0.52	-4.32	-2.18	-28.75	-0.91	-0.46
Bangladesh	LDC	Soybean Oil Net Trade	0.06	8.48	4.15	3.79	-20.60	-10.89
China	Ding		-1.15	-2.49	-1.25	-69.26	86.06	36.40
Colombia	Ding		0.05	-0.22	-0.11	1.01	605.41	165.60
India	Ding		-1.51	-67.78	-43.24	-29.74	567.60	158.38
Philippines	Ding		0.35	3.03	1.50	-88.76	132.64	52.53
Thailand	Ding		-1.50	10.74	5.23	5.03	2.09	1.04
Turkey	Ding		0.15	5.56	2.74	-46.17	172.58	65.10
United States	DC		-0.95	14.58	7.04	-54.77	-12.40	-6.40

Table 27 Continued

Scenario			(17)			(18)		
Country	Development Status	Variable	% Change	Swiss-25 Cuts- Full SSM % Change Variance	% Change St. Dev.	% Change	Swiss-25 Cuts- Full SSM Bound to URAA % Change Variance	% Change St. Dev.
Bangladesh	LDC	Soybean Net Trade	-9.28	-23.74	-12.67	-5.95	-14.38	-7.47
China	Ding		39.60	66.74	29.13	24.33	-15.41	-8.03
Colombia	Ding		-1.33	444.10	133.26	-3.38	80.82	34.47
India	Ding		-93.91	-90.60	-69.33	-75.37	-62.45	-38.72
Philippines	Ding		40.48	347.23	111.48	18.90	851.26	208.42
Thailand	Ding		0.59	-12.42	-6.42	0.14	-0.88	-0.44
Turkey	Ding		10.37	4.62	2.28	1.98	-2.89	-1.45
United States	DC		12.77	-0.37	-0.18	8.24	0.72	0.36
Bangladesh	LDC	Soybean Meal Net Trade	3.09	42.55	19.39	2.22	-12.66	-6.55
China	Ding		-99.99	-99.97	-98.22	-67.30	39.30	18.02
Colombia	Ding		-0.01	38.69	17.77	0.86	-17.58	-9.22
India	Ding		49.67	1903.90	347.65	36.82	887.22	214.20
Philippines	Ding		-2.29	5.27	2.60	-0.97	-7.98	-4.07
Thailand	Ding		-0.58	28.83	13.50	-0.03	2.49	1.24
Turkey	Ding		-25.20	125.87	50.29	-4.65	18.65	8.93
United States	DC		-28.74	-2.14	-1.08	-19.47	-5.36	-2.72
Bangladesh	LDC	Soybean Oil Net Trade	3.79	-20.22	-10.68	2.21	-4.38	-2.21
China	Ding		-69.26	86.24	36.47	-41.74	121.96	48.98
Colombia	Ding		0.99	591.51	162.97	1.72	66.07	28.87
India	Ding		-29.74	567.80	158.42	-20.71	313.19	103.27
Philippines	Ding		-88.75	132.74	52.56	-41.81	286.99	96.72
Thailand	Ding		12.94	7.55	3.71	-0.64	10.15	4.95
Turkey	Ding		-46.17	172.92	65.20	-8.66	30.82	14.38
United States	DC		-54.76	-12.95	-6.70	-35.42	-21.52	-11.41

The welfare results reported in Tables 28 through 30 follow the same structure as those of the previous section. Changes in consumer, producer and soybean crush surplus are shown in Table 28. These changes remain consistent with those of the DDA tariff cuts (Table 17), with consumer surplus decreasing when the SSM is not capped. However, as is the case with the DDA tariff cuts, a capped SSM (scenario 18) with Swiss-25 tariff cuts also leads to a general increase in consumer surplus, though at no more than one-fifth of a percent. Producer Surplus follows this trend, where with an uncapped Full SSM (scenario 17), increases producer surplus, with surpluses slightly negative in scenario (18) when the additional tariff rates are capped at URAA levels.

Crush surplus, equation (21), again in Table 28, is the surplus soybean demand for crush to be either processed into soybean meal or oil, where as simple consumer surplus is defined as the surplus of demand for soybeans as food. Once again, crush surplus varies between net exporters and importers of soybeans. In contrast to Table 17, the United States soybean crush surplus actually decreases in all scenarios by as much as 15% with the Full SSM (scenario 17), and 10.14% when tariffs are capped (scenario 18). China and India's soybean crush surplus both increase in all scenarios, by as much as 86% for China (scenario 17) and 68% for India (scenario 17). Overall, world crush surplus increases in all scenarios regardless of the SSM or cap employed.

When the Swiss-25 tariff cuts are in place, Table 29 shows that tariff revenues overall increase for soybeans and soybean oil, but decrease for soybean oil. World soybean tariff revenues increase by 24.5% when the Full SSM (scenario 17) is in place, even as the Swiss-25 cuts are taken, and soybean oil tariff revenues increase by 48.5% with the Full SSM, and even increase slightly to 50.12% when tariffs are capped (scenario 18). World tariff revenues for

soybean meal, on the other hand, decrease by almost 18% with the full SSM, and 12.56% when tariffs are capped in scenario (18). China, as an individual country, shows the most interesting change, where tariff revenues are reduced to almost zero for soybean oil with the more drastic Swiss-25 tariff cuts in scenarios (17) and (18), while soybean tariff revenues for the country actually increase by 36.7% with the Full SSM (scenario 17) and 24.08% in scenario (18), when tariffs are capped.

Net welfare changes from the Swiss-25 tariff cuts are presented in Table 30. These results differ from those presented in Table 19 in that net exporting countries such as the United States show losses in net welfare when the Swiss-25 tariff cuts are taken, regardless of the SSM employed. Whereas net importing countries, such as China and India, show increases in net welfare by as much as almost 20% in the case of India when the Full SSM is imposed (scenario 17), and 12% when tariffs are capped (scenario 18). This is particularly interesting result since the overall changes in individual consumer and producer surplus are consistent between the DDA tariff cuts and Swiss-25 tariff cuts. The difference is in the changes in soybean crush surplus, which in the case of the Swiss-25 tariff cuts is negative for exporting countries such as the United States, and positive for larger importing countries, i.e. China and India.

Table 28: Swiss-25 Tariff Cuts Changes in Surplus

Scenario			(15)			(16)		
Country	Development Status	Variable	Swiss-25 Cuts- % Change	Price SSM Only % Change Variance	SSM Only % Change St. Dev.	Swiss-25 Cuts- % Change	Volume SSM Only % Change Variance	SSM Only % Change St. Dev.
Bangladesh	LDC	Consumer Surplus	0.00	-0.07	-0.03	-0.06	10.51	5.13
China	Ding		0.00	-0.10	-0.05	-0.05	13.61	6.59
Colombia	Ding		0.01	-0.04	-0.02	-0.08	3.28	1.63
India	Ding		-0.01	-0.63	-0.32	-3.16	109.60	44.78
Philippines	Ding		0.01	0.00	0.00	-0.07	2.83	1.40
Thailand	Ding		0.01	0.02	0.01	-0.08	0.05	0.02
Turkey	Ding		0.00	-0.03	-0.01	-0.03	5.54	2.73
United States	DC		0.00	-0.10	-0.05	-0.02	13.64	6.60
World	n/a		0.00	0.00	0.00	-0.08	0.02	0.01
Bangladesh	LDC	Producer Surplus	n/a			0.08	-0.16	-0.08
China	Ding		-0.01	-0.10	-0.05			
Colombia	Ding		-0.01	-0.01	-0.01	0.09	0.57	0.28
India	Ding		0.02	-0.81	-0.40	6.08	-45.33	-26.06
Philippines	Ding		n/a			0.09	3.87	1.92
Thailand	Ding		-0.01	0.08	0.04			
Turkey	Ding		-0.01	-0.01	-0.01	0.10	0.21	0.11
United States	DC		-0.01	0.00	0.00	0.12	2.84	1.41
World	n/a		-0.01	-0.03	-0.02	0.32	5.30	2.62
Argentina ¹	Ding	Soybean Crush Surplus	-0.51	-7.60	-3.87	-26.69	-35.69	-19.80
Bangladesh	LDC		-0.34	5.14	2.54	-18.97	-37.63	-21.02
Brazil ¹	Ding		-0.54	-8.17	-4.17	-26.92	-53.02	-31.45
Canada ¹	DC		-0.05	3.99	1.98	-27.76	731.53	188.36
China	Ding		1.24	98.59	40.92	86.08	525.05	150.01
Colombia	Ding		-0.35	-5.38	-2.72	-2.72	3369.11	488.99
India	Ding		3.33	-34.05	-18.79	68.10	4497.47	578.05
Malaysia	Ding		-0.51	-8.98	-4.59	44.84	-77.94	-53.04
Mexico	Ding		-0.32	-2.01	-1.01	132.70	646.17	173.16
Paraguay ¹	Ding		-0.49	-4.13	-2.08	-25.50	-41.38	-23.43
Philippines	Ding		-0.33	-1.90	-0.96	106.14	642.03	172.40
Thailand	Ding		0.01	-0.18	-0.09	1.33	-17.30	-9.06
Turkey	Ding		-0.21	-3.86	-1.95	74.70	566.79	158.22
United States ¹	DC		-0.28	-7.03	-3.58	-15.01	-24.04	-12.84
World	n/a		0.13	5.31	2.62	11.96	-12.96	-6.71

^{1/} Net Exporter of Soybeans

Table 28 Continued

Scenario			(17)			(18)		
Country	Development Status	Variable	Swiss-25 Cuts- Full SSM			Swiss-25 Cuts- Full SSM Bound to URAA		
			% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Consumer Surplus	-0.06	10.61	5.17	0.17	0.96	0.48
China	Ding		-0.05	13.75	6.65	0.13	1.03	0.51
Colombia	Ding		-0.07	3.33	1.65	0.21	0.26	0.13
India	Ding		-3.16	109.66	44.80	-0.87	41.18	18.82
Philippines	Ding		-0.07	2.85	1.41	0.20	0.48	0.24
Thailand	Ding		-0.07	0.07	0.03	0.21	-0.82	-0.41
Turkey	Ding		-0.03	5.58	2.75	0.08	-0.41	-0.21
United States	DC		-0.02	13.77	6.66	0.06	0.97	0.48
World	n/a		-0.08	0.01	0.01	0.05	0.01	0.00
Bangladesh	LDC	Producer Surplus				n/a		
China	Ding		0.07	-0.13	-0.06	-0.22	-2.21	-1.11
Colombia	Ding		0.09	0.57	0.28	-0.24	-0.28	-0.14
India	Ding		6.08	-45.33	-26.06	1.54	-25.86	-13.90
Philippines	Ding					n/a		
Thailand	Ding		0.08	3.90	1.93	-0.23	-0.24	-0.12
Turkey	Ding		0.09	0.21	0.11	-0.25	-0.43	-0.22
United States	DC		0.12	2.87	1.42	-0.32	-0.21	-0.11
World	n/a		0.31	5.35	2.64	-0.18	0.16	0.08
Argentina ¹	Ding	Soybean Crush Surplus	-26.68	-36.41	-20.26	-18.17	-20.28	-10.71
Bangladesh	LDC		-18.96	-38.10	-21.32	-12.41	-26.71	-14.39
Brazil ¹	Ding		-26.91	-53.06	-31.48	-18.27	-36.29	-20.18
Canada ¹	DC		-27.75	723.02	186.88	-16.95	930.59	221.03
China	Ding		86.08	524.37	149.87	49.66	115.84	46.91
Colombia	Ding		-2.56	3335.15	486.10	-11.74	579.56	160.68
India	Ding		68.10	4497.89	578.08	48.83	1798.98	335.77
Malaysia	Ding		44.84	-77.90	-52.99	-16.66	-56.93	-34.37
Mexico	Ding		132.70	645.74	173.08	88.00	290.83	97.69
Paraguay ¹	Ding		-25.50	-41.93	-23.80	-17.38	-27.09	-14.61
Philippines	Ding		106.14	641.47	172.30	44.99	881.95	213.36
Thailand	Ding		1.34	-17.21	-9.01	0.25	2.48	1.23
Turkey	Ding		74.71	566.25	158.12	12.44	38.85	17.84
United States ¹	DC		-15.00	-24.93	-13.36	-10.14	-12.80	-6.62
World	n/a		11.96	-12.99	-6.72	6.61	-17.51	-9.18

^{1/} Net Exporter of Soybeans

Table 29: Swiss-25 Tariff Cuts Changes in Tariff Revenue

Scenario		Variable	(15)			(16)		
Country	Development Status		Swiss-25 Cuts- Price SSM Only			Swiss-25 Cuts- Volume SSM Only		
			% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Soybean Tariff Revenue	-0.16	9.28	4.54	-9.21	-9.55	-4.90
China	Ding		0.65	-27.35	-14.77	39.69	2.89	1.43
Colombia	Ding		-0.10	-0.57	-0.29	-1.57	93.01	38.93
Philippines	Ding		-0.16	1.48	0.74	40.56	99.35	41.19
Thailand	Ding		0.00	0.06	0.03	0.67	13.29	6.44
Turkey	Ding		-0.04	0.63	0.31	10.46	40.05	18.34
World	n/a		0.25	-10.72	-5.51	24.51	-11.11	-5.72
Bangladesh	LDC	Soybean Meal Tariff Revenue	0.06	-3.11	-1.57	4.32	51.17	22.95
China	Ding		3.07	67.59	29.46	18.74	1625.11	315.34
Colombia	Ding		0.02	0.26	0.13	1.26	210.06	76.08
Philippines	Ding		0.01	-0.06	-0.03	-1.12	4.87	2.41
Thailand	Ding		0.00	0.07	0.03	0.62	8.75	4.29
Turkey	Ding		0.08	-2.07	-1.04	-24.32	-44.46	-25.48
World	n/a		-0.22	-5.25	-2.66	-17.97	45.78	20.74
Bangladesh	LDC	Soybean Oil Tariff Revenue	-0.06	5.89	2.90	-4.34	-0.08	-0.04
China	Ding		-1.83	-33.47	-18.43	-99.99	-99.96	-97.93
Colombia	Ding		0.09	-6.44	-3.27	34.61	36198.14	1805.21
India	Ding		8.53	1211.31	262.12	162.36	20310.08	1328.64
Philippines	Ding		0.23	-5.62	-2.85	-29.65	36821.98	1821.51
Turkey	Ding		0.03	-3.86	-1.95	146.48	2698.78	429.04
World	n/a		2.79	99.25	41.15	48.28	1567.83	308.39

Table 29 Continued

Scenario		Variable	(17)			(18)		
Country	Development Status		Swiss-25 Cuts- Full SSM			Swiss-25 Cuts- Full SSM Bound to URAA		
			% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Soybean Tariff Revenue	-9.21	-9.30	-4.76	-6.15	-18.58	-9.77
China	Ding		39.69	3.21	1.59	24.08	82.56	35.11
Colombia	Ding		-1.52	90.48	38.01	-3.66	-6.74	-3.43
Philippines	Ding		40.55	99.49	41.24	18.58	77.95	33.40
Thailand	Ding		0.67	13.30	6.44	-0.07	0.56	0.28
Turkey	Ding		10.46	40.11	18.37	1.77	7.07	3.47
World	n/a		24.49	-12.39	-6.40	15.32	-14.03	-7.28
Bangladesh	LDC	Soybean Meal Tariff Revenue	4.32	51.05	22.90	2.14	7.82	3.83
China	Ding		18.75	1623.53	315.15	49.11	144.97	56.51
Colombia	Ding		1.25	209.90	76.04	0.81	49.25	22.17
Philippines	Ding		-1.11	4.88	2.41	-1.04	5.02	2.48
Thailand	Ding		0.62	8.77	4.29	-0.11	-0.34	-0.17
Turkey	Ding		-24.32	-44.47	-25.48	-4.73	-28.38	-15.37
World	n/a		-17.97	45.63	20.68	-12.86	-14.60	-7.59
Bangladesh	LDC	Soybean Oil Tariff Revenue	-4.34	0.31	0.16	-2.34	12.09	5.87
China	Ding		-99.99	-99.96	-97.90	-67.41	87.75	37.02
Colombia	Ding		35.04	35670.27	1791.30	4.06	6540.88	714.92
India	Ding		162.35	20312.31	1328.72	111.98	3640.52	511.60
Philippines	Ding		-29.63	36840.91	1822.00	113.75	12649.65	1029.14
Turkey	Ding		146.48	2696.17	428.79	74.51	96.99	40.35
World	n/a		48.53	1599.86	312.29	50.12	262.20	90.32

Table 30: Swiss-25 Tariff Cuts Changes in Net Welfare

Scenario			(15)			(16)		
Country	Development Status	Variable	Swiss-25 Cuts- Price SSM Only			Swiss-25 Cuts- Volume SSM Only		
			% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Net Welfare	-0.08	9.31	4.55	-5.09	-2.23	-1.12
China	Ding		0.28	-9.46	-4.85	13.42	-8.00	-4.08
Colombia	Ding		-0.01	1.45	0.72	4.12	1563.65	307.88
India	Ding		0.84	-4.70	-2.38	19.62	-26.13	-14.05
Philippines	Ding		-0.03	0.46	0.23	9.92	-22.20	-11.80
Thailand	Ding		0.00	-0.14	-0.07	0.49	-6.15	-3.12
Turkey	Ding		-0.01	-0.45	-0.23	4.06	4.42	2.18
United States	DC		-0.04	0.49	0.25	-1.62	3.47	1.72

Table 30 Continued

Scenario			(17)			(18)		
Country	Development Status	Variable	Swiss-25 Cuts- Full SSM			Swiss-25 Cuts- Full SSM Bound to URAA		
			% Change	% Change Variance	% Change St. Dev.	% Change	% Change Variance	% Change St. Dev.
Bangladesh	LDC	Net Welfare	-5.10	-1.76	-0.88	-2.95	7.11	3.49
China	Ding		13.42	-7.99	-4.08	8.87	8.22	4.03
Colombia	Ding		4.18	1543.99	305.46	-0.06	308.03	102.00
India	Ding		19.62	-26.12	-14.05	12.19	-7.28	-3.71
Philippines	Ding		9.92	-22.18	-11.78	5.34	-11.76	-6.06
Thailand	Ding		0.49	-6.14	-3.12	0.05	-1.00	-0.50
Turkey	Ding		4.06	4.43	2.19	1.17	-2.77	-1.39
United States	DC		-1.62	3.50	1.73	-1.37	-0.48	-0.24

5.5. Swiss-25 Tariff Cuts and SSM Frequencies

The following tables show the how often each SSM is triggered out of a possible 1,000 iterations, as denoted by the “count” variable, and the average additional duty available in those 1,000 iterations. Table 31 shows the values for the price SSM alone in scenarios (15), (16), (17) and (18). Table 32 includes the values for the volume SSM for the same scenarios. Each “count” variable in Table 32 is listed as Volume SSM 1, Volume SSM 2 or Volume SSM 3 to denote the three Volume SSM trigger levels and possible additional duties as outlined in Table 5.

Table 31 contains results with regards to the price SSM. When only the price SSM is employed (scenario 15), India triggers the price SSM 726 times out of a possible 1,000 iterations, with an average additional duty of 17.04%, a figure higher than when the DDA tariff cuts are in place in scenario (10), a result of the greater tariff reductions imposed by the Swiss-25 tariff cuts. Additionally, China triggers the price SSM in scenario (15) 608 times with an average additional duty of 7.08%. When the Volume SSM is in place, most countries’ use of the Price SSM decreases, likely due to the increased use of the volume SSM.

When the volume SSM is employed in scenarios (16), (17) and (18), we see mixed results, as demonstrated by the results specific to the volume SSM in Table 32. China, for instance, triggers the third level of the Volume SSM 100% of the time with an average additional duty of 50% when the Volume SSM is in place alone (scenario 16) and when tariffs are bound to URAA rates (scenario 18). In the case of India, once again, the Volume SSM is triggered almost 100% of the time, with the distribution of triggers varying between the top two bands Volume SSM 2 and 3, with additional duties ranging from 45-49% in scenarios (16) and (18). The Philippines and Turkey also showed high rates of Volume SSM usage with additional duties

ranging from 35-50% for the two countries. The result that is most interesting are the figures presented in scenario (17), where the Full SSM is employed without a tariff cap.

Table 31: Swiss-25 Tariff Cuts Price Special Safeguard Mechanism (SSM) Results

Scenario			(15)				(16)			
Country	Development Status	Variable	Swiss-25 Cuts- Price SSM Only				Swiss-25 Cuts- Volume SSM Only			
			Value	% Change	% Change Variance	% Change St. Dev.	Value	% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	393.10	-0.01	-0.10	-0.05	393.43	0.08	13.67	6.62
World Prices	n/a	Soybean Meal	343.38	0.00	0.42	0.21	347.51	1.20	83.88	35.60
World Prices	n/a	Soybean Oil	910.47	-0.12	7.58	3.72	840.09	-7.84	-23.74	-12.67
Bangladesh	LDC	Price SSM	0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
China	Ding		7.08	-38.16	-62.82	-39.03	0.00	-100.00	-100.00	-100.00
Colombia	Ding		0.23	-33.04	-63.29	-39.41	1.52	353.27	94.61	39.50
India	Ding		17.04	-41.18	-66.14	-41.81	0.00	-100.00	-100.00	-100.00
Philippines	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
Turkey	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
Bangladesh	LDC	Price SSM Count	0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
China	Ding		608.00	0.83	-0.44	-0.22	0.00	-100.00	-100.00	-100.00
Colombia	Ding		26.00	13.04	12.70	6.16	153.00	565.22	476.71	140.15
India	Ding		726.00	0.14	-0.23	-0.11	0.00	-100.00	-100.00	-100.00
Philippines	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
Turkey	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a

Table 31 Continued

Scenario			(17)				(18)			
Country	Development Status	Variable	Swiss-25 Cuts- Full SSM			Swiss-25 Cuts- Full SSM Bound to URAA				
			Value	% Change	% Change Variance	% Change St. Dev.	Value	% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	393.42	0.08	13.80	6.68	392.29	-0.21	0.90	0.45
World Prices	n/a	Soybean Meal	347.52	1.20	83.82	35.58	343.12	-0.08	-0.63	-0.32
World Prices	n/a	Soybean Oil	840.05	-7.85	-23.35	-12.45	870.99	-4.45	-2.67	-1.35
Bangladesh	LDC	Price SSM	0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
China	Ding		0.00	-100.00	-100.00	-100.00	0.00	-100.00	-100.00	-100.00
Colombia	Ding		0.86	155.95	-38.61	-21.65	1.01	201.79	5.64	2.78
India	Ding		0.00	-100.00	-100.00	-100.00	0.00	-100.00	-100.00	-100.00
Philippines	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
Turkey	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
Bangladesh	LDC	Price SSM Count	0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
China	Ding		0.00	-100.00	-100.00	-100.00	0.00	-100.00	-100.00	-100.00
Colombia	Ding		154.00	569.57	479.79	140.79	130.00	465.22	403.32	124.35
India	Ding		0.00	-100.00	-100.00	-100.00	0.00	-100.00	-100.00	-100.00
Philippines	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
Turkey	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a

Table 32: Swiss-25 Tariff Cuts Volume Special Safeguard Mechanism (SSM) Results

Scenario			(15)				(16)			
Country	Development Status	Variable	Swiss-25 Cuts- Price SSM Only				Swiss-25 Cuts- Volume SSM Only			
			Value	% Change	% Change Variance	% Change St. Dev.	Value	% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	393.10	-0.01	-0.10	-0.05	393.43	0.08	13.67	6.62
World Prices	n/a	Soybean Meal	343.38	0.00	0.42	0.21	347.51	1.20	83.88	35.60
World Prices	n/a	Soybean Oil	910.47	-0.12	7.58	3.72	840.09	-7.84	-23.74	-12.67
Bangladesh	LDC	Volume SSM	0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
China	Ding		500.00	0.00	n/a	n/a	50.00	0.00	n/a	n/a
Colombia	Ding		0.25	0.00	0.00	0.00	6.25	24900.00	18667.20	1269.93
India	Ding		400.70	0.17	2.17E+26	1.47E+14	49.60	22.65	2.66E+27	5.15E+14
Philippines	Ding		65.20	11.07	10.28	5.01	40.70	584.33	-92.45	-72.53
Turkey	Ding		400.00	0.00	0.00	0.00	49.00	24.25	9.08E+26	3.01E+14
Bangladesh	LDC	Volume SSM 1 Count	0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
China	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
Colombia	Ding		1.00	0.00	0.00	0.00	250.00	24900.00	18668.47	1269.98
India	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
Philippines	Ding		176.00	6.02	4.75	2.35	18.00	-89.16	-87.23	-64.27
Turkey	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
Bangladesh	LDC	Volume SSM 2 Count	0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
China	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
Colombia	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
India	Ding		993.00	-0.70	n/a	n/a	94.00	-90.60	n/a	n/a
Philippines	Ding		53.00	23.26	21.97	10.44	933.00	2069.77	51.91	23.25
Turkey	Ding		1000.00	0.00	n/a	n/a	30.00	-97.00	n/a	n/a
Bangladesh	LDC	Volume SSM 3 Count	0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
China	Ding		1000.00	0.00	n/a	n/a	1000.00	0.00	n/a	n/a
Colombia	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
India	Ding		7.00	n/a	n/a	n/a	906.00	n/a	n/a	n/a
Philippines	Ding		0.00	n/a	n/a	n/a	48.00	n/a	n/a	n/a
Turkey	Ding		0.00	n/a	n/a	n/a	970.00	n/a	n/a	n/a

Table 32 Continued

Scenario			(17)				(18)			
Country	Development Status	Variable	Swiss-25 Cuts- Full SSM				Swiss-25 Cuts- Full SSM Bound to URAA			
			Value	% Change	% Change Variance	% Change St. Dev.	Value	% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	393.42	0.08	13.80	6.68	392.29	-0.21	0.90	0.45
World Prices	n/a	Soybean Meal	347.52	1.20	83.82	35.58	343.12	-0.08	-0.63	-0.32
World Prices	n/a	Soybean Oil	840.05	-7.85	-23.35	-12.45	870.99	-4.45	-2.67	-1.35
Bangladesh	LDC	Volume SSM	0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
China	Ding		0.00	0.00	n/a	n/a	50.00	0.00	n/a	n/a
Colombia	Ding		11.70	24800.00	18617.33	1268.11	9.25	3600.00	3466.38	497.19
India	Ding		0.85	22.65	2.66E+27	5.15E+14	44.90	12.23	7.79E+27	8.83E+14
Philippines	Ding		1.04	584.33	-92.45	-72.53	35.60	504.09	-35.20	-19.50
Turkey	Ding		0.29	24.25	9.08E+26	3.01E+14	45.70	13.93	7.70E+27	8.77E+14
Bangladesh	LDC	Volume SSM 1 Count	0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
China	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
Colombia	Ding		187.19	24800.00	18618.34	1268.15	37.00	3600.00	3466.61	497.21
India	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
Philippines	Ding		17.69	-89.16	-87.23	-64.27	196.00	18.07	13.82	6.69
Turkey	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
Bangladesh	LDC	Volume SSM 2 Count	0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
China	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
Colombia	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
India	Ding		85.25	-90.60	n/a	n/a	511.00	-48.90	n/a	n/a
Philippines	Ding		62.57	2069.77	51.91	23.25	759.00	1665.12	344.50	110.83
Turkey	Ding		29.13	-97.00	n/a	n/a	443.00	-55.70	n/a	n/a
Bangladesh	LDC	Volume SSM 3 Count	0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
China	Ding		0.00	0.00	n/a	n/a	1000.00	0.00	n/a	n/a
Colombia	Ding		0.00	n/a	n/a	n/a	0.00	n/a	n/a	n/a
India	Ding		85.25	n/a	n/a	n/a	489.00	n/a	n/a	n/a
Philippines	Ding		45.74	n/a	n/a	n/a	4.00	n/a	n/a	n/a
Turkey	Ding		29.13	n/a	n/a	n/a	557.00	n/a	n/a	n/a

6. Conclusion

The DDA agricultural negotiators have agreed that a new safeguard measure will be developed for use by developing countries, that it will apply to all agricultural products and that it will have both a price and a quantity trigger. There also seems to be reasonable agreement on the trigger levels included in the Chair's text of December 2008 (WTO, 2008c). More contentious is the question of whether a country can breach its pre-Doha tariff bindings when it applies the SSM. Exporters argue that the pre-Doha tariff bindings should only be exceeded on a limited number of tariff lines and additional criteria should be met in order to go above the bindings. Disagreement also exists on whether there will be additional criteria applied in determining if a country is eligible to use the SSM. For example, is a country allowed to use the price SSM when imports are falling or negligible? Does application of the SSM make sense when there is a domestic harvest shortfall such that imports are needed to maintain reasonable domestic food supply levels? Developing countries, particularly the G-33, argue that there should be no criteria imposed on SSM use other than the basic trigger mechanism itself. Regardless of the final outcome, these are important questions that developing countries will have to contemplate when considering whether to apply the SSM when it is available along with the rent-seeking behavior of domestic stakeholders who may be in a position to benefit from such a policy choice.

Assessing the impacts of tariff cuts and the combination of tariff cuts and an SSM policy has important implications for world commodity prices, trade volumes and economic welfare. This assessment is also of significant importance to negotiators attempting to conclude the Doha Round of multilateral talks. This study sheds light on the effects of the proposed DDA tariff

reductions, and more importantly, when the tariff cuts are combined with SSM use by developing countries.

In terms of market access, the results suggest that reducing tariffs according to the DDA proposed tariff cuts has a relatively minor effect on world soybean, meal and oil prices. This is because if there is significant binding overhang in a country's tariff structure for soybeans, meal and oil, the DDA tariff cuts to bound tariffs may not force a reduction applied tariffs. When addressing the effects of tariff reduction, use of an SSM and caps on additional tariff levels, results tend to vary based on the development status, average current tariff rates and status of a country as either net importer or exporter of a given commodity. However, overall changes in world prices, trade and welfare present a clearer picture of how the SSM may affect global trade.

Overall, world prices are increased as tariffs are reduced. Soybean oil saw the greatest percentage increase in world prices at 1.90%, while the world price of soybeans increased by 0.48% and soybean meal by 1.43%. This result is consistent with tariff escalation in that on average soybean oil and meal tariffs are higher than the raw soybean tariffs. Still, however, these relatively low figures demonstrate the considerable gap between bound and applied tariff rates, signifying that a reduction in bound tariffs may not always guarantee a reduction in applied tariff rates as well.

When an SSM is employed on soybean oil, the soybean commodity market is driven by the level of crush produced and exported, as production and trade of soybean meal and oil is contingent upon the level of soybeans available for crush. It is clear that the Volume SSM holds the greatest impact compared with the Price SSM; when both safeguards are in place the Volume SSM is employed most often. Though results vary across individual countries, the SSM increases world prices of soybeans and soybean meal, while decreasing world soybean oil prices with both

DDA and Swiss-25 tariff cuts. When considering the DDA tariff cuts combined with an SSM policy for developing nations, the world price of soybean oil shows the greatest percentage fall at 6.74%, while soybean and meal prices increase by 0.52% and 2.01%, respectively. This trend also holds under the Swiss-25 tariff cuts, with soybean oil prices decreasing by 7.85%, and soybean and meal prices increasing by 0.08% and 1.20%, respectively. This more dramatic change in soybean oil prices is primarily a result of the frequent and heavy use of the Volume SSM by developing countries according to the simulations conducted in this thesis.

Overall, world producer surplus increases with an SSM, while consumer surplus decreases, again for both tariff cutting scenarios, though at only minor levels. As is expected tariff revenues for soybean oil increase overall, as do tariff revenues for soybeans with an SSM on soybean oil, while soybean meal tariff revenues decrease. When tariff cuts are taken according to the DDA tariff commitments, world prices and producer surplus become less stable with the SSM. However capping the additional SSM duties at their pre-Doha bound rates goes a long way in stabilizing world prices.

To conclude this thesis, we revisit the more important issues surrounding the SSM, which might help negotiators conclude the talks on this policy instrument, or at least illustrate the potential economic impacts of the SSM in relation to the gains from trade liberalization. First, inadequate research and inadequate preparation by negotiators when it came time to discuss the technical details of the SSM plays an important role in the disagreements over the details.

Second, for most commodities in developing countries huge gaps exist between their applied and bound tariffs and much of this “binding overhang” will remain after the Doha Round tariff cuts are completed. So, why is the SSM at the center of the negotiations? The SSM has become a matter of principle to developing countries – something they are owed by the

developed world regardless of its necessity or economic impacts. From the exporters' perspective, an important developing country that does not have water in its tariffs is China. Given China's large role in world soybean trade, selling a trade agreement to domestic stakeholders in the U.S. will be challenging if China has open-ended access to an SSM that raises tariffs above the level they negotiated during WTO accession.

Third, given the vaguely defined purpose of *Special and Differential Treatment*, "...operationally effective to enable developing countries to effectively take account of their development needs, including food security, livelihood security and rural development" (WTO, 2001), it is difficult to provide an objective evaluation of the SSM since much of this depends on how often developing countries will make use of the mechanism. Based on this thesis and the work of Finger (2009) and Montemayor (2008) it is clear that the SSM will trigger frequently, particularly the volume-based SSM, and sometimes when it is not needed. Given that the rules of the SSM appear to provide little guidance as to when the flexibility to use the SSM might make sense, a key question for developing countries will be how to decide whether and to what extent to apply SSM duties, whenever the mechanical formulas indicate eligibility. If developing countries are seeking domestic price stability from the SSM, a simpler policy like Special Products will shield products from trade liberalization and allow higher protection rates effectively negating the need for all the complexity an SSM brings to the table. As demonstrated in this thesis and corroborated by earlier research in Hertel, Martin and Leister (2010) and Grant and Meilke (2006, 2009) once you evaluate its price stabilization ability, the volume-based SSM can actually destabilizes domestic prices.

Fourth, while poor farmers might legitimately argue for an SSM duty when tariff reductions result in an import volume increase, the case is much weaker when domestic prices

are rising and imports surge as a result of a crop shortfall. In the latter case, both the rural and urban poor are vulnerable. Since most poor people, including producers, are net buyers of food in low-income developing countries, especially in years of poor harvests, an SSM duty is likely to reduce real incomes of the poor in these cases. Finger (2009) argues that the urban poor and other net buyers of food need a seat at the table when decisions on the use of the SSM are being made.

Fifth, from the perspective of developed country exporters, middle-income developing countries are likely to be the growth markets for agrifood exports moving forward. Hence, for agricultural exporters, whether developed or developing, the DDA is importantly about securing additional market access to these economies. Market access to developing countries will be determined, perhaps to a considerable extent, by the scope and use of the SSM. Currently, all developing countries face smaller tariff cuts than developed countries, have access to sensitive and special products (5.3% of tariff lines for the former and 12% of tariff lines for the latter), and will have access to the SSM, which will likely cover all tariff lines. In addition, there are more lenient tariff cutting rules for least developed countries, small vulnerable economies and recently acceded Members (WTO, 2008c) and some developing countries will continue to have access to the SSG although the future of this safeguard instrument is less certain. Similarly, the current stalemate on the SSM is all about exceptions to the rules for its use and how open-ended its use should be. All of the above serve to limit market access.

Finally, the UR SSG and the proposed SSM are different in one important respect. The SSG was put in place when countries changed the "instruments" they used to protect producers; when the URAA mandated the conversion of non-tariff barriers into bound tariff equivalents (tariffication). In moving from a system of quotas and variable levies to a system of tariffs and

tariff-rate quotas the true tariff equivalent wasn't known *a priori* and hence an unpredicted import surge might be more likely than with the simple lowering of tariffs which are unequivocally more transparent.

References

- Ash, M., J. Livezey, and E. Dohlman. 2002. "ERS Soybean Backgrounder." Economic Research Service, U.S. Department of Agriculture. OCS 2006-01.
- Baldwin, R.E. 2009. "Trade Negotiations Within the GATT/WTO Framework: A Survey of Successes and Failures." *Journal of Policy Modeling* 31:515-525.
- Bernal, L.E. 2005. "Methodology for the Identification of Special Products (SP) and Products for Eligibility Under the Special Safeguard Mechanism (SSM) by Developing Countries." International Centre for Trade and Sustainable Development (ICTSD) International Trade in Agriculture and Sustainable Development. <http://www.ictsd.org>.
- De Gorter, H., E. Kliaugu, and A. Nassar. 2009. "How Current Proposals on the SSM in the Doha Impasse Matter for Developing Country Exporters." Institute for International Trade Negotiations. Analysis of Agricultural Tariff Related Import Barriers. The World Bank Group.
- ERS, USDA. 1996. "1996 Act Redesigns U.S. Farm Programs." U.S. Department of Agriculture. www.ers.usda.gov.
- ERS, USDA. 2010. "Soybean Market Prices." U.S. Department of Agriculture. www.ers.usda.gov.
- Fabiosa, J., et al. 2005. "The Doha Round of the World Trade Organization and Agricultural Markets Liberalization: Impacts on Developing Economies." *Review of Agricultural Economics* 27(3):317-335.

- Finger, J.M. 2009. "A Special Safeguard Mechanism for Agricultural Imports and the Management of Reform." The World Bank Development Research Group Trade and Integration Team. Policy Research Working Paper No. 4927.
- Food and Agriculture Organization of the United Nations (FAO). 1995. "Impact of the Uruguay Round on Agriculture. Rome.
- Francios, J.F., B. McDonald, and H. Nordstrom. 1995. "Assessing the Uruguay Round." In W. Martin, and L. Alan Winters, eds. *The Uruguay Round and the Developing Economies*. World Bank Discussion Paper No. 307. Washington, D.C.: World Bank.
- Goldin, I., and D. van der Mensbrugghe. 1995. "The Uruguay Round: An Assessment of Economy-wide and Agricultural Reforms." In W. Martin, and L. Alan Winters, eds. *The Uruguay Round and the Developing Economies*. World Bank Discussion Paper No. 307. Washington, D.C.: World Bank.
- Grant, J.H., and K.D. Meilke. 2006. "The World Trade Organization Special Safeguard Mechanism: A Case Study of Wheat." *Review of Agricultural Economics* 28(1):24-47.
- Grant, J.H., and K.D. Meilke. 2009. "Triggers, Remedies and Tariff Cuts: Assessing the Impact of a Special Safeguard Mechanism for Developing Countries." *Estey Center Journal for International Law and Trade Policy* 10(1):223-246.
- Grant, J.H., and K.D. Meilke. 2011 *Forthcoming*. "The Special Safeguard Mechanism: Previous Studies and Present Outlook," in *The Doha Development Agenda: What's on the Table?*, edited by Will Martin and Aaditya Mattoo, *Forthcoming* Invited Book Chapter, World Bank, Washington D.C.

- Hallaert, J.J. 2005. "Special Agricultural Safeguards: Virtual Benefits and Real Costs- Lessons for the Doha Round." Policy Development and Review Department. International Monetary Fund. IMF Working Paper: WP/05/131.
- Harrison, G., T. Rutherford, and D. Tarr. 1995. "Quantifying the Uruguay Round." In W. Martin, and L. Alan Winters, eds. *The Uruguay Round and the Developing Economies*. World Bank Discussion Paper No. 307. Washington, D.C.: World Bank.
- Healy, S., R. Pearce, and M. Stockbridge. 1998. *The Implications of the Uruguay Round Agreement on Agriculture for Developing Countries: A Training Manual*. Food and Agriculture Organization of the United Nations. Training Manual 41. Rome.
- Hertel, T.W., W. Martin, and A.M. Leister. 2010. "Potential Implications of the Special Safeguard Mechanism (SSM): the Case of Wheat." The World Bank.
<https://www.gtap.agecon.purdue.edu/resources/download/4876.pdf>.
- ICTSD. 2008a. "After the Collapse: Rethinking the Special Safeguard Mechanism for Developing Country Agriculture." Bridges Monthly 12(4).
<http://ictsd.net/i/news/bridges/27725>.
- ICTSD. 2008b. "Agricultural Safeguard Controversy Triggers Breakdown in Doha Round Talks." Bridges Weekly Trade News Digest 12(7). 7 August.
<http://ictsd.net/news/bridgesweekly/18034>.
- ICTSD. 2008c. "G-7 Talks on Special Safeguard Mechanism Inconclusive as Blame Game Heats up." Bridges Daily Updates Issue 9. WTO Mini-Ministerial, Geneva. 29 July.
- ICTSD. 2008d. "WTO Mini-Ministerial Ends in Collapse." Daily Update. 30 July.
<http://ictsd.net/i/wto/englishupdates/15315>.

- ICTSD. 2009. "Countries Exchange Technical Notes on SSM." Bridges Weekly Trade News Digest 13(43). 16 December. <http://ictsd.org/i/news/bridgesweekly/66514>.
- Josling, T., and S. Tangermann. 1999. "Implementation of the WTO Agreement on Agriculture and Developments for the Next Round of Negotiations." *European Review of Agricultural Economics* 26(3):371-388.
- Josling, T.E., S. Tangermann, and T.K. Warley. 1996. *Agriculture Trade in the GATT*. New York: St. Martin's Press, Inc.
- Krueger, A. 1999. "The Developing Countries and the Next Round of Multilateral Trade Negotiations." *The World Economy* 22(7):909-932.
- Laborde, D., and W. Martin. 2010. "Agricultural Market Access." Global Analytical Tools on Trade. IFPRI. Washington, D.C. <http://gatt.ifpri.info/dda0/>.
- Leetmaa, S.E., and K.Z. Ackerman. 1998. "Export Subsidy Commitments: Few are Binding yet, but some Members try to Evade Them." Economic Research Service, USDA. Agriculture in the WTO. WRS-98-44: 21-26.
- Meilke, K.D., and G.R. Griffith. 1983. "Incorporating Policy Variables in a Model of the World Soybean/Rapeseed Market." *American Journal of Agricultural Economics* 65(1):65-73.
- Meilke, K. D., J. Rude, M. Burfisher and M. Bredahl. 2001. *Market Access: Issues and Options in the Agricultural Negotiations*. Commissioned Paper 14. International Agricultural Trade Research Consortium.
- Meilke, K.D., M. Wensley, and M. Cluff. 2001. "The Impact of Trade Liberalization on the International Oilseed Complex." *Review of Agricultural Economics* 23(1):2-17.

Montemayor, R.Q. 2008. “How Will the May 2008 ‘Modalities’ Text Affect Access to the Special Safeguard Mechanism, and the Effectiveness of Additional Safeguard Duties?” International Centre for Trade and Sustainable Development (ICTSD). Issue Paper No. 15.

NASS (National Agricultural Statistics Service). 2010. “Agricultural Prices.” U.S. Department of Agriculture. www.nass.usda.gov.

Nello, S.S. 2007. “Winners and Losers from World Agricultural Trade Liberalization.” Robert Schuman Centre for Advanced Studies. European University Institute, Florence, Italy. EUI Working Paper RSCAS 2007/18.

Norton, G. 2008. AAEC 5154 International Trade and Development. Fall Semester Notes. Virginia Tech, Blacksburg, VA.

Page, S. 2002. “Developing Countries in GATT/WTO Negotiations.” Overseas Development Institute. Working Paper.

Ruffer, T., and P. Vergano. 2002. “An Agricultural Safeguard Mechanism for Developing Countries.” UK Department for International Development. www.dfid.gov.uk.

Schnepf, R., and C.E. Hanrahan. 2010. “WTO Doha Round: Implication for U.S. Agriculture.” Congressional Research Service (CRS) Report for Congress. RS22927. www.crs.gov.

Schwab, S. 2008. United States Trade Representative Press Briefing, 30 July 2008. http://www.ustr.gov/assets/Document_Library/Transcripts/2008/July/asset_upload_file786_15046.pdf.

- Sharma, R. 2000. "Module 2: Preparing for Negotiating Further Reductions of the Bound Tariffs." Multilateral Trade Negotiations on Agriculture A Resource Manual II: Agreement on Agriculture. FAO. Rome.
- Sharma, R., P. Konandreas, and J. Greenfield. 1996. "An Overview of Assessments of the Impact of the Uruguay Round on Agricultural Prices and Incomes." *Food Policy* 21(4/5):351-363.
- Sobel, A.C. 2006. *Political Economy and Global Affairs*. CQ Press, Washington, DC.
- Somwaru, A., and D. Skully. 2005. "Will Special Agricultural Safeguards Advance or Retard LDC Growth and Welfare? A Dynamic General Equilibrium Analysis." Paper presented at AAEA Annual Meeting, Providence RI, 24-27 July.
- South Centre Trade For Development Program (SCTDP). 2009. "The Special Safeguard Mechanism: Some Issues for Consideration by Developing Countries." Trade for Development Program. <http://www.southcentre.org>.
- UNCTAD. 1995. "Report on Evaluating the Outcome of the Uruguay Round Agricultural Agreement Using the Agricultural Trade Policy Simulation Model." Consultancy Report to ITP by Gulbrandsen, O. Geneva.
- UNCTAD. 2003. "Back to Basics: Market Access Issues in the Doha Agenda." United Nations.
- USDA, 2009. Production Supply and Distribution Tables.
<http://www.fas.usda.gov/psdonline/psdQuery.aspx>.
- Valdés, A., and W. Foster. 2003. "Special Safeguards for Developing Country Agriculture: A Proposal for WTO Negotiations." *World Trade Review* 2(1):5-31.

- Valdés, A., and W. Foster. 2005. "The New SSM: A Price Floor Mechanism for Developing Countries." International Centre for Trade and Sustainable Development (ICTSD) International Trade in Agriculture and Sustainable Development. <http://www.ictsd.org>.
- Walker, D. 2010. "Report by the Chairman, H.E. David Walker, to the Trade Negotiations Committee for the Purpose of the TNC Stocktaking Exercise." Negotiating Group on Agriculture. Committee on Agriculture Special Session. WTO. TN/AG/25.
- Wolfe, R. 2009. "The Special Safeguard Fiasco in the WTO: The Perils of Inadequate Analysis and Negotiation." Groupe d'Économie Mondiale. Working Paper.
- World Bank. 2003. "Global Economic Prospects: Realizing the Development Promise of the Doha Agenda." www.worldbank.org.
- WTO. 2001. Doha WTO Ministerial 2001: Ministerial Declaration. WT/MIN(01)/DEC/1. 14 November. http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm.
- WTO. 2003a. Formula Approaches to Tariff Negotiations. TN/MA/S/3/Rev.2. <http://docsonline.wto.org/imrd/directdoc.asp?DDFDocuments/t/tn/ma/S3R2.doc>.
- WTO. 2003b. Tariff Negotiations in Agriculture Reduction Methods. Background Fact Sheet. WTO Agriculture Negotiations. http://www.wto.org/english/tratop_e/agric_e/agnegs_swissformula_e.htm.
- WTO. 2008a. "An Unofficial Guide to Agricultural Safeguards." 5 August. www.wto.org.
- WTO. 2008b. *Revised Draft for Modalities for Agriculture*. TN/AG/W/4/Rev. 3. July.
- WTO. 2008c. *Revised Draft for Modalities for Agriculture*. TN/AG/W/4/Rev.4. December.

WTO. 2008d. *Revised Draft for Modalities for Agriculture: Special Safeguard Mechanism*.

TN/AG/W/7. December.

WTO. 2010a. "Agriculture Negotiators Prepare to Resume After Stocktaking." 2010 WTO News Items. 3 May 2010. Available at

http://www.wto.org/english/news_e/news10_e/agng_03may10_e.htm.

WTO. 2010b. "Development Aspects of the Doha Round of Negotiations."

WT/COMTD/W/143/Rev.5. October.

Zhao, X., J. Mullen, and G. Griffith. 2005. "Economic Surplus Measurement in Multi-Market Models." University of New England Working Paper Series in Agricultural and Resource Economics. <http://www.une.edu.au/febl/EconStud/wps.htm>.

Appendices

Appendix A. Doha Development Agenda Tariff Reduction Commitments

Table A: DDA Soybean Tariff Reductions

Commodity			Soybean			
Country	Development Status	Applied Tariff	Bound Tariff	Reduced Bound Tariff	DDA Applied Tariff	Swiss-25 Applied Tariff
Algeria	Ding		0.05	0.05	0	
Americas Group	Ding	0.04	0.46	0.29	0.04	0.04
Asia/Oceania Group	DC	0.05	0.25	0.125	0.05	0.05
Bangladesh	LDC	0.07	0.5	0.5	0.07	0.07
Canada	DC				0	
China	Ding	0.03	0.04	0.03	0.03	0.03
Colombia	Ding	0.11	1.25	0.72	0.11	0.11
Dominican Republic	Ding		0.4	0.25	0	
Egypt	Ding	0.05	0.1	0.07	0.05	0.05
European Group	DC	0.12	0.16	0.11	0.11	0.12
European Union	DC	0	0.25	0.125	0	0.00
India	Ding				0	
Indonesia	Ding	0	0.27	0.18	0	0.00
Iran	Ding	0.05	0.23	0.23	0.05	0.05
Japan	DC	0	0	0	0	0.00
Malaysia	Ding	0	0.1	0.07	0	0.00
Mexico	Ding	0.06	0.33	0.21	0.06	0.06
Middle East/Africa Group	Ding	0.15	0.53	0.53	0.15	0.15
Morocco	Ding	0.1	0.65	0.4	0.1	0.10
Peru	Ding	0.09	0.3	0.2	0.09	0.09
Philippines	Ding	0.03	0.09	0.06	0.03	0.03
South Africa	DC	0.08	0.4	0.25	0.08	0.08
South Korea	DC	0.05	4.98	2.65	0.05	0.05
Syria	Ding	0.1	0.1	0.1	0.1	0.10
Taiwan	DC	0.05	0.05	0.03	0.03	0.05
Thailand	Ding	0.35	0.8	0.5	0.35	0.35
Tunisia	Ding	0.17	0.17	0.11	0.11	0.17
Turkey	Ding	0.05	0.23	0.15	0.05	0.05
Venezuela	Ding	0.2	1.17	0.67	0.2	0.20
Vietnam	Ding	0.04	0.09	0.09	0.04	0.04

Table B: Soybean Average Tariff Rates Based on Development Status

Commodity	Soybean				
Development Status	Applied Tariff	Bound Tariff	Reduced Bound Tariff	DDA Applied Tariff	Swiss-25 Applied Tariff
Developed Countries	6	42.14	28.07	3.75	5.98
Developing Countries	8.5	54.55	33.23	7.67	8.44
Least Developed Countries	4	9	9	4	3.99

Table C: DDA Soybean Meal Tariff Reductions

Commodity	Soybean Meal					
Country	Development Status	Applied Tariff	Bound Tariff	Reduced Bound Tariff	DDA Applied Tariff	Swiss-25 Applied Tariff
Algeria	Ding	0.05	0.05	0.05	0.05	0.05
Americas Group	Ding	0.1	0.47	0.29	0.1	0.10
Asia/Oceania Group	DC	0.07	0.31	0.13	0.07	0.07
Bangladesh	LDC	0.04	2	2	0.04	0.04
Canada	DC	0.03	0.03	0.015	0.015	0.03
China	Ding	0.09	0.09	0.06	0.06	0.09
Colombia	Ding	0.15	0.88	0.5	0.15	0.15
Dominican Republic	Ding	0.02	0.4	0.25	0.02	0.02
Egypt	Ding	0.02	0.1	0.07	0.02	0.02
European Group	DC	0.06	0.2	0.13	0.06	0.06
European Union	DC	0.05	0.25	0.125	0.05	0.05
India	Ding				0	
Indonesia	Ding	0	0.4	0.25	0	0.00
Iran	Ding	0.23	0.23	0.23	0.23	0.23
Japan	DC	0.04	0.04	0.02	0.02	0.04
Malaysia	Ding	0	0.1	0.07	0	0.00
Mexico	Ding	0.18	0.25	0.17	0.17	0.18
Middle East/Africa Group	Ding	0.22	0.54	0.54	0.22	0.22
Morocco	Ding	0.78	1.28	0.73	0.73	0.76
Peru	Ding	0.13	0.3	0.2	0.13	0.13
Philippines	Ding	0.12	0.4	0.25	0.12	0.12
South Africa	DC	0.2	0.38	0.24	0.2	0.20
South Korea	DC	0.04	0.27	0.18	0.04	0.04
Syria	Ding	0.1	0.1	0.1	0.1	0.10
Taiwan	DC	0.05	0.05	0.03	0.03	0.05
Thailand	Ding	0.4	0.4	0.25	0.25	0.39

Tunisia	Ding	0.39	1.5	0.8	0.39	0.38
Turkey	Ding	0.23	0.23	0.15	0.15	0.23
Venezuela	Ding	0.25	0.88	0.5	0.25	0.25
Vietnam	Ding	0.18	0.3	0.3	0.18	0.18

Table D: Soybean Meal Average Tariff Rates Based on Development Status

Commodity	Soybean Meal				
Development Status	Applied Tariff	Bound Tariff	Reduced Bound Tariff	DDA Applied Tariff	Swiss-25 Applied Tariff
Developed Countries	6.88	52.88	41.19	6.31	6.85
Developing Countries	17.45	39.5	25.18	15.05	17.20
Least-Developed Countries	18	30	30	18	17.87

Table E: DDA Soybean Oil Tariff Reductions

Commodity	Soybean Oil					
Country	Development Status	Applied Tariff	Bound Tariff	Reduced Bound Tariff	DDA Applied Tariff	Swiss-25 Applied Tariff
Algeria	Ding	0.05	0.2	0.2	0.05	0.05
Americas Group	Ding	0.32	0.73	0.45	0.32	0.32
Asia/Oceania Group	DC	0.08	0.27	0.14	0.08	0.08
Bangladesh	LDC	0.33	2	2	0.33	0.33
Canada	DC	0.05	0.05	0.025	0.025	0.05
China	Ding	0.42	0.42	0.26	0.26	0.41
Colombia	Ding	0.25	0.75	0.47	0.25	0.25
Dominican Republic	Ding	0.2	0.3	0.2	0.2	0.20
Egypt	Ding	0.12	0.15	0.1	0.1	0.12
European Group	DC	0.22	0.23	0.15	0.15	0.22
European Union	DC	0.07	0.07	0.035	0.035	0.07
India	Ding	0.45	0.45	0.3	0.3	0.44
Indonesia	Ding	0	0.35	0.22	0	0.00
Iran	Ding	0.32	0.32	0.32	0.32	0.32
Japan	DC	0.2	0.22	0.11	0.11	0.20
Malaysia	Ding	0.05	0.05	0.03	0.03	0.05
Mexico	Ding	0.2	0.45	0.28	0.2	0.20
Middle East/Africa Group	Ding	0.19	0.51	0.51	0.19	0.19
Morocco	Ding	0.35	1.69	0.9	0.35	0.35

Peru	Ding	0.12	0.3	0.2	0.12	0.12
Philippines	Ding	0.09	0.27	0.18	0.09	0.09
South Africa	DC	0.1	0.81	0.81	0.1	0.10
South Korea	DC	0.08	0.16	0.11	0.08	0.08
Syria	Ding	0.17	0.17	0.17	0.17	0.17
Taiwan	DC	0.05	0.05	0.03	0.03	0.05
Thailand	Ding				0	
Tunisia	Ding	0.23	0.23	0.15	0.15	0.23
Turkey	Ding	0.25	0.25	0.17	0.17	0.25
Venezuela	Ding	0.25	0.75	0.47	0.25	0.25
Vietnam	Ding	0.35	0.35	0.35	0.35	0.35

Table F: Soybean Oil Average Tariff Rates Based on Development Status

Commodity	Soybean Oil				
Development Status	Applied Tariff	Bound Tariff	Reduced Bound Tariff	DDA Applied Tariff	Swiss- 25 Applied Tariff
Developed Countries	21.25	59	46.81	18.94	21.00
Developing Countries	17.55	37.4	26.23	14.02	17.38
Least-Developed Countries	35	35	35	35	34.52

Appendix B. Model Results

Table G: Production Shocks Only Price Effects

Country	Development Status	Commodity	% Change	Price SSM Only	
				% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	0	0	0
Argentina	Ding		0	0	0
Asia/Oceania Group	DC		0	0	0
Bangladesh	LDC		0	0	0
Brazil	Ding		0	0	0
Canada	DC		0	0	0
China	Ding		0	0	0
Colombia	Ding		0	0	0
Egypt	Ding		0	0	0
European Group	DC		0	0	0
European Union	DC		0	0	0
India	Ding		0	0	0
Indonesia	Ding		0	0	0
Iran	Ding		0	0	0
Japan	DC		0	0	0
Malaysia	Ding		0	0	0
Mexico	Ding		0	0	0
Middle East/African Group	Ding		0	0	0
Morocco	Ding		0	0	0
Paraguay	Ding		0	0	0
Peru	Ding		0	0	0
Philippines	Ding		0	0	0
South Africa	Ding		0	0	0
South Korea	Ding		0	0	0
Syria	Ding		0	0	0
Taiwan	Ding		0	0	0
Thailand	Ding		0	0	0
Tunisia	Ding		0	0	0
Turkey	Ding		0	0	0
United States	DC		0	0	0
Venezuela	Ding		0	0	0
Vietnam	Ding		0	0	0
World	n/a		0	0	0
Algeria	Ding		0	0	0
Americas Group	Ding	Soybean Meal	0	0	0
Argentina	Ding		0	0	0
Asia/Oceania Group	DC		0	0	0
Bangladesh	LDC		0	0	0
Brazil	Ding		0	0	0
Canada	DC		0	0	0
China	Ding		0	0	0
Colombia	Ding		0	0	0
Dominican Republic	Ding		0	0	0
Egypt	Ding		0	0	0

European Group	DC	0	0	0
European Union	DC	0	0	0
India	Ding	0	0	0
Indonesia	Ding	0	0	0
Iran	Ding	0	0	0
Japan	DC	0	0	0
Malaysia	Ding	0	0	0
Mexico	Ding	0	0	0
Middle East/African Group	Ding	0	0	0
Morocco	Ding	0	0	0
Paraguay	Ding	0	0	0
Peru	Ding	0	0	0
Philippines	Ding	0	0	0
South Africa	Ding	0	0	0
South Korea	Ding	0	0	0
Syria	Ding	0	0	0
Taiwan	Ding	0	0	0
Thailand	Ding	0	0	0
Tunisia	Ding	0	0	0
Turkey	Ding	0	0	0
Venezuela	Ding	0	0	0
Vietnam	Ding	0	0	0
World	n/a	0	0	0
Algeria	Ding	0	0	0
Americas Group	Ding	0	0	0
Argentina	Ding	0	0	0
Asia/Oceania Group	DC	0	0	0
Bangladesh	LDC	0	0	0
Brazil	Ding	0	0	0
Canada	DC	0	0	0
China	Ding	0	0	0
Colombia	Ding	0	0	0
Dominican Republic	Ding	0	0	0
Egypt	Ding	0	0	0
European Group	DC	0	0	0
European Union	DC	0	0	0
India	Ding	0	0	0
Indonesia	Ding	0	0	0
Iran	Ding	0	0	0
Japan	DC	0	0	0
Malaysia	Ding	0	0	0
Mexico	Ding	0	0	0
Middle East/African Group	Ding	0	0	0
Morocco	Ding	0	0	0
Paraguay	Ding	0	0	0
Peru	Ding	0	0	0
Philippines	Ding	0	0	0
South Africa	Ding	0	0	0
South Korea	Ding	0	0	0
Syria	Ding	0	0	0

Soybean Oil

Taiwan	Ding	0	0	0
Thailand	Ding	0	0	0
Tunisia	Ding	0	0	0
Turkey	Ding	0	0	0
Venezuela	Ding	0	0	0
Vietnam	Ding	0	0	0
World	n/a	0	0	0

Country	Development Status	Commodity	% Change	Volume SSM Only	
				% Change Variance	% Change St. Dev.
Americas Group	Ding		1.77	255.35	88.51
Argentina	Ding		0.52	16.76	8.06
Asia/Oceania Group	DC		0.51	15.68	7.56
Bangladesh	LDC		0.52	16.76	8.06
Brazil	Ding		0.52	16.76	8.06
Canada	DC		0.52	16.76	8.06
China	Ding		0.52	16.76	8.06
Colombia	Ding		0.52	16.76	8.06
Egypt	Ding		0.52	16.76	8.06
European Group	DC		0.52	16.76	8.06
European Union	DC		0.52	16.76	8.06
India	Ding		8.08	556.73	156.27
Indonesia	Ding		0.52	16.76	8.06
Iran	Ding		0.52	16.76	8.06
Japan	DC		0.52	16.76	8.06
Malaysia	Ding		0.52	16.76	8.06
Mexico	Ding	Soybean	0.52	16.76	8.06
Middle East/African Group	Ding		0.52	16.76	8.06
Morocco	Ding		0.52	16.76	8.06
Paraguay	Ding		0.52	16.76	8.06
Peru	Ding		0.52	16.76	8.06
Philippines	Ding		0.52	16.76	8.06
South Africa	Ding		0.12	-13.27	-6.87
South Korea	Ding		0.52	16.76	8.06
Syria	Ding		0.52	16.76	8.06
Taiwan	Ding		0.52	16.76	8.06
Thailand	Ding		0.52	16.76	8.06
Tunisia	Ding		0.52	16.76	8.06
Turkey	Ding		0.52	16.76	8.06
United States	DC		0.66	16.76	8.06
Venezuela	Ding		0.52	16.76	8.06
Vietnam	Ding		0.52	16.76	8.06
World	n/a		0.52	16.76	8.06
Algeria	Ding		1.96	99.16	41.12
Americas Group	Ding		1.96	99.16	41.12
Argentina	Ding		1.96	99.16	41.12
Asia/Oceania Group	DC	Soybean	1.96	99.16	41.12
Bangladesh	LDC	Meal	1.96	99.16	41.12
Brazil	Ding		1.96	99.16	41.12
Canada	DC		1.96	99.16	41.12
China	Ding		-3.32	-80.48	-55.82
Colombia	Ding		1.96	99.16	41.12

Dominican Republic	Ding	1.96	99.16	41.12
Egypt	Ding	1.96	99.16	41.12
European Group	DC	1.96	99.16	41.12
European Union	DC	1.96	99.16	41.12
India	Ding	1.96	99.16	41.12
Indonesia	Ding	1.96	99.16	41.12
Iran	Ding	1.96	99.16	41.12
Japan	DC	1.96	99.16	41.12
Malaysia	Ding	1.96	99.16	41.12
Mexico	Ding	1.96	99.16	41.12
Middle East/African Group	Ding	1.96	99.16	41.12
Morocco	Ding	1.96	99.16	41.12
Paraguay	Ding	1.96	99.16	41.12
Peru	Ding	1.96	99.16	41.12
Philippines	Ding	1.96	99.16	41.12
South Africa	Ding	1.96	99.16	41.12
South Korea	Ding	1.96	99.16	41.12
Syria	Ding	1.96	99.16	41.12
Taiwan	Ding	1.96	99.16	41.12
Thailand	Ding	1.96	99.16	41.12
Tunisia	Ding	1.96	99.16	41.12
Turkey	Ding	1.96	99.16	41.12
Venezuela	Ding	1.96	99.16	41.12
Vietnam	Ding	1.96	99.16	41.12
World	n/a	1.96	99.16	41.12
Algeria	Ding	-6.77	-14.17	-7.36
Americas Group	Ding	2.85	2159.07	375.30
Argentina	Ding	-6.77	-14.17	-7.36
Asia/Oceania Group	DC	-6.77	-14.17	-7.36
Bangladesh	LDC	-6.77	-14.17	-7.36
Brazil	Ding	-6.77	-14.17	-7.36
Canada	DC	-6.77	-14.17	-7.36
China	Ding	30.23	67.46	29.41
Colombia	Ding	-6.77	-14.17	-7.36
Dominican Republic	Ding	-6.77	-14.17	-7.36
Egypt	Ding	-6.77	-14.17	-7.36
European Group	DC	-6.77	-14.17	-7.36
European Union	DC	-6.77	-14.17	-7.36
India	Ding	26.13	256.42	88.79
Indonesia	Ding	-6.77	-14.17	-7.36
Iran	Ding	-6.77	-14.17	-7.36
Japan	DC	-6.77	-14.17	-7.36
Malaysia	Ding	9.95	-5.92	-3.00
Mexico	Ding	23.06	157.68	60.52
Middle East/African Group	Ding	-6.77	-14.17	-7.36
Morocco	Ding	-6.77	-14.17	-7.36
Paraguay	Ding	-6.77	-14.17	-7.36
Peru	Ding	-6.77	-14.17	-7.36
Philippines	Ding	-4.77	448.04	134.10
South Africa	Ding	-6.77	-14.17	-7.36
South Korea	Ding	-6.77	-14.17	-7.36

Syria	Ding	-6.77	-14.17	-7.36
Taiwan	Ding	-4.68	-45.08	-25.89
Thailand	Ding	-1.69	-31.95	-17.51
Tunisia	Ding	-6.77	-14.17	-7.36
Turkey	Ding	25.11	54.55	24.32
Venezuela	Ding	-6.77	-14.17	-7.36
Vietnam	Ding	-6.77	-14.17	-7.36
World	n/a	-6.77	-14.17	-7.36

			Full SSM		
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	1.75	252.94	87.87
Argentina	Ding		0.52	16.76	8.06
Asia/Oceana Group	DC		0.51	15.68	7.55
Bangladesh	LDC		0.52	16.76	8.06
Brazil	Ding		0.52	16.76	8.06
Canada	DC		0.52	16.76	8.06
China	Ding		0.52	16.76	8.06
Colombia	Ding		0.52	16.76	8.06
Egypt	Ding		0.52	16.76	8.06
European Group	DC		0.52	16.76	8.06
European Union	DC		0.52	16.76	8.06
India	Ding		8.08	556.59	156.24
Indonesia	Ding		0.52	16.76	8.06
Iran	Ding		0.52	16.76	8.06
Japan	DC		0.52	16.76	8.06
Malaysia	Ding		0.52	16.76	8.06
Mexico	Ding		0.52	16.76	8.06
Middle East/African Group	Ding		0.52	16.76	8.06
Morocco	Ding		0.52	16.76	8.06
Paraguay	Ding		0.52	16.76	8.06
Peru	Ding		0.52	16.76	8.06
Philippines	Ding		0.52	16.76	8.06
South Africa	Ding		0.12	-13.27	-6.87
South Korea	Ding		0.52	16.76	8.06
Syria	Ding		0.52	16.76	8.06
Taiwan	Ding		0.52	16.76	8.06
Thailand	Ding		0.52	16.76	8.06
Tunisia	Ding		0.52	16.76	8.06
Turkey	Ding		0.52	16.76	8.06
United States	DC		0.66	16.76	8.06
Venezuela	Ding		0.52	16.76	8.06
Vietnam	Ding		0.52	16.76	8.06
World	n/a		0.52	16.76	8.06
Algeria	Ding		1.96	99.15	41.12
Americas Group	Ding		1.96	99.15	41.12
Argentina	Ding	1.96	99.15	41.12	
Asia/Oceana Group	DC	Soybean	1.96	99.15	41.12
Bangladesh	LDC	Meal	1.96	99.15	41.12
Brazil	Ding	1.96	99.15	41.12	
Canada	DC	1.96	99.15	41.12	
China	Ding	-3.32	-80.48	-55.82	

Colombia	Ding	1.96	99.15	41.12
Dominican Republic	Ding	1.96	99.15	41.12
Egypt	Ding	1.96	99.15	41.12
European Group	DC	1.96	99.15	41.12
European Union	DC	1.96	99.15	41.12
India	Ding	1.96	99.15	41.12
Indonesia	Ding	1.96	99.15	41.12
Iran	Ding	1.96	99.15	41.12
Japan	DC	1.96	99.15	41.12
Malaysia	Ding	1.96	99.15	41.12
Mexico	Ding	1.96	99.15	41.12
Middle East/African Group	Ding	1.96	99.15	41.12
Morocco	Ding	1.96	99.15	41.12
Paraguay	Ding	1.96	99.15	41.12
Peru	Ding	1.96	99.15	41.12
Philippines	Ding	1.96	99.15	41.12
South Africa	Ding	1.96	99.15	41.12
South Korea	Ding	1.96	99.15	41.12
Syria	Ding	1.96	99.15	41.12
Taiwan	Ding	1.96	99.15	41.12
Thailand	Ding	1.96	99.15	41.12
Tunisia	Ding	1.96	99.15	41.12
Turkey	Ding	1.96	99.15	41.12
Venezuela	Ding	1.96	99.15	41.12
Vietnam	Ding	1.96	99.15	41.12
World	n/a	1.96	99.15	41.12
Algeria	Ding	-6.77	-14.17	-7.36
Americas Group	Ding	2.77	2150.25	374.37
Argentina	Ding	-6.77	-14.17	-7.36
Asia/Oceania Group	DC	-6.77	-14.17	-7.36
Bangladesh	LDC	-6.77	-14.17	-7.36
Brazil	Ding	-6.77	-14.17	-7.36
Canada	DC	-6.77	-14.17	-7.36
China	Ding	30.23	67.46	29.41
Colombia	Ding	-6.77	-14.17	-7.36
Dominican Republic	Ding	-6.77	-14.17	-7.36
Egypt	Ding	-6.77	-14.17	-7.36
European Group	DC	-6.77	-14.17	-7.36
European Union	DC	-6.77	-14.17	-7.36
India	Ding	26.13	256.18	88.73
Indonesia	Ding	-6.77	-14.17	-7.36
Iran	Ding	-6.77	-14.17	-7.36
Japan	DC	-6.77	-14.17	-7.36
Malaysia	Ding	9.95	-5.91	-3.00
Mexico	Ding	23.06	157.75	60.54
Middle East/African Group	Ding	-6.77	-14.17	-7.36
Morocco	Ding	-6.77	-14.17	-7.36
Paraguay	Ding	-6.77	-14.17	-7.36
Peru	Ding	-6.77	-14.17	-7.36
Philippines	Ding	-4.77	447.92	134.08
South Africa	Ding	-6.77	-14.17	-7.36

Soybean Oil

South Korea	Ding	-6.77	-14.17	-7.36
Syria	Ding	-6.77	-14.17	-7.36
Taiwan	Ding	-4.68	-45.08	-25.89
Thailand	Ding	-1.69	-31.94	-17.50
Tunisia	Ding	-6.76	-15.28	-7.96
Turkey	Ding	25.11	54.55	24.32
Venezuela	Ding	-6.77	-14.17	-7.36
Vietnam	Ding	-6.77	-14.17	-7.36
World	n/a	-6.77	-14.17	-7.36

Table H: Production Shocks Only Supply Effects

Country	Development Status	Commodity	% Change	Price SSM Only	
				% Change Variance	% Change St. Dev.
Americas Group	Ding		0	0	0
Argentina	Ding		0	0	0
Asia/Oceania Group	DC		0	0	0
Brazil	Ding		0	0	0
Canada	DC		0	0	0
China	Ding		0	0	0
Colombia	Ding		0	0	0
Egypt	Ding		0	0	0
European Group	DC		0	0	0
European Union	DC		0	0	0
India	Ding		0	0	0
Indonesia	Ding		0	0	0
Iran	Ding		0	0	0
Japan	DC		0	0	0
Mexico	Ding	Soybean	0	0	0
Middle East/African Group	Ding		0	0	0
Paraguay	Ding		0	0	0
Peru	Ding		0	0	0
Philippines	Ding		0	n/a	n/a
South Africa	Ding		0	0	0
South Korea	Ding		0	0	0
Syria	Ding		0	n/a	n/a
Thailand	Ding		0	0	0
Tunisia	Ding		0	0	0
Turkey	Ding		0	0	0
United States	DC		0	0	0
Venezuela	Ding		0	0	0
Vietnam	Ding		0	0	0
World	n/a		0	0	0
Americas Group	Ding		0	0	0
Argentina	Ding		0	0	0
Asia/Oceania Group	DC	Soybean	0	0	0
Bangladesh	LDC	Meal	0	0	0
Brazil	Ding		0	0	0
Canada	DC		0	0	0
China	Ding		0	0	0

Colombia	Ding	0	0	0
Egypt	Ding	0	0	0
European Group	DC	0	0	0
European Union	DC	0	0	0
India	Ding	0	0	0
Iran	Ding	0	0	0
Japan	DC	0	0	0
Malaysia	Ding	0	0	0
Mexico	Ding	0	0	0
Middle				
East/African Group	Ding	0	0	0
Morocco	Ding	0	0	0
Paraguay	Ding	0	0	0
Peru	Ding	0	0	0
Philippines	Ding	0	0	0
South Africa	Ding	0	0	0
South Korea	Ding	0	0	0
Syria	Ding	0	0	0
Taiwan	Ding	0	0	0
Thailand	Ding	0	0	0
Tunisia	Ding	0	0	0
Turkey	Ding	0	0	0
United States	DC	0	0	0
Venezuela	Ding	0	0	0
Vietnam	Ding	0	0	0
World	n/a	0	0	0
Americas Group	Ding	0	0	0
Argentina	Ding	0	0	0
Asia/Oceania				
Group	DC	0	0	0
Bangladesh	LDC	0	0	0
Brazil	Ding	0	0	0
Canada	DC	0	0	0
China	Ding	0	0	0
Colombia	Ding	0	0	0
Egypt	Ding	0	0	0
European Group	DC	0	0	0
European Union	DC	0	0	0
India	Ding	0	0	0
Iran	Ding	0	0	0
Japan	DC	0	0	0
Malaysia	Ding	0	0	0
Mexico	Ding	0	0	0
Middle				
East/African Group	Ding	0	0	0
Morocco	Ding	0	0	0
Paraguay	Ding	0	0	0
Peru	Ding	0	0	0
Philippines	Ding	0	0	0
South Africa	Ding	0	0	0
South Korea	Ding	0	0	0
Syria	Ding	0	0	0
Taiwan	Ding	0	0	0
Thailand	Ding	0	0	0
Tunisia	Ding	0	0	0
Turkey	Ding	0	0	0

Soybean Oil

United States	DC		0	0	0
Venezuela	Ding		0	0	0
Vietnam	Ding		0	0	0
World	n/a		0	0	0

Country	Development Status	Commodity	% Change	Volume SSM Only	
				% Change Variance	% Change St. Dev.
Americas Group	Ding		0.44	-6.79	-3.46
Argentina	Ding		0.05	0.60	0.30
Asia/Oceania Group	DC		0.14	0.54	0.27
Brazil	Ding		0.04	0.44	0.22
Canada	DC		0.17	0.09	0.05
China	Ding		0.03	-0.32	-0.16
Colombia	Ding		0.13	0.10	0.05
Egypt	Ding		0.16	0.00	0.00
European Group	DC		0.13	0.01	0.01
European Union	DC		0.16	0.02	0.01
India	Ding		2.91	-29.06	-15.77
Indonesia	Ding		0.03	0.08	0.04
Iran	Ding		0.06	0.05	0.03
Japan	DC		0.19	-0.40	-0.20
Mexico	Ding	Soybean	0.13	-0.04	-0.02
Middle East/African Group	Ding		0.08	-0.04	-0.02
Paraguay	Ding		0.10	0.27	0.13
Peru	Ding		0.26	0.03	0.02
Philippines	Ding		0.00	n/a	n/a
South Africa	Ding		0.02	0.90	0.45
South Korea	Ding		0.19	0.16	0.08
Syria	Ding		0.00	n/a	n/a
Thailand	Ding		0.10	16.76	8.06
Tunisia	Ding		0.10	0.02	0.01
Turkey	Ding		0.17	-0.01	-0.01
United States	DC		0.20	0.91	0.45
Venezuela	Ding		0.13	-0.11	-0.06
Vietnam	Ding		0.06	16.76	8.06
World	n/a		0.21	1.27	0.63
Americas Group	Ding		2.52	7774.51	787.38
Argentina	Ding		-11.64	-34.05	-18.79
Asia/Oceania Group	DC		-8.78	-36.97	-20.61
Bangladesh	LDC		-8.15	115.96	46.96
Brazil	Ding		-11.79	-32.93	-18.10
Canada	DC		-16.09	-38.08	-21.31
China	Ding	Soybean	30.92	5347.77	638.09
Colombia	Ding	Meal	-7.72	27.48	12.91
Egypt	Ding		-10.39	-33.83	-18.65
European Group	DC		-7.72	-29.11	-15.80
European Union	DC		-4.02	-40.64	-22.96
India	Ding		17.55	967.24	226.69
Iran	Ding		-4.49	386.78	120.63
Japan	DC		-8.54	-21.87	-11.61
Malaysia	Ding		28.84	-73.70	-48.72

Mexico	Ding		32.95	31946.31	1690.15
Middle					
East/African Group	Ding		-6.32	-41.42	-23.46
Morocco	Ding		-1.80	185.85	69.07
Paraguay	Ding		-11.03	-34.91	-19.32
Peru	Ding		-10.15	-40.00	-22.54
Philippines	Ding		-3.65	54554.20	2237.82
South Africa	Ding		-3.78	-16.88	-8.83
South Korea	Ding		-11.21	-36.97	-20.61
Syria	Ding		-9.17	-35.91	-19.94
Taiwan	Ding		-7.47	2908.39	448.49
Thailand	Ding		0.83	-31.95	-17.51
Tunisia	Ding		-3.25	1454.58	294.28
Turkey	Ding		24.67	2128.45	372.06
United States	DC		-6.18	-35.69	-19.81
Venezuela	Ding		-8.00	-28.85	-15.65
Vietnam	Ding		-5.05	261.03	90.01
World	n/a		0.37	-12.77	-6.61
Americas Group	Ding		2.52	7774.51	787.38
Argentina	Ding		-11.64	-34.05	-18.79
Asia/Oceania					
Group	DC		-8.78	-36.97	-20.61
Bangladesh	LDC		-8.15	115.96	46.96
Brazil	Ding		-11.79	-32.93	-18.10
Canada	DC		-16.09	-38.08	-21.31
China	Ding		30.92	5347.77	638.09
Colombia	Ding		-7.72	27.48	12.91
Egypt	Ding		-10.39	-33.83	-18.65
European Group	DC		-7.72	-29.11	-15.80
European Union	DC		-4.02	-40.64	-22.96
India	Ding		17.55	967.24	226.69
Iran	Ding		-4.49	386.78	120.63
Japan	DC		-8.54	-21.87	-11.61
Malaysia	Ding		28.84	-73.70	-48.72
Mexico	Ding	Soybean Oil	32.95	31946.31	1690.15
Middle					
East/African Group	Ding		-6.32	-41.42	-23.46
Morocco	Ding		-1.80	185.85	69.07
Paraguay	Ding		-11.03	-34.91	-19.32
Peru	Ding		-10.15	-40.00	-22.54
Philippines	Ding		-3.65	54554.20	2237.82
South Africa	Ding		-3.78	-16.88	-8.83
South Korea	Ding		-11.21	-36.97	-20.61
Syria	Ding		-9.17	-35.91	-19.94
Taiwan	Ding		-7.47	2908.39	448.49
Thailand	Ding		0.83	-31.95	-17.51
Tunisia	Ding		-3.25	1454.58	294.28
Turkey	Ding		24.67	2128.45	372.06
United States	DC		-6.18	-35.69	-19.81
Venezuela	Ding		-8.00	-28.85	-15.65
Vietnam	Ding		-5.05	261.03	90.01
World	n/a		-0.12	-16.21	-8.47

Full SSM					
Country	Development	Commodity	%	% Change	% Change

	Status		Change	Variance	St. Dev.
Americas Group	Ding		0.44	-6.73	-3.42
Argentina	Ding		0.05	0.60	0.30
Asia/Oceania					
Group	DC		0.14	0.55	0.27
Brazil	Ding		0.04	0.44	0.22
Canada	DC		0.17	0.09	0.05
China	Ding		0.03	-0.32	-0.16
Colombia	Ding		0.13	0.10	0.05
Egypt	Ding		0.16	0.00	0.00
European Group	DC		0.13	0.01	0.01
European Union	DC		0.16	0.02	0.01
India	Ding		2.91	-29.05	-15.77
Indonesia	Ding		0.03	0.08	0.04
Iran	Ding		0.06	0.05	0.03
Japan	DC		0.19	-0.40	-0.20
Mexico	Ding	Soybean	0.13	-0.04	-0.02
Middle					
East/African Group	Ding		0.08	-0.04	-0.02
Paraguay	Ding		0.10	0.27	0.14
Peru	Ding		0.26	0.03	0.02
Philippines	Ding		0.00	n/a	n/a
South Africa	Ding		0.02	0.90	0.45
South Korea	Ding		0.19	0.16	0.08
Syria	Ding		0.00	n/a	n/a
Thailand	Ding		0.10	16.76	8.06
Tunisia	Ding		0.10	0.02	0.01
Turkey	Ding		0.17	-0.01	-0.01
United States	DC		0.20	0.91	0.45
Venezuela	Ding		0.13	-0.11	-0.06
Vietnam	Ding		0.06	16.76	8.06
World	n/a		0.21	1.27	0.63
Americas Group	Ding		2.45	7759.21	786.52
Argentina	Ding		-11.63	-34.13	-18.84
Asia/Oceania					
Group	DC		-8.78	-37.01	-20.63
Bangladesh	LDC		-8.15	114.82	46.57
Brazil	Ding		-11.79	-33.01	-18.15
Canada	DC		-16.09	-38.17	-21.37
China	Ding		30.92	5348.79	638.16
Colombia	Ding		-7.72	26.91	12.65
Egypt	Ding		-10.39	-33.89	-18.69
European Group	DC		-7.72	-29.15	-15.83
European Union	DC	Soybean	-4.02	-40.76	-23.03
India	Ding	Meal	17.55	967.47	226.72
Iran	Ding		-4.49	386.13	120.48
Japan	DC		-8.54	-22.10	-11.74
Malaysia	Ding		28.84	-73.70	-48.72
Mexico	Ding		32.96	31951.24	1690.29
Middle					
East/African Group	Ding		-6.32	-41.55	-23.55
Morocco	Ding		-1.80	185.74	69.04
Paraguay	Ding		-11.03	-35.01	-19.38
Peru	Ding		-10.15	-40.07	-22.59
Philippines	Ding		-3.65	54550.23	2237.74
South Africa	Ding		-3.78	-16.88	-8.83

South Korea	Ding		-11.21	-37.04	-20.65
Syria	Ding		-9.17	-35.99	-20.00
Taiwan	Ding		-7.47	2906.50	448.32
Thailand	Ding		0.83	-31.94	-17.50
Tunisia	Ding		-3.25	1403.44	287.74
Turkey	Ding		24.67	2126.59	371.87
United States	DC		-6.18	-35.79	-19.87
Venezuela	Ding		-8.00	-29.07	-15.78
Vietnam	Ding		-5.04	260.54	89.88
World	n/a		0.37	-12.77	-6.60
Americas Group	Ding		2.45	7759.21	786.52
Argentina	Ding		-11.63	-34.13	-18.84
Asia/Oceania					
Group	DC		-8.78	-37.01	-20.63
Bangladesh	LDC		-8.15	114.82	46.57
Brazil	Ding		-11.79	-33.01	-18.15
Canada	DC		-16.09	-38.17	-21.37
China	Ding		30.92	5348.79	638.16
Colombia	Ding		-7.72	26.91	12.65
Egypt	Ding		-10.39	-33.89	-18.69
European Group	DC		-7.72	-29.15	-15.83
European Union	DC		-4.02	-40.76	-23.03
India	Ding		17.55	967.47	226.72
Iran	Ding		-4.49	386.13	120.48
Japan	DC		-8.54	-22.10	-11.74
Malaysia	Ding		28.84	-73.70	-48.72
Mexico	Ding		32.96	31951.24	1690.29
Middle		Soybean Oil			
East/African Group	Ding		-6.32	-41.55	-23.55
Morocco	Ding		-1.80	185.74	69.04
Paraguay	Ding		-11.03	-35.01	-19.38
Peru	Ding		-10.15	-40.07	-22.59
Philippines	Ding		-3.65	54550.23	2237.74
South Africa	Ding		-3.78	-16.88	-8.83
South Korea	Ding		-11.21	-37.04	-20.65
Syria	Ding		-9.17	-35.99	-20.00
Taiwan	Ding		-7.47	2906.50	448.32
Thailand	Ding		0.83	-31.94	-17.50
Tunisia	Ding		-3.25	1403.44	287.74
Turkey	Ding		24.67	2126.59	371.87
United States	DC		-6.18	-35.79	-19.87
Venezuela	Ding		-8.00	-29.07	-15.78
Vietnam	Ding		-5.04	260.54	89.88
World	n/a		-0.12	-16.21	-8.46

Table I: Production Shocks Only Demand Effects

Country	Development Status	Commodity	% Change	Price SSM Only	
				% Change Variance	% Change St. Dev.
Americas Group	Ding		0	0	0
Argentina	Ding		0	0	0
Asia/Oceania		Soybean			
Group	DC		0	0	0
Bangladesh	LDC		0	0	0

Brazil	Ding	0	0	0
Canada	DC	0	0	0
China	Ding	0	0	0
Colombia	Ding	0	0	0
Egypt	Ding	0	0	0
European Group	DC	0	0	0
European Union	DC	0	0	0
India	Ding	0	0	0
Indonesia	Ding	0	0	0
Iran	Ding	0	0	0
Japan	DC	0	0	0
Malaysia	Ding	0	0	0
Mexico	Ding	0	0	0
Middle				
East/African Group	Ding	0	0	0
Paraguay	Ding	0	0	0
Peru	Ding	0	0	0
Philippines	Ding	0	0	0
South Africa	Ding	0	0	0
South Korea	Ding	0	0	0
Syria	Ding	0	0	0
Taiwan	Ding	0	0	0
Thailand	Ding	0	0	0
Tunisia	Ding	0	0	0
Turkey	Ding	0	0	0
United States	DC	0	0	0
Venezuela	Ding	0	0	0
Vietnam	Ding	0	0	0
World	n/a	0	0	0
Algeria	Ding	0	0	0
Americas Group	Ding	0	0	0
Argentina	Ding	0	0	0
Asia/Oceania				
Group	DC	0	0	0
Bangladesh	LDC	0	0	0
Brazil	Ding	0	0	0
Canada	DC	0	0	0
China	Ding	0	0	0
Colombia	Ding	0	0	0
Dominican				
Republic	Ding	0	0	0
Egypt	Ding	0	0	0
European Group	DC	0	0	0
European Union	DC	0	0	0
India	Ding	0	0	0
Indonesia	Ding	0	0	0
Iran	Ding	0	0	0
Japan	DC	0	0	0
Malaysia	Ding	0	0	0
Mexico	Ding	0	0	0
Middle				
East/African Group	Ding	0	0	0
Morocco	Ding	0	0	0
Paraguay	Ding	0	0	0
Peru	Ding	0	0	0
Philippines	Ding	0	0	0

Soybean
Meal

South Africa	Ding	0	0	0
South Korea	Ding	0	0	0
Syria	Ding	0	0	0
Taiwan	Ding	0	0	0
Thailand	Ding	0	0	0
Tunisia	Ding	0	0	0
Turkey	Ding	0	0	0
United States	DC	0	0	0
Venezuela	Ding	0	0	0
Vietnam	Ding	0	0	0
World	n/a	0	0	0
Algeria	Ding	0	0	0
Americas Group	Ding	0	0	0
Argentina	Ding	0	0	0
Asia/Oceana				
Group	DC	0	0	0
Bangladesh	LDC	0	0	0
Brazil	Ding	0	0	0
Canada	DC	0	0	0
China	Ding	0	0	0
Colombia	Ding	0	0	0
Dominican				
Republic	Ding	0	0	0
Egypt	Ding	0	0	0
European Group	DC	0	0	0
European Union	DC	0	0	0
India	Ding	0	0	0
Indonesia	Ding	0	0	0
Iran	Ding	0	0	0
Japan	DC	0	0	0
Malaysia	Ding	0	0	0
Mexico	Ding	0	0	0
Middle				
East/African Group	Ding	0	0	0
Morocco	Ding	0	0	0
Paraguay	Ding	0	0	0
Peru	Ding	0	0	0
Philippines	Ding	0	0	0
South Africa	Ding	0	0	0
South Korea	Ding	0	0	0
Syria	Ding	0	0	0
Taiwan	Ding	0	0	0
Thailand	Ding	0	0	0
Tunisia	Ding	0	0	0
Turkey	Ding	0	0	0
United States	DC	0	0	0
Venezuela	Ding	0	0	0
Vietnam	Ding	0	0	0
World	n/a	0	0	0

Country	Development Status	Commodity	Volume SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	-0.80	255.35	88.51
Argentina	Ding		-0.52	16.76	8.06
Asia/Oceana	DC		-0.18	15.68	7.56

Group				
Bangladesh	LDC	-0.21	16.76	8.06
Brazil	Ding	-0.22	16.76	8.06
Canada	DC	-0.10	16.76	8.06
China	Ding	-0.16	16.76	8.06
Colombia	Ding	-0.26	16.76	8.06
Egypt	Ding	-0.23	16.76	8.06
European Group	DC	-0.26	16.76	8.06
European Union	DC	-0.21	16.76	8.06
India	Ding	-2.45	556.73	156.27
Indonesia	Ding	-0.08	16.76	8.06
Iran	Ding	-0.26	16.76	8.06
Japan	DC	-0.16	16.76	8.06
Malaysia	Ding	-0.26	16.76	8.06
Mexico	Ding	-0.16	16.76	8.06
Middle				
East/African Group	Ding	-0.16	16.76	8.06
Paraguay	Ding	-0.26	16.76	8.06
Peru	Ding	-0.16	16.76	8.06
Philippines	Ding	-0.25	16.76	8.06
South Africa	Ding	-0.06	-13.27	-6.87
South Korea	Ding	-0.10	16.76	8.06
Syria	Ding	-0.16	16.76	8.06
Taiwan	Ding	-0.13	16.76	8.06
Thailand	Ding	-0.26	-1.14	-0.57
Tunisia	Ding	-0.14	16.76	8.06
Turkey	Ding	-0.10	16.76	8.06
United States	DC	-0.08	16.76	8.06
Venezuela	Ding	-0.23	16.76	8.06
Vietnam	Ding	-0.08	16.76	8.06
World	n/a	-0.27	15.72	7.57
Algeria	Ding	-1.00	99.16	41.12
Americas Group	Ding	-0.60	99.16	41.12
Argentina	Ding	-2.63	99.16	41.12
Asia/Oceania				
Group	DC	-1.50	99.16	41.12
Bangladesh	LDC	-0.40	99.16	41.12
Brazil	Ding	-1.00	99.16	41.12
Canada	DC	-0.68	99.16	41.12
China	Ding	4.18	-80.48	-55.82
Colombia	Ding	-0.50	99.16	41.12
Dominican				
Republic	Ding	-1.00	99.16	41.12
Egypt	Ding	-0.20	99.16	41.12
European Group	DC	-1.00	99.16	41.12
European Union	DC	-1.40	99.16	41.12
India	Ding	-0.60	99.16	41.12
Indonesia	Ding	-0.80	99.16	41.12
Iran	Ding	-1.00	99.16	41.12
Japan	DC	-0.39	99.16	41.12
Malaysia	Ding	-0.20	99.16	41.12
Mexico	Ding	-0.39	99.16	41.12
Middle				
East/African Group	Ding	-0.40	99.16	41.12
Morocco	Ding	-0.29	99.16	41.12
Paraguay	Ding	-0.70	99.16	41.12

Soybean
Meal

Peru	Ding		-0.50	99.16	41.12
Philippines	Ding		-0.30	99.16	41.12
South Africa	Ding		-0.50	99.16	41.12
South Korea	Ding		-0.22	99.16	41.12
Syria	Ding		-1.00	99.16	41.12
Taiwan	Ding		-0.29	99.16	41.12
Thailand	Ding		-0.38	99.16	41.12
Tunisia	Ding		-1.00	99.16	41.12
Turkey	Ding		-0.28	99.16	41.12
United States	DC		-0.24	99.16	41.12
Venezuela	Ding		-0.50	99.16	41.12
Vietnam	Ding		-0.50	99.16	41.12
World	n/a		0.37	-12.77	-6.61
Algeria	Ding		3.47	-14.17	-7.36
Americas Group	Ding		-0.88	2159.07	375.30
Argentina	Ding		1.59	-14.17	-7.36
Asia/Oceania					
Group	DC		5.23	-14.17	-7.36
Bangladesh	LDC		2.42	-14.17	-7.36
Brazil	Ding		3.05	-14.17	-7.36
Canada	DC		1.21	-14.17	-7.36
China	Ding		-4.03	67.46	29.41
Colombia	Ding		1.38	-14.17	-7.36
Dominican					
Republic	Ding		3.47	-14.17	-7.36
Egypt	Ding		0.68	-14.17	-7.36
European Group	DC		3.18	-14.17	-7.36
European Union	DC		3.50	-14.17	-7.36
India	Ding		-6.96	256.42	88.79
Indonesia	Ding		2.08	-14.17	-7.36
Iran	Ding		3.47	-14.17	-7.36
Japan	DC	Soybean Oil	0.95	-14.17	-7.36
Malaysia	Ding		-2.97	-5.92	-3.00
Mexico	Ding		-3.53	157.68	60.52
Middle					
East/African Group	Ding		3.47	-14.17	-7.36
Morocco	Ding		1.73	-14.17	-7.36
Paraguay	Ding		2.08	-14.17	-7.36
Peru	Ding		3.47	-14.17	-7.36
Philippines	Ding		1.56	448.04	134.10
South Africa	Ding		3.47	-14.17	-7.36
South Korea	Ding		0.69	-14.17	-7.36
Syria	Ding		3.47	-14.17	-7.36
Taiwan	Ding		0.46	-45.08	-25.89
Thailand	Ding		0.83	-31.95	-17.51
Tunisia	Ding		3.14	-14.17	-7.36
Turkey	Ding		-5.67	54.55	24.32
United States	DC		2.08	-14.17	-7.36
Venezuela	Ding		1.03	-14.17	-7.36
Vietnam	Ding		2.63	-14.17	-7.36
World	n/a		-0.12	-16.21	-8.47

Country	Development Status	Commodity	% Change	Full SSM	
				% Change Variance	% Change St. Dev.

Americas Group	Ding		-0.79	252.94	87.87
Argentina	Ding		-0.52	16.76	8.06
Asia/Oceania					
Group	DC		-0.18	15.68	7.55
Bangladesh	LDC		-0.21	16.76	8.06
Brazil	Ding		-0.22	16.76	8.06
Canada	DC		-0.10	16.76	8.06
China	Ding		-0.16	16.76	8.06
Colombia	Ding		-0.26	16.76	8.06
Egypt	Ding		-0.23	16.76	8.06
European Group	DC		-0.26	16.76	8.06
European Union	DC		-0.21	16.76	8.06
India	Ding		-2.45	556.59	156.24
Indonesia	Ding		-0.08	16.76	8.06
Iran	Ding		-0.26	16.76	8.06
Japan	DC		-0.16	16.76	8.06
Malaysia	Ding		-0.26	16.76	8.06
Mexico	Ding	Soybean	-0.16	16.76	8.06
Middle					
East/African Group	Ding		-0.16	16.76	8.06
Paraguay	Ding		-0.26	16.76	8.06
Peru	Ding		-0.16	16.76	8.06
Philippines	Ding		-0.25	16.76	8.06
South Africa	Ding		-0.06	-13.27	-6.87
South Korea	Ding		-0.10	16.76	8.06
Syria	Ding		-0.16	16.76	8.06
Taiwan	Ding		-0.13	16.76	8.06
Thailand	Ding		-0.26	-1.15	-0.58
Tunisia	Ding		-0.15	16.76	8.06
Turkey	Ding		-0.10	16.76	8.06
United States	DC		-0.08	16.76	8.06
Venezuela	Ding		-0.23	16.76	8.06
Vietnam	Ding		-0.08	16.76	8.06
World	n/a		-0.27	15.71	7.57
Algeria	Ding		-1.00	99.15	41.12
Americas Group	Ding		-0.60	99.15	41.12
Argentina	Ding		-2.63	99.15	41.12
Asia/Oceania					
Group	DC		-1.50	99.15	41.12
Bangladesh	LDC		-0.40	99.15	41.12
Brazil	Ding		-1.00	99.15	41.12
Canada	DC		-0.68	99.15	41.12
China	Ding		4.18	-80.48	-55.82
Colombia	Ding		-0.50	99.15	41.12
Dominican		Soybean			
Republic	Ding	Meal	-1.00	99.15	41.12
Egypt	Ding		-0.20	99.15	41.12
European Group	DC		-1.00	99.15	41.12
European Union	DC		-1.40	99.15	41.12
India	Ding		-0.60	99.15	41.12
Indonesia	Ding		-0.80	99.15	41.12
Iran	Ding		-1.00	99.15	41.12
Japan	DC		-0.39	99.15	41.12
Malaysia	Ding		-0.20	99.15	41.12
Mexico	Ding		-0.39	99.15	41.12
Middle	Ding		-0.40	99.15	41.12

East/African Group				
Morocco	Ding	-0.29	99.15	41.12
Paraguay	Ding	-0.70	99.15	41.12
Peru	Ding	-0.50	99.15	41.12
Philippines	Ding	-0.30	99.15	41.12
South Africa	Ding	-0.50	99.15	41.12
South Korea	Ding	-0.22	99.15	41.12
Syria	Ding	-1.00	99.15	41.12
Taiwan	Ding	-0.29	99.15	41.12
Thailand	Ding	-0.38	99.15	41.12
Tunisia	Ding	-1.00	99.15	41.12
Turkey	Ding	-0.28	99.15	41.12
United States	DC	-0.24	99.15	41.12
Venezuela	Ding	-0.50	99.15	41.12
Vietnam	Ding	-0.50	99.15	41.12
World	n/a	0.37	-12.77	-6.60
Algeria	Ding	3.47	-14.17	-7.36
Americas Group	Ding	-0.85	2150.25	374.37
Argentina	Ding	1.59	-14.17	-7.36
Asia/Oceania				
Group	DC	5.23	-14.17	-7.36
Bangladesh	LDC	2.42	-14.17	-7.36
Brazil	Ding	3.05	-14.17	-7.36
Canada	DC	1.21	-14.17	-7.36
China	Ding	-4.03	67.46	29.41
Colombia	Ding	1.38	-14.17	-7.36
Dominican Republic	Ding	3.47	-14.17	-7.36
Egypt	Ding	0.68	-14.17	-7.36
European Group	DC	3.18	-14.17	-7.36
European Union	DC	3.50	-14.17	-7.36
India	Ding	-6.96	256.18	88.73
Indonesia	Ding	2.07	-14.17	-7.36
Iran	Ding	3.47	-14.17	-7.36
Japan	DC	0.95	-14.17	-7.36
Malaysia	Ding	-2.98	-5.91	-3.00
Mexico	Ding	-3.53	157.75	60.54
Middle East/African Group				
East/African Group	Ding	3.47	-14.17	-7.36
Morocco	Ding	1.73	-14.17	-7.36
Paraguay	Ding	2.07	-14.17	-7.36
Peru	Ding	3.47	-14.17	-7.36
Philippines	Ding	1.56	447.92	134.08
South Africa	Ding	3.47	-14.17	-7.36
South Korea	Ding	0.69	-14.17	-7.36
Syria	Ding	3.47	-14.17	-7.36
Taiwan	Ding	0.46	-45.08	-25.89
Thailand	Ding	0.83	-31.94	-17.50
Tunisia	Ding	3.14	-15.28	-7.96
Turkey	Ding	-5.67	54.55	24.32
United States	DC	2.07	-14.17	-7.36
Venezuela	Ding	1.03	-14.17	-7.36
Vietnam	Ding	2.63	-14.17	-7.36
World	n/a	-0.12	-16.21	-8.46

Soybean Oil

Table J: Production Shocks Only Soybean Crush Effects

Country	Development Status	Commodity	% Change	Price SSM Only	
				% Change Variance	% Change St. Dev.
Americas Group	Ding	Crush	0	0	0
Argentina	Ding		0	0	0
Asia/Oceania Group	DC		0	0	0
Bangladesh	LDC		0	0	0
Brazil	Ding		0	0	0
Canada	DC		0	0	0
China	Ding		0	0	0
Colombia	Ding		0	0	0
Egypt	Ding		0	0	0
European Group	DC		0	0	0
European Union	DC		0	0	0
India	Ding		0	0	0
Iran	Ding		0	0	0
Japan	DC		0	0	0
Malaysia	Ding		0	0	0
Mexico	Ding		0	0	0
Middle East/African Group	Ding		0	0	0
Morocco	Ding		0	0	0
Paraguay	Ding		0	0	0
Peru	Ding		0	0	0
Philippines	Ding		0	0	0
South Africa	Ding		0	0	0
South Korea	Ding		0	0	0
Syria	Ding		0	0	0
Taiwan	Ding		0	0	0
Thailand	Ding		0	0	0
Tunisia	Ding		0	0	0
Turkey	Ding		0	0	0
United States	DC		0	0	0
Venezuela	Ding		0	0	0
Vietnam	Ding		0	0	0
World	n/a		0	1.52E-10	7.59E-11

Country	Development Status	Commodity	% Change	Volume SSM Only	
				% Change Variance	% Change St. Dev.
Americas Group	Ding	Crush	2.52	7774.51	787.38
Argentina	Ding		-11.64	-34.05	-18.79
Asia/Oceania Group	DC		-8.78	-36.97	-20.61
Bangladesh	LDC		-8.15	115.96	46.96
Brazil	Ding		-11.79	-32.93	-18.10
Canada	DC		-16.09	-38.08	-21.31
China	Ding		30.92	5347.77	638.09
Colombia	Ding		-7.72	27.48	12.91
Egypt	Ding		-10.39	-33.83	-18.65
European Group	DC		-7.72	-29.11	-15.80
European Union	DC		-4.02	-40.64	-22.96

India	Ding	17.55	967.24	226.69
Iran	Ding	-4.49	386.78	120.63
Japan	DC	-8.54	-21.87	-11.61
Malaysia	Ding	28.84	-73.70	-48.72
Mexico	Ding	32.95	31946.31	1690.15
Middle				
East/African Group	Ding	-6.32	-41.42	-23.46
Morocco	Ding	-1.80	185.85	69.07
Paraguay	Ding	-11.03	-34.91	-19.32
Peru	Ding	-10.15	-40.00	-22.54
Philippines	Ding	-3.65	54554.20	2237.82
South Africa	Ding	-3.78	-16.88	-8.83
South Korea	Ding	-11.21	-36.97	-20.61
Syria	Ding	-9.17	-35.91	-19.94
Taiwan	Ding	-7.47	2908.39	448.49
Thailand	Ding	0.83	-31.95	-17.51
Tunisia	Ding	-3.25	1454.58	294.28
Turkey	Ding	24.67	2128.45	372.06
United States	DC	-6.18	-35.69	-19.81
Venezuela	Ding	-8.00	-28.85	-15.65
Vietnam	Ding	-5.05	261.03	90.01
World	n/a	0.29	-13.54	-7.02

Country	Development Status	Commodity	%	Full SSM	
				% Change Variance	% Change St. Dev.
Americas Group	Ding	Crush	2.45	7759.21	786.52
Argentina	Ding		-11.63	-34.13	-18.84
Asia/Oceania					
Group	DC		-8.78	-37.01	-20.63
Bangladesh	LDC		-8.15	114.82	46.57
Brazil	Ding		-11.79	-33.01	-18.15
Canada	DC		-16.09	-38.17	-21.37
China	Ding		30.92	5348.79	638.16
Colombia	Ding		-7.72	26.91	12.65
Egypt	Ding		-10.39	-33.89	-18.69
European Group	DC		-7.72	-29.15	-15.83
European Union	DC		-4.02	-40.76	-23.03
India	Ding		17.55	967.47	226.72
Iran	Ding		-4.49	386.13	120.48
Japan	DC		-8.54	-22.10	-11.74
Malaysia	Ding		28.84	-73.70	-48.72
Mexico	Ding		32.96	31951.24	1690.29
Middle					
East/African Group	Ding		-6.32	-41.55	-23.55
Morocco	Ding		-1.80	185.74	69.04
Paraguay	Ding		-11.03	-35.01	-19.38
Peru	Ding		-10.15	-40.07	-22.59
Philippines	Ding		-3.65	54550.23	2237.74
South Africa	Ding		-3.78	-16.88	-8.83
South Korea	Ding		-11.21	-37.04	-20.65
Syria	Ding		-9.17	-35.99	-20.00
Taiwan	Ding		-7.47	2906.50	448.32
Thailand	Ding		0.83	-31.94	-17.50
Tunisia	Ding		-3.25	1403.44	287.74

Turkey	Ding	24.67	2126.59	371.87
United States	DC	-6.18	-35.79	-19.87
Venezuela	Ding	-8.00	-29.07	-15.78
Vietnam	Ding	-5.04	260.54	89.88
World	n/a	0.29	-13.54	-7.01

Table K: Production Shocks Only Net Trade Effects

Country	Development Status	Commodity	% Change	Price SSM Only	
				% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	0	0	0
Argentina	Ding		0	0	0
Asia/Oceania Group	DC		0	0	0
Bangladesh	LDC		0	0	0
Brazil	Ding		0	0	0
Canada	DC		0	0	0
China	Ding		0	0	0
Colombia	Ding		0	0	0
Egypt	Ding		0	0	0
European Group	DC		0	0	0
European Union	DC		0	0	0
India	Ding		0	0	0
Indonesia	Ding		0	0	0
Iran	Ding		0	0	0
Japan	DC		0	0	0
Malaysia	Ding		0	0	0
Mexico	Ding		0	0	0
Middle East/African Group	Ding		0	0	0
Morocco	Ding		0	0	0
Paraguay	Ding		0	0	0
Peru	Ding		0	0	0
Philippines	Ding		0	0	0
South Africa	Ding		0	0	0
South Korea	Ding		0	0	0
Syria	Ding		0	0	0
Taiwan	Ding		0	0	0
Thailand	Ding		0	0	0
Tunisia	Ding		0	0	0
Turkey	Ding		0	0	0
United States	DC		0	0	0
Venezuela	Ding		0	0	0
Vietnam	Ding		0	0	0
Algeria	Ding		0	0	0
Americas Group	Ding	Soybean Meal	0	0	0
Argentina	Ding		0	0	0
Asia/Oceania Group	DC		0	0	0
Bangladesh	LDC		0	0	0
Brazil	Ding		0	0	0
Canada	DC		0	0	0
China	Ding		0	0	0
Colombia	Ding		0	0	0

Dominican Republic	Ding	0	0	0
Egypt	Ding	0	0	0
European Group	DC	0	0	0
European Union	DC	0	0	0
India	Ding	0	0	0
Indonesia	Ding	0	0	0
Iran	Ding	0	0	0
Japan	DC	0	0	0
Malaysia	Ding	0	0	0
Mexico	Ding	0	0	0
Middle East/African Group	Ding	0	0	0
Morocco	Ding	0	0	0
Paraguay	Ding	0	0	0
Peru	Ding	0	0	0
Philippines	Ding	0	0	0
South Africa	Ding	0	0	0
South Korea	Ding	0	0	0
Syria	Ding	0	0	0
Taiwan	Ding	0	0	0
Thailand	Ding	0	0	0
Tunisia	Ding	0	0	0
Turkey	Ding	0	0	0
United States	DC	0	0	0
Venezuela	Ding	0	0	0
Vietnam	Ding	0	0	0
Algeria	Ding	0	0	0
Americas Group	Ding	0	0	0
Argentina	Ding	0	0	0
Asia/Oceania Group	DC	0	0	0
Bangladesh	LDC	0	0	0
Brazil	Ding	0	0	0
Canada	DC	0	0	0
China	Ding	0	0	0
Colombia	Ding	0	0	0
Dominican Republic	Ding	0	0	0
Egypt	Ding	0	0	0
European Group	DC	0	0	0
European Union	DC	0	0	0
India	Ding	0	0	0
Indonesia	Ding	0	0	0
Iran	Ding	0	0	0
Japan	DC	0	0	0
Malaysia	Ding	0	0	0
Mexico	Ding	0	0	0
Middle East/African Group	Ding	0	0	0
Morocco	Ding	0	0	0
Paraguay	Ding	0	0	0
Peru	Ding	0	0	0
Philippines	Ding	0	0	0
South Africa	Ding	0	0	0
South Korea	Ding	0	0	0

Soybean Oil

Syria	Ding	0	0	0
Taiwan	Ding	-3.41	-4.87	-2.46
Thailand	Ding	7.57	2.22	1.10
Tunisia	Ding	0	0	0
Turkey	Ding	0	0	0
United States	DC	0	0	0
Venezuela	Ding	0	0	0
Vietnam	Ding	0	0	0

Country	Development Status	Commodity	% Change	Volume SSM Only	
				% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	-7.02	34.00	15.76
Argentina	Ding		67.43	-8.51	-4.35
Asia/Oceania Group	DC		-25.26	2.31	1.15
Bangladesh	LDC		-7.58	37.65	17.33
Brazil	Ding		16.47	-5.78	-2.93
Canada	DC		13.56	-0.54	-0.27
China	Ding		33.39	58.00	25.70
Colombia	Ding		-4.96	-0.34	-0.17
Egypt	Ding		-10.39	-20.70	-10.95
European Group	DC		-28.35	-0.79	-0.39
European Union	DC		-3.96	-1.91	-0.96
India	Ding		-96.09	-97.10	-82.97
Indonesia	Ding		-0.14	0.74	0.37
Iran	Ding		-5.30	6.53	3.21
Japan	DC		-6.02	-24.83	-13.30
Malaysia	Ding		21.92	-58.38	-35.48
Mexico	Ding		33.75	1812.58	337.33
Middle East/African Group	Ding		-8.19	-8.84	-4.52
Morocco	Ding		-1.83	185.85	69.07
Paraguay	Ding		5.87	-0.83	-0.42
Peru	Ding		-7.05	-12.24	-6.32
Philippines	Ding		-3.44	30478.67	1648.68
South Africa	Ding		9.44	7.28	3.58
South Korea	Ding		-8.48	-3.82	-1.93
Syria	Ding		-9.19	-35.85	-19.90
Taiwan	Ding		-6.62	2105.14	369.59
Thailand	Ding		0.67	-19.64	-10.35
Tunisia	Ding		-3.51	-0.49	-0.25
Turkey	Ding		8.14	-6.58	-3.35
United States	DC		10.05	-0.88	-0.44
Venezuela	Ding		-16.39	1.42	0.71
Vietnam	Ding		-1.26	9.82	4.80
Algeria	Ding		-1.00	99.16	41.12
Americas Group	Ding		-4.69	3683.03	515.06
Argentina	Ding		-11.88	-34.98	-19.37
Asia/Oceania Group	DC	Soybean Meal	-0.16	162.74	62.09
Bangladesh	LDC		2.16	237.92	83.83
Brazil	Ding		-20.52	-34.62	-19.14
Canada	DC		12.45	55.29	24.61
China	Ding		-100.00	-100.00	-100.00

Colombia	Ding	0.85	199.39	73.03
Dominican Republic	Ding	-1.01	99.16	41.12
Egypt	Ding	35.50	-38.65	-21.68
European Group	DC	11.81	2051.99	363.89
European Union	DC	-0.11	155.11	59.72
India	Ding	27.90	965.67	226.45
Indonesia	Ding	-0.80	99.16	41.12
Iran	Ding	2.07	131.74	52.23
Japan	DC	6.69	2963.84	453.52
Malaysia	Ding	-10.07	-96.73	-81.91
Mexico	Ding	-69.49	105392.58	3147.96
Middle East/African Group	Ding	3.29	6112.22	688.18
Morocco	Ding	2.02	147.35	57.27
Paraguay	Ding	-11.92	-35.70	-19.81
Peru	Ding	0.43	265.73	91.24
Philippines	Ding	-0.13	444.36	133.31
South Africa	Ding	-0.05	-12.61	-6.52
South Korea	Ding	4.74	-34.17	-18.86
Syria	Ding	5.56	1228.64	264.50
Taiwan	Ding	33.70	24473.53	1467.59
Thailand	Ding	-0.91	590.30	162.74
Tunisia	Ding	0.41	143.66	56.10
Turkey	Ding	-21.37	3345.74	487.00
United States	DC	-23.84	-37.18	-20.74
Venezuela	Ding	0.13	159.28	61.02
Vietnam	Ding	-0.44	100.34	41.54
Algeria	Ding	3.43	-14.17	-7.36
Americas Group	Ding	-8.04	5985.50	680.10
Argentina	Ding	-14.36	-32.82	-18.04
Asia/Oceania Group	DC	9.17	-5.63	-2.85
Bangladesh	LDC	3.14	-11.83	-6.10
Brazil	Ding	-36.18	33.61	15.59
Canada	DC	124.38	-26.82	-14.45
China	Ding	-73.86	-66.73	-42.32
Colombia	Ding	3.30	9.68	4.73
Dominican Republic	Ding	3.47	-14.17	-7.36
Egypt	Ding	10.89	-19.50	-10.28
European Group	DC	14.16	24.21	11.45
European Union	DC	42.36	22.06	10.48
India	Ding	-26.01	595.52	163.73
Indonesia	Ding	2.08	-14.17	-7.36
Iran	Ding	8.40	0.01	0.01
Japan	DC	39.59	589.47	162.58
Malaysia	Ding	-445.39	-100.00	-100.00
Mexico	Ding	-155.47	52836.22	2200.79
Middle East/African Group	Ding	9.69	11.51	5.60
Morocco	Ding	2.44	-0.14	-0.07
Paraguay	Ding	-13.33	-32.77	-18.01
Peru	Ding	4.11	-10.37	-5.33
Philippines	Ding	11.64	20628.03	1339.72
South Africa	Ding	4.39	-13.54	-7.01

Soybean Oil

South Korea	Ding	8.30	-8.18	-4.18
Syria	Ding	264.34	412.06	126.29
		-		
Taiwan	Ding	1.64E+16	4.56E+28	2.13E+15
Thailand	Ding	-3.39	-7.11	-3.62
Tunisia	Ding	4.47	-6.15	-3.13
Turkey	Ding	-38.85	436.39	131.60
United States	DC	-50.69	1930.29	350.59
Venezuela	Ding	1.54	-4.24	-2.14
Vietnam	Ding	3.03	-11.26	-5.80

Country	Development Status	Commodity	% Change	Full SSM	
				% Change Variance	% Change St. Dev.
Americas Group	Ding		-6.77	33.36	15.48
Argentina	Ding		67.43	-8.51	-4.35
Asia/Oceania Group	DC		-25.26	2.30	1.14
Bangladesh	LDC		-7.58	37.03	17.06
Brazil	Ding		16.46	-5.78	-2.93
Canada	DC		13.56	-0.53	-0.27
China	Ding		33.39	58.07	25.73
Colombia	Ding		-4.96	-0.34	-0.17
Egypt	Ding		-10.39	-20.71	-10.96
European Group	DC		-28.35	-0.77	-0.39
European Union	DC		-3.96	-1.90	-0.95
India	Ding		-96.09	-97.11	-82.99
Indonesia	Ding		-0.14	0.75	0.37
Iran	Ding		-5.30	6.55	3.22
Japan	DC		-6.02	-24.82	-13.29
Malaysia	Ding		21.92	-58.37	-35.48
Mexico	Ding	Soybean	33.75	1812.94	337.37
Middle East/African Group	Ding		-8.19	-8.86	-4.53
Morocco	Ding		-1.83	185.74	69.04
Paraguay	Ding		5.87	-0.83	-0.42
Peru	Ding		-7.05	-12.24	-6.32
Philippines	Ding		-3.44	30476.58	1648.62
South Africa	Ding		9.44	7.29	3.58
South Korea	Ding		-8.48	-3.92	-1.98
Syria	Ding		-9.19	-35.93	-19.96
Taiwan	Ding		-6.61	2103.88	369.45
Thailand	Ding		0.67	-19.65	-10.36
Tunisia	Ding		-3.50	-0.48	-0.24
Turkey	Ding		8.14	-6.60	-3.36
United States	DC		10.05	-0.88	-0.44
Venezuela	Ding		-16.39	1.42	0.71
Vietnam	Ding		-1.26	9.82	4.80
Algeria	Ding		-1.00	99.15	41.12
Americas Group	Ding		-4.60	3676.32	514.52
Argentina	Ding	Soybean Meal	-11.88	-35.07	-19.42
Asia/Oceania Group	DC		-0.16	162.71	62.08
Bangladesh	LDC		2.16	237.69	83.76

Brazil	Ding	-20.52	-34.79	-19.25
Canada	DC	12.45	54.74	24.39
China	Ding	-100.00	-100.00	-100.00
Colombia	Ding	0.85	199.29	73.00
Dominican Republic	Ding	-1.01	99.15	41.12
Egypt	Ding	35.50	-38.74	-21.73
European Group	DC	11.81	2047.67	363.43
European Union	DC	-0.11	155.07	59.71
India	Ding	27.91	965.91	226.48
Indonesia	Ding	-0.80	99.15	41.12
Iran	Ding	2.07	131.69	52.21
Japan	DC	6.69	2955.80	452.79
Malaysia	Ding	-10.07	-96.72	-81.90
Mexico	Ding	-69.50	105408.64	3148.21
Middle East/African Group	Ding	3.29	6102.80	687.58
Morocco	Ding	2.02	147.29	57.25
Paraguay	Ding	-11.92	-35.80	-19.88
Peru	Ding	0.43	265.62	91.21
Philippines	Ding	-0.13	444.25	133.29
South Africa	Ding	-0.05	-12.61	-6.52
South Korea	Ding	4.74	-34.37	-18.99
Syria	Ding	5.56	1227.36	264.33
Taiwan	Ding	33.70	24449.57	1466.83
Thailand	Ding	-0.91	590.62	162.80
Tunisia	Ding	0.41	141.65	55.45
Turkey	Ding	-21.37	3344.19	486.87
United States	DC	-23.84	-37.33	-20.84
Venezuela	Ding	0.13	159.23	61.01
Vietnam	Ding	-0.44	100.33	41.54
Algeria	Ding	3.43	-14.17	-7.36
Americas Group	Ding	-7.81	5972.28	679.25
Argentina	Ding	-14.36	-32.92	-18.10
Asia/Oceania Group	DC	9.17	-5.63	-2.86
Bangladesh	LDC	3.14	-11.84	-6.11
Brazil	Ding	-36.17	33.00	15.32
Canada	DC	124.36	-27.03	-14.58
China	Ding	-73.87	-66.62	-42.22
Colombia	Ding	3.30	9.64	4.71
Dominican Republic	Ding	3.47	-14.17	-7.36
Egypt	Ding	10.89	-19.73	-10.41
European Group	DC	14.16	24.10	11.40
European Union	DC	42.35	22.00	10.45
India	Ding	-26.01	595.82	163.78
Indonesia	Ding	2.07	-14.17	-7.36
Iran	Ding	8.40	0.00	0.00
Japan	DC	39.58	585.92	161.90
Malaysia	Ding	-445.39	-100.00	-100.00
Mexico	Ding	-155.48	52845.43	2200.99
Middle East/African Group	Ding	9.69	11.47	5.58

Morocco	Ding	2.44	-0.15	-0.07
Paraguay	Ding	-13.33	-32.89	-18.08
Peru	Ding	4.10	-10.38	-5.33
Philippines	Ding	11.64	20625.81	1339.65
South Africa	Ding	4.39	-13.52	-7.00
South Korea	Ding	8.30	-8.52	-4.36
Syria	Ding	264.31	410.60	125.97
		-		
Taiwan	Ding	1.64E+16	4.55E+28	2.13E+15
Thailand	Ding	-1.79	-5.47	-2.77
Tunisia	Ding	4.47	-7.62	-3.88
Turkey	Ding	-38.85	436.26	131.57
United States	DC	-50.68	1921.10	349.57
Venezuela	Ding	1.54	-4.25	-2.15
Vietnam	Ding	3.03	-11.26	-5.80

Table L: Production Shocks Only Surplus Effects

Country	Development Status	Variable	% Change	Price SSM Only	
				% Change Variance	% Change St. Dev.
Americas Group	Ding		0	0	0
Argentina	Ding		0	0	0
Asia/Oceania Group	DC		0	0	0
Bangladesh	LDC		0	0	0
Brazil	Ding		0	0	0
Canada	DC		0	0	0
China	Ding		0	0	0
Colombia	Ding		0	0	0
Egypt	Ding		0	0	0
European Group	DC		0	0	0
European Union	DC		0	0	0
India	Ding		0	0	0
Indonesia	Ding		0	0	0
Iran	Ding		0	0	0
Japan	DC		0	0	0
Malaysia	Ding		0	0	0
Mexico	Ding	Consumer	0	0	0
Middle East/African Group	Ding		0	0	0
Paraguay	Ding		0	0	0
Peru	Ding		0	0	0
Philippines	Ding		0	0	0
South Africa	Ding		0	0	0
South Korea	Ding		0	0	0
Syria	Ding		0	0	0
Taiwan	Ding		0	0	0
Thailand	Ding		0	0	0
Tunisia	Ding		0	0	0
Turkey	Ding		0	0	0
United States	DC		0	0	0
Venezuela	Ding		0	0	0
Vietnam	Ding		0	0	0
World	n/a		0	0	0

Americas Group	Ding		0	0	0
Argentina	Ding		0	0	0
Asia/Oceania					
Group	DC		0	0	0
Brazil	Ding		0	0	0
Canada	DC		0	0	0
China	Ding		0	0	0
Colombia	Ding		0	0	0
Egypt	Ding		0	0	0
European Group	DC		0	0	0
European Union	DC		0	0	0
India	Ding		0	0	0
Indonesia	Ding		0	0	0
Iran	Ding		0	0	0
Japan	DC	Producer	0	0	0
Mexico	Ding		0	0	0
Middle					
East/African Group	Ding		0	0	0
Paraguay	Ding		0	0	0
Peru	Ding		0	0	0
South Africa	Ding		0	0	0
South Korea	Ding		0	0	0
Thailand	Ding		0	0	0
Tunisia	Ding		0	0	0
Turkey	Ding		0	0	0
United States	DC		0	0	0
Venezuela	Ding		0	0	0
Vietnam	Ding		0	0	0
World	n/a		0	0	0
Americas Group	Ding		0	0	0
Argentina	Ding		0	0	0
Asia/Oceania					
Group	DC		0	0	0
Bangladesh	LDC		0	0	0
Brazil	Ding		0	0	0
Canada	DC		0	0	0
China	Ding		0	0	0
Colombia	Ding		0	0	0
Egypt	Ding		0	0	0
European Group	DC		0	0	0
European Union	DC		0	0	0
India	Ding		0	0	0
Iran	Ding	Crush	0	0	0
Japan	DC		0	0	0
Malaysia	Ding		0	0	0
Mexico	Ding		0	0	0
Middle					
East/African Group	Ding		0	0	0
Morocco	Ding		0	0	0
Paraguay	Ding		0	0	0
Peru	Ding		0	0	0
Philippines	Ding		0	0	0
South Africa	Ding		0	0	0
South Korea	Ding		0	0	0
Syria	Ding		0	0	0
Taiwan	Ding		0	0	0

Thailand	Ding	0	0	0
Tunisia	Ding	0	0	0
Turkey	Ding	0	0	0
United States	DC	0	0	0
Venezuela	Ding	0	0	0
Vietnam	Ding	0	0	0
World	n/a	0	0	0

Country	Development Status	Variable	%	Volume SSM Only	
				% Change Variance	% Change St. Dev.
Americas Group	Ding		-1.57	239.79	84.34
Argentina	Ding		-1.03	15.57	7.50
Asia/Oceania					
Group	DC		-0.36	15.27	7.36
Bangladesh	LDC		-0.41	16.28	7.84
Brazil	Ding		-0.44	16.25	7.82
Canada	DC		-0.21	16.52	7.95
China	Ding		-0.31	16.40	7.89
Colombia	Ding		-0.52	16.17	7.78
Egypt	Ding		-0.46	16.22	7.81
European Group	DC		-0.51	16.17	7.78
European Union	DC		-0.41	16.28	7.84
India	Ding		-4.81	525.89	150.18
Indonesia	Ding		-0.09	16.73	8.04
Iran	Ding		-0.52	16.17	7.78
Japan	DC		-0.31	16.40	7.89
Malaysia	Ding	Consumer	-0.52	16.17	7.78
Mexico	Ding		-0.31	16.40	7.89
Middle					
East/African Group	Ding		-0.31	16.40	7.89
Paraguay	Ding		-0.52	16.17	7.78
Peru	Ding		-0.31	16.40	7.89
Philippines	Ding		-0.49	16.19	7.79
South Africa	Ding		-0.13	-13.08	-6.77
South Korea	Ding		-0.21	16.52	7.95
Syria	Ding		-0.31	16.40	7.89
Taiwan	Ding		-0.25	16.47	7.92
Thailand	Ding		-0.52	-0.89	-0.45
Tunisia	Ding		-0.29	16.43	7.90
Turkey	Ding		-0.21	16.52	7.95
United States	DC		-0.15	16.58	7.97
Venezuela	Ding		-0.46	16.22	7.81
Vietnam	Ding		-0.15	16.58	7.97
World	n/a		-0.25	15.79	7.61
Americas Group	Ding		1.82	-17.60	-9.23
Argentina	Ding		0.55	5.39	2.66
Asia/Oceania					
Group	DC		0.60	3.46	1.71
Brazil	Ding		0.54	6.06	2.98
Canada	DC	Producer	0.62	1.60	0.79
China	Ding		0.53	0.06	0.03
Colombia	Ding		0.60	1.58	0.79
Egypt	Ding		0.61	1.04	0.52
European Group	DC		0.59	1.51	0.75
European Union	DC		0.61	1.12	0.56

India	Ding		9.52	-59.46	-36.33
Indonesia	Ding		0.55	2.91	1.45
Iran	Ding		0.55	1.91	0.95
Japan	DC		0.62	0.17	0.08
Mexico	Ding		0.58	0.98	0.49
Middle					
East/African Group	Ding		0.56	5.17	2.55
Paraguay	Ding		0.59	2.38	1.18
Peru	Ding		0.69	2.19	1.09
South Africa	Ding		0.22	6.00	2.96
South Korea	Ding		0.64	1.64	0.82
Thailand	Ding		0.57	17.00	8.17
Tunisia	Ding		0.57	1.30	0.65
Turkey	Ding		0.61	1.03	0.51
United States	DC		0.78	4.66	2.30
Venezuela	Ding		0.56	0.60	0.30
Vietnam	Ding		0.55	16.89	8.12
World	n/a		0.95	6.87	3.38
Americas Group	Ding		5.86	8924.03	849.95
Argentina	Ding		-21.92	-48.52	-28.25
Asia/Oceania					
Group	DC		-16.79	-47.48	-27.53
Bangladesh	LDC		-15.64	82.52	35.10
Brazil	Ding		-22.19	-47.83	-27.77
Canada	DC		-29.59	-56.41	-33.98
China	Ding		71.40	9229.61	865.90
Colombia	Ding		-14.84	8.78	4.30
Egypt	Ding		-19.70	-46.89	-27.12
European Group	DC		-14.85	-39.66	-22.32
European Union	DC		-7.89	-45.31	-26.05
India	Ding		39.03	1469.17	296.13
Iran	Ding		-8.79	344.30	110.79
Japan	DC		-16.36	-34.60	-19.13
Malaysia	Ding		65.98	-56.35	-33.93
Mexico	Ding	Crush	76.95	52233.57	2187.65
Middle					
East/African Group	Ding		-12.24	-48.56	-28.28
Morocco	Ding		-3.57	175.71	66.04
Paraguay	Ding		-20.85	-48.49	-28.23
Peru	Ding		-19.27	-51.57	-30.41
Philippines	Ding		-6.43	63563.59	2423.16
South Africa	Ding		-7.58	-23.57	-12.58
South Korea	Ding		-21.17	-50.34	-29.53
Syria	Ding		-17.50	-47.14	-27.29
Taiwan	Ding		-14.36	2474.33	407.38
Thailand	Ding		1.66	-30.82	-16.83
Tunisia	Ding		-6.40	1355.86	281.56
Turkey	Ding		55.43	3363.47	488.51
United States	DC		-11.97	-43.40	-24.77
Venezuela	Ding		-15.36	-39.71	-22.35
Vietnam	Ding		-9.83	225.73	80.48
World	n/a		11.06	90.71	38.10

				Full SSM	
Country	Development	Variable	%	% Change	% Change

	Status		Change	Variance	St. Dev.
Americas Group	Ding		-1.56	237.51	83.71
Argentina	Ding		-1.03	15.57	7.50
Asia/Oceania Group	DC		-0.36	15.27	7.36
Bangladesh	LDC		-0.41	16.28	7.83
Brazil	Ding		-0.44	16.25	7.82
Canada	DC		-0.21	16.52	7.95
China	Ding		-0.31	16.40	7.89
Colombia	Ding		-0.52	16.16	7.78
Egypt	Ding		-0.46	16.22	7.81
European Group	DC		-0.51	16.17	7.78
European Union	DC		-0.41	16.28	7.83
India	Ding		-4.81	525.75	150.15
Indonesia	Ding		-0.09	16.73	8.04
Iran	Ding		-0.52	16.16	7.78
Japan	DC		-0.31	16.40	7.89
Malaysia	Ding		-0.52	16.16	7.78
Mexico	Ding	Consumer	-0.31	16.40	7.89
Middle					
East/African Group	Ding		-0.31	16.40	7.89
Paraguay	Ding		-0.52	16.16	7.78
Peru	Ding		-0.31	16.40	7.89
Philippines	Ding		-0.50	16.19	7.79
South Africa	Ding		-0.13	-13.08	-6.77
South Korea	Ding		-0.21	16.52	7.95
Syria	Ding		-0.31	16.40	7.89
Taiwan	Ding		-0.25	16.47	7.92
Thailand	Ding		-0.52	-0.90	-0.45
Tunisia	Ding		-0.29	16.43	7.90
Turkey	Ding		-0.21	16.52	7.95
United States	DC		-0.16	16.58	7.97
Venezuela	Ding		-0.46	16.22	7.81
Vietnam	Ding		-0.16	16.58	7.97
World	n/a		-0.25	15.78	7.60
Americas Group	Ding		1.80	-17.43	-9.13
Argentina	Ding		0.55	5.39	2.66
Asia/Oceania Group	DC		0.60	3.47	1.72
Brazil	Ding		0.54	6.05	2.98
Canada	DC		0.62	1.60	0.80
China	Ding		0.53	0.05	0.02
Colombia	Ding		0.60	1.57	0.78
Egypt	Ding		0.61	1.04	0.52
European Group	DC		0.59	1.50	0.75
European Union	DC		0.61	1.12	0.56
India	Ding		9.52	-59.45	-36.32
Indonesia	Ding	Producer	0.55	2.92	1.45
Iran	Ding		0.55	1.91	0.95
Japan	DC		0.62	0.17	0.08
Mexico	Ding		0.58	0.98	0.49
Middle					
East/African Group	Ding		0.56	5.17	2.55
Paraguay	Ding		0.59	2.38	1.18
Peru	Ding		0.69	2.19	1.09
South Africa	Ding		0.22	6.00	2.96
South Korea	Ding		0.64	1.65	0.82
Thailand	Ding		0.57	17.00	8.17

Tunisia	Ding		0.57	1.30	0.65
Turkey	Ding		0.61	1.03	0.51
United States	DC		0.78	4.66	2.30
Venezuela	Ding		0.56	0.61	0.30
Vietnam	Ding		0.55	16.89	8.12
World	n/a		0.95	6.87	3.38
Americas Group	Ding		5.72	8906.61	849.03
Argentina	Ding		-21.92	-48.58	-28.30
Asia/Oceana Group	DC		-16.79	-47.52	-27.56
Bangladesh	LDC		-15.64	81.56	34.74
Brazil	Ding		-22.19	-47.89	-27.82
Canada	DC		-29.59	-56.47	-34.02
China	Ding		71.40	9231.32	865.99
Colombia	Ding		-14.84	8.30	4.07
Egypt	Ding		-19.70	-46.94	-27.15
European Group	DC		-14.85	-39.70	-22.35
European Union	DC		-7.88	-45.42	-26.12
India	Ding		39.04	1469.58	296.18
Iran	Ding		-8.78	343.72	110.65
Japan	DC		-16.36	-34.80	-19.25
Malaysia	Ding		65.98	-56.35	-33.93
Mexico	Ding		76.96	52241.92	2187.84
Middle		Crush			
East/African Group	Ding		-12.24	-48.68	-28.36
Morocco	Ding		-3.56	175.59	66.01
Paraguay	Ding		-20.85	-48.57	-28.28
Peru	Ding		-19.27	-51.63	-30.45
Philippines	Ding		-6.43	63559.48	2423.08
South Africa	Ding		-7.58	-23.57	-12.58
South Korea	Ding		-21.17	-50.39	-29.57
Syria	Ding		-17.50	-47.21	-27.34
Taiwan	Ding		-14.36	2472.70	407.22
Thailand	Ding		1.66	-30.81	-16.82
Tunisia	Ding		-6.39	1308.36	275.28
Turkey	Ding		55.43	3360.58	488.27
United States	DC		-11.97	-43.48	-24.82
Venezuela	Ding		-15.36	-39.90	-22.47
Vietnam	Ding		-9.83	225.29	80.36
World	n/a		11.06	90.49	38.02

Table M: Production Shocks Only Tariff Revenue Effects

Country	Development Status	Commodity	% Change	Price SSM Only	
				% Change Variance	% Change St. Dev.
Asia/Oceana Group	DC		0	0	0
Bangladesh	LDC		0	0	0
China	Ding		0	0	0
Colombia	Ding		0	0	0
Egypt	Ding	Soybean	0	0	0
European Group	DC		0	0	0
European Union	DC		-208.74	13.22	6.40
Indonesia	Ding		-220.92	16.07	7.73
Iran	Ding		0	0	0

Japan	DC		-110.63	0.73	0.36
Malaysia	Ding		n/a	n/a	n/a
Mexico	Ding		0	0	0
Middle					
East/African Group	Ding		0	0	0
Morocco	Ding		0	0	0
Peru	Ding		0	0	0
Philippines	Ding		0	0	0
South Korea	Ding		0	0	0
Syria	Ding		0	0	0
Taiwan	Ding		0	0	0
Thailand	Ding		0	0	0
Tunisia	Ding		0	0	0
Turkey	Ding		0	0	0
Venezuela	Ding		0	0	0
Vietnam	Ding		0	0	0
World	n/a		0	0	0
Algeria	Ding		0	0	0
Americas Group	Ding		0	0	0
Asia/Oceania					
Group	DC		0	0	0
Bangladesh	LDC		0	0	0
Canada	DC		0	0	0
China	Ding		0	0	0
Colombia	Ding		0	0	0
Dominican					
Republic	Ding		0	0	0
Egypt	Ding		0	0	0
European Group	DC		0	0	0
European Union	DC		0	0	0
Indonesia	Ding		323.69	-3.00	-1.51
Iran	Ding		0	0	0
Japan	DC		0	0	0
Malaysia	Ding	Soybean	n/a	n/a	n/a
Mexico	Ding	Meal	0	0	0
Middle					
East/African Group	Ding		0	0	0
Morocco	Ding		0	0	0
Peru	Ding		0	0	0
Philippines	Ding		0	0	0
South Africa	Ding		0	0	0
South Korea	Ding		0	0	0
Syria	Ding		0	0	0
Taiwan	Ding		0	0	0
Thailand	Ding		0	0	0
Tunisia	Ding		0	0	0
Turkey	Ding		0	0	0
Venezuela	Ding		0	0	0
Vietnam	Ding		0	0	0
World	n/a		0	0	0
Algeria	Ding		0	0	0
Americas Group	Ding		0	0	0
Asia/Oceania					
Group	DC	Soybean Oil	0	0	0
Bangladesh	LDC		0	0	0
Canada	DC		0	0	0

China	Ding	0	0	0
Colombia	Ding	0	0	0
Dominican Republic	Ding	0	0	0
Egypt	Ding	0	0	0
European Group	DC	0	0	0
European Union	DC	0	0	0
India	Ding	0	0	0
Indonesia	Ding	814.51	7.59	3.72
Iran	Ding	0	0	0
Japan	DC	0	1.06E-11	5.31E-12
Malaysia	Ding	0	0	0
Mexico	Ding	0	0	0
Middle East/African Group	Ding	0	0	0
Morocco	Ding	0	0	0
Peru	Ding	0	0	0
Philippines	Ding	0	0	0
South Africa	Ding	0	0	0
South Korea	Ding	0	0	0
Syria	Ding	0	0	0
Taiwan	Ding	2.34	2.82	1.40
Tunisia	Ding	0	0	0
Turkey	Ding	0	0	0
Venezuela	Ding	0	0	0
Vietnam	Ding	0	0	0
World	n/a	0	0	0

Country	Development Status	Commodity	% Change	Volume SSM Only	
				% Change Variance	% Change St. Dev.
Asia/Oceania Group	DC		-24.92	3.32	1.65
Bangladesh	LDC		-7.10	20.41	9.73
China	Ding		34.06	19.72	9.42
Colombia	Ding		-4.47	3.71	1.84
Egypt	Ding		-9.92	54.99	24.49
European Group	DC		-28.00	0.90	0.45
European Union	DC		-326.06	-1.85	-0.93
Indonesia	Ding		-167.37	12.52	6.08
Iran	Ding		-4.81	14.73	7.11
Japan	DC		-64.91	-11.38	-5.86
Malaysia	Ding	Soybean	n/a	n/a	n/a
Mexico	Ding		34.42	424.71	129.06
Middle East/African Group	Ding		-7.71	13.19	6.39
Morocco	Ding		-1.32	35.09	16.23
Peru	Ding		-6.57	23.26	11.02
Philippines	Ding		-3.03	2068.20	365.64
South Korea	Ding		-8.01	25.44	12.00
Syria	Ding		-8.72	86.83	36.69
Taiwan	Ding		-6.15	-64.25	-40.21
Thailand	Ding		1.19	40.30	18.45
Tunisia	Ding		-3.01	1.64	0.82
Turkey	Ding		8.70	52.74	23.59

Venezuela	Ding		-15.88	2.13	1.06
Vietnam	Ding		-0.76	17.38	8.34
World	n/a		17.56	20.89	9.95
Algeria	Ding		0.93	83.27	35.38
Americas Group	Ding		-2.70	9616.36	885.72
Asia/Oceania					
Group	DC		1.79	-33.54	-18.48
Bangladesh	LDC		4.16	79.98	34.16
Canada	DC		14.64	-9.17	-4.70
China	Ding		-28.74	204.31	74.45
Colombia	Ding		2.82	73.79	31.83
Dominican					
Republic	Ding		0.92	82.89	35.24
Egypt	Ding		38.13	-5.41	-2.74
European Group	DC		13.98	-27.20	-14.68
European Union	DC		32.76	-26.80	-14.44
Indonesia	Ding		-48.61	-10.31	-5.30
Iran	Ding		4.05	525.20	150.04
Japan	DC		30.12	9.76	4.77
Malaysia	Ding	Soybean	n/a	n/a	n/a
Mexico	Ding	Meal	-68.87	10090.51	909.48
Middle					
East/African Group	Ding		5.31	27.19	12.78
Morocco	Ding		4.00	141.89	55.53
Peru	Ding		2.39	71.06	30.79
Philippines	Ding		1.83	186.36	69.22
South Africa	Ding		1.90	0.97	0.48
South Korea	Ding		6.78	37.21	17.14
Syria	Ding		7.62	-18.11	-9.50
Taiwan	Ding		36.39	2808.36	439.29
Thailand	Ding		1.02	44.60	20.25
Tunisia	Ding		2.36	-24.50	-13.11
Turkey	Ding		-19.85	-94.23	-75.97
Venezuela	Ding		2.08	80.95	34.52
Vietnam	Ding		1.50	93.66	39.16
World	n/a		-11.22	9768.85	893.42
Algeria	Ding		-3.57	11.38	5.54
Americas Group	Ding		9.94	3736.57	519.40
Asia/Oceania					
Group	DC		1.79	423.39	128.78
Bangladesh	LDC		-3.83	0.80	0.40
Canada	DC		108.89	-10.46	-5.38
China	Ding		-100.00	-100.00	-100.00
Colombia	Ding		-3.69	-8.70	-4.45
Dominican					
Republic	Ding	Soybean	-3.53	12.04	5.85
Egypt	Ding	Oil	3.38	-15.17	-7.90
European Group	DC		6.43	34.23	15.86
European Union	DC		1.83	80.68	34.42
India	Ding		75.00	8239.32	813.20
Indonesia	Ding		474.25	-35.58	-19.74
Iran	Ding		1.07	187.44	69.54
Japan	DC		8.77	32.07	14.92
Malaysia	Ding		-2399.53	675.84	178.54
Mexico	Ding		-255.13	155005.42	3838.34
Middle	Ding		2.27	30.32	14.16

East/African Group					
Morocco	Ding	-4.49	-8.03	-4.10	
Peru	Ding	-2.94	8.73	4.27	
Philippines	Ding	15.64	31527.90	1678.42	
South Africa	Ding	-2.67	-18.17	-9.54	
South Korea	Ding	0.97	-16.64	-8.70	
Syria	Ding	239.91	335.97	108.80	
		-			
Taiwan	Ding	6.34E+16	3.58E+29	5.98E+15	
Tunisia	Ding	-2.60	11.12	5.41	
Turkey	Ding	91.06	235.28	83.11	
Venezuela	Ding	-5.33	-10.48	-5.38	
Vietnam	Ding	-3.94	1.39	0.69	
World	n/a	-18.86	165.45	62.93	

Full SSM					
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Asia/Oceania Group	DC		-24.92	3.32	1.65
Bangladesh	LDC		-7.10	20.38	9.72
China	Ding		34.06	19.81	9.46
Colombia	Ding		-4.47	3.73	1.85
Egypt	Ding		-9.92	54.92	24.46
European Group	DC		-28.00	0.91	0.46
European Union	DC		-299.89	-12.26	-6.33
Indonesia	Ding		-22.09	10.77	5.25
Iran	Ding		-4.81	14.74	7.12
Japan	DC		-74.06	-8.90	-4.55
Malaysia	Ding		n/a	n/a	n/a
Mexico	Ding		34.42	424.81	129.09
Middle					
East/African Group	Ding	Soybean	-7.71	13.15	6.37
Morocco	Ding		-1.32	35.08	16.23
Peru	Ding		-6.56	23.24	11.01
Philippines	Ding		-3.03	2067.88	365.60
South Korea	Ding		-8.01	25.27	11.92
Syria	Ding		-8.72	86.69	36.64
Taiwan	Ding		-6.15	-64.33	-40.27
Thailand	Ding		1.19	40.31	18.45
Tunisia	Ding		-3.00	1.61	0.80
Turkey	Ding		8.70	52.71	23.58
Venezuela	Ding		-15.88	2.13	1.06
Vietnam	Ding		-0.76	17.37	8.34
World	n/a		17.57	20.96	9.98
Algeria	Ding		0.93	83.27	35.38
Americas Group	Ding		-2.60	9595.63	884.66
Asia/Oceania Group	DC		1.79	-33.56	-18.49
Bangladesh	LDC		4.16	79.99	34.16
Canada	DC		14.64	-9.21	-4.72
China	Ding	Soybean	-28.74	204.50	74.50
Colombia	Ding	Meal	2.82	73.79	31.83
Dominican					
Republic	Ding		0.92	82.88	35.23
Egypt	Ding		38.12	-5.45	-2.76
European Group	DC		13.98	-27.32	-14.75

European Union	DC		32.76	-26.91	-14.51
Indonesia	Ding		102.75	-0.60	-0.30
Iran	Ding		4.05	524.06	149.81
Japan	DC		30.12	9.68	4.73
Malaysia	Ding		n/a	n/a	n/a
Mexico	Ding		-68.88	10092.03	909.56
Middle					
East/African Group	Ding		5.31	27.19	12.78
Morocco	Ding		4.00	140.52	55.09
Peru	Ding		2.39	71.05	30.79
Philippines	Ding		1.83	186.36	69.22
South Africa	Ding		1.90	0.97	0.48
South Korea	Ding		6.78	37.22	17.14
Syria	Ding		7.62	-18.17	-9.54
Taiwan	Ding		36.38	2806.96	439.16
Thailand	Ding		1.02	44.59	20.25
Tunisia	Ding		2.36	-16.15	-8.43
Turkey	Ding		-19.85	-94.24	-76.00
Venezuela	Ding		2.08	80.94	34.52
Vietnam	Ding		1.50	93.66	39.16
World	n/a		-11.22	9772.11	893.59
Algeria	Ding		-3.57	11.38	5.54
Americas Group	Ding		9.95	3728.87	518.78
Asia/Oceania Group	DC		1.79	423.42	128.78
Bangladesh	LDC		-3.83	0.80	0.40
Canada	DC		108.88	-10.54	-5.42
China	Ding		-100.00	-100.00	-100.00
Colombia	Ding		-3.69	-8.70	-4.45
Dominican					
Republic	Ding		-3.53	12.04	5.85
Egypt	Ding		3.38	-15.17	-7.89
European Group	DC		6.43	34.22	15.85
European Union	DC		1.83	80.06	34.19
India	Ding		75.00	8240.41	813.26
Indonesia	Ding		2.59	-37.73	-21.09
Iran	Ding		1.07	187.49	69.56
Japan	DC		8.77	32.06	14.92
Malaysia	Ding	Soybean Oil	-2399.47	673.60	178.14
Mexico	Ding		-255.15	155034.81	3838.72
Middle					
East/African Group	Ding		2.27	30.33	14.16
Morocco	Ding		-4.49	-8.02	-4.09
Peru	Ding		-2.94	8.73	4.27
Philippines	Ding		15.64	31531.51	1678.52
South Africa	Ding		-2.67	-18.19	-9.55
South Korea	Ding		0.97	-16.63	-8.69
Syria	Ding		239.89	333.75	108.27
			-		
Taiwan	Ding		6.34E+16	3.58E+29	5.98E+15
Tunisia	Ding		-2.55	-1.59	-0.80
Turkey	Ding		91.06	234.94	83.01
Venezuela	Ding		-5.33	-10.48	-5.38
Vietnam	Ding		-3.94	1.40	0.70
World	n/a		-18.86	165.31	62.88

Table N: Production Shocks Only Net Welfare Effects

Country	Development Status	Variable	% Change	Price SSM Only	
				% Change Variance	% Change St. Dev.
Algeria	Ding	Net Welfare	0	0	0
Americas Group	Ding		0	0	0
Argentina	Ding		0	0	0
Asia/Oceania Group	DC		0	0	0
Bangladesh	LDC		0	-2.21E-12	-1.11E-12
Brazil	Ding		0	0	0
Canada	DC		0	0	0
China	Ding		0	0	0
Colombia	Ding		0	0	0
Dominican Republic	Ding		0	0	0
Egypt	Ding		0	0	0
European Group	DC		0	0	0
European Union	DC		0	0	0
India	Ding		0	0	0
Indonesia	Ding		0	0	0
Iran	Ding		0	0	0
Japan	DC		0	0	0
Malaysia	Ding		0	0	0
Mexico	Ding		0	0	0
Middle East/African Group	Ding		0	0	0
Morocco	Ding		0	0	0
Paraguay	Ding		0	0	0
Peru	Ding		0	0	0
Philippines	Ding		0	0	0
South Africa	Ding		0	0	0
South Korea	Ding		0	0	0
Syria	Ding		0	0	0
Taiwan	Ding		0	-3.13E-12	-1.57E-12
Thailand	Ding		0	0	0
Tunisia	Ding		0	0	0
Turkey	Ding		0	0	0
United States	DC		0	0	0
Venezuela	Ding		0	0	0
Vietnam	Ding		0	0	0

Country	Development Status	Variable	% Change	Volume SSM Only	
				% Change Variance	% Change St. Dev.
Algeria	Ding	Net Welfare	-1.53	29.52	13.81
Americas Group	Ding		2.37	-17.80	-9.33
Argentina	Ding		-1.06	7.55	3.71
Asia/Oceania Group	DC		-0.38	1.44	0.72
Bangladesh	LDC		-4.34	6.80	3.34
Brazil	Ding		-0.59	7.48	3.67
Canada	DC		-0.19	1.61	0.80
China	Ding		10.80	-10.07	-5.17
Colombia	Ding		-1.40	1.31	0.65

Dominican Republic	Ding	-3.06	15.29	7.37
Egypt	Ding	-8.92	1.55	0.77
European Group	DC	-1.79	1.92	0.96
European Union	DC	-3.50	-0.46	-0.23
India	Ding	16.36	-45.32	-26.05
Indonesia	Ding	-0.08	6.44	3.17
Iran	Ding	-1.73	5.20	2.57
Japan	DC	-1.71	7.49	3.68
Malaysia	Ding	6.58	1.91	0.95
Mexico	Ding	20.31	45.15	20.48
Middle East/African Group	Ding	-0.59	9.26	4.53
Morocco	Ding	-2.32	26.80	12.61
Paraguay	Ding	-0.15	2.61	1.30
Peru	Ding	-0.86	9.44	4.61
Philippines	Ding	1.02	313.08	103.24
South Africa	Ding	-0.02	1.49	0.74
South Korea	Ding	-1.35	-2.26	-1.13
Syria	Ding	-4.73	-12.28	-6.34
Taiwan	Ding	-2.79	190.29	70.38
Thailand	Ding	0.72	-6.94	-3.53
Tunisia	Ding	-0.82	1.58	0.79
Turkey	Ding	3.04	1.55	0.77
United States	DC	-0.76	5.58	2.75
Venezuela	Ding	-1.96	0.06	0.03
Vietnam	Ding	0.04	221.47	79.30

Full SSM

Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Algeria	Ding		-1.53	29.52	13.80
Americas Group	Ding		2.34	-17.36	-9.10
Argentina	Ding		-1.06	7.55	3.71
Asia/Oceania Group	DC		-0.38	1.45	0.72
Bangladesh	LDC		-4.34	6.79	3.34
Brazil	Ding		-0.58	7.47	3.67
Canada	DC		-0.19	1.61	0.80
China	Ding		10.80	-10.09	-5.18
Colombia	Ding		-1.40	1.31	0.65
Dominican Republic	Ding		-3.06	15.29	7.37
Egypt	Ding		-8.91	1.54	0.77
European Group	DC		-1.79	1.91	0.95
European Union	DC		-3.50	-0.47	-0.23
India	Ding		16.36	-45.31	-26.05
Indonesia	Ding		-0.08	6.43	3.16
Iran	Ding		-1.73	5.19	2.56
Japan	DC		-1.71	7.49	3.68
Malaysia	Ding		6.58	1.91	0.95
Mexico	Ding		20.31	45.14	20.47
Middle East/African Group	Ding		-0.59	9.27	4.53
Morocco	Ding		-2.32	26.79	12.60
Paraguay	Ding		-0.15	2.61	1.30
Peru	Ding		-0.86	9.43	4.61

Philippines	Ding	1.02	313.02	103.23
South Africa	Ding	-0.02	1.49	0.74
South Korea	Ding	-1.35	-2.24	-1.13
Syria	Ding	-4.73	-12.62	-6.52
Taiwan	Ding	-2.79	190.27	70.37
Thailand	Ding	0.72	-6.95	-3.54
Tunisia	Ding	-0.81	1.52	0.76
Turkey	Ding	3.04	1.55	0.77
United States	DC	-0.76	5.59	2.76
Venezuela	Ding	-1.96	0.08	0.04
Vietnam	Ding	0.04	221.42	79.28

Table O: Exchange Rate Shocks Only Price Effects

Country	Development Status	Commodity	% Change	Price SSM Only	
				% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	0.00	0.08	0.04
Argentina	Ding		0.00	0.08	0.04
Asia/Oceania Group	DC		0.00	0.07	0.04
Bangladesh	LDC		0.00	0.08	0.04
Brazil	Ding		0.00	0.05	0.02
Canada	DC		0.00	0.07	0.03
China	Ding		0.00	0.08	0.04
Colombia	Ding		0.00	0.07	0.04
Egypt	Ding		0.00	0.07	0.03
European Group	DC		0.00	0.07	0.03
European Union	DC		0.00	0.06	0.03
India	Ding		0.04	-1.92	-0.97
Indonesia	Ding		0.00	0.04	0.02
Iran	Ding		0.00	0.08	0.04
Japan	DC		0.00	0.05	0.02
Malaysia	Ding		0.00	0.08	0.04
Mexico	Ding		0.00	0.07	0.04
Middle East/African Group	Ding		0.00	0.08	0.04
Morocco	Ding		0.00	0.08	0.04
Paraguay	Ding		0.00	0.08	0.04
Peru	Ding		0.00	0.08	0.04
Philippines	Ding		0.00	0.07	0.03
South Africa	Ding		0.00	0.07	0.04
South Korea	Ding		0.00	0.05	0.02
Syria	Ding		0.00	0.07	0.04
Taiwan	Ding		0.00	0.08	0.04
Thailand	Ding		0.00	0.07	0.04
Tunisia	Ding		0.00	0.07	0.04
Turkey	Ding		0.00	0.07	0.04
United States	DC		0.00	0.08	0.04
Venezuela	Ding		0.00	0.06	0.03
Vietnam	Ding		0.00	0.08	0.04
World	n/a		0.00	0.08	0.04
Algeria	Ding	Soybean	0.00	0.23	0.11
Americas Group	Ding		0.00	0.27	0.13
Argentina	Ding		0.00	0.29	0.14
Asia/Oceania Group	DC	Meal	0.00	0.22	0.11

Bangladesh	LDC	0.00	0.28	0.14
Brazil	Ding	0.00	0.07	0.04
Canada	DC	0.00	0.21	0.10
China	Ding	0.00	0.29	0.14
Colombia	Ding	0.00	0.18	0.09
Dominican Republic	Ding	0.00	0.16	0.08
Egypt	Ding	0.00	0.21	0.10
European Group	DC	0.00	0.20	0.10
European Union	DC	0.00	0.16	0.08
India	Ding	0.00	0.16	0.08
Indonesia	Ding	0.00	0.06	0.03
Iran	Ding	0.00	0.29	0.14
Japan	DC	0.00	0.10	0.05
Malaysia	Ding	0.00	0.29	0.14
Mexico	Ding	0.00	0.25	0.12
Middle East/African Group	Ding	0.00	0.29	0.14
Morocco	Ding	0.00	0.23	0.12
Paraguay	Ding	0.00	0.24	0.12
Peru	Ding	0.00	0.26	0.13
Philippines	Ding	0.00	0.21	0.10
South Africa	Ding	0.00	0.13	0.07
South Korea	Ding	0.00	0.10	0.05
Syria	Ding	0.00	0.24	0.12
Taiwan	Ding	0.00	0.25	0.13
Thailand	Ding	0.00	0.18	0.09
Tunisia	Ding	0.00	0.23	0.11
Turkey	Ding	0.00	0.22	0.11
Venezuela	Ding	0.00	0.19	0.10
Vietnam	Ding	0.00	0.29	0.14
World	n/a	0.00	0.29	0.14
Algeria	Ding	-0.11	3.36	1.67
Americas Group	Ding	-0.04	0.61	0.31
Argentina	Ding	-0.11	3.79	1.88
Asia/Oceania Group	DC	-0.11	3.51	1.74
Bangladesh	LDC	-0.04	0.51	0.25
Brazil	Ding	-0.11	2.37	1.18
Canada	DC	-0.11	3.40	1.69
China	Ding	0.60	-17.45	-9.14
Colombia	Ding	-0.02	-0.36	-0.18
Dominican Republic	Ding	-0.01	-1.00	-0.50
Egypt	Ding	0.01	-1.55	-0.78
European Group	DC	-0.11	3.23	1.60
European Union	DC	-0.11	2.90	1.44
India	Ding	0.58	-16.18	-8.45
Indonesia	Ding	0.26	-7.35	-3.74
Iran	Ding	-0.11	3.79	1.88
Japan	DC	-0.11	2.57	1.28
Malaysia	Ding	0.02	-1.64	-0.83
Mexico	Ding	-0.03	0.06	0.03
Middle East/African Group	Ding	-0.04	0.44	0.22
Morocco	Ding	-0.02	-0.32	-0.16
Paraguay	Ding	-0.11	3.63	1.80
Peru	Ding	-0.03	0.03	0.01
Philippines	Ding	0.01	-1.43	-0.72

South Africa	Ding	-0.11	3.12	1.55
South Korea	Ding	-0.11	2.62	1.30
Syria	Ding	-0.11	3.65	1.81
Taiwan	Ding	0.01	-0.06	-0.03
Thailand	Ding	0.00	-0.09	-0.05
Tunisia	Ding	0.25	-8.71	-4.46
Turkey	Ding	0.22	-8.02	-4.09
Venezuela	Ding	-0.02	-0.51	-0.26
Vietnam	Ding	-0.04	0.67	0.34
World	n/a	-0.11	3.79	1.88

Volume SSM Only

Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	0.46	15.25	7.36
Argentina	Ding		0.46	15.78	7.60
Asia/Oceania Group	DC		0.46	14.17	6.85
Bangladesh	LDC		0.46	15.54	7.49
Brazil	Ding		0.46	8.52	4.18
Canada	DC		0.46	14.13	6.83
China	Ding		0.46	15.78	7.60
Colombia	Ding		0.46	13.62	6.59
Egypt	Ding		0.46	14.34	6.93
European Group	DC		0.45	13.43	6.50
European Union	DC		0.45	11.79	5.73
India	Ding		8.99	-2.35	-1.18
Indonesia	Ding		0.46	7.34	3.61
Iran	Ding		0.46	15.78	7.60
Japan	DC		0.46	10.13	4.94
Malaysia	Ding		0.46	15.78	7.60
Mexico	Ding		0.46	15.06	7.27
Middle East/African Group	Ding		0.46	15.78	7.60
Morocco	Ding		0.46	14.29	6.91
Paraguay	Ding		0.46	14.97	7.22
Peru	Ding		0.46	15.31	7.38
Philippines	Ding		0.46	13.46	6.52
South Africa	Ding		0.46	12.26	5.95
South Korea	Ding		0.46	10.11	4.93
Syria	Ding		0.46	15.13	7.30
Taiwan	Ding		0.46	15.30	7.38
Thailand	Ding		0.46	13.63	6.60
Tunisia	Ding		0.45	14.13	6.83
Turkey	Ding		0.46	14.59	7.05
United States	DC		0.58	15.78	7.60
Venezuela	Ding		0.46	13.98	6.76
Vietnam	Ding		0.46	15.78	7.60
World	n/a		0.46	15.78	7.60
Algeria	Ding	Soybean Meal	2.05	64.86	28.40
Americas Group	Ding		2.06	80.60	34.39
Argentina	Ding		2.06	83.98	35.64
Asia/Oceania Group	DC		2.06	65.31	28.57
Bangladesh	LDC		2.06	80.38	34.31
Brazil	Ding		2.06	24.34	11.51

Canada	DC	2.06	63.18	27.74
China	Ding	-3.40	-72.12	-47.20
Colombia	Ding	2.05	56.62	25.15
Dominican Republic	Ding	2.06	52.45	23.47
Egypt	Ding	2.06	64.38	28.21
European Group	DC	2.05	57.48	25.49
European Union	DC	2.05	43.04	19.60
India	Ding	2.06	52.99	23.69
Indonesia	Ding	2.07	21.25	10.11
Iran	Ding	2.06	84.01	35.65
Japan	DC	2.07	33.71	15.63
Malaysia	Ding	2.06	83.98	35.64
Mexico	Ding	2.06	73.81	31.84
Middle East/African Group	Ding	2.06	84.17	35.71
Morocco	Ding	2.05	65.97	28.83
Paraguay	Ding	2.06	72.74	31.43
Peru	Ding	2.06	77.27	33.14
Philippines	Ding	2.06	58.26	25.80
South Africa	Ding	2.06	43.92	19.97
South Korea	Ding	2.07	33.17	15.40
Syria	Ding	2.06	73.20	31.61
Taiwan	Ding	2.06	75.97	32.65
Thailand	Ding	2.06	57.75	25.60
Tunisia	Ding	2.05	64.96	28.44
Turkey	Ding	2.06	66.63	29.08
Venezuela	Ding	2.06	59.50	26.29
Vietnam	Ding	2.06	83.98	35.64
World	n/a	2.06	83.98	35.64
Algeria	Ding	-6.97	-13.61	-7.06
Americas Group	Ding	4.16	-52.25	-30.90
Argentina	Ding	-6.98	-14.09	-7.31
Asia/Oceania Group	DC	-6.98	-13.93	-7.23
Bangladesh	LDC	-6.76	-18.18	-9.55
Brazil	Ding	-6.98	-13.83	-7.17
Canada	DC	-6.97	-14.10	-7.32
China	Ding	29.94	67.61	29.47
Colombia	Ding	-6.98	-13.88	-7.20
Dominican Republic	Ding	-6.98	-13.85	-7.18
Egypt	Ding	-2.36	141.98	55.56
European Group	DC	-6.97	-13.47	-6.98
European Union	DC	-6.97	-13.18	-6.82
India	Ding	26.57	17.52	8.40
Indonesia	Ding	-6.77	-18.34	-9.64
Iran	Ding	-6.98	-14.08	-7.31
Japan	DC	-6.98	-14.07	-7.30
Malaysia	Ding	9.65	-2.48	-1.25
Mexico	Ding	14.76	18.50	8.86
Middle East/African Group	Ding	-1.76	-60.61	-37.24
Morocco	Ding	-6.87	-17.21	-9.01
Paraguay	Ding	-6.98	-14.12	-7.33
Peru	Ding	-5.79	-36.88	-20.55
Philippines	Ding	3.23	-37.04	-20.65
South Africa	Ding	-6.97	-13.68	-7.09
South Korea	Ding	-6.98	-14.00	-7.27

Syria	Ding	-6.98	-14.05	-7.29
Taiwan	Ding	-4.74	-36.57	-20.36
Thailand	Ding	-1.92	-27.74	-15.00
Tunisia	Ding	-1.27	-62.52	-38.78
Turkey	Ding	26.53	8.28	4.06
Venezuela	Ding	-6.98	-14.08	-7.31
Vietnam	Ding	-6.79	-19.99	-10.55
World	n/a	-6.98	-14.09	-7.31

Full SSM					
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	0.46	15.35	7.40
Argentina	Ding		0.45	15.86	7.64
Asia/Oceania Group	DC		0.45	14.24	6.88
Bangladesh	LDC		0.45	15.62	7.53
Brazil	Ding		0.45	8.56	4.19
Canada	DC		0.45	14.20	6.87
China	Ding		0.45	15.86	7.64
Colombia	Ding		0.45	13.69	6.63
Egypt	Ding		0.46	14.40	6.96
European Group	DC		0.45	13.50	6.54
European Union	DC		0.45	11.86	5.76
India	Ding		8.98	-2.12	-1.07
Indonesia	Ding		0.46	7.37	3.62
Iran	Ding		0.45	15.86	7.64
Japan	DC		0.46	10.17	4.96
Malaysia	Ding		0.45	15.86	7.64
Mexico	Ding		0.45	15.13	7.30
Middle East/African Group	Ding		0.45	15.86	7.64
Morocco	Ding		0.45	14.36	6.94
Paraguay	Ding		0.45	15.04	7.26
Peru	Ding		0.45	15.39	7.42
Philippines	Ding		0.45	13.53	6.55
South Africa	Ding		0.45	12.32	5.98
South Korea	Ding		0.46	10.15	4.95
Syria	Ding		0.45	15.21	7.33
Taiwan	Ding		0.45	15.38	7.41
Thailand	Ding		0.46	13.69	6.63
Tunisia	Ding		0.45	14.21	6.87
Turkey	Ding		0.45	14.66	7.08
United States	DC		0.58	15.86	7.64
Venezuela	Ding		0.45	14.04	6.79
Vietnam	Ding		0.45	15.86	7.64
World	n/a		0.45	15.86	7.64
Algeria	Ding	Soybean Meal	2.05	64.90	28.41
Americas Group	Ding		2.06	80.64	34.40
Argentina	Ding		2.06	84.01	35.65
Asia/Oceania Group	DC		2.06	65.32	28.58
Bangladesh	LDC		2.06	80.40	34.31
Brazil	Ding		2.06	24.34	11.51
Canada	DC		2.06	63.18	27.74
China	Ding		-3.40	-72.19	-47.26

Colombia	Ding	2.06	56.65	25.16
Dominican Republic	Ding	2.06	52.47	23.48
Egypt	Ding	2.07	64.39	28.21
European Group	DC	2.05	57.51	25.50
European Union	DC	2.05	43.07	19.61
India	Ding	2.06	53.01	23.70
Indonesia	Ding	2.07	21.24	10.11
Iran	Ding	2.06	84.04	35.66
Japan	DC	2.07	33.70	15.63
Malaysia	Ding	2.06	84.01	35.65
Mexico	Ding	2.06	73.84	31.85
Middle East/African Group	Ding	2.06	84.20	35.72
Morocco	Ding	2.06	65.99	28.84
Paraguay	Ding	2.06	72.76	31.44
Peru	Ding	2.06	77.31	33.16
Philippines	Ding	2.06	58.28	25.81
South Africa	Ding	2.06	43.94	19.98
South Korea	Ding	2.07	33.16	15.40
Syria	Ding	2.06	73.24	31.62
Taiwan	Ding	2.06	75.99	32.66
Thailand	Ding	2.06	57.78	25.61
Tunisia	Ding	2.05	64.99	28.45
Turkey	Ding	2.06	66.65	29.09
Venezuela	Ding	2.06	59.55	26.31
Vietnam	Ding	2.06	84.01	35.65
World	n/a	2.06	84.01	35.65
Algeria	Ding	-6.98	-13.26	-6.86
Americas Group	Ding	4.07	-51.77	-30.55
Argentina	Ding	-6.98	-13.70	-7.10
Asia/Oceania Group	DC	-6.98	-13.58	-7.04
Bangladesh	LDC	-6.51	-25.76	-13.84
Brazil	Ding	-6.98	-13.60	-7.05
Canada	DC	-6.98	-13.75	-7.13
China	Ding	29.93	68.38	29.76
Colombia	Ding	-6.65	-23.22	-12.38
Dominican Republic	Ding	-6.63	-23.97	-12.80
Egypt	Ding	-2.20	118.36	47.77
European Group	DC	-6.98	-13.12	-6.79
European Union	DC	-6.98	-12.86	-6.65
India	Ding	26.55	18.03	8.64
Indonesia	Ding	-6.11	-30.08	-16.38
Iran	Ding	-6.98	-13.69	-7.09
Japan	DC	-6.98	-13.83	-7.17
Malaysia	Ding	9.64	-2.36	-1.18
Mexico	Ding	14.51	19.53	9.33
Middle East/African Group	Ding	-1.79	-60.47	-37.13
Morocco	Ding	-6.62	-24.74	-13.25
Paraguay	Ding	-6.98	-13.75	-7.13
Peru	Ding	-5.68	-39.32	-22.10
Philippines	Ding	3.22	-37.12	-20.70
South Africa	Ding	-6.98	-13.37	-6.92
South Korea	Ding	-6.98	-13.75	-7.13
Syria	Ding	-6.98	-13.67	-7.08
Taiwan	Ding	-4.74	-36.37	-20.23

Thailand	Ding	-1.92	-27.63	-14.93
Tunisia	Ding	-1.23	-63.35	-39.46
Turkey	Ding	26.52	8.82	4.32
Venezuela	Ding	-6.67	-23.24	-12.39
Vietnam	Ding	-6.57	-26.56	-14.30
World	n/a	-6.98	-13.70	-7.10

Table P: Exchange Rate Shocks Only Supply Effects

Country	Development Status	Commodity	% Change	Price SSM Only	
				% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	0.00	0.08	0.04
Argentina	Ding		0.00	0.08	0.04
Asia/Oceania Group	DC		0.00	0.07	0.04
Brazil	Ding		0.00	0.05	0.02
Canada	DC		0.00	0.07	0.03
China	Ding		0.00	0.08	0.04
Colombia	Ding		0.00	0.07	0.04
Egypt	Ding		0.00	0.07	0.03
European Group	DC		0.00	0.07	0.03
European Union	DC		0.00	0.06	0.03
India	Ding		0.02	-1.92	-0.97
Indonesia	Ding		0.00	0.04	0.02
Iran	Ding		0.00	0.08	0.04
Japan	DC		0.00	0.05	0.02
Mexico	Ding		0.00	0.07	0.04
Middle East/African Group	Ding		0.00	0.08	0.04
Paraguay	Ding		0.00	0.08	0.04
Peru	Ding		0.00	0.08	0.04
Philippines	Ding		0.00	n/a	n/a
South Africa	Ding		0.00	0.07	0.04
South Korea	Ding		0.00	0.05	0.02
Syria	Ding		0.00	n/a	n/a
Thailand	Ding		0.00	0.07	0.04
Tunisia	Ding		0.00	0.07	0.04
Turkey	Ding		0.00	0.07	0.04
United States	DC		0.00	0.08	0.04
Venezuela	Ding		0.00	0.06	0.03
Vietnam	Ding		0.00	0.08	0.04
World	n/a		0.00	-0.06	-0.03
Americas Group	Ding	Soybean	-0.05	4.69	2.32
Argentina	Ding		-0.28	-15.31	-7.97
Asia/Oceania Group	DC		-0.22	-13.86	-7.19
Bangladesh	LDC		-0.07	7.67	3.76
Brazil	Ding		-0.28	-11.37	-5.86
Canada	DC		-0.39	-14.60	-7.59
China	Ding		0.75	523.26	149.65
Colombia	Ding		-0.05	-3.02	-1.52
Egypt	Ding		0.02	8.86	4.34
European Group	DC		-0.18	-11.13	-5.73
European Union	DC		-0.10	-8.48	-4.33
India	Ding		0.64	-5.70	-2.89

Iran	Ding	-0.11	31.60	14.72
Japan	DC	-0.20	-8.96	-4.59
Malaysia	Ding	0.03	9.45	4.62
Mexico	Ding	-0.05	0.02	0.01
Middle East/African Group	Ding	-0.06	0.13	0.07
Morocco	Ding	-0.02	-1.21	-0.60
Paraguay	Ding	-0.27	-14.83	-7.71
Peru	Ding	-0.08	0.30	0.15
Philippines	Ding	0.00	1.78	0.89
South Africa	Ding	-0.12	-0.18	-0.09
South Korea	Ding	-0.28	-11.58	-5.97
Syria	Ding	-0.22	-14.59	-7.58
Taiwan	Ding	0.00	-0.02	-0.01
Thailand	Ding	0.00	-0.09	-0.05
Tunisia	Ding	0.19	-11.49	-5.92
Turkey	Ding	0.20	66.87	29.18
United States	DC	-0.15	-15.74	-8.20
Venezuela	Ding	-0.04	-3.21	-1.62
Vietnam	Ding	-0.05	9.44	4.62
World	n/a	0.00	0.29	0.15
Americas Group	Ding	-0.05	4.69	2.32
Argentina	Ding	-0.28	-15.31	-7.97
Asia/Oceania Group	DC	-0.22	-13.86	-7.19
Bangladesh	LDC	-0.07	7.67	3.76
Brazil	Ding	-0.28	-11.37	-5.86
Canada	DC	-0.39	-14.60	-7.59
China	Ding	0.75	523.26	149.65
Colombia	Ding	-0.05	-3.02	-1.52
Egypt	Ding	0.02	8.86	4.34
European Group	DC	-0.18	-11.13	-5.73
European Union	DC	-0.10	-8.48	-4.33
India	Ding	0.64	-5.70	-2.89
Iran	Ding	-0.11	31.60	14.72
Japan	DC	-0.20	-8.96	-4.59
Malaysia	Ding	0.03	9.45	4.62
Mexico	Ding	-0.05	0.02	0.01
Middle East/African Group	Ding	-0.06	0.13	0.07
Morocco	Ding	-0.02	-1.21	-0.60
Paraguay	Ding	-0.27	-14.83	-7.71
Peru	Ding	-0.08	0.30	0.15
Philippines	Ding	0.00	1.78	0.89
South Africa	Ding	-0.12	-0.18	-0.09
South Korea	Ding	-0.28	-11.58	-5.97
Syria	Ding	-0.22	-14.59	-7.58
Taiwan	Ding	0.00	-0.02	-0.01
Thailand	Ding	0.00	-0.09	-0.05
Tunisia	Ding	0.19	-11.49	-5.92
Turkey	Ding	0.20	66.87	29.18
United States	DC	-0.15	-15.74	-8.20
Venezuela	Ding	-0.04	-3.21	-1.62
Vietnam	Ding	-0.05	9.44	4.62
World	n/a	-0.01	-0.98	-0.49

Soybean Oil

		Volume SSM Only			
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	0.12	15.25	7.36
Argentina	Ding		0.05	15.78	7.60
Asia/Oceania Group	DC		0.13	14.17	6.85
Brazil	Ding		0.03	8.52	4.18
Canada	DC		0.15	14.13	6.83
China	Ding		0.02	15.78	7.60
Colombia	Ding		0.11	13.62	6.59
Egypt	Ding		0.14	14.34	6.93
European Group	DC		0.11	13.43	6.50
European Union	DC		0.14	11.79	5.73
India	Ding		3.23	-2.35	-1.18
Indonesia	Ding		0.02	7.34	3.61
Iran	Ding		0.05	15.78	7.60
Japan	DC		0.17	10.13	4.94
Mexico	Ding		0.11	15.06	7.27
Middle East/African Group	Ding		0.07	15.78	7.60
Paraguay	Ding		0.09	14.97	7.22
Peru	Ding		0.23	15.31	7.38
Philippines	Ding		0.00	n/a	n/a
South Africa	Ding		0.07	12.26	5.95
South Korea	Ding		0.16	10.11	4.93
Syria	Ding		0.00	n/a	n/a
Thailand	Ding		0.09	13.63	6.60
Tunisia	Ding		0.09	14.13	6.83
Turkey	Ding		0.15	14.59	7.05
United States	DC		0.17	15.78	7.60
Venezuela	Ding		0.11	13.98	6.76
Vietnam	Ding		0.05	15.78	7.60
World	n/a		0.21	14.19	6.86
Americas Group	Ding	Soybean Meal	6.52	4326.44	565.32
Argentina	Ding		-11.38	-34.52	-19.08
Asia/Oceania Group	DC		-8.59	-40.62	-22.94
Bangladesh	LDC		-7.73	1027.30	235.75
Brazil	Ding		-11.54	-38.34	-21.48
Canada	DC		-15.68	-38.83	-21.79
China	Ding		30.49	1307.17	275.12
Colombia	Ding		-7.59	-30.02	-16.35
Egypt	Ding		-0.33	1054.92	239.84
European Group	DC		-7.57	-29.05	-15.77
European Union	DC		-3.93	-44.88	-25.76
India	Ding		15.94	470.32	138.81
Iran	Ding		-4.42	176.21	66.20
Japan	DC		-8.39	-31.03	-16.95
Malaysia	Ding		28.77	-73.93	-48.94
Mexico	Ding		22.44	6711.65	725.33
Middle East/African Group	Ding		1.06	2622.70	421.79
Morocco	Ding		-1.68	61.46	27.07
Paraguay	Ding		-10.79	-36.12	-20.08
Peru	Ding		-7.33	403.28	124.34
Philippines	Ding		7.99	5164.83	625.59
South Africa	Ding		-4.32	-2.37	-1.19

South Korea	Ding	-10.92	-35.36	-19.60
Syria	Ding	-8.97	-37.50	-20.94
Taiwan	Ding	-6.67	379.96	119.08
Thailand	Ding	0.94	-27.74	-15.00
Tunisia	Ding	1.18	1163.81	255.50
Turkey	Ding	26.16	318.51	104.57
United States	DC	-6.04	-37.34	-20.84
Venezuela	Ding	-7.83	-34.63	-19.15
Vietnam	Ding	-4.79	216.12	77.80
World	n/a	0.37	-11.40	-5.87
Americas Group	Ding	6.52	4326.44	565.32
Argentina	Ding	-11.38	-34.52	-19.08
Asia/Oceana Group	DC	-8.59	-40.62	-22.94
Bangladesh	LDC	-7.73	1027.30	235.75
Brazil	Ding	-11.54	-38.34	-21.48
Canada	DC	-15.68	-38.83	-21.79
China	Ding	30.49	1307.17	275.12
Colombia	Ding	-7.59	-30.02	-16.35
Egypt	Ding	-0.33	1054.92	239.84
European Group	DC	-7.57	-29.05	-15.77
European Union	DC	-3.93	-44.88	-25.76
India	Ding	15.94	470.32	138.81
Iran	Ding	-4.42	176.21	66.20
Japan	DC	-8.39	-31.03	-16.95
Malaysia	Ding	28.77	-73.93	-48.94
Mexico	Ding	22.44	6711.65	725.33
Middle East/African Group	Ding	1.06	2622.70	421.79
Morocco	Ding	-1.68	61.46	27.07
Paraguay	Ding	-10.79	-36.12	-20.08
Peru	Ding	-7.33	403.28	124.34
Philippines	Ding	7.99	5164.83	625.59
South Africa	Ding	-4.32	-2.37	-1.19
South Korea	Ding	-10.92	-35.36	-19.60
Syria	Ding	-8.97	-37.50	-20.94
Taiwan	Ding	-6.67	379.96	119.08
Thailand	Ding	0.94	-27.74	-15.00
Tunisia	Ding	1.18	1163.81	255.50
Turkey	Ding	26.16	318.51	104.57
United States	DC	-6.04	-37.34	-20.84
Venezuela	Ding	-7.83	-34.63	-19.15
Vietnam	Ding	-4.79	216.12	77.80
World	n/a	-0.12	-13.28	-6.88

Soybean Oil

Full SSM

Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding		0.12	15.35	7.40
Argentina	Ding		0.05	15.86	7.64
Asia/Oceana Group	DC		0.13	14.24	6.88
Brazil	Ding	Soybean	0.03	8.56	4.19
Canada	DC		0.15	14.20	6.87
China	Ding		0.02	15.86	7.64
Colombia	Ding		0.11	13.69	6.63

Egypt	Ding	0.14	14.40	6.96
European Group	DC	0.11	13.50	6.54
European Union	DC	0.14	11.86	5.76
India	Ding	3.23	-2.12	-1.07
Indonesia	Ding	0.02	7.37	3.62
Iran	Ding	0.05	15.86	7.64
Japan	DC	0.17	10.17	4.96
Mexico	Ding	0.11	15.13	7.30
Middle East/African Group	Ding	0.07	15.86	7.64
Paraguay	Ding	0.09	15.04	7.26
Peru	Ding	0.23	15.39	7.42
Philippines	Ding	0.00	n/a	n/a
South Africa	Ding	0.07	12.32	5.98
South Korea	Ding	0.16	10.15	4.95
Syria	Ding	0.00	n/a	n/a
Thailand	Ding	0.09	13.69	6.63
Tunisia	Ding	0.09	14.21	6.87
Turkey	Ding	0.15	14.66	7.08
United States	DC	0.17	15.86	7.64
Venezuela	Ding	0.11	14.04	6.79
Vietnam	Ding	0.05	15.86	7.64
World	n/a	0.21	14.28	6.90
Americas Group	Ding	6.44	4327.67	565.41
Argentina	Ding	-11.38	-35.44	-19.65
Asia/Oceania Group	DC	-8.58	-41.46	-23.49
Bangladesh	LDC	-7.32	1275.28	270.85
Brazil	Ding	-11.53	-39.07	-21.94
Canada	DC	-15.67	-39.78	-22.40
China	Ding	30.48	1298.13	273.92
Colombia	Ding	-7.07	-6.77	-3.44
Egypt	Ding	0.03	1009.23	233.05
European Group	DC	-7.56	-29.75	-16.18
European Union	DC	-3.93	-45.23	-26.00
India	Ding	15.94	471.46	139.05
Iran	Ding	-4.42	179.90	67.30
Japan	DC	-8.38	-31.76	-17.39
Malaysia	Ding	28.78	-73.90	-48.91
Mexico	Ding	22.13	6933.45	738.66
Middle East/African Group	Ding	1.03	2605.34	420.13
Morocco	Ding	-1.55	40.94	18.72
Paraguay	Ding	-10.78	-37.00	-20.63
Peru	Ding	-7.08	415.21	126.98
Philippines	Ding	8.00	5199.04	627.95
South Africa	Ding	-4.32	-2.08	-1.04
South Korea	Ding	-10.92	-36.13	-20.08
Syria	Ding	-8.97	-38.32	-21.47
Taiwan	Ding	-6.65	376.98	118.40
Thailand	Ding	0.94	-27.63	-14.93
Tunisia	Ding	1.22	1153.41	254.04
Turkey	Ding	26.16	319.95	104.93
United States	DC	-6.04	-38.26	-21.42
Venezuela	Ding	-7.30	-8.00	-4.08
Vietnam	Ding	-4.55	185.58	68.99
World	n/a	0.37	-11.46	-5.90

Soybean
Meal

Americas Group	Ding	6.44	4327.67	565.41
Argentina	Ding	-11.38	-35.44	-19.65
Asia/Oceania Group	DC	-8.58	-41.46	-23.49
Bangladesh	LDC	-7.32	1275.28	270.85
Brazil	Ding	-11.53	-39.07	-21.94
Canada	DC	-15.67	-39.78	-22.40
China	Ding	30.48	1298.13	273.92
Colombia	Ding	-7.07	-6.77	-3.44
Egypt	Ding	0.03	1009.23	233.05
European Group	DC	-7.56	-29.75	-16.18
European Union	DC	-3.93	-45.23	-26.00
India	Ding	15.94	471.46	139.05
Iran	Ding	-4.42	179.90	67.30
Japan	DC	-8.38	-31.76	-17.39
Malaysia	Ding	28.78	-73.90	-48.91
Mexico	Ding	22.13	6933.45	738.66
Middle East/African Group	Ding	1.03	2605.34	420.13
Morocco	Ding	-1.55	40.94	18.72
Paraguay	Ding	-10.78	-37.00	-20.63
Peru	Ding	-7.08	415.21	126.98
Philippines	Ding	8.00	5199.04	627.95
South Africa	Ding	-4.32	-2.08	-1.04
South Korea	Ding	-10.92	-36.13	-20.08
Syria	Ding	-8.97	-38.32	-21.47
Taiwan	Ding	-6.65	376.98	118.40
Thailand	Ding	0.94	-27.63	-14.93
Tunisia	Ding	1.22	1153.41	254.04
Turkey	Ding	26.16	319.95	104.93
United States	DC	-6.04	-38.26	-21.42
Venezuela	Ding	-7.30	-8.00	-4.08
Vietnam	Ding	-4.55	185.58	68.99
World	n/a	-0.12	-13.42	-6.95

Table Q: Exchange Rate Shocks Only Demand Effects

Country	Development Status	Commodity	Price SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	0.00	0.08	0.04
Argentina	Ding		0.00	0.08	0.04
Asia/Oceania Group	DC		0.00	0.07	0.04
Bangladesh	LDC		0.00	0.08	0.04
Brazil	Ding		0.00	0.05	0.02
Canada	DC		0.00	0.07	0.03
China	Ding		0.00	0.08	0.04
Colombia	Ding		0.00	0.07	0.04
Egypt	Ding		0.00	0.07	0.03
European Group	DC		0.00	0.07	0.03
European Union	DC		0.00	0.06	0.03
India	Ding		-0.01	-1.92	-0.97
Indonesia	Ding		0.00	0.04	0.02
Iran	Ding		0.00	0.08	0.04
Japan	DC		0.00	0.05	0.02

Malaysia	Ding	0.00	0.08	0.04
Mexico	Ding	0.00	0.07	0.04
Middle East/African Group	Ding	0.00	0.08	0.04
Paraguay	Ding	0.00	0.08	0.04
Peru	Ding	0.00	0.08	0.04
Philippines	Ding	0.00	0.07	0.03
South Africa	Ding	0.00	0.07	0.04
South Korea	Ding	0.00	0.05	0.02
Syria	Ding	0.00	0.07	0.04
Taiwan	Ding	0.00	0.08	0.04
Thailand	Ding	0.00	0.07	0.04
Tunisia	Ding	0.00	0.07	0.04
Turkey	Ding	0.00	0.07	0.04
United States	DC	0.00	0.08	0.04
Venezuela	Ding	0.00	0.06	0.03
Vietnam	Ding	0.00	0.08	0.04
World	n/a	0.00	-0.01	0.00
Algeria	Ding	0.00	0.23	0.11
Americas Group	Ding	0.00	0.27	0.13
Argentina	Ding	0.01	0.29	0.14
Asia/Oceania Group	DC	0.00	0.22	0.11
Bangladesh	LDC	0.00	0.28	0.14
Brazil	Ding	0.00	0.07	0.04
Canada	DC	0.00	0.21	0.10
China	Ding	0.01	0.29	0.14
Colombia	Ding	0.00	0.18	0.09
Dominican Republic	Ding	0.00	0.16	0.08
Egypt	Ding	0.00	0.21	0.10
European Group	DC	0.00	0.20	0.10
European Union	DC	0.00	0.16	0.08
India	Ding	0.00	0.16	0.08
Indonesia	Ding	0.00	0.06	0.03
Iran	Ding	0.00	0.29	0.14
Japan	DC	0.00	0.10	0.05
Malaysia	Ding	0.00	0.29	0.14
Mexico	Ding	0.00	0.25	0.12
Middle East/African Group	Ding	0.00	0.29	0.14
Morocco	Ding	0.00	0.23	0.12
Paraguay	Ding	0.00	0.24	0.12
Peru	Ding	0.00	0.26	0.13
Philippines	Ding	0.00	0.21	0.10
South Africa	Ding	0.00	0.13	0.07
South Korea	Ding	0.00	0.10	0.05
Syria	Ding	0.00	0.24	0.12
Taiwan	Ding	0.00	0.25	0.13
Thailand	Ding	0.00	0.18	0.09
Tunisia	Ding	0.00	0.23	0.11
Turkey	Ding	0.00	0.22	0.11
United States	DC	0.00	0.29	0.14
Venezuela	Ding	0.00	0.19	0.10
Vietnam	Ding	0.00	0.29	0.14
World	n/a	0.00	0.29	0.15
Algeria	Ding	0.06	3.36	1.67
Americas Group	Ding	0.01	0.61	0.31

Soybean
Meal

Soybean Oil

Argentina	Ding	0.03	3.79	1.88
Asia/Oceania Group	DC	0.09	3.51	1.74
Bangladesh	LDC	0.01	0.51	0.25
Brazil	Ding	0.05	2.37	1.18
Canada	DC	0.02	3.40	1.69
China	Ding	-0.08	-17.45	-9.14
Colombia	Ding	0.00	-0.36	-0.18
Dominican Republic	Ding	0.00	-1.00	-0.50
Egypt	Ding	0.00	-1.55	-0.78
European Group	DC	0.05	3.23	1.60
European Union	DC	0.06	2.90	1.44
India	Ding	-0.15	-16.18	-8.45
Indonesia	Ding	-0.08	-7.35	-3.74
Iran	Ding	0.06	3.79	1.88
Japan	DC	0.02	2.57	1.28
Malaysia	Ding	0.00	-1.64	-0.83
Mexico	Ding	0.00	0.06	0.03
Middle East/African Group	Ding	0.02	0.44	0.22
Morocco	Ding	0.01	-0.32	-0.16
Paraguay	Ding	0.03	3.63	1.80
Peru	Ding	0.02	0.03	0.01
Philippines	Ding	0.00	-1.43	-0.72
South Africa	Ding	0.06	3.12	1.55
South Korea	Ding	0.01	2.62	1.30
Syria	Ding	0.06	3.65	1.81
Taiwan	Ding	0.00	-0.06	-0.03
Thailand	Ding	0.00	-0.09	-0.05
Tunisia	Ding	-0.12	-8.71	-4.46
Turkey	Ding	-0.05	-8.02	-4.09
United States	DC	0.03	3.79	1.88
Venezuela	Ding	0.00	-0.51	-0.26
Vietnam	Ding	0.02	0.67	0.34
World	n/a	-0.01	-0.98	-0.49

Volume SSM Only

Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	-0.21	15.25	7.36
Argentina	Ding		-0.46	15.78	7.60
Asia/Oceania Group	DC		-0.16	14.17	6.85
Bangladesh	LDC		-0.18	15.54	7.49
Brazil	Ding		-0.20	8.52	4.18
Canada	DC		-0.09	14.13	6.83
China	Ding		-0.14	15.78	7.60
Colombia	Ding		-0.23	13.62	6.59
Egypt	Ding		-0.21	14.34	6.93
European Group	DC		-0.22	13.43	6.50
European Union	DC		-0.18	11.79	5.73
India	Ding		-2.69	-2.35	-1.18
Indonesia	Ding		-0.07	7.34	3.61
Iran	Ding		-0.23	15.78	7.60
Japan	DC		-0.14	10.13	4.94
Malaysia	Ding		-0.23	15.78	7.60

Mexico	Ding	-0.14	15.06	7.27
Middle East/African Group	Ding	-0.14	15.78	7.60
Paraguay	Ding	-0.23	14.97	7.22
Peru	Ding	-0.14	15.31	7.38
Philippines	Ding	-0.22	13.46	6.52
South Africa	Ding	-0.23	12.26	5.95
South Korea	Ding	-0.09	10.11	4.93
Syria	Ding	-0.14	15.13	7.30
Taiwan	Ding	-0.11	15.30	7.38
Thailand	Ding	-0.23	13.63	6.60
Tunisia	Ding	-0.13	14.13	6.83
Turkey	Ding	-0.09	14.59	7.05
United States	DC	-0.07	15.78	7.60
Venezuela	Ding	-0.21	13.98	6.76
Vietnam	Ding	-0.07	15.78	7.60
World	n/a	-0.25	14.42	6.97
Algeria	Ding	-1.05	64.86	28.40
Americas Group	Ding	-0.63	80.60	34.39
Argentina	Ding	-2.75	83.98	35.64
Asia/Oceania Group	DC	-1.58	65.31	28.57
Bangladesh	LDC	-0.42	80.38	34.31
Brazil	Ding	-1.04	24.34	11.51
Canada	DC	-0.72	63.18	27.74
China	Ding	4.26	-72.12	-47.20
Colombia	Ding	-0.52	56.62	25.15
Dominican Republic	Ding	-1.05	52.45	23.47
Egypt	Ding	-0.21	64.38	28.21
European Group	DC	-1.04	57.48	25.49
European Union	DC	-1.46	43.04	19.60
India	Ding	-0.63	52.99	23.69
Indonesia	Ding	-0.84	21.25	10.11
Iran	Ding	-1.05	84.01	35.65
Japan	DC	-0.41	33.71	15.63
Malaysia	Ding	-0.21	83.98	35.64
Mexico	Ding	-0.41	73.81	31.84
Middle East/African Group	Ding	-0.42	84.17	35.71
Morocco	Ding	-0.30	65.97	28.83
Paraguay	Ding	-0.73	72.74	31.43
Peru	Ding	-0.52	77.27	33.14
Philippines	Ding	-0.31	58.26	25.80
South Africa	Ding	-0.52	43.92	19.97
South Korea	Ding	-0.23	33.17	15.40
Syria	Ding	-1.05	73.20	31.61
Taiwan	Ding	-0.31	75.97	32.65
Thailand	Ding	-0.40	57.75	25.60
Tunisia	Ding	-1.05	64.96	28.44
Turkey	Ding	-0.29	66.63	29.08
United States	DC	-0.25	83.98	35.64
Venezuela	Ding	-0.52	59.50	26.29
Vietnam	Ding	-0.52	83.98	35.64
World	n/a	0.37	-11.40	-5.87
Algeria	Ding	3.57	-13.61	-7.06
Americas Group	Ding	-1.27	-52.25	-30.90
Argentina	Ding	1.63	-14.09	-7.31

Asia/Oceania Group	DC	5.36	-13.93	-7.23
Bangladesh	LDC	2.41	-18.18	-9.55
Brazil	Ding	3.12	-13.83	-7.17
Canada	DC	1.24	-14.10	-7.32
China	Ding	-3.98	67.61	29.47
Colombia	Ding	1.42	-13.88	-7.20
Dominican Republic	Ding	3.57	-13.85	-7.18
Egypt	Ding	0.24	141.98	55.56
European Group	DC	3.27	-13.47	-6.98
European Union	DC	3.60	-13.18	-6.82
India	Ding	-7.05	17.52	8.40
Indonesia	Ding	2.06	-18.34	-9.64
Iran	Ding	3.57	-14.08	-7.31
Japan	DC	0.97	-14.07	-7.30
Malaysia	Ding	-2.88	-2.48	-1.25
Mexico	Ding	-2.25	18.50	8.86
Middle East/African Group	Ding	0.90	-60.61	-37.24
Morocco	Ding	1.75	-17.21	-9.01
Paraguay	Ding	2.13	-14.12	-7.33
Peru	Ding	2.96	-36.88	-20.55
Philippines	Ding	-1.05	-37.04	-20.65
South Africa	Ding	3.55	-13.68	-7.09
South Korea	Ding	0.71	-14.00	-7.27
Syria	Ding	3.57	-14.05	-7.29
Taiwan	Ding	0.46	-36.57	-20.36
Thailand	Ding	0.94	-27.74	-15.00
Tunisia	Ding	0.59	-62.52	-38.78
Turkey	Ding	-5.97	8.28	4.06
United States	DC	2.13	-14.09	-7.31
Venezuela	Ding	1.07	-14.08	-7.31
Vietnam	Ding	2.63	-19.99	-10.55
World	n/a	-0.12	-13.28	-6.88

Country	Development Status	Commodity	Full SSM		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	-0.21	15.35	7.40
Argentina	Ding		-0.45	15.86	7.64
Asia/Oceania Group	DC		-0.16	14.24	6.88
Bangladesh	LDC		-0.18	15.62	7.53
Brazil	Ding		-0.19	8.56	4.19
Canada	DC		-0.09	14.20	6.87
China	Ding		-0.14	15.86	7.64
Colombia	Ding		-0.23	13.69	6.63
Egypt	Ding		-0.20	14.40	6.96
European Group	DC		-0.22	13.50	6.54
European Union	DC		-0.18	11.86	5.76
India	Ding		-2.69	-2.12	-1.07
Indonesia	Ding		-0.07	7.37	3.62
Iran	Ding		-0.23	15.86	7.64
Japan	DC		-0.14	10.17	4.96
Malaysia	Ding		-0.23	15.86	7.64
Mexico	Ding		-0.14	15.13	7.30

Middle East/African Group	Ding	-0.14	15.86	7.64
Paraguay	Ding	-0.23	15.04	7.26
Peru	Ding	-0.14	15.39	7.42
Philippines	Ding	-0.22	13.53	6.55
South Africa	Ding	-0.23	12.32	5.98
South Korea	Ding	-0.09	10.15	4.95
Syria	Ding	-0.14	15.21	7.33
Taiwan	Ding	-0.11	15.38	7.41
Thailand	Ding	-0.23	13.69	6.63
Tunisia	Ding	-0.13	14.21	6.87
Turkey	Ding	-0.09	14.66	7.08
United States	DC	-0.07	15.86	7.64
Venezuela	Ding	-0.20	14.04	6.79
Vietnam	Ding	-0.07	15.86	7.64
World	n/a	-0.25	14.50	7.01
Algeria	Ding	-1.05	64.90	28.41
Americas Group	Ding	-0.63	80.64	34.40
Argentina	Ding	-2.76	84.01	35.65
Asia/Oceania Group	DC	-1.58	65.32	28.58
Bangladesh	LDC	-0.42	80.40	34.31
Brazil	Ding	-1.04	24.34	11.51
Canada	DC	-0.72	63.18	27.74
China	Ding	4.27	-72.19	-47.26
Colombia	Ding	-0.52	56.65	25.16
Dominican Republic	Ding	-1.05	52.47	23.48
Egypt	Ding	-0.21	64.39	28.21
European Group	DC	-1.05	57.51	25.50
European Union	DC	-1.47	43.07	19.61
India	Ding	-0.63	53.01	23.70
Indonesia	Ding	-0.84	21.24	10.11
Iran	Ding	-1.05	84.04	35.66
Japan	DC	-0.41	33.70	15.63
Malaysia	Ding	-0.21	84.01	35.65
Mexico	Ding	-0.41	73.84	31.85
Middle East/African Group	Ding	-0.42	84.20	35.72
Morocco	Ding	-0.30	65.99	28.84
Paraguay	Ding	-0.73	72.76	31.44
Peru	Ding	-0.52	77.31	33.16
Philippines	Ding	-0.31	58.28	25.81
South Africa	Ding	-0.52	43.94	19.98
South Korea	Ding	-0.23	33.16	15.40
Syria	Ding	-1.05	73.24	31.62
Taiwan	Ding	-0.31	75.99	32.66
Thailand	Ding	-0.40	57.78	25.61
Tunisia	Ding	-1.05	64.99	28.45
Turkey	Ding	-0.29	66.65	29.09
United States	DC	-0.25	84.01	35.65
Venezuela	Ding	-0.52	59.55	26.31
Vietnam	Ding	-0.52	84.01	35.65
World	n/a	0.37	-11.46	-5.90
Algeria	Ding	3.58	-13.26	-6.86
Americas Group	Ding	-1.25	-51.77	-30.55
Argentina	Ding	1.64	-13.70	-7.10
Asia/Oceania Group	DC	5.37	-13.58	-7.04

Bangladesh	LDC	2.32	-25.76	-13.84
Brazil	Ding	3.12	-13.60	-7.05
Canada	DC	1.24	-13.75	-7.13
China	Ding	-3.98	68.38	29.76
Colombia	Ding	1.36	-23.22	-12.38
Dominican Republic	Ding	3.39	-23.97	-12.80
Egypt	Ding	0.22	118.36	47.77
European Group	DC	3.27	-13.12	-6.79
European Union	DC	3.60	-12.86	-6.65
India	Ding	-7.04	18.03	8.64
Indonesia	Ding	1.86	-30.08	-16.38
Iran	Ding	3.57	-13.69	-7.09
Japan	DC	0.97	-13.83	-7.17
Malaysia	Ding	-2.88	-2.36	-1.18
Mexico	Ding	-2.21	19.53	9.33
Middle East/African Group	Ding	0.92	-60.47	-37.13
Morocco	Ding	1.69	-24.74	-13.25
Paraguay	Ding	2.14	-13.75	-7.13
Peru	Ding	2.91	-39.32	-22.10
Philippines	Ding	-1.05	-37.12	-20.70
South Africa	Ding	3.55	-13.37	-6.92
South Korea	Ding	0.71	-13.75	-7.13
Syria	Ding	3.57	-13.67	-7.08
Taiwan	Ding	0.46	-36.37	-20.23
Thailand	Ding	0.95	-27.63	-14.93
Tunisia	Ding	0.57	-63.35	-39.46
Turkey	Ding	-5.97	8.82	4.32
United States	DC	2.14	-13.70	-7.10
Venezuela	Ding	1.02	-23.24	-12.39
Vietnam	Ding	2.55	-26.56	-14.30
World	n/a	-0.12	-13.42	-6.95

Table R: Exchange Rate Shocks Only Soybean Crush Effects

Country	Development Status	Commodity	Price SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Crush	-0.05	4.69	2.32
Argentina	Ding		-0.28	-15.31	-7.97
Asia/Oceania Group	DC		-0.22	-13.86	-7.19
Bangladesh	LDC		-0.07	7.67	3.76
Brazil	Ding		-0.28	-11.37	-5.86
Canada	DC		-0.39	-14.60	-7.59
China	Ding		0.75	523.26	149.65
Colombia	Ding		-0.05	-3.02	-1.52
Egypt	Ding		0.02	8.86	4.34
European Group	DC		-0.18	-11.13	-5.73
European Union	DC		-0.10	-8.48	-4.33
India	Ding		0.64	-5.70	-2.89
Iran	Ding		-0.11	31.60	14.72
Japan	DC		-0.20	-8.96	-4.59
Malaysia	Ding		0.03	9.45	4.62
Mexico	Ding		-0.05	0.02	0.01

Middle East/African Group	Ding	-0.06	0.13	0.07
Morocco	Ding	-0.02	-1.21	-0.60
Paraguay	Ding	-0.27	-14.83	-7.71
Peru	Ding	-0.08	0.30	0.15
Philippines	Ding	0.00	1.78	0.89
South Africa	Ding	-0.12	-0.18	-0.09
South Korea	Ding	-0.28	-11.58	-5.97
Syria	Ding	-0.22	-14.59	-7.58
Taiwan	Ding	0.00	-0.02	-0.01
Thailand	Ding	0.00	-0.09	-0.05
Tunisia	Ding	0.19	-11.49	-5.92
Turkey	Ding	0.20	66.87	29.18
United States	DC	-0.15	-15.74	-8.20
Venezuela	Ding	-0.04	-3.21	-1.62
Vietnam	Ding	-0.05	9.44	4.62
World	n/a	0.00	0.05	0.02

Volume SSM Only

Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Crush	6.52	4326.44	565.32
Argentina	Ding		-11.38	-34.52	-19.08
Asia/Oceania Group	DC		-8.59	-40.62	-22.94
Bangladesh	LDC		-7.73	1027.30	235.75
Brazil	Ding		-11.54	-38.34	-21.48
Canada	DC		-15.68	-38.83	-21.79
China	Ding		30.49	1307.17	275.12
Colombia	Ding		-7.59	-30.02	-16.35
Egypt	Ding		-0.33	1054.92	239.84
European Group	DC		-7.57	-29.05	-15.77
European Union	DC		-3.93	-44.88	-25.76
India	Ding		15.94	470.32	138.81
Iran	Ding		-4.42	176.21	66.20
Japan	DC		-8.39	-31.03	-16.95
Malaysia	Ding		28.77	-73.93	-48.94
Mexico	Ding		22.44	6711.65	725.33
Middle East/African Group	Ding		1.06	2622.70	421.79
Morocco	Ding		-1.68	61.46	27.07
Paraguay	Ding		-10.79	-36.12	-20.08
Peru	Ding		-7.33	403.28	124.34
Philippines	Ding		7.99	5164.83	625.59
South Africa	Ding		-4.32	-2.37	-1.19
South Korea	Ding		-10.92	-35.36	-19.60
Syria	Ding		-8.97	-37.50	-20.94
Taiwan	Ding		-6.67	379.96	119.08
Thailand	Ding		0.94	-27.74	-15.00
Tunisia	Ding		1.18	1163.81	255.50
Turkey	Ding		26.16	318.51	104.57
United States	DC		-6.04	-37.34	-20.84
Venezuela	Ding		-7.83	-34.63	-19.15
Vietnam	Ding		-4.79	216.12	77.80
World	n/a		0.28	-11.66	-6.01

Country	Development Status	Commodity	Full SSM		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Crush	6.44	4327.67	565.41
Argentina	Ding		-11.38	-35.44	-19.65
Asia/Oceania Group	DC		-8.58	-41.46	-23.49
Bangladesh	LDC		-7.32	1275.28	270.85
Brazil	Ding		-11.53	-39.07	-21.94
Canada	DC		-15.67	-39.78	-22.40
China	Ding		30.48	1298.13	273.92
Colombia	Ding		-7.07	-6.77	-3.44
Egypt	Ding		0.03	1009.23	233.05
European Group	DC		-7.56	-29.75	-16.18
European Union	DC		-3.93	-45.23	-26.00
India	Ding		15.94	471.46	139.05
Iran	Ding		-4.42	179.90	67.30
Japan	DC		-8.38	-31.76	-17.39
Malaysia	Ding		28.78	-73.90	-48.91
Mexico	Ding		22.13	6933.45	738.66
Middle East/African Group	Ding		1.03	2605.34	420.13
Morocco	Ding		-1.55	40.94	18.72
Paraguay	Ding		-10.78	-37.00	-20.63
Peru	Ding		-7.08	415.21	126.98
Philippines	Ding		8.00	5199.04	627.95
South Africa	Ding		-4.32	-2.08	-1.04
South Korea	Ding		-10.92	-36.13	-20.08
Syria	Ding		-8.97	-38.32	-21.47
Taiwan	Ding		-6.65	376.98	118.40
Thailand	Ding		0.94	-27.63	-14.93
Tunisia	Ding		1.22	1153.41	254.04
Turkey	Ding		26.16	319.95	104.93
United States	DC		-6.04	-38.26	-21.42
Venezuela	Ding		-7.30	-8.00	-4.08
Vietnam	Ding		-4.55	185.58	68.99
World	n/a		0.28	-11.73	-6.05

Table S: Exchange Rate Shocks Only Net Trade Effects

Country	Development Status	Commodity	Price SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	0.20	-1.61	-0.81
Argentina	Ding		1.61	-12.47	-6.44
Asia/Oceania Group	DC		-0.60	-5.60	-2.84
Bangladesh	LDC		-0.06	4.35	2.15
Brazil	Ding		0.39	-12.13	-6.26
Canada	DC		0.32	-7.98	-4.08
China	Ding		0.81	263.23	90.59
Colombia	Ding		-0.03	0.25	0.12
Egypt	Ding		0.02	8.60	4.21
European Group	DC		-0.66	-8.82	-4.51
European Union	DC		-0.10	-9.53	-4.88
India	Ding		-5.41	48.32	21.78
Indonesia	Ding		0.00	0.04	0.02

Iran	Ding	-0.13	38.29	17.60
Japan	DC	-0.14	-12.81	-6.62
Malaysia	Ding	0.02	6.88	3.38
Mexico	Ding	-0.05	0.01	0.01
Middle East/African Group	Ding	-0.08	-0.51	-0.25
Morocco	Ding	-0.02	-1.21	-0.60
Paraguay	Ding	0.14	-7.80	-3.98
Peru	Ding	-0.05	0.13	0.07
Philippines	Ding	0.00	3.44	1.70
South Africa	Ding	0.40	-3.53	-1.78
South Korea	Ding	-0.21	-11.43	-5.89
Syria	Ding	-0.23	-14.51	-7.54
Taiwan	Ding	0.00	-0.01	-0.01
Thailand	Ding	0.00	-0.05	-0.02
Tunisia	Ding	0.20	30.10	14.06
Turkey	Ding	0.07	20.37	9.71
United States	DC	0.23	-5.52	-2.80
Venezuela	Ding	-0.08	-1.72	-0.87
Vietnam	Ding	-0.01	-0.21	-0.11
Algeria	Ding	0.00	0.23	0.11
Americas Group	Ding	0.07	1.71	0.85
Argentina	Ding	-0.29	-15.66	-8.16
Asia/Oceania Group	DC	0.05	2.60	1.29
Bangladesh	LDC	0.02	3.67	1.82
Brazil	Ding	-0.51	-7.36	-3.75
Canada	DC	0.33	-11.87	-6.12
China	Ding	-2.88	-26.03	-14.00
Colombia	Ding	0.01	-1.26	-0.63
Dominican Republic	Ding	0.00	0.16	0.08
Egypt	Ding	-0.07	9.66	4.72
European Group	DC	0.36	-1.29	-0.65
European Union	DC	0.06	1.53	0.76
India	Ding	1.00	-22.17	-11.78
Indonesia	Ding	0.00	0.06	0.03
Iran	Ding	0.10	5.95	2.93
Japan	DC	0.18	0.28	0.14
Malaysia	Ding	-0.01	15.04	7.26
Mexico	Ding	0.10	-0.37	-0.19
Middle East/African Group	Ding	0.04	18.27	8.75
Morocco	Ding	0.03	-0.69	-0.35
Paraguay	Ding	-0.29	-15.04	-7.83
Peru	Ding	0.01	0.13	0.07
Philippines	Ding	0.00	-1.25	-0.63
South Africa	Ding	0.02	1.56	0.78
South Korea	Ding	0.12	-6.58	-3.35
Syria	Ding	0.18	7.58	3.72
Taiwan	Ding	0.01	-0.07	-0.04
Thailand	Ding	0.00	-0.31	-0.16
Tunisia	Ding	-0.11	-7.94	-4.05
Turkey	Ding	-0.17	-11.81	-6.09
United States	DC	-0.60	-18.12	-9.51
Venezuela	Ding	0.00	-0.76	-0.38
Vietnam	Ding	0.00	0.35	0.17
Algeria	Ding	0.06	3.36	1.67

Americas Group	Ding	0.15	1.75	0.87
Argentina	Ding	-0.34	-16.53	-8.64
Asia/Oceania Group	DC	0.17	5.60	2.76
Bangladesh	LDC	0.02	0.71	0.35
Brazil	Ding	-0.84	-5.16	-2.62
Canada	DC	2.92	-17.67	-9.26
China	Ding	-1.74	-28.79	-15.61
Colombia	Ding	0.02	-1.09	-0.55
Dominican Republic	Ding	0.00	-1.00	-0.50
Egypt	Ding	-0.02	16.09	7.75
European Group	DC	0.29	8.81	4.31
European Union	DC	0.89	5.53	2.73
India	Ding	-0.78	-31.74	-17.38
Indonesia	Ding	-0.08	-7.35	-3.74
Iran	Ding	0.16	6.10	3.01
Japan	DC	0.89	-0.63	-0.31
Malaysia	Ding	-0.45	25.80	12.16
Mexico	Ding	0.22	0.96	0.48
Middle East/African Group	Ding	0.07	1.55	0.77
Morocco	Ding	0.01	-0.38	-0.19
Paraguay	Ding	-0.32	-15.99	-8.35
Peru	Ding	0.02	0.07	0.04
Philippines	Ding	-0.01	-5.06	-2.56
South Africa	Ding	0.08	3.69	1.83
South Korea	Ding	0.19	-7.66	-3.90
Syria	Ding	6.03	17.33	8.32
Taiwan	Ding	0.00	0.00	0.00
Thailand	Ding	-4.62	-8.62	-4.41
Tunisia	Ding	-0.18	-10.69	-5.50
Turkey	Ding	-0.32	-20.59	-10.89
United States	DC	-1.15	11.95	5.81
Venezuela	Ding	0.01	-0.97	-0.49
Vietnam	Ding	0.02	0.80	0.40

Volume SSM Only

Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	-25.29	4428.02	572.91
Argentina	Ding		65.76	-27.05	-14.59
Asia/Oceania Group	DC		-24.50	-9.50	-4.87
Bangladesh	LDC		-7.19	734.67	188.91
Brazil	Ding		16.04	-31.50	-17.23
Canada	DC		13.15	-16.99	-8.89
China	Ding		32.93	626.68	169.57
Colombia	Ding		-4.84	-15.35	-7.99
Egypt	Ding		-0.34	985.61	229.49
European Group	DC		-27.69	-16.03	-8.36
European Union	DC		-3.87	-41.76	-23.68
India	Ding		-98.32	-72.82	-47.87
Indonesia	Ding		-0.12	7.34	3.61
Iran	Ding		-5.21	228.99	81.38
Japan	DC		-5.90	-27.38	-14.78
Malaysia	Ding		21.88	-58.69	-35.73

Mexico	Ding	22.96	6501.19	712.48
Middle East/African Group	Ding	1.20	1031.06	236.31
Morocco	Ding	-1.71	61.46	27.07
Paraguay	Ding	5.65	-13.18	-6.82
Peru	Ding	-5.12	184.85	68.77
Philippines	Ding	7.44	4480.88	576.82
South Africa	Ding	15.95	-3.76	-1.90
South Korea	Ding	-8.25	-30.95	-16.90
Syria	Ding	-8.99	-37.25	-20.78
Taiwan	Ding	-5.90	347.06	111.44
Thailand	Ding	0.78	-17.22	-9.02
Tunisia	Ding	1.11	1438.60	292.25
Turkey	Ding	8.64	-29.76	-16.19
United States	DC	9.78	-5.86	-2.97
Venezuela	Ding	-16.07	-35.26	-19.54
Vietnam	Ding	-1.18	15.53	7.49
Algeria	Ding	-1.05	64.86	28.40
Americas Group	Ding	-10.04	316.91	104.18
Argentina	Ding	-11.62	-36.29	-20.18
Asia/Oceania Group	DC	-0.28	84.04	35.66
Bangladesh	LDC	2.00	211.76	76.57
Brazil	Ding	-20.09	-36.03	-20.02
Canada	DC	12.02	-19.92	-10.51
China	Ding	-97.37	-90.67	-69.45
Colombia	Ding	0.80	50.85	22.82
Dominican Republic	Ding	-1.06	52.45	23.47
Egypt	Ding	0.23	1370.23	283.44
European Group	DC	11.41	-9.94	-5.10
European Union	DC	-0.25	39.07	17.93
India	Ding	25.25	386.78	120.63
Indonesia	Ding	-0.84	21.25	10.11
Iran	Ding	1.91	102.54	42.32
Japan	DC	6.50	-0.36	-0.18
Malaysia	Ding	-10.08	-96.32	-80.81
Mexico	Ding	-47.72	4110.07	548.85
Middle East/African Group	Ding	-1.34	13977.54	1086.49
Morocco	Ding	1.80	63.26	27.77
Paraguay	Ding	-11.66	-37.63	-21.02
Peru	Ding	0.13	96.96	40.34
Philippines	Ding	-0.76	-35.38	-19.62
South Africa	Ding	0.04	42.11	19.21
South Korea	Ding	4.58	-26.92	-14.52
Syria	Ding	5.33	129.76	51.58
Taiwan	Ding	28.64	472.11	139.19
Thailand	Ding	-0.99	62.20	27.36
Tunisia	Ding	-2.42	-28.05	-15.18
Turkey	Ding	-22.64	301.20	100.30
United States	DC	-23.22	-47.17	-27.32
Venezuela	Ding	0.09	61.79	27.20
Vietnam	Ding	-0.47	83.66	35.52
Algeria	Ding	3.53	-13.61	-7.06
Americas Group	Ding	-17.73	405.86	124.91
Argentina	Ding	-14.06	-35.23	-19.52
Asia/Oceania Group	DC	9.29	-10.05	-5.16

Bangladesh	LDC	3.11	-15.82	-8.25
Brazil	Ding	-35.88	-33.66	-18.55
Canada	DC	121.35	-38.66	-21.68
China	Ding	-72.88	-14.77	-7.68
Colombia	Ding	3.32	-5.72	-2.90
Dominican Republic	Ding	3.57	-13.85	-7.18
Egypt	Ding	0.76	3415.03	492.88
European Group	DC	14.19	-13.05	-6.75
European Union	DC	42.60	-9.03	-4.62
India	Ding	-25.24	142.03	55.57
Indonesia	Ding	2.06	-18.34	-9.64
Iran	Ding	8.50	-3.55	-1.79
Japan	DC	38.82	-19.11	-10.06
Malaysia	Ding	-451.12	-100.00	-100.00
Mexico	Ding	-104.91	6201.18	693.80
Middle East/African Group	Ding	0.81	183.67	68.42
Morocco	Ding	2.44	-7.77	-3.96
Paraguay	Ding	-13.05	-36.79	-20.49
Peru	Ding	3.42	-33.90	-18.70
Philippines	Ding	-18.45	1585.04	310.49
South Africa	Ding	4.62	-10.26	-5.27
South Korea	Ding	8.12	-28.51	-15.45
Syria	Ding	268.17	17.29	8.30
Taiwan	Ding	954.89	643.07	172.59
Thailand	Ding	-4.62	-0.28	-0.14
Tunisia	Ding	0.45	-47.46	-27.51
Turkey	Ding	-41.04	132.62	52.52
United States	DC	-50.07	63.01	27.68
Venezuela	Ding	1.57	-9.40	-4.82
Vietnam	Ding	3.02	-18.31	-9.62

Full SSM					
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	-24.99	4425.16	572.69
Argentina	Ding		65.72	-27.84	-15.05
Asia/Oceania Group	DC		-24.48	-9.83	-5.04
Bangladesh	LDC		-6.81	930.67	221.04
Brazil	Ding		16.03	-32.29	-17.71
Canada	DC		13.14	-17.51	-9.18
China	Ding		32.92	621.97	168.70
Colombia	Ding		-4.52	15.96	7.69
Egypt	Ding		0.02	944.91	223.25
European Group	DC		-27.67	-16.61	-8.68
European Union	DC		-3.87	-42.25	-24.00
India	Ding		-98.32	-72.82	-47.87
Indonesia	Ding		-0.12	7.37	3.62
Iran	Ding		-5.21	233.98	82.75
Japan	DC		-5.90	-28.30	-15.32
Malaysia	Ding		21.88	-58.64	-35.69
Mexico	Ding		22.65	6715.97	725.59
Middle East/African Group	Ding		1.17	1024.43	235.33
Morocco	Ding		-1.57	40.94	18.72

Paraguay	Ding	5.64	-13.69	-7.09
Peru	Ding	-4.95	192.45	71.01
Philippines	Ding	7.44	4510.04	578.97
South Africa	Ding	15.93	-3.96	-2.00
South Korea	Ding	-8.25	-31.69	-17.35
Syria	Ding	-8.99	-38.07	-21.30
Taiwan	Ding	-5.88	344.38	110.80
Thailand	Ding	0.78	-17.12	-8.96
Tunisia	Ding	1.16	1432.98	291.53
Turkey	Ding	8.64	-30.42	-16.59
United States	DC	9.77	-6.21	-3.15
Venezuela	Ding	-14.99	-2.08	-1.04
Vietnam	Ding	-1.13	19.44	9.29
Algeria	Ding	-1.05	64.90	28.41
Americas Group	Ding	-9.94	318.05	104.46
Argentina	Ding	-11.61	-37.21	-20.76
Asia/Oceania Group	DC	-0.29	84.25	35.74
Bangladesh	LDC	1.86	180.85	67.58
Brazil	Ding	-20.07	-36.45	-20.28
Canada	DC	12.01	-20.39	-10.77
China	Ding	-97.34	-90.46	-69.11
Colombia	Ding	0.70	34.96	16.17
Dominican Republic	Ding	-1.06	52.47	23.48
Egypt	Ding	-1.04	1298.28	273.94
European Group	DC	11.40	-9.52	-4.88
European Union	DC	-0.25	39.28	18.02
India	Ding	25.24	387.65	120.83
Indonesia	Ding	-0.84	21.24	10.11
Iran	Ding	1.90	103.17	42.54
Japan	DC	6.49	-0.38	-0.19
Malaysia	Ding	-10.09	-96.29	-80.75
Mexico	Ding	-47.10	4249.39	559.50
Middle East/African Group	Ding	-1.32	13887.40	1082.68
Morocco	Ding	1.59	49.22	22.16
Paraguay	Ding	-11.65	-38.51	-21.58
Peru	Ding	0.11	89.80	37.77
Philippines	Ding	-0.76	-35.18	-19.49
South Africa	Ding	0.04	42.29	19.29
South Korea	Ding	4.58	-27.33	-14.75
Syria	Ding	5.32	131.36	52.11
Taiwan	Ding	28.55	468.05	138.34
Thailand	Ding	-0.99	62.23	27.37
Tunisia	Ding	-2.45	-28.91	-15.68
Turkey	Ding	-22.64	303.64	100.91
United States	DC	-23.21	-48.07	-27.94
Venezuela	Ding	0.04	51.72	23.18
Vietnam	Ding	-0.48	82.80	35.20
Algeria	Ding	3.53	-13.26	-6.86
Americas Group	Ding	-17.49	406.76	125.11
Argentina	Ding	-14.05	-36.23	-20.14
Asia/Oceania Group	DC	9.30	-9.55	-4.90
Bangladesh	LDC	2.98	-25.28	-13.56
Brazil	Ding	-35.87	-34.03	-18.78
Canada	DC	121.30	-39.86	-22.45

China	Ding	-72.86	-12.73	-6.58
Colombia	Ding	3.13	-24.62	-13.18
Dominican Republic	Ding	3.39	-23.97	-12.80
Egypt	Ding	0.39	3194.88	474.01
European Group	DC	14.19	-12.28	-6.34
European Union	DC	42.61	-8.48	-4.33
India	Ding	-25.23	142.85	55.84
Indonesia	Ding	1.86	-30.08	-16.38
Iran	Ding	8.50	-2.98	-1.50
Japan	DC	38.82	-19.33	-10.18
Malaysia	Ding	-451.12	-100.00	-100.00
Mexico	Ding	-103.46	6402.77	706.40
Middle East/African Group	Ding	0.85	181.73	67.85
Morocco	Ding	2.34	-16.95	-8.87
Paraguay	Ding	-13.05	-37.74	-21.09
Peru	Ding	3.35	-37.08	-20.68
Philippines	Ding	-18.45	1595.29	311.74
South Africa	Ding	4.62	-9.90	-5.08
South Korea	Ding	8.12	-29.11	-15.80
Syria	Ding	268.14	19.15	9.15
Taiwan	Ding	952.43	637.61	171.59
Thailand	Ding	11.26	0.71	0.36
Tunisia	Ding	0.42	-48.67	-28.36
Turkey	Ding	-41.03	134.41	53.10
United States	DC	-50.06	65.48	28.64
Venezuela	Ding	1.49	-23.70	-12.65
Vietnam	Ding	2.91	-25.82	-13.87

Table T: Exchange Rate Shocks Only Surplus Effects

Country	Development Status	Variable	Price SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Consumer	0.00	0.09	0.04
Argentina	Ding		0.00	0.10	0.05
Asia/Oceania Group	DC		0.00	0.08	0.04
Bangladesh	LDC		0.00	0.09	0.04
Brazil	Ding		0.00	0.05	0.03
Canada	DC		0.00	0.07	0.04
China	Ding		0.00	0.09	0.04
Colombia	Ding		0.00	0.08	0.04
Egypt	Ding		0.00	0.08	0.04
European Group	DC		0.00	0.08	0.04
European Union	DC		0.00	0.07	0.03
India	Ding		-0.03	-2.09	-1.05
Indonesia	Ding		0.00	0.04	0.02
Iran	Ding		0.00	0.09	0.05
Japan	DC		0.00	0.05	0.03
Malaysia	Ding		0.00	0.09	0.05
Mexico	Ding		0.00	0.08	0.04
Middle East/African Group	Ding		0.00	0.09	0.04
Paraguay	Ding		0.00	0.09	0.04
Peru	Ding		0.00	0.08	0.04

Philippines	Ding	0.00	0.08	0.04
South Africa	Ding	0.00	0.09	0.04
South Korea	Ding	0.00	0.05	0.03
Syria	Ding	0.00	0.08	0.04
Taiwan	Ding	0.00	0.09	0.04
Thailand	Ding	0.00	0.08	0.04
Tunisia	Ding	0.00	0.08	0.04
Turkey	Ding	0.00	0.08	0.04
United States	DC	0.00	0.08	0.04
Venezuela	Ding	0.00	0.07	0.04
Vietnam	Ding	0.00	0.08	0.04
World	n/a	0.00	0.00	0.00
Americas Group	Ding	0.00	0.07	0.04
Argentina	Ding	0.00	0.07	0.04
Asia/Oceania Group	DC	0.00	0.07	0.03
Brazil	Ding	0.00	0.04	0.02
Canada	DC	0.00	0.06	0.03
China	Ding	0.00	0.08	0.04
Colombia	Ding	0.00	0.06	0.03
Egypt	Ding	0.00	0.06	0.03
European Group	DC	0.00	0.06	0.03
European Union	DC	0.00	0.06	0.03
India	Ding	0.05	-1.74	-0.87
Indonesia	Ding	0.00	0.03	0.02
Iran	Ding	0.00	0.07	0.04
Japan	DC	0.00	0.04	0.02
Mexico	Ding	0.00	0.07	0.03
Middle East/African Group	Ding	0.00	0.07	0.04
Paraguay	Ding	0.00	0.07	0.04
Peru	Ding	0.00	0.06	0.03
South Africa	Ding	0.00	0.07	0.04
South Korea	Ding	0.00	0.04	0.02
Thailand	Ding	0.00	0.07	0.03
Tunisia	Ding	0.00	0.07	0.03
Turkey	Ding	0.00	0.06	0.03
United States	DC	0.00	0.07	0.03
Venezuela	Ding	0.00	0.06	0.03
Vietnam	Ding	0.00	0.07	0.04
World	n/a	0.00	-0.01	0.00
Americas Group	Ding	-0.10	4.63	2.29
Argentina	Ding	-0.60	-16.76	-8.76
Asia/Oceania Group	DC	-0.47	-15.02	-7.81
Bangladesh	LDC	-0.14	8.53	4.18
Brazil	Ding	-0.60	-12.61	-6.52
Canada	DC	-0.85	-16.53	-8.64
China	Ding	1.54	554.04	155.74
Colombia	Ding	-0.09	-3.20	-1.61
Egypt	Ding	0.06	11.25	5.47
European Group	DC	-0.39	-12.08	-6.23
European Union	DC	-0.21	-8.85	-4.53
India	Ding	1.28	-4.71	-2.39
Iran	Ding	-0.22	30.70	14.32
Japan	DC	-0.41	-9.65	-4.95
Malaysia	Ding	0.09	12.45	6.04

Mexico	Ding	-0.10	0.11	0.05
Middle East/African Group	Ding	-0.12	0.76	0.38
Morocco	Ding	-0.03	-1.03	-0.52
Paraguay	Ding	-0.57	-16.13	-8.42
Peru	Ding	-0.15	1.07	0.53
Philippines	Ding	0.01	2.02	1.01
South Africa	Ding	-0.24	-0.45	-0.22
South Korea	Ding	-0.59	-12.90	-6.67
Syria	Ding	-0.47	-15.72	-8.20
Taiwan	Ding	0.00	-0.02	-0.01
Thailand	Ding	0.00	-0.09	-0.05
Tunisia	Ding	0.37	-11.08	-5.70
Turkey	Ding	0.40	69.82	30.32
United States	DC	-0.31	-16.51	-8.62
Venezuela	Ding	-0.09	-3.38	-1.71
Vietnam	Ding	-0.10	9.24	4.52
World	n/a	0.17	11.68	5.68

Volume SSM Only

Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Consumer	-0.40	14.60	7.05
Argentina	Ding		-0.80	14.49	7.00
Asia/Oceania Group	DC		-0.31	13.71	6.64
Bangladesh	LDC		-0.35	15.01	7.24
Brazil	Ding		-0.37	7.99	3.92
Canada	DC		-0.18	13.88	6.71
China	Ding		-0.26	15.38	7.42
Colombia	Ding		-0.43	13.00	6.30
Egypt	Ding		-0.39	13.75	6.65
European Group	DC		-0.42	12.83	6.22
European Union	DC		-0.35	11.32	5.51
India	Ding		-5.31	-7.06	-3.60
Indonesia	Ding		-0.08	7.30	3.59
Iran	Ding		-0.43	15.13	7.30
Japan	DC		-0.26	9.74	4.76
Malaysia	Ding		-0.43	15.12	7.29
Mexico	Ding		-0.26	14.67	7.08
Middle East/African Group	Ding		-0.26	15.39	7.42
Paraguay	Ding		-0.43	14.32	6.92
Peru	Ding		-0.26	14.92	7.20
Philippines	Ding		-0.41	12.87	6.24
South Africa	Ding		-0.43	11.60	5.64
South Korea	Ding		-0.18	9.86	4.81
Syria	Ding		-0.26	14.73	7.11
Taiwan	Ding		-0.22	14.97	7.22
Thailand	Ding		-0.43	12.97	6.29
Tunisia	Ding		-0.25	13.78	6.67
Turkey	Ding		-0.18	14.33	6.92
United States	DC		-0.13	15.58	7.51
Venezuela	Ding		-0.39	13.40	6.49
Vietnam	Ding		-0.13	15.58	7.51
World	n/a		-0.23	2.24	1.11

Americas Group	Ding	0.54	15.62	7.53
Argentina	Ding	0.49	15.91	7.66
Asia/Oceania Group	DC	0.55	14.53	7.02
Brazil	Ding	0.48	8.61	4.22
Canada	DC	0.56	14.55	7.03
China	Ding	0.47	15.85	7.63
Colombia	Ding	0.54	13.94	6.74
Egypt	Ding	0.56	14.74	7.11
European Group	DC	0.53	13.74	6.65
European Union	DC	0.55	12.17	5.91
India	Ding	11.11	3.46	1.71
Indonesia	Ding	0.47	7.40	3.63
Iran	Ding	0.49	15.95	7.68
Japan	DC	0.59	10.61	5.17
Mexico	Ding	0.54	15.39	7.42
Middle East/African Group	Ding	0.50	15.99	7.70
Paraguay	Ding	0.52	15.24	7.35
Peru	Ding	0.64	15.98	7.69
South Africa	Ding	0.50	12.48	6.06
South Korea	Ding	0.58	10.57	5.15
Thailand	Ding	0.52	13.90	6.72
Tunisia	Ding	0.51	14.37	6.95
Turkey	Ding	0.56	15.02	7.25
United States	DC	0.72	16.30	7.84
Venezuela	Ding	0.54	14.30	6.91
Vietnam	Ding	0.49	15.93	7.67
World	n/a	0.93	15.48	7.46
Americas Group	Ding	14.62	5016.35	615.29
Argentina	Ding	-21.50	-48.06	-27.93
Asia/Oceania Group	DC	-16.49	-49.91	-29.23
Bangladesh	LDC	-14.72	1326.60	277.70
Brazil	Ding	-21.80	-51.42	-30.30
Canada	DC	-28.95	-55.72	-33.46
China	Ding	70.35	2266.49	386.47
Colombia	Ding	-14.61	-40.21	-22.68
Egypt	Ding	2.00	1327.14	277.78
European Group	DC	-14.59	-38.98	-21.89
European Union	DC	-7.74	-48.99	-28.58
India	Ding	34.61	653.63	174.52
Iran	Ding	-8.62	153.83	59.32
Japan	DC	-16.09	-42.14	-23.93
Malaysia	Ding	65.33	-56.97	-34.40
Mexico	Ding	52.03	8821.87	844.56
Middle East/African Group	Ding	3.88	3154.63	470.49
Morocco	Ding	-3.30	56.86	25.24
Paraguay	Ding	-20.45	-48.76	-28.42
Peru	Ding	-12.96	505.15	146.00
Philippines	Ding	19.53	6565.59	716.43
South Africa	Ding	-8.46	-10.56	-5.43
South Korea	Ding	-20.70	-48.43	-28.19
Syria	Ding	-17.17	-47.82	-27.77
Taiwan	Ding	-12.59	336.92	109.03
Thailand	Ding	1.85	-26.08	-14.02
Tunisia	Ding	2.73	1280.63	271.57

Turkey	Ding	59.19	568.87	158.63
United States	DC	-11.74	-44.41	-25.44
Venezuela	Ding	-15.08	-44.45	-25.47
Vietnam	Ding	-9.32	197.07	72.36
World	n/a	10.66	13.47	6.52

Country	Development Status	Variable	%	Full SSM	
				% Change Variance	% Change St. Dev.
Americas Group	Ding	Consumer	-0.39	14.71	7.10
Argentina	Ding		-0.79	14.58	7.04
Asia/Oceania Group	DC		-0.31	13.79	6.67
Bangladesh	LDC		-0.35	15.10	7.28
Brazil	Ding		-0.37	8.03	3.94
Canada	DC		-0.18	13.95	6.75
China	Ding		-0.26	15.47	7.46
Colombia	Ding		-0.43	13.08	6.34
Egypt	Ding		-0.39	13.82	6.69
European Group	DC		-0.42	12.91	6.26
European Union	DC		-0.34	11.39	5.54
India	Ding		-5.31	-6.84	-3.48
Indonesia	Ding		-0.08	7.33	3.60
Iran	Ding		-0.43	15.22	7.34
Japan	DC		-0.26	9.79	4.78
Malaysia	Ding		-0.43	15.21	7.34
Mexico	Ding		-0.26	14.75	7.12
Middle East/African Group	Ding		-0.26	15.47	7.46
Paraguay	Ding		-0.43	14.40	6.96
Peru	Ding		-0.26	15.00	7.24
Philippines	Ding		-0.41	12.95	6.28
South Africa	Ding		-0.42	11.67	5.67
South Korea	Ding		-0.18	9.90	4.84
Syria	Ding		-0.26	14.82	7.15
Taiwan	Ding		-0.22	15.05	7.26
Thailand	Ding		-0.43	13.04	6.32
Tunisia	Ding		-0.25	13.86	6.71
Turkey	Ding		-0.18	14.40	6.96
United States	DC		-0.13	15.66	7.55
Venezuela	Ding		-0.39	13.48	6.53
Vietnam	Ding		-0.13	15.66	7.55
World	n/a		-0.23	2.25	1.12
Americas Group	Ding	Producer	0.54	15.71	7.57
Argentina	Ding		0.48	15.99	7.70
Asia/Oceania Group	DC		0.55	14.59	7.05
Brazil	Ding		0.47	8.65	4.23
Canada	DC		0.56	14.61	7.06
China	Ding		0.47	15.92	7.67
Colombia	Ding		0.53	14.00	6.77
Egypt	Ding		0.56	14.80	7.14
European Group	DC		0.53	13.81	6.68
European Union	DC		0.55	12.23	5.94
India	Ding		11.10	3.68	1.82
Indonesia	Ding		0.47	7.43	3.65

Iran	Ding	0.49	16.02	7.71
Japan	DC	0.59	10.65	5.19
Mexico	Ding	0.53	15.46	7.45
Middle East/African Group	Ding	0.50	16.06	7.73
Paraguay	Ding	0.52	15.31	7.38
Peru	Ding	0.64	16.05	7.72
South Africa	Ding	0.50	12.54	6.08
South Korea	Ding	0.58	10.61	5.17
Thailand	Ding	0.52	13.96	6.75
Tunisia	Ding	0.51	14.45	6.98
Turkey	Ding	0.56	15.08	7.28
United States	DC	0.71	16.37	7.87
Venezuela	Ding	0.53	14.36	6.94
Vietnam	Ding	0.49	16.00	7.70
World	n/a	0.93	15.57	7.50
Americas Group	Ding	14.45	5017.66	615.38
Argentina	Ding	-21.49	-48.82	-28.46
Asia/Oceania Group	DC	-16.48	-50.64	-29.75
Bangladesh	LDC	-13.92	1600.08	312.32
Brazil	Ding	-21.80	-52.02	-30.74
Canada	DC	-28.94	-56.43	-33.99
China	Ding	70.33	2250.97	384.87
Colombia	Ding	-13.62	-18.03	-9.46
Egypt	Ding	2.61	1259.73	268.75
European Group	DC	-14.58	-39.61	-22.29
European Union	DC	-7.73	-49.33	-28.82
India	Ding	34.60	655.07	174.78
Iran	Ding	-8.62	157.18	60.37
Japan	DC	-16.08	-42.76	-24.34
Malaysia	Ding	65.34	-56.91	-34.36
Mexico	Ding	51.36	9099.32	859.13
Middle East/African Group	Ding	3.82	3132.69	468.57
Morocco	Ding	-3.05	38.07	17.50
Paraguay	Ding	-20.44	-49.50	-28.93
Peru	Ding	-12.47	517.31	148.46
Philippines	Ding	19.56	6617.61	719.61
South Africa	Ding	-8.45	-10.28	-5.28
South Korea	Ding	-20.69	-49.05	-28.62
Syria	Ding	-17.16	-48.54	-28.26
Taiwan	Ding	-12.55	334.33	108.41
Thailand	Ding	1.85	-25.95	-13.95
Tunisia	Ding	2.81	1270.19	270.16
Turkey	Ding	59.19	571.23	159.08
United States	DC	-11.73	-45.24	-26.00
Venezuela	Ding	-14.06	-18.95	-9.97
Vietnam	Ding	-8.87	171.58	64.80
World	n/a	10.65	13.41	6.49

Table U: Exchange Rate Shocks Only Tariff Revenue Effects

Country	Development Status	Commodity	% Change	Price SSM Only	
				% Change Variance	% Change St. Dev.

Asia/Oceania Group	DC	-0.54	-5.77	-2.93
Bangladesh	LDC	-0.06	1.24	0.62
China	Ding	0.71	-26.59	-14.32
Colombia	Ding	-0.03	-0.80	-0.40
Egypt	Ding	0.00	-4.46	-2.25
European Group	DC	-0.60	-2.27	-1.14
European Union	DC	103.12	-0.67	-0.34
Indonesia	Ding	117.67	1.96	0.97
Iran	Ding	-0.12	4.03	2.00
Japan	DC	-48.85	2.23	1.11
Malaysia	Ding	n/a	n/a	n/a
Mexico	Ding	-0.05	0.32	0.16
Middle East/African Group	Ding	-0.08	3.79	1.88
Morocco	Ding	-0.02	0.01	0.01
Peru	Ding	-0.05	-0.50	-0.25
Philippines	Ding	-0.01	-1.95	-0.98
South Korea	Ding	-0.18	2.65	1.31
Syria	Ding	-0.20	10.04	4.90
Taiwan	Ding	0.00	0.14	0.07
Thailand	Ding	0.00	0.20	0.10
Tunisia	Ding	0.16	-8.01	-4.09
Turkey	Ding	0.05	-2.77	-1.39
Venezuela	Ding	-0.09	-4.33	-2.19
Vietnam	Ding	-0.01	0.44	0.22
World	n/a	0.30	-16.17	-8.44
Algeria	Ding	0.00	0.28	0.14
Americas Group	Ding	0.06	10.25	5.00
Asia/Oceania Group	DC	0.04	-9.72	-4.98
Bangladesh	LDC	0.02	-0.18	-0.09
Canada	DC	0.31	-11.16	-5.74
China	Ding	1.71	-53.28	-31.65
Colombia	Ding	0.01	0.66	0.33
Dominican Republic	Ding	0.00	0.21	0.10
Egypt	Ding	-0.03	5.84	2.88
European Group	DC	0.33	-10.10	-5.18
European Union	DC	0.62	3.00	1.49
Indonesia	Ding	-223.10	9.57	4.68
Iran	Ding	0.09	17.85	8.56
Japan	DC	0.65	-9.37	-4.80
Malaysia	Ding	n/a	n/a	n/a
Mexico	Ding	0.10	-0.14	-0.07
Middle East/African Group	Ding	0.03	-0.44	-0.22
Morocco	Ding	0.02	6.06	2.99
Peru	Ding	0.00	0.26	0.13
Philippines	Ding	0.00	0.46	0.23
South Africa	Ding	0.01	-0.66	-0.33
South Korea	Ding	0.11	-3.37	-1.70
Syria	Ding	0.17	-12.74	-6.59
Taiwan	Ding	0.00	-0.01	0.00
Thailand	Ding	0.00	0.13	0.07
Tunisia	Ding	-0.11	44.39	20.16
Turkey	Ding	-0.15	15.49	7.47
Venezuela	Ding	0.00	0.45	0.23
Vietnam	Ding	0.00	0.29	0.14

World	n/a	-0.21	19.42	9.28
Algeria	Ding	-0.07	5.04	2.49
Americas Group	Ding	0.37	20.37	9.71
Asia/Oceania Group	DC	0.01	-0.49	-0.24
Bangladesh	LDC	0.22	-12.96	-6.71
Canada	DC	2.35	-12.56	-6.49
China	Ding	-2.72	-26.20	-14.09
Colombia	Ding	0.37	-14.55	-7.56
Dominican Republic	Ding	0.59	-19.63	-10.35
Egypt	Ding	1.16	-20.66	-10.93
European Group	DC	0.13	-7.39	-3.76
European Union	DC	0.05	-4.71	-2.38
India	Ding	2.38	-49.73	-29.10
Indonesia	Ding	-3.27E+17	2.42E+30	1.56E+16
Iran	Ding	0.01	0.26	0.13
Japan	DC	0.16	-8.00	-4.09
Malaysia	Ding	-2.14	56.76	25.21
Mexico	Ding	0.61	-14.32	-7.44
Middle East/African Group	Ding	0.47	-24.90	-13.34
Morocco	Ding	0.26	-14.57	-7.57
Peru	Ding	0.75	-5.84	-2.97
Philippines	Ding	1.53	78.94	33.77
South Africa	Ding	-0.05	4.63	2.29
South Korea	Ding	0.05	-1.16	-0.58
Syria	Ding	5.13	9.07	4.44
Taiwan	Ding	0.00	0.00	0.00
Tunisia	Ding	2.78	78.25	33.51
Turkey	Ding	2.04	-31.33	-17.13
Venezuela	Ding	0.38	-14.08	-7.31
Vietnam	Ding	0.19	-12.26	-6.33
World	n/a	1.30	-49.72	-29.09

Soybean Oil

Volume SSM Only

Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Asia/Oceania Group	DC		-24.88	0.77	0.38
Bangladesh	LDC		-6.82	6.87	3.38
China	Ding		33.34	32.42	15.07
Colombia	Ding		-4.43	5.72	2.82
Egypt	Ding		0.91	1969.41	354.91
European Group	DC		-28.28	-44.89	-25.77
European Union	DC		-461.51	-12.78	-6.61
Indonesia	Ding		-109.98	8.44	4.14
Iran	Ding		-4.70	24.21	11.45
Japan	DC	Soybean	-63.77	-6.50	-3.30
Malaysia	Ding		n/a	n/a	n/a
Mexico	Ding		22.82	198.27	72.70
Middle East/African Group	Ding		0.68	1418.58	289.69
Morocco	Ding		-1.19	22.42	10.64
Peru	Ding		-4.97	122.94	49.31
Philippines	Ding		6.80	58.02	25.71
South Korea	Ding		-7.82	-7.33	-3.73
Syria	Ding		-8.54	24.36	11.52

Taiwan	Ding	-5.75	-54.31	-32.41
Thailand	Ding	1.26	47.75	21.55
Tunisia	Ding	1.08	-50.43	-29.59
Turkey	Ding	9.18	56.60	25.14
Venezuela	Ding	-15.65	-16.43	-8.58
Vietnam	Ding	-0.79	10.21	4.98
World	n/a	17.05	4.39	2.17
Algeria	Ding	0.89	49.07	22.09
Americas Group	Ding	-7.53	15806.28	1161.20
Asia/Oceania Group	DC	1.59	-20.33	-10.74
Bangladesh	LDC	4.06	92.72	38.82
Canada	DC	14.18	-5.38	-2.73
China	Ding	-26.03	200.06	73.22
Colombia	Ding	2.81	53.18	23.77
Dominican Republic	Ding	0.87	37.30	17.17
Egypt	Ding	0.67	896.89	215.74
European Group	DC	13.54	-39.48	-22.21
European Union	DC	34.16	-50.23	-29.45
Indonesia	Ding	186.43	6.22	3.06
Iran	Ding	3.77	241.55	84.81
Japan	DC	29.36	-23.20	-12.37
Malaysia	Ding	n/a	n/a	n/a
Mexico	Ding	-45.59	4919.76	608.50
Middle East/African Group	Ding	0.97	511.77	147.34
Morocco	Ding	3.72	78.26	33.51
Peru	Ding	2.17	88.69	37.37
Philippines	Ding	1.30	92.42	38.72
South Africa	Ding	2.03	39.83	18.25
South Korea	Ding	6.72	36.61	16.88
Syria	Ding	7.33	-18.77	-9.87
Taiwan	Ding	32.11	400.64	123.75
Thailand	Ding	1.00	29.59	13.84
Tunisia	Ding	-0.37	2191.81	378.73
Turkey	Ding	-21.19	-47.75	-27.72
Venezuela	Ding	2.09	53.56	23.92
Vietnam	Ding	1.53	77.96	33.40
World	n/a	-9.56	524.53	149.91
Algeria	Ding	-3.64	13.20	6.40
Americas Group	Ding	4.04	655.76	174.91
Asia/Oceania Group	DC	1.80	137.90	54.24
Bangladesh	LDC	-3.18	133.03	52.65
Canada	DC	101.75	-16.94	-8.86
China	Ding	-97.58	-89.14	-67.04
Colombia	Ding	-3.87	-5.20	-2.63
Dominican Republic	Ding	-3.60	13.24	6.41
Egypt	Ding	25.69	1666.34	320.28
European Group	DC	6.34	30.68	14.31
European Union	DC	1.62	0.79	0.40
India	Ding	77.50	511.03	147.19
Indonesia	Ding	-1.80E+17	5.09E+30	2.26E+16
Iran	Ding	1.01	112.29	45.70
Japan	DC	8.64	44.13	20.06
Malaysia	Ding	-2351.13	530.11	151.02
Mexico	Ding	-157.28	17864.32	1240.31

Middle East/African Group	Ding	22.22	8880.02	847.63
Morocco	Ding	-4.25	7.39	3.63
Peru	Ding	7.68	5039.30	616.89
Philippines	Ding	21.39	3191.96	473.76
South Africa	Ding	-2.62	20.73	9.88
South Korea	Ding	0.54	-8.74	-4.47
Syria	Ding	250.07	-38.44	-21.54
Taiwan	Ding	800.31	516.98	148.39
Tunisia	Ding	36.40	18851.33	1276.64
Turkey	Ding	90.27	304.36	101.09
Venezuela	Ding	-5.51	-9.35	-4.79
Vietnam	Ding	-3.36	41.35	18.89
World	n/a	5.31	-4.74	-2.40

Full SSM					
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Asia/Oceania Group	DC	Soybean	-24.86	0.30	0.15
Bangladesh	LDC		-6.49	-5.26	-2.67
China	Ding		33.33	33.33	15.47
Colombia	Ding		-4.15	-7.88	-4.02
Egypt	Ding		1.09	1785.98	334.28
European Group	DC		-28.26	-44.98	-25.82
European Union	DC		-341.64	-11.22	-5.78
Indonesia	Ding		310.56	7.94	3.89
Iran	Ding		-4.70	24.65	11.65
Japan	DC		68.81	-6.23	-3.16
Malaysia	Ding		n/a	n/a	n/a
Mexico	Ding		22.49	202.03	73.79
Middle East/African Group	Ding		0.66	1407.91	288.32
Morocco	Ding		-1.07	18.87	9.03
Peru	Ding		-4.82	114.75	46.54
Philippines	Ding		6.80	58.71	25.98
South Korea	Ding		-7.82	-7.14	-3.64
Syria	Ding		-8.53	25.43	12.00
Taiwan	Ding		-5.73	-53.94	-32.13
Thailand	Ding		1.26	47.84	21.59
Tunisia	Ding		1.12	-51.27	-30.19
Turkey	Ding		9.17	56.88	25.25
Venezuela	Ding		-14.73	-24.66	-13.20
Vietnam	Ding		-0.75	6.82	3.35
World	n/a		17.03	1.04	0.52
Algeria	Ding	Soybean Meal	0.89	49.07	22.09
Americas Group	Ding		-7.43	15801.85	1161.03
Asia/Oceania Group	DC		1.59	-21.09	-11.17
Bangladesh	LDC		3.94	108.00	44.22
Canada	DC		14.17	-6.31	-3.21
China	Ding		-25.99	198.82	72.86
Colombia	Ding		2.72	62.57	27.50
Dominican Republic	Ding		0.88	37.29	17.17
Egypt	Ding		-0.20	867.07	210.98
European Group	DC		13.52	-40.07	-22.59
European Union	DC		34.14	-49.98	-29.28

Indonesia	Ding	-140.27	2.27	1.13
Iran	Ding	3.77	244.86	85.70
Japan	DC	29.34	-23.98	-12.81
Malaysia	Ding	n/a	n/a	n/a
Mexico	Ding	-44.91	5082.41	619.89
Middle East/African Group	Ding	0.99	508.72	146.72
Morocco	Ding	3.53	138.90	54.56
Peru	Ding	2.15	90.51	38.03
Philippines	Ding	1.31	92.53	38.75
South Africa	Ding	2.03	39.75	18.22
South Korea	Ding	6.72	36.33	16.76
Syria	Ding	7.32	-19.70	-10.39
Taiwan	Ding	32.02	397.66	123.08
Thailand	Ding	1.00	29.63	13.85
Tunisia	Ding	-0.39	2180.03	377.50
Turkey	Ding	-21.19	-48.22	-28.04
Venezuela	Ding	2.05	57.57	25.53
Vietnam	Ding	1.53	78.27	33.52
World	n/a	-9.53	535.36	152.06
Algeria	Ding	-3.64	13.83	6.69
Americas Group	Ding	4.09	658.59	175.43
Asia/Oceania Group	DC	1.79	138.98	54.59
Bangladesh	LDC	-2.15	109.98	44.91
Canada	DC	101.66	-17.94	-9.42
China	Ding	-97.55	-88.89	-66.67
Colombia	Ding	-2.29	-44.96	-25.81
Dominican Republic	Ding	-1.39	-16.24	-8.48
Egypt	Ding	28.48	1430.29	291.19
European Group	DC	6.33	30.30	14.15
European Union	DC	1.62	1.00	0.50
India	Ding	77.47	511.27	147.24
Indonesia	Ding	7.66E+17	8.66E+30	2.94E+16
Iran	Ding	1.01	113.61	46.15
Japan	DC	8.64	43.41	19.76
Malaysia	Ding	-2350.90	518.13	148.62
Mexico	Ding	-155.38	18266.35	1255.23
Middle East/African Group	Ding	22.16	8886.64	847.98
Morocco	Ding	-3.26	-28.16	-15.24
Peru	Ding	8.75	5095.82	620.82
Philippines	Ding	21.04	3154.71	470.50
South Africa	Ding	-2.62	21.33	10.15
South Korea	Ding	0.53	-8.70	-4.45
Syria	Ding	249.93	-38.16	-21.36
Taiwan	Ding	798.12	512.72	147.53
Tunisia	Ding	36.76	18775.05	1273.87
Turkey	Ding	90.26	307.41	101.84
Venezuela	Ding	-3.95	-44.63	-25.59
Vietnam	Ding	-2.48	13.42	6.50
World	n/a	5.63	0.97	0.48

Table V: Exchange Rate Shocks Only Net Welfare Effects

Price SSM Only

Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Algeria	Ding	Net Welfare	-0.04	3.53	1.75
Americas Group	Ding		0.00	-0.42	-0.21
Argentina	Ding		-0.04	1.96	0.98
Asia/Oceania Group	DC		-0.01	3.23	1.60
Bangladesh	LDC		0.16	-12.32	-6.36
Brazil	Ding		-0.03	0.59	0.30
Canada	DC		-0.02	0.82	0.41
China	Ding		0.33	-51.60	-30.43
Colombia	Ding		0.06	43.70	19.87
Dominican Republic	Ding		0.52	-20.77	-10.99
Egypt	Ding		0.23	99.94	41.40
European Group	DC		-0.06	2.17	1.08
European Union	DC		-0.09	-10.07	-5.17
India	Ding		0.39	-16.67	-8.71
Indonesia	Ding		0.00	0.08	0.04
Iran	Ding		-0.05	7.56	3.71
Japan	DC		-0.04	-2.54	-1.28
Malaysia	Ding		0.01	1.94	0.96
Mexico	Ding		-0.01	-2.68	-1.35
Middle East/African Group	Ding		0.02	-5.61	-2.85
Morocco	Ding		0.10	-9.58	-4.91
Paraguay	Ding		-0.02	0.73	0.37
Peru	Ding		0.15	39.57	18.14
Philippines	Ding		0.01	-2.54	-1.28
South Africa	Ding		-0.01	0.82	0.41
South Korea	Ding		-0.03	-5.93	-3.01
Syria	Ding		-0.14	-16.08	-8.39
Taiwan	Ding		0.00	0.05	0.02
Thailand	Ding		0.00	-0.29	-0.14
Tunisia	Ding		0.35	-36.55	-20.35
Turkey	Ding		0.04	5.54	2.73
United States	DC		-0.04	1.34	0.67
Venezuela	Ding		0.14	-8.99	-4.60
Vietnam	Ding		0.01	-7.88	-4.02

Volume SSM Only

Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Algeria	Ding	Net Welfare	-1.59	23.68	11.21
Americas Group	Ding		2.55	-49.65	-29.04
Argentina	Ding		-1.10	24.82	11.72
Asia/Oceania Group	DC		-0.38	37.43	17.23
Bangladesh	LDC		-3.74	179.43	67.16
Brazil	Ding		-0.63	8.88	4.35
Canada	DC		-0.21	18.60	8.90
China	Ding		10.76	-82.17	-57.78
Colombia	Ding		-1.39	-0.21	-0.11
Dominican Republic	Ding		-3.13	15.09	7.28
Egypt	Ding		5.46	19221.37	1290.01
European Group	DC		-1.82	12.56	6.09
European Union	DC		-3.45	-43.89	-25.10

India	Ding	16.96	0.15	0.07
Indonesia	Ding	-0.07	7.33	3.60
Iran	Ding	-1.76	54.10	24.14
Japan	DC	-1.65	3.45	1.71
Malaysia	Ding	6.62	2.25	1.12
Mexico	Ding	14.73	1156.94	254.53
Middle East/African Group	Ding	1.67	421.59	128.38
Morocco	Ding	-2.19	15.26	7.36
Paraguay	Ding	-0.20	18.14	8.69
Peru	Ding	1.53	11086.74	957.67
Philippines	Ding	2.99	-35.25	-19.53
South Africa	Ding	-0.01	22.40	10.64
South Korea	Ding	-1.31	-8.85	-4.53
Syria	Ding	-4.69	-54.53	-32.57
Taiwan	Ding	-2.41	96.33	40.12
Thailand	Ding	0.77	58.48	25.89
Tunisia	Ding	4.44	3701.20	516.54
Turkey	Ding	3.20	17.37	8.34
United States	DC	-0.78	22.18	10.53
Venezuela	Ding	-2.01	13.58	6.58
Vietnam	Ding	0.07	170.90	64.59

Full SSM					
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Algeria	Ding	Net Welfare	-1.59	24.13	11.41
Americas Group	Ding		2.53	-49.42	-28.88
Argentina	Ding		-1.10	25.04	11.82
Asia/Oceania Group	DC		-0.38	37.71	17.35
Bangladesh	LDC		-2.84	159.14	60.98
Brazil	Ding		-0.63	8.95	4.38
Canada	DC		-0.21	18.71	8.95
China	Ding		10.76	-81.64	-57.15
Colombia	Ding		-1.05	225.09	80.30
Dominican Republic	Ding		-1.15	-22.14	-11.76
Egypt	Ding		6.22	17649.38	1232.27
European Group	DC		-1.82	12.81	6.21
European Union	DC		-3.45	-44.38	-25.42
India	Ding		16.95	0.42	0.21
Indonesia	Ding		-0.07	7.42	3.64
Iran	Ding		-1.76	54.89	24.46
Japan	DC		-1.65	3.35	1.66
Malaysia	Ding		6.62	2.27	1.13
Mexico	Ding		14.54	1199.59	260.50
Middle East/African Group	Ding		1.66	420.58	128.16
Morocco	Ding		-1.72	-14.41	-7.49
Paraguay	Ding		-0.20	18.26	8.75
Peru	Ding		1.77	11218.97	963.91
Philippines	Ding		2.99	-35.15	-19.47
South Africa	Ding		-0.01	22.51	10.68
South Korea	Ding		-1.31	-9.14	-4.68
Syria	Ding		-4.69	-54.59	-32.61
Taiwan	Ding		-2.41	95.81	39.93

Thailand	Ding	0.77	58.51	25.90
Tunisia	Ding	4.49	3679.44	514.77
Turkey	Ding	3.20	17.33	8.32
United States	DC	-0.78	22.35	10.61
Venezuela	Ding	-1.37	-16.13	-8.42
Vietnam	Ding	0.11	128.96	51.31

Table W: Full Stochastic Model DDA Tariff Cuts Price Effects

Country	Development Status	Commodity	%	DDA Cuts- No SSM	
				% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	-3.29	-3.62	-1.82
Argentina	Ding		0.48	1.21	0.60
Asia/Oceania Group	DC		0.49	1.16	0.58
Bangladesh	LDC		0.48	1.00	0.50
Brazil	Ding		0.48	1.03	0.51
Canada	DC		0.48	0.97	0.48
China	Ding		0.48	1.21	0.61
Colombia	Ding		0.48	1.05	0.53
Egypt	Ding		0.48	1.07	0.53
European Group	DC		-0.41	-1.00	-0.50
European Union	DC		0.48	0.82	0.41
India	Ding		-0.75	-22.09	-11.73
Indonesia	Ding		0.48	0.95	0.48
Iran	Ding		0.48	1.18	0.59
Japan	DC		0.48	0.91	0.45
Malaysia	Ding		0.48	1.21	0.60
Mexico	Ding		0.48	1.04	0.52
Middle East/African Group	Ding		0.48	1.20	0.60
Morocco	Ding		0.48	0.88	0.44
Paraguay	Ding		0.48	1.10	0.55
Peru	Ding		0.48	1.22	0.61
Philippines	Ding		0.48	0.85	0.43
South Africa	Ding		0.70	6.60	3.25
South Korea	Ding		0.48	0.97	0.49
Syria	Ding		0.48	1.11	0.55
Taiwan	Ding		-1.43	-2.67	-1.34
Thailand	Ding		0.48	1.10	0.55
Tunisia	Ding		-4.67	-9.25	-4.74
Turkey	Ding		0.48	1.18	0.59
Venezuela	Ding		0.48	1.10	0.55
Vietnam	Ding		0.48	1.21	0.60
United States	DC		0.62	1.21	0.60
World	n/a		0.48	1.21	0.60
Algeria	Ding	Soybean Meal	1.43	2.35	1.17
Americas Group	Ding		1.43	3.54	1.75
Argentina	Ding		1.43	3.79	1.88
Asia/Oceania Group	DC		1.43	2.98	1.48
Bangladesh	LDC		1.43	3.13	1.56
Brazil	Ding		1.43	2.93	1.45
Canada	DC		-0.04	0.08	0.04

China	Ding	-1.36	-0.91	-0.45
Colombia	Ding	1.43	2.90	1.44
Dominican Republic	Ding	1.43	2.98	1.48
Egypt	Ding	1.43	3.35	1.66
European Group	DC	1.43	2.34	1.16
European Union	DC	1.43	2.42	1.20
India	Ding	1.43	2.93	1.45
Indonesia	Ding	1.43	2.87	1.43
Iran	Ding	1.43	3.77	1.87
Japan	DC	-0.52	-0.94	-0.47
Malaysia	Ding	1.43	3.79	1.88
Mexico	Ding	0.57	1.54	0.77
Middle East/African Group	Ding	1.43	3.78	1.87
Morocco	Ding	-1.42	-3.17	-1.60
Paraguay	Ding	1.43	3.29	1.63
Peru	Ding	1.43	3.03	1.51
Philippines	Ding	1.43	2.65	1.32
South Africa	Ding	1.43	2.94	1.46
South Korea	Ding	1.43	2.98	1.48
Syria	Ding	1.43	3.17	1.57
Taiwan	Ding	-0.50	-0.61	-0.30
Thailand	Ding	-9.43	-17.83	-9.35
Tunisia	Ding	1.43	2.26	1.12
Turkey	Ding	-5.16	-9.66	-4.95
Venezuela	Ding	1.43	3.01	1.50
Vietnam	Ding	1.43	3.79	1.88
World	n/a	1.43	3.79	1.88
Algeria	Ding	1.90	6.34	3.12
Americas Group	Ding	1.90	6.00	2.96
Argentina	Ding	1.90	6.31	3.11
Asia/Oceania Group	DC	1.90	4.30	2.13
Bangladesh	LDC	1.90	5.53	2.73
Brazil	Ding	1.89	2.32	1.15
Canada	DC	-0.53	-1.21	-0.60
China	Ding	-9.58	-16.29	-8.51
Colombia	Ding	1.90	5.49	2.71
Dominican Republic	Ding	1.90	5.02	2.48
Egypt	Ding	0.08	-0.30	-0.15
European Group	DC	-3.95	-5.84	-2.96
European Union	DC	-1.43	-1.21	-0.61
India	Ding	-8.64	-15.26	-7.95
Indonesia	Ding	1.90	3.84	1.90
Iran	Ding	1.90	6.33	3.11
Japan	DC	-5.73	-10.42	-5.35
Malaysia	Ding	-0.04	2.30	1.14
Mexico	Ding	1.90	5.42	2.67
Middle East/African Group	Ding	1.90	6.39	3.15
Morocco	Ding	1.90	5.38	2.66
Paraguay	Ding	1.90	5.41	2.67
Peru	Ding	1.90	6.34	3.12
Philippines	Ding	1.90	4.72	2.33
South Africa	Ding	1.90	4.67	2.31

Soybean Oil

South Korea	Ding	1.89	2.83	1.41
Syria	Ding	1.90	5.26	2.60
Taiwan	Ding	-2.08	10.44	5.09
Thailand	Ding	13.38	-58.93	-35.92
Tunisia	Ding	-4.73	-7.10	-3.61
Turkey	Ding	-4.63	-9.37	-4.80
Venezuela	Ding	1.90	5.74	2.83
Vietnam	Ding	1.90	6.31	3.11
World	n/a	1.90	6.31	3.11

DDA Cuts- Price SSM Only					
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	0.00	0.03	0.01
Argentina	Ding		0.00	0.04	0.02
Asia/Oceania Group	DC		0.00	0.02	0.01
Bangladesh	LDC		0.00	0.03	0.01
Brazil	Ding		0.00	0.00	0.00
Canada	DC		0.00	0.01	0.01
China	Ding		0.00	0.04	0.02
Colombia	Ding		0.00	0.01	0.01
Egypt	Ding		0.00	0.01	0.01
European Group	DC		0.00	0.01	0.00
European Union	DC		0.00	0.01	0.00
India	Ding		0.00	-0.03	-0.01
Indonesia	Ding		0.00	0.00	0.00
Iran	Ding		0.00	0.04	0.02
Japan	DC		0.00	0.00	0.00
Malaysia	Ding		0.00	0.04	0.02
Mexico	Ding		0.00	0.02	0.01
Middle East/African Group	Ding		0.00	0.04	0.02
Morocco	Ding		0.00	0.02	0.01
Paraguay	Ding		0.00	0.02	0.01
Peru	Ding		0.00	0.02	0.01
Philippines	Ding		0.00	0.01	0.01
South Africa	Ding		0.00	0.01	0.00
South Korea	Ding		0.00	0.00	0.00
Syria	Ding		0.00	0.02	0.01
Taiwan	Ding		0.00	0.03	0.02
Thailand	Ding		0.00	0.02	0.01
Tunisia	Ding		0.00	0.01	0.01
Turkey	Ding		0.00	0.02	0.01
Venezuela	Ding		0.00	0.01	0.00
Vietnam	Ding		0.00	0.04	0.02
United States	DC		0.00	0.04	0.02
World	n/a		0.00	0.04	0.02
Algeria	Ding	Soybean Meal	0.00	0.00	0.00
Americas Group	Ding		0.00	-0.01	0.00
Argentina	Ding		0.00	-0.01	-0.01
Asia/Oceania Group	DC		0.00	0.00	0.00
Bangladesh	LDC		0.00	-0.01	0.00
Brazil	Ding		0.00	0.00	0.00

Canada	DC	0.00	0.00	0.00
China	Ding	0.00	-0.01	-0.01
Colombia	Ding	0.00	0.00	0.00
Dominican Republic	Ding	0.00	0.00	0.00
Egypt	Ding	0.00	0.00	0.00
European Group	DC	0.00	0.00	0.00
European Union	DC	0.00	0.00	0.00
India	Ding	0.00	-0.01	0.00
Indonesia	Ding	0.00	0.00	0.00
Iran	Ding	0.00	-0.01	-0.01
Japan	DC	0.00	0.00	0.00
Malaysia	Ding	0.00	-0.01	-0.01
Mexico	Ding	0.00	0.00	0.00
Middle East/African Group	Ding	0.00	-0.01	-0.01
Morocco	Ding	0.00	0.00	0.00
Paraguay	Ding	0.00	-0.01	0.00
Peru	Ding	0.00	-0.01	0.00
Philippines	Ding	0.00	0.00	0.00
South Africa	Ding	0.00	0.00	0.00
South Korea	Ding	0.00	0.00	0.00
Syria	Ding	0.00	0.00	0.00
Taiwan	Ding	0.00	-0.01	0.00
Thailand	Ding	0.00	0.00	0.00
Tunisia	Ding	0.00	0.00	0.00
Turkey	Ding	0.00	0.00	0.00
Venezuela	Ding	0.00	0.00	0.00
Vietnam	Ding	0.00	-0.01	-0.01
World	n/a	0.00	-0.01	-0.01
Algeria	Ding	0.00	0.06	0.03
Americas Group	Ding	0.00	0.17	0.08
Argentina	Ding	0.00	0.20	0.10
Asia/Oceania Group	DC	0.00	0.09	0.05
Bangladesh	LDC	0.00	0.17	0.08
Brazil	Ding	0.00	0.00	0.00
Canada	DC	0.00	0.08	0.04
China	Ding	0.00	-0.06	-0.03
Colombia	Ding	0.00	0.06	0.03
Dominican Republic	Ding	0.00	0.12	0.06
Egypt	Ding	0.00	0.10	0.05
European Group	DC	0.00	0.05	0.02
European Union	DC	0.00	0.03	0.02
India	Ding	0.03	-2.97	-1.49
Indonesia	Ding	0.09	-4.07	-2.05
Iran	Ding	0.00	0.20	0.10
Japan	DC	0.00	0.02	0.01
Malaysia	Ding	0.00	0.20	0.10
Mexico	Ding	0.00	0.11	0.06
Middle East/African Group	Ding	0.00	0.20	0.10
Morocco	Ding	0.00	0.08	0.04
Paraguay	Ding	0.00	0.14	0.07
Peru	Ding	0.00	0.12	0.06
Philippines	Ding	0.00	0.06	0.03

Soybean Oil

South Africa	Ding	0.00	0.08	0.04
South Korea	Ding	0.00	0.02	0.01
Syria	Ding	0.00	0.13	0.06
Taiwan	Ding	0.00	0.08	0.04
Thailand	Ding	0.00	0.07	0.04
Tunisia	Ding	0.00	-0.10	-0.05
Turkey	Ding	0.00	0.13	0.06
Venezuela	Ding	0.00	0.07	0.03
Vietnam	Ding	0.00	0.20	0.10
World	n/a	0.00	0.20	0.10

DDA Cuts- Volume SSM Only					
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	1.78	182.40	68.05
Argentina	Ding		0.52	16.93	8.13
Asia/Oceania Group	DC		0.50	5.00	2.47
Bangladesh	LDC		0.52	13.07	6.34
Brazil	Ding		0.51	1.12	0.56
Canada	DC		0.52	5.53	2.73
China	Ding		0.52	16.94	8.14
Colombia	Ding		0.52	5.31	2.62
Egypt	Ding		0.52	7.15	3.51
European Group	DC		0.52	3.59	1.78
European Union	DC		0.52	2.07	1.03
India	Ding		8.07	157.95	60.61
Indonesia	Ding		0.51	1.20	0.60
Iran	Ding		0.52	16.90	8.12
Japan	DC		0.52	2.03	1.01
Malaysia	Ding		0.52	16.93	8.13
Mexico	Ding		0.52	9.39	4.59
Middle East/African Group	Ding		0.52	17.07	8.20
Morocco	Ding		0.52	5.20	2.57
Paraguay	Ding		0.52	9.34	4.57
Peru	Ding		0.52	10.40	5.07
Philippines	Ding		0.52	3.72	1.85
South Africa	Ding		0.13	-7.86	-4.01
South Korea	Ding		0.52	1.97	0.98
Syria	Ding		0.52	9.62	4.70
Taiwan	Ding		0.52	10.68	5.20
Thailand	Ding		0.52	5.64	2.78
Tunisia	Ding		0.52	4.88	2.41
Turkey	Ding		0.52	7.79	3.82
Venezuela	Ding		0.52	6.18	3.04
Vietnam	Ding		0.52	16.93	8.13
United States	DC		0.66	16.93	8.13
World	n/a		0.52	16.93	8.13
Algeria	Ding	Soybean Meal	2.00	11.63	5.66
Americas Group	Ding		2.01	58.16	25.76
Argentina	Ding		2.01	93.05	38.94
Asia/Oceania Group	DC		2.00	21.52	10.24
Bangladesh	LDC		2.00	57.44	25.48

Brazil	Ding	2.00	4.33	2.14
Canada	DC	2.00	20.29	9.68
China	Ding	-3.37	-68.56	-43.93
Colombia	Ding	2.01	15.58	7.51
Dominican Republic	Ding	2.00	13.66	6.61
Egypt	Ding	2.01	27.27	12.81
European Group	DC	2.00	5.79	2.85
European Union	DC	1.99	0.97	0.48
India	Ding	2.00	13.20	6.40
Indonesia	Ding	2.00	4.98	2.46
Iran	Ding	2.01	92.49	38.74
Japan	DC	2.01	7.99	3.92
Malaysia	Ding	2.01	93.05	38.94
Mexico	Ding	2.01	40.79	18.66
Middle East/African Group	Ding	2.01	95.57	39.85
Morocco	Ding	2.00	11.24	5.47
Paraguay	Ding	2.01	35.55	16.42
Peru	Ding	2.01	42.79	19.50
Philippines	Ding	2.00	11.36	5.53
South Africa	Ding	2.00	9.92	4.84
South Korea	Ding	2.01	7.87	3.86
Syria	Ding	2.00	31.94	14.86
Taiwan	Ding	2.01	41.94	19.14
Thailand	Ding	2.01	18.32	8.78
Tunisia	Ding	2.00	9.67	4.72
Turkey	Ding	2.01	28.08	13.17
Venezuela	Ding	2.01	19.96	9.53
Vietnam	Ding	2.01	93.05	38.94
World	n/a	2.01	93.05	38.94
Algeria	Ding	-6.74	-11.03	-5.68
Americas Group	Ding	3.39	1578.14	309.65
Argentina	Ding	-6.75	-15.11	-7.86
Asia/Oceania Group	DC	-6.75	-13.76	-7.14
Bangladesh	LDC	-6.75	-14.11	-7.33
Brazil	Ding	-6.75	-13.53	-7.01
Canada	DC	-6.75	-14.02	-7.27
China	Ding	30.26	65.63	28.70
Colombia	Ding	-6.75	-12.24	-6.32
Dominican Republic	Ding	-6.75	-13.52	-7.01
Egypt	Ding	-4.07	382.77	119.72
European Group	DC	-6.74	-10.80	-5.55
European Union	DC	-6.74	-10.87	-5.59
India	Ding	25.92	78.78	33.71
Indonesia	Ding	-6.73	-13.89	-7.21
Iran	Ding	-6.75	-14.94	-7.77
Japan	DC	-6.75	-14.30	-7.43
Malaysia	Ding	9.84	-15.88	-8.28
Mexico	Ding	15.92	973.85	227.70
Middle East/African Group	Ding	-6.67	-6.94	-3.53
Morocco	Ding	-6.75	-11.91	-6.14
Paraguay	Ding	-6.75	-14.48	-7.52
Peru	Ding	-6.75	-13.07	-6.76

Soybean Oil

Philippines	Ding	1.13	433.54	130.98
South Africa	Ding	-6.75	-13.86	-7.19
South Korea	Ding	-6.75	-14.12	-7.33
Syria	Ding	-6.75	-13.12	-6.79
Taiwan	Ding	-4.65	-25.25	-13.54
Thailand	Ding	-1.75	-20.63	-10.91
Tunisia	Ding	-5.25	7.27	3.57
Turkey	Ding	25.44	28.30	13.27
Venezuela	Ding	-6.75	-13.23	-6.85
Vietnam	Ding	-6.75	-15.11	-7.86
World	n/a	-6.75	-15.11	-7.86

DDA Cuts- Full SSM					
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	1.77	179.89	67.30
Argentina	Ding		0.52	16.91	8.13
Asia/Oceania Group	DC		0.50	5.02	2.48
Bangladesh	LDC		0.52	13.05	6.33
Brazil	Ding		0.51	1.12	0.56
Canada	DC		0.52	5.53	2.73
China	Ding		0.52	16.92	8.13
Colombia	Ding		0.52	5.31	2.62
Egypt	Ding		0.52	7.15	3.51
European Group	DC		0.52	3.56	1.76
European Union	DC		0.52	2.05	1.02
India	Ding		8.07	157.96	60.61
Indonesia	Ding		0.51	1.20	0.60
Iran	Ding		0.52	16.88	8.11
Japan	DC		0.52	2.03	1.01
Malaysia	Ding		0.52	16.91	8.13
Mexico	Ding		0.52	9.39	4.59
Middle East/African Group	Ding		0.52	17.05	8.19
Morocco	Ding		0.52	5.17	2.55
Paraguay	Ding		0.52	9.35	4.57
Peru	Ding		0.52	10.38	5.06
Philippines	Ding		0.52	3.73	1.85
South Africa	Ding		0.13	-7.85	-4.01
South Korea	Ding		0.52	1.98	0.99
Syria	Ding		0.52	9.60	4.69
Taiwan	Ding		0.52	10.68	5.21
Thailand	Ding		0.52	5.66	2.79
Tunisia	Ding		0.52	4.83	2.39
Turkey	Ding		0.52	7.81	3.83
Venezuela	Ding		0.52	6.16	3.04
Vietnam	Ding		0.52	16.91	8.13
United States	DC		0.66	16.91	8.13
World	n/a		0.52	16.91	8.13
Algeria	Ding	Soybean Meal	2.00	11.64	5.66
Americas Group	Ding		2.01	58.18	25.77
Argentina	Ding		2.01	93.02	38.93
Asia/Oceania Group	DC		2.01	21.52	10.24

Bangladesh	LDC	2.01	57.43	25.47
Brazil	Ding	2.00	4.35	2.15
Canada	DC	2.01	20.30	9.68
China	Ding	-3.37	-68.58	-43.95
Colombia	Ding	2.01	15.60	7.52
Dominican Republic	Ding	2.01	13.64	6.60
Egypt	Ding	2.01	27.25	12.80
European Group	DC	2.00	5.82	2.87
European Union	DC	2.00	0.99	0.49
India	Ding	2.01	13.22	6.40
Indonesia	Ding	2.00	4.98	2.46
Iran	Ding	2.01	92.46	38.73
Japan	DC	2.01	7.98	3.91
Malaysia	Ding	2.01	93.02	38.93
Mexico	Ding	2.01	40.83	18.67
Middle East/African Group	Ding	2.01	95.54	39.83
Morocco	Ding	2.00	11.21	5.46
Paraguay	Ding	2.01	35.55	16.43
Peru	Ding	2.01	42.80	19.50
Philippines	Ding	2.00	11.40	5.54
South Africa	Ding	2.01	9.95	4.86
South Korea	Ding	2.01	7.88	3.86
Syria	Ding	2.01	31.97	14.88
Taiwan	Ding	2.01	41.95	19.14
Thailand	Ding	2.01	18.35	8.79
Tunisia	Ding	2.00	9.67	4.72
Turkey	Ding	2.01	28.08	13.17
Venezuela	Ding	2.01	19.96	9.53
Vietnam	Ding	2.01	93.02	38.93
World	n/a	2.01	93.02	38.93
Algeria	Ding	-6.74	-11.10	-5.72
Americas Group	Ding	3.20	1580.50	309.94
Argentina	Ding	-6.74	-15.17	-7.90
Asia/Oceania Group	DC	-6.74	-13.77	-7.14
Bangladesh	LDC	-6.74	-14.19	-7.36
Brazil	Ding	-6.74	-13.48	-6.98
Canada	DC	-6.74	-14.01	-7.27
China	Ding	30.26	65.51	28.65
Colombia	Ding	-6.74	-12.81	-6.63
Dominican Republic	Ding	-6.74	-13.65	-7.08
Egypt	Ding	-4.46	323.51	105.79
European Group	DC	-6.74	-10.84	-5.58
European Union	DC	-6.74	-10.90	-5.61
India	Ding	25.92	78.71	33.68
Indonesia	Ding	-6.45	-23.21	-12.37
Iran	Ding	-6.74	-15.00	-7.81
Japan	DC	-6.74	-14.31	-7.43
Malaysia	Ding	9.84	-16.01	-8.35
Mexico	Ding	15.74	1001.50	231.89
Middle East/African Group	Ding	-6.67	-7.03	-3.58
Morocco	Ding	-6.74	-12.02	-6.20
Paraguay	Ding	-6.74	-14.46	-7.51

Peru	Ding	-6.74	-13.11	-6.78
Philippines	Ding	1.11	433.43	130.96
South Africa	Ding	-6.74	-13.85	-7.18
South Korea	Ding	-6.74	-14.08	-7.31
Syria	Ding	-6.74	-13.13	-6.80
Taiwan	Ding	-4.64	-25.24	-13.54
Thailand	Ding	-1.75	-20.73	-10.97
Tunisia	Ding	-5.26	4.29	2.12
Turkey	Ding	25.45	28.32	13.28
Venezuela	Ding	-6.74	-13.97	-7.25
Vietnam	Ding	-6.74	-15.17	-7.90
World	n/a	-6.74	-15.17	-7.90

DDA Cuts- Full SSM Bound to URAA

Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding		-0.35	22.97	10.89
Argentina	Ding		-0.49	-0.02	-0.01
Asia/Oceania Group	DC		-0.50	-0.57	-0.29
Bangladesh	LDC		-0.49	0.78	0.39
Brazil	Ding		-0.49	-0.80	-0.40
Canada	DC		-0.49	-0.24	-0.12
China	Ding		-0.49	-0.02	-0.01
Colombia	Ding		-0.49	-0.73	-0.36
Egypt	Ding		-0.49	-0.71	-0.36
European Group	DC		-0.49	0.14	0.07
European Union	DC		-0.49	-0.19	-0.09
India	Ding		8.53	168.00	63.71
Indonesia	Ding		-0.49	-0.97	-0.48
Iran	Ding		-0.49	0.06	0.03
Japan	DC		-0.49	-0.85	-0.43
Malaysia	Ding		-0.49	-0.02	-0.01
Mexico	Ding		-0.49	-0.87	-0.44
Middle East/African Group	Ding	Soybean	-0.49	0.03	0.01
Morocco	Ding		-0.49	0.20	0.10
Paraguay	Ding		-0.49	-0.54	-0.27
Peru	Ding		-0.49	-0.41	-0.21
Philippines	Ding		-0.49	-0.24	-0.12
South Africa	Ding		-0.61	-3.61	-1.82
South Korea	Ding		-0.49	-0.87	-0.43
Syria	Ding		-0.49	-0.22	-0.11
Taiwan	Ding		-0.49	0.52	0.26
Thailand	Ding		-0.49	-0.06	-0.03
Tunisia	Ding		-0.49	0.27	0.13
Turkey	Ding		-0.49	-0.89	-0.44
Venezuela	Ding		-0.49	-0.93	-0.47
Vietnam	Ding		-0.49	-0.02	-0.01
United States	DC		-0.63	-0.02	-0.01
World	n/a		-0.49	-0.02	-0.01
Algeria	Ding	Soybean	-0.09	-0.51	-0.26
Americas Group	Ding	Meal	-0.09	-0.25	-0.13
Argentina	Ding		-0.09	-0.13	-0.06

Asia/Oceania Group	DC	-0.09	-0.10	-0.05
Bangladesh	LDC	-0.09	-0.14	-0.07
Brazil	Ding	-0.09	-0.12	-0.06
Canada	DC	-0.09	0.01	0.00
China	Ding	-0.09	-0.13	-0.07
Colombia	Ding	-0.09	-0.30	-0.15
Dominican Republic	Ding	-0.09	-0.23	-0.11
Egypt	Ding	-0.09	0.01	0.00
European Group	DC	-0.09	-0.40	-0.20
European Union	DC	-0.09	-0.39	-0.19
India	Ding	-0.09	-0.36	-0.18
Indonesia	Ding	-0.09	-0.15	-0.08
Iran	Ding	-0.09	-0.12	-0.06
Japan	DC	-0.09	-0.09	-0.04
Malaysia	Ding	-0.09	-0.13	-0.06
Mexico	Ding	-0.09	0.05	0.03
Middle East/African Group	Ding	-0.09	-0.15	-0.07
Morocco	Ding	-0.09	-0.40	-0.20
Paraguay	Ding	-0.09	-0.09	-0.04
Peru	Ding	-0.09	-0.39	-0.19
Philippines	Ding	-0.09	-0.15	-0.07
South Africa	Ding	-0.09	-0.28	-0.14
South Korea	Ding	-0.09	-0.08	-0.04
Syria	Ding	-0.09	-0.28	-0.14
Taiwan	Ding	-0.09	-0.27	-0.13
Thailand	Ding	-0.09	-0.23	-0.11
Tunisia	Ding	-0.09	-0.51	-0.25
Turkey	Ding	-0.09	-0.05	-0.02
Venezuela	Ding	-0.09	-0.32	-0.16
Vietnam	Ding	-0.09	-0.13	-0.06
World	n/a	-0.09	-0.13	-0.06
Algeria	Ding	-3.11	-2.98	-1.50
Americas Group	Ding	-2.52	153.13	59.10
Argentina	Ding	-3.11	1.03	0.51
Asia/Oceania Group	DC	-3.11	-2.11	-1.06
Bangladesh	LDC	-3.11	1.37	0.68
Brazil	Ding	-3.11	-5.70	-2.89
Canada	DC	-3.11	-1.10	-0.55
China	Ding	9.20	28.31	13.27
Colombia	Ding	-3.11	-4.10	-2.07
Dominican Republic	Ding	-3.11	-1.92	-0.97
Egypt	Ding	-3.11	-2.24	-1.12
European Group	DC	-3.11	-2.96	-1.49
European Union	DC	-3.11	-4.16	-2.10
India	Ding	29.21	220.02	78.89
Indonesia	Ding	-2.96	-11.74	-6.05
Iran	Ding	-3.11	1.11	0.56
Japan	DC	-3.11	-5.34	-2.71
Malaysia	Ding	-1.44	14.12	6.82
Mexico	Ding	-0.37	259.63	89.64
Middle East/African Group	Ding	-3.11	0.99	0.50
Morocco	Ding	-3.11	-2.64	-1.33

Soybean Oil

Paraguay	Ding	-3.11	-2.34	-1.18
Peru	Ding	-3.11	-1.31	-0.66
Philippines	Ding	-2.65	-9.99	-5.12
South Africa	Ding	-3.11	-3.40	-1.72
South Korea	Ding	-3.11	-5.24	-2.65
Syria	Ding	-3.11	-2.22	-1.12
Taiwan	Ding	-1.35	-3.98	-2.01
Thailand	Ding	-0.69	3.42	1.70
Tunisia	Ding	-3.04	-8.04	-4.11
Turkey	Ding	3.52	11.03	5.37
Venezuela	Ding	-3.11	-4.41	-2.23
Vietnam	Ding	-3.11	1.03	0.51
World	n/a	-3.11	1.03	0.51

Table X: Full Stochastic Model DDA Tariff Cuts Supply Effects

Country	Development Status	Commodity	%	DDA Cuts- No SSM	
				% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	-0.84	-0.84	-0.42
Argentina	Ding		0.05	0.02	0.01
Asia/Oceania Group	DC		0.14	-0.15	-0.07
Brazil	Ding		0.03	0.03	0.01
Canada	DC		0.15	0.03	0.02
China	Ding		0.02	0.12	0.06
Colombia	Ding		0.12	-0.01	0.00
Egypt	Ding		0.15	0.00	0.00
European Group	DC		-0.10	-0.01	-0.01
European Union	DC		0.15	-0.01	0.00
India	Ding		-0.27	9.81	4.79
Indonesia	Ding		0.02	-0.02	-0.01
Iran	Ding		0.06	-0.01	-0.01
Japan	DC		0.18	0.14	0.07
Mexico	Ding		0.12	0.00	0.00
Middle East/African Group	Ding		0.07	0.01	0.01
Paraguay	Ding		0.10	0.01	0.01
Peru	Ding		0.24	0.06	0.03
Philippines	Ding		n/a	n/a	n/a
South Africa	Ding		0.11	-0.51	-0.26
South Korea	Ding		0.17	-0.02	-0.01
Syria	Ding		n/a	n/a	n/a
Thailand	Ding		0.10	1.10	0.55
Tunisia	Ding		-0.94	-0.03	-0.02
Turkey	Ding		0.16	0.01	0.00
United States	DC		0.19	0.06	0.03
Venezuela	Ding		0.12	0.00	0.00
Vietnam	Ding		0.05	1.21	0.60
World	n/a		0.07	0.09	0.05
Americas Group	Ding	Soybean Meal	11.79	149.99	58.11
Argentina	Ding		7.61	1.11	0.56
Asia/Oceania Group	DC		6.13	4.76	2.35
Bangladesh	LDC		4.50	15.60	7.52

Brazil	Ding	7.59	18.24	8.74
Canada	DC	-5.52	-3.12	-1.57
China	Ding	-14.63	-21.47	-11.39
Colombia	Ding	4.97	17.82	8.54
Egypt	Ding	2.60	4.34	2.15
European Group	DC	-1.44	0.11	0.05
European Union	DC	-0.16	2.04	1.02
India	Ding	-7.49	-69.69	-44.95
Iran	Ding	3.14	23.70	11.22
Japan	DC	-11.90	-34.32	-18.96
Malaysia	Ding	2.79	5.65	2.79
Mexico	Ding	2.35	10.33	5.04
Middle East/African				
Group	Ding	4.64	1.99	0.99
Morocco	Ding	-1.13	-2.80	-1.41
Paraguay	Ding	7.26	9.98	4.87
Peru	Ding	7.17	10.07	4.92
Philippines	Ding	4.67	15.61	7.52
South Africa	Ding	3.20	10.91	5.31
South Korea	Ding	7.62	18.94	9.06
Syria	Ding	6.05	8.66	4.24
Taiwan	Ding	1.99	-97.52	-84.26
Thailand	Ding	-8.77	-70.24	-45.45
Tunisia	Ding	6.71	23.50	11.13
Turkey	Ding	-12.01	-44.99	-25.83
United States	DC	3.98	1.30	0.65
Venezuela	Ding	5.46	18.29	8.76
Vietnam	Ding	3.22	25.93	12.22
World	n/a	0.06	-0.12	-0.06
Americas Group	Ding	11.79	149.99	58.11
Argentina	Ding	7.61	1.11	0.56
Asia/Oceania Group	DC	6.13	4.76	2.35
Bangladesh	LDC	4.50	15.60	7.52
Brazil	Ding	7.59	18.24	8.74
Canada	DC	-5.52	-3.12	-1.57
China	Ding	-14.63	-21.47	-11.39
Colombia	Ding	4.97	17.82	8.54
Egypt	Ding	2.60	4.34	2.15
European Group	DC	-1.44	0.11	0.05
European Union	DC	-0.16	2.04	1.02
India	Ding	-7.49	-69.69	-44.95
Iran	Ding	3.14	23.70	11.22
Japan	DC	-11.90	-34.32	-18.96
Malaysia	Ding	2.79	5.65	2.79
Mexico	Ding	2.35	10.33	5.04
Middle East/African				
Group	Ding	4.64	1.99	0.99
Morocco	Ding	-1.13	-2.80	-1.41
Paraguay	Ding	7.26	9.98	4.87
Peru	Ding	7.17	10.07	4.92
Philippines	Ding	4.67	15.61	7.52
South Africa	Ding	3.20	10.91	5.31
South Korea	Ding	7.62	18.94	9.06
Syria	Ding	6.05	8.66	4.24

Soybean Oil

Taiwan	Ding	1.99	-97.52	-84.26
Thailand	Ding	-8.77	-70.24	-45.45
Tunisia	Ding	6.71	23.50	11.13
Turkey	Ding	-12.01	-44.99	-25.83
United States	DC	3.98	1.30	0.65
Venezuela	Ding	5.46	18.29	8.76
Vietnam	Ding	3.22	25.93	12.22
World	n/a	0.33	-1.27	-0.64

Country	Development Status	Commodity	DDA Cuts- Price SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	0.00	0.00	0.00
Argentina	Ding		0.00	0.00	0.00
Asia/Oceania Group	DC		0.00	0.00	0.00
Brazil	Ding		0.00	0.00	0.00
Canada	DC		0.00	0.00	0.00
China	Ding		0.00	0.00	0.00
Colombia	Ding		0.00	0.00	0.00
Egypt	Ding		0.00	0.00	0.00
European Group	DC		0.00	0.00	0.00
European Union	DC		0.00	0.00	0.00
India	Ding		0.00	-0.01	0.00
Indonesia	Ding		0.00	0.00	0.00
Iran	Ding		0.00	0.00	0.00
Japan	DC		0.00	0.00	0.00
Mexico	Ding		0.00	0.00	0.00
Middle East/African Group	Ding		0.00	0.00	0.00
Paraguay	Ding		0.00	0.00	0.00
Peru	Ding		0.00	0.00	0.00
Philippines	Ding		n/a	n/a	n/a
South Africa	Ding		0.00	0.00	0.00
South Korea	Ding		0.00	0.00	0.00
Syria	Ding		n/a	n/a	n/a
Thailand	Ding		0.00	0.02	0.01
Tunisia	Ding		0.00	0.00	0.00
Turkey	Ding		0.00	0.00	0.00
United States	DC		0.00	0.00	0.00
Venezuela	Ding		0.00	0.00	0.00
Vietnam	Ding		0.00	0.04	0.02
World	n/a		0.00	0.00	0.00
Americas Group	Ding	Soybean Meal	0.00	0.08	0.04
Argentina	Ding		0.00	-0.16	-0.08
Asia/Oceania Group	DC		0.00	-0.22	-0.11
Bangladesh	LDC		0.00	-0.07	-0.03
Brazil	Ding		0.00	-0.14	-0.07
Canada	DC		0.00	-0.24	-0.12
China	Ding		0.00	-0.70	-0.35
Colombia	Ding		0.00	0.02	0.01
Egypt	Ding		0.00	-0.22	-0.11
European Group	DC		0.00	-0.09	-0.04
European Union	DC		0.00	-0.01	-0.01

India	Ding	0.04	-1.20	-0.60
Iran	Ding	0.00	0.31	0.15
Japan	DC	0.00	-0.06	-0.03
Malaysia	Ding	0.00	-0.18	-0.09
Mexico	Ding	0.00	0.00	0.00
Middle East/African				
Group	Ding	0.00	-0.12	-0.06
Morocco	Ding	0.00	0.01	0.01
Paraguay	Ding	0.00	-0.07	-0.03
Peru	Ding	0.00	-0.07	-0.03
Philippines	Ding	0.00	-0.06	-0.03
South Africa	Ding	0.00	0.00	0.00
South Korea	Ding	0.00	-0.11	-0.06
Syria	Ding	0.00	-0.09	-0.05
Taiwan	Ding	0.00	0.08	0.04
Thailand	Ding	0.00	0.07	0.04
Tunisia	Ding	0.00	-0.25	-0.13
Turkey	Ding	0.00	-0.02	-0.01
United States	DC	0.00	-0.16	-0.08
Venezuela	Ding	0.00	0.03	0.01
Vietnam	Ding	0.00	0.34	0.17
World	n/a	0.00	-0.02	-0.01
Americas Group	Ding	0.00	0.08	0.04
Argentina	Ding	0.00	-0.16	-0.08
Asia/Oceania Group	DC	0.00	-0.22	-0.11
Bangladesh	LDC	0.00	-0.07	-0.03
Brazil	Ding	0.00	-0.14	-0.07
Canada	DC	0.00	-0.24	-0.12
China	Ding	0.00	-0.70	-0.35
Colombia	Ding	0.00	0.02	0.01
Egypt	Ding	0.00	-0.22	-0.11
European Group	DC	0.00	-0.09	-0.04
European Union	DC	0.00	-0.01	-0.01
India	Ding	0.04	-1.20	-0.60
Iran	Ding	0.00	0.31	0.15
Japan	DC	0.00	-0.06	-0.03
Malaysia	Ding	0.00	-0.18	-0.09
Mexico	Ding	0.00	0.00	0.00
Middle East/African				
Group	Ding	0.00	-0.12	-0.06
Morocco	Ding	0.00	0.01	0.01
Paraguay	Ding	0.00	-0.07	-0.03
Peru	Ding	0.00	-0.07	-0.03
Philippines	Ding	0.00	-0.06	-0.03
South Africa	Ding	0.00	0.00	0.00
South Korea	Ding	0.00	-0.11	-0.06
Syria	Ding	0.00	-0.09	-0.05
Taiwan	Ding	0.00	0.08	0.04
Thailand	Ding	0.00	0.07	0.04
Tunisia	Ding	0.00	-0.25	-0.13
Turkey	Ding	0.00	-0.02	-0.01
United States	DC	0.00	-0.16	-0.08
Venezuela	Ding	0.00	0.03	0.01
Vietnam	Ding	0.00	0.34	0.17

Soybean Oil

World	n/a	0.00	-0.06	-0.03

Country	Development Status	Commodity	DDA Cuts- Volume SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	0.44	-6.86	-3.49
Argentina	Ding		0.05	0.57	0.28
Asia/Oceana Group	DC		0.14	0.52	0.26
Brazil	Ding		0.04	0.43	0.21
Canada	DC		0.17	0.07	0.03
China	Ding		0.03	-0.32	-0.16
Colombia	Ding		0.13	0.12	0.06
Egypt	Ding		0.16	0.00	0.00
European Group	DC		0.13	-0.01	-0.01
European Union	DC		0.16	0.02	0.01
India	Ding		2.90	-28.56	-15.48
Indonesia	Ding		0.03	0.08	0.04
Iran	Ding		0.06	0.04	0.02
Japan	DC		0.19	-0.38	-0.19
Mexico	Ding		0.13	-0.03	-0.02
Middle East/African Group	Ding		0.08	0.08	0.04
Paraguay	Ding		0.10	0.26	0.13
Peru	Ding		0.26	0.14	0.07
Philippines	Ding		n/a	n/a	n/a
South Africa	Ding		0.02	0.87	0.43
South Korea	Ding		0.19	0.21	0.11
Syria	Ding		n/a	n/a	n/a
Thailand	Ding		0.10	5.64	2.78
Tunisia	Ding		0.10	0.01	0.01
Turkey	Ding		0.17	0.00	0.00
United States	DC		0.20	0.84	0.42
Venezuela	Ding		0.13	-0.10	-0.05
Vietnam	Ding		0.06	16.93	8.13
World	n/a		0.21	1.19	0.59
Americas Group	Ding	Soybean Meal	3.13	3785.02	523.30
Argentina	Ding		-11.42	25.73	12.13
Asia/Oceana Group	DC		-8.59	6.71	3.30
Bangladesh	LDC		-8.03	22.47	10.66
Brazil	Ding		-11.57	-35.99	-19.99
Canada	DC		-15.77	10.89	5.30
China	Ding		30.89	207.28	75.29
Colombia	Ding		-7.58	-13.51	-7.00
Egypt	Ding		-4.46	6802.28	730.80
European Group	DC		-7.59	-31.42	-17.19
European Union	DC		-3.95	-34.96	-19.35
India	Ding		17.40	662.62	176.15
Iran	Ding		-4.41	125.65	50.22
Japan	DC		-8.39	-22.27	-11.83
Malaysia	Ding		28.76	-84.86	-61.09
Mexico	Ding		23.72	8720.79	839.19
Middle East/African Group	Ding		-6.08	328.41	106.98

Morocco	Ding	-1.74	-7.28	-3.71
Paraguay	Ding	-10.82	8.11	3.98
Peru	Ding	-9.94	1.00	0.50
Philippines	Ding	4.73	6176.06	692.22
South Africa	Ding	-3.69	-16.06	-8.38
South Korea	Ding	-10.98	-20.29	-10.72
Syria	Ding	-9.00	-0.33	-0.17
Taiwan	Ding	-7.14	7395.33	765.76
Thailand	Ding	0.86	-20.63	-10.91
Tunisia	Ding	-2.04	275.48	93.77
Turkey	Ding	25.04	217.55	78.20
United States	DC	-6.06	30.80	14.37
Venezuela	Ding	-7.85	-9.24	-4.73
Vietnam	Ding	-4.96	105.41	43.32
World	n/a	0.37	-9.91	-5.08
Americas Group	Ding	3.13	3785.02	523.30
Argentina	Ding	-11.42	25.73	12.13
Asia/Oceania Group	DC	-8.59	6.71	3.30
Bangladesh	LDC	-8.03	22.47	10.66
Brazil	Ding	-11.57	-35.99	-19.99
Canada	DC	-15.77	10.89	5.30
China	Ding	30.89	207.28	75.29
Colombia	Ding	-7.58	-13.51	-7.00
Egypt	Ding	-4.46	6802.28	730.80
European Group	DC	-7.59	-31.42	-17.19
European Union	DC	-3.95	-34.96	-19.35
India	Ding	17.40	662.62	176.15
Iran	Ding	-4.41	125.65	50.22
Japan	DC	-8.39	-22.27	-11.83
Malaysia	Ding	28.76	-84.86	-61.09
Mexico	Ding	23.72	8720.79	839.19
Middle East/African Group	Ding	Soybean Oil -6.08	328.41	106.98
Morocco	Ding	-1.74	-7.28	-3.71
Paraguay	Ding	-10.82	8.11	3.98
Peru	Ding	-9.94	1.00	0.50
Philippines	Ding	4.73	6176.06	692.22
South Africa	Ding	-3.69	-16.06	-8.38
South Korea	Ding	-10.98	-20.29	-10.72
Syria	Ding	-9.00	-0.33	-0.17
Taiwan	Ding	-7.14	7395.33	765.76
Thailand	Ding	0.86	-20.63	-10.91
Tunisia	Ding	-2.04	275.48	93.77
Turkey	Ding	25.04	217.55	78.20
United States	DC	-6.06	30.80	14.37
Venezuela	Ding	-7.85	-9.24	-4.73
Vietnam	Ding	-4.96	105.41	43.32
World	n/a	-0.11	-10.81	-5.56

Country	Development Status	Commodity	%	DDA Cuts- Full SSM	
				% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	0.44	-6.76	-3.44

Argentina	Ding	0.05	0.57	0.28
Asia/Oceania Group	DC	0.14	0.53	0.26
Brazil	Ding	0.04	0.43	0.21
Canada	DC	0.17	0.07	0.04
China	Ding	0.03	-0.32	-0.16
Colombia	Ding	0.13	0.12	0.06
Egypt	Ding	0.16	0.00	0.00
European Group	DC	0.13	-0.01	-0.01
European Union	DC	0.16	0.02	0.01
India	Ding	2.90	-28.56	-15.48
Indonesia	Ding	0.03	0.08	0.04
Iran	Ding	0.06	0.04	0.02
Japan	DC	0.19	-0.38	-0.19
Mexico	Ding	0.13	-0.03	-0.02
Middle East/African Group	Ding	0.08	0.08	0.04
Paraguay	Ding	0.10	0.26	0.13
Peru	Ding	0.26	0.14	0.07
Philippines	Ding	n/a	n/a	n/a
South Africa	Ding	0.02	0.86	0.43
South Korea	Ding	0.19	0.21	0.11
Syria	Ding	n/a	n/a	n/a
Thailand	Ding	0.10	5.66	2.79
Tunisia	Ding	0.10	0.01	0.01
Turkey	Ding	0.17	0.00	0.00
United States	DC	0.20	0.85	0.42
Venezuela	Ding	0.13	-0.10	-0.05
Vietnam	Ding	0.06	16.91	8.13
World	n/a	0.21	1.19	0.59
Americas Group	Ding	2.96	3770.57	522.14
Argentina	Ding	-11.40	24.68	11.66
Asia/Oceania Group	DC	-8.58	5.78	2.85
Bangladesh	LDC	-8.02	21.19	10.08
Brazil	Ding	-11.55	-35.86	-19.92
Canada	DC	-15.74	10.19	4.97
China	Ding	30.89	207.07	75.23
Colombia	Ding	-7.56	-14.78	-7.68
Egypt	Ding	-5.30	5889.44	673.91
European Group	DC	-7.58	-31.74	-17.38
European Union	DC	-3.95	-35.03	-19.40
India	Ding	17.40	663.12	176.25
Iran	Ding	-4.40	124.66	49.89
Japan	DC	-8.37	-22.48	-11.96
Malaysia	Ding	28.76	-84.88	-61.12
Mexico	Ding	23.49	8943.87	850.99
Middle East/African Group	Ding	-6.07	326.75	106.58
Morocco	Ding	-1.74	-7.50	-3.82
Paraguay	Ding	-10.80	7.52	3.69
Peru	Ding	-9.92	0.47	0.24
Philippines	Ding	4.71	6172.42	691.99
South Africa	Ding	-3.68	-16.02	-8.36
South Korea	Ding	-10.96	-20.41	-10.79
Syria	Ding	-8.99	-0.74	-0.37

Soybean
Meal

Taiwan	Ding	-7.12	7347.30	762.98
Thailand	Ding	0.86	-20.73	-10.97
Tunisia	Ding	-2.04	263.28	90.60
Turkey	Ding	25.05	216.99	78.04
United States	DC	-6.05	29.69	13.88
Venezuela	Ding	-7.82	-10.84	-5.58
Vietnam	Ding	-4.95	104.50	43.00
World	n/a	0.37	-9.86	-5.06
Americas Group	Ding	2.96	3770.57	522.14
Argentina	Ding	-11.40	24.68	11.66
Asia/Oceania Group	DC	-8.58	5.78	2.85
Bangladesh	LDC	-8.02	21.19	10.08
Brazil	Ding	-11.55	-35.86	-19.92
Canada	DC	-15.74	10.19	4.97
China	Ding	30.89	207.07	75.23
Colombia	Ding	-7.56	-14.78	-7.68
Egypt	Ding	-5.30	5889.44	673.91
European Group	DC	-7.58	-31.74	-17.38
European Union	DC	-3.95	-35.03	-19.40
India	Ding	17.40	663.12	176.25
Iran	Ding	-4.40	124.66	49.89
Japan	DC	-8.37	-22.48	-11.96
Malaysia	Ding	28.76	-84.88	-61.12
Mexico	Ding	23.49	8943.87	850.99
Middle East/African Group	Ding	-6.07	326.75	106.58
Morocco	Ding	-1.74	-7.50	-3.82
Paraguay	Ding	-10.80	7.52	3.69
Peru	Ding	-9.92	0.47	0.24
Philippines	Ding	4.71	6172.42	691.99
South Africa	Ding	-3.68	-16.02	-8.36
South Korea	Ding	-10.96	-20.41	-10.79
Syria	Ding	-8.99	-0.74	-0.37
Taiwan	Ding	-7.12	7347.30	762.98
Thailand	Ding	0.86	-20.73	-10.97
Tunisia	Ding	-2.04	263.28	90.60
Turkey	Ding	25.05	216.99	78.04
United States	DC	-6.05	29.69	13.88
Venezuela	Ding	-7.82	-10.84	-5.58
Vietnam	Ding	-4.95	104.50	43.00
World	n/a	-0.11	-10.82	-5.57

Soybean Oil

DDA Cuts- Full SSM Bound to URAA					
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	-0.09	-0.95	-0.47
Argentina	Ding		-0.05	0.06	0.03
Asia/Oceania Group	DC		-0.14	0.78	0.39
Brazil	Ding		-0.03	0.05	0.02
Canada	DC		-0.16	-0.05	-0.02
China	Ding		-0.02	-0.47	-0.23
Colombia	Ding		-0.12	0.05	0.02
Egypt	Ding		-0.15	-0.01	-0.01

European Group	DC	-0.12	-0.05	-0.02
European Union	DC	-0.16	0.02	0.01
India	Ding	3.07	-30.44	-16.60
Indonesia	Ding	-0.02	0.10	0.05
Iran	Ding	-0.06	0.08	0.04
Japan	DC	-0.18	-0.55	-0.28
Mexico	Ding	-0.12	0.00	0.00
Middle East/African Group	Ding	-0.07	-0.11	-0.06
Paraguay	Ding	-0.10	0.02	0.01
Peru	Ding	-0.25	-0.18	-0.09
Philippines	Ding	n/a	n/a	n/a
South Africa	Ding	-0.10	0.31	0.15
South Korea	Ding	-0.18	0.16	0.08
Syria	Ding	n/a	n/a	n/a
Thailand	Ding	-0.10	-0.06	-0.03
Tunisia	Ding	-0.10	-0.01	-0.01
Turkey	Ding	-0.16	-0.03	-0.01
United States	DC	-0.19	0.06	0.03
Venezuela	Ding	-0.12	-0.02	-0.01
Vietnam	Ding	-0.05	-0.02	-0.01
World	n/a	0.02	-0.05	-0.03
Americas Group	Ding	-2.15	121.95	48.98
Argentina	Ding	-5.02	12.81	6.21
Asia/Oceania Group	DC	-3.88	5.48	2.70
Bangladesh	LDC	-3.51	6.01	2.96
Brazil	Ding	-5.07	-15.12	-7.87
Canada	DC	-7.07	6.31	3.11
China	Ding	12.74	63.19	27.75
Colombia	Ding	-3.46	-8.02	-4.09
Egypt	Ding	-4.45	8.68	4.25
European Group	DC	-3.24	-6.82	-3.47
European Union	DC	-1.82	-10.76	-5.53
India	Ding	16.94	682.51	179.73
Iran	Ding	-2.20	6.16	3.04
Japan	DC	-3.72	-11.70	-6.03
Malaysia	Ding	-0.97	-23.32	-12.43
Mexico	Ding	0.75	2750.21	433.87
Middle East/African Group	Ding	-2.90	16.34	7.86
Morocco	Ding	-1.18	-5.64	-2.86
Paraguay	Ding	-4.79	2.28	1.13
Peru	Ding	-4.48	3.26	1.62
Philippines	Ding	-2.37	204.56	74.52
South Africa	Ding	-2.04	-5.67	-2.88
South Korea	Ding	-4.87	-9.98	-5.12
Syria	Ding	-3.99	-0.65	-0.33
Taiwan	Ding	-0.73	2197.85	379.36
Thailand	Ding	0.34	3.42	1.70
Tunisia	Ding	-1.64	-12.44	-6.43
Turkey	Ding	4.03	20.59	9.81
United States	DC	-2.69	13.46	6.52
Venezuela	Ding	-3.60	-7.47	-3.81
Vietnam	Ding	-2.40	4.89	2.42

Soybean
Meal

World	n/a		0.05	-0.81	-0.41
Americas Group	Ding		-2.15	121.95	48.98
Argentina	Ding		-5.02	12.81	6.21
Asia/Oceania Group	DC		-3.88	5.48	2.70
Bangladesh	LDC		-3.51	6.01	2.96
Brazil	Ding		-5.07	-15.12	-7.87
Canada	DC		-7.07	6.31	3.11
China	Ding		12.74	63.19	27.75
Colombia	Ding		-3.46	-8.02	-4.09
Egypt	Ding		-4.45	8.68	4.25
European Group	DC		-3.24	-6.82	-3.47
European Union	DC		-1.82	-10.76	-5.53
India	Ding		16.94	682.51	179.73
Iran	Ding		-2.20	6.16	3.04
Japan	DC		-3.72	-11.70	-6.03
Malaysia	Ding		-0.97	-23.32	-12.43
Mexico	Ding		0.75	2750.21	433.87
Middle East/African Group	Ding	Soybean Oil	-2.90	16.34	7.86
Morocco	Ding		-1.18	-5.64	-2.86
Paraguay	Ding		-4.79	2.28	1.13
Peru	Ding		-4.48	3.26	1.62
Philippines	Ding		-2.37	204.56	74.52
South Africa	Ding		-2.04	-5.67	-2.88
South Korea	Ding		-4.87	-9.98	-5.12
Syria	Ding		-3.99	-0.65	-0.33
Taiwan	Ding		-0.73	2197.85	379.36
Thailand	Ding		0.34	3.42	1.70
Tunisia	Ding		-1.64	-12.44	-6.43
Turkey	Ding		4.03	20.59	9.81
United States	DC		-2.69	13.46	6.52
Venezuela	Ding		-3.60	-7.47	-3.81
Vietnam	Ding		-2.40	4.89	2.42
World	n/a		-0.16	-0.16	-0.08

Table Y: Full Stochastic Model DDA Tariff Cuts Demand Effects

Country	Development Status	Commodity	% Change	DDA Cuts- No SSM	
				% Change Variance	% Change St. Dev.
Americas Group	Ding		1.57	-3.62	-1.82
Argentina	Ding		-0.48	1.21	0.60
Asia/Oceania Group	DC		-0.17	1.16	0.58
Bangladesh	LDC		-0.19	1.00	0.50
Brazil	Ding		-0.21	1.03	0.51
Canada	DC		-0.10	0.97	0.48
China	Ding	Soybean	-0.14	1.21	0.61
Colombia	Ding		-0.24	1.05	0.53
Egypt	Ding		-0.22	1.07	0.53
European Group	DC		0.21	-1.00	-0.50
European Union	DC		-0.19	0.82	0.41
India	Ding		0.23	-22.09	-11.73
Indonesia	Ding		-0.07	0.95	0.48

Iran	Ding	-0.24	1.18	0.59
Japan	DC	-0.14	0.91	0.45
Malaysia	Ding	-0.24	1.21	0.60
Mexico	Ding	-0.14	1.04	0.52
Middle East/African Group	Ding	-0.14	1.20	0.60
Paraguay	Ding	-0.24	1.10	0.55
Peru	Ding	-0.14	1.22	0.61
Philippines	Ding	-0.23	0.85	0.43
South Africa	Ding	-0.36	6.60	3.25
South Korea	Ding	-0.10	0.97	0.49
Syria	Ding	-0.15	1.11	0.55
Taiwan	Ding	0.36	-2.67	-1.34
Thailand	Ding	-0.24	0.75	0.37
Tunisia	Ding	1.40	-9.25	-4.74
Turkey	Ding	-0.10	1.18	0.59
United States	DC	-0.07	1.21	0.60
Venezuela	Ding	-0.22	1.10	0.55
Vietnam	Ding	-0.07	1.21	0.60
World	n/a	-0.12	1.02	0.51
Algeria	Ding	-0.72	2.35	1.17
Americas Group	Ding	-0.43	3.54	1.75
Argentina	Ding	-1.86	3.79	1.88
Asia/Oceania Group	DC	-1.07	2.98	1.48
Bangladesh	LDC	-0.29	3.13	1.56
Brazil	Ding	-0.71	2.93	1.45
Canada	DC	0.02	0.08	0.04
China	Ding	1.76	-0.91	-0.45
Colombia	Ding	-0.36	2.90	1.44
Dominican Republic	Ding	-0.72	2.98	1.48
Egypt	Ding	-0.14	3.35	1.66
European Group	DC	-0.72	2.34	1.16
European Union	DC	-1.00	2.42	1.20
India	Ding	-0.43	2.93	1.45
Indonesia	Ding	-0.57	2.87	1.43
Iran	Ding	-0.72	3.77	1.87
Japan	DC	0.10	-0.94	-0.47
Malaysia	Ding	-0.14	3.79	1.88
Mexico	Ding	-0.11	1.54	0.77
Middle East/African Group	Ding	-0.29	3.78	1.87
Morocco	Ding	0.21	-3.17	-1.60
Paraguay	Ding	-0.50	3.29	1.63
Peru	Ding	-0.36	3.03	1.51
Philippines	Ding	-0.21	2.65	1.32
South Africa	Ding	-0.36	2.94	1.46
South Korea	Ding	-0.16	2.98	1.48
Syria	Ding	-0.72	3.17	1.57
Taiwan	Ding	0.07	-0.61	-0.30
Thailand	Ding	2.07	-17.83	-9.35
Tunisia	Ding	-0.72	2.26	1.12
Turkey	Ding	0.77	-9.66	-4.95
United States	DC	-0.17	3.79	1.88
Venezuela	Ding	-0.36	3.01	1.50

Vietnam	Ding	-0.36	3.79	1.88
World	n/a	0.06	-0.12	-0.06
Algeria	Ding	-0.95	6.34	3.12
Americas Group	Ding	-0.57	6.00	2.96
Argentina	Ding	-0.44	6.31	3.11
Asia/Oceania Group	DC	-1.42	4.30	2.13
Bangladesh	LDC	-0.66	5.53	2.73
Brazil	Ding	-0.83	2.32	1.15
Canada	DC	0.09	-1.21	-0.60
China	Ding	1.44	-16.29	-8.51
Colombia	Ding	-0.38	5.49	2.71
Dominican Republic	Ding	-0.95	5.02	2.48
Egypt	Ding	-0.01	-0.30	-0.15
European Group	DC	1.97	-5.84	-2.96
European Union	DC	0.76	-1.21	-0.61
India	Ding	2.58	-15.26	-7.95
Indonesia	Ding	-0.56	3.84	1.90
Iran	Ding	-0.95	6.33	3.11
Japan	DC	0.86	-10.42	-5.35
Malaysia	Ding	0.01	2.30	1.14
Mexico	Ding	-0.28	5.42	2.67
Middle East/African Group	Ding	-0.95	6.39	3.15
Morocco	Ding	-0.47	5.38	2.66
Paraguay	Ding	-0.57	5.41	2.67
Peru	Ding	-0.95	6.34	3.12
Philippines	Ding	-0.60	4.72	2.33
South Africa	Ding	-0.94	4.67	2.31
South Korea	Ding	-0.19	2.83	1.41
Syria	Ding	-0.95	5.26	2.60
Taiwan	Ding	0.21	10.44	5.09
Thailand	Ding	-5.50	-58.93	-35.92
Tunisia	Ding	2.36	-7.10	-3.61
Turkey	Ding	1.11	-9.37	-4.80
United States	DC	-0.57	6.31	3.11
Venezuela	Ding	-0.28	5.74	2.83
Vietnam	Ding	-0.72	6.31	3.11
World	n/a	0.33	-1.27	-0.64

Country	Development Status	Commodity	DDA Cuts- Price SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	0.00	0.03	0.01
Argentina	Ding		0.00	0.04	0.02
Asia/Oceania Group	DC		0.00	0.02	0.01
Bangladesh	LDC		0.00	0.03	0.01
Brazil	Ding		0.00	0.00	0.00
Canada	DC		0.00	0.01	0.01
China	Ding		0.00	0.04	0.02
Colombia	Ding		0.00	0.01	0.01
Egypt	Ding		0.00	0.01	0.01
European Group	DC		0.00	0.01	0.00

European Union	DC	0.00	0.01	0.00
India	Ding	0.00	-0.03	-0.01
Indonesia	Ding	0.00	0.00	0.00
Iran	Ding	0.00	0.04	0.02
Japan	DC	0.00	0.00	0.00
Malaysia	Ding	0.00	0.04	0.02
Mexico	Ding	0.00	0.02	0.01
Middle East/African				
Group	Ding	0.00	0.04	0.02
Paraguay	Ding	0.00	0.02	0.01
Peru	Ding	0.00	0.02	0.01
Philippines	Ding	0.00	0.01	0.01
South Africa	Ding	0.00	0.01	0.00
South Korea	Ding	0.00	0.00	0.00
Syria	Ding	0.00	0.02	0.01
Taiwan	Ding	0.00	0.03	0.02
Thailand	Ding	0.00	0.01	0.00
Tunisia	Ding	0.00	0.01	0.01
Turkey	Ding	0.00	0.02	0.01
United States	DC	0.00	0.04	0.02
Venezuela	Ding	0.00	0.01	0.00
Vietnam	Ding	0.00	0.04	0.02
World	n/a	0.00	0.03	0.01
Algeria	Ding	0.00	0.00	0.00
Americas Group	Ding	0.00	-0.01	0.00
Argentina	Ding	0.00	-0.01	-0.01
Asia/Oceania Group	DC	0.00	0.00	0.00
Bangladesh	LDC	0.00	-0.01	0.00
Brazil	Ding	0.00	0.00	0.00
Canada	DC	0.00	0.00	0.00
China	Ding	0.00	-0.01	-0.01
Colombia	Ding	0.00	0.00	0.00
Dominican Republic	Ding	0.00	0.00	0.00
Egypt	Ding	0.00	0.00	0.00
European Group	DC	0.00	0.00	0.00
European Union	DC	0.00	0.00	0.00
India	Ding	0.00	-0.01	0.00
Indonesia	Ding	0.00	0.00	0.00
Iran	Ding	0.00	-0.01	-0.01
Japan	DC	0.00	0.00	0.00
Malaysia	Ding	0.00	-0.01	-0.01
Mexico	Ding	0.00	0.00	0.00
Middle East/African				
Group	Ding	0.00	-0.01	-0.01
Morocco	Ding	0.00	0.00	0.00
Paraguay	Ding	0.00	-0.01	0.00
Peru	Ding	0.00	-0.01	0.00
Philippines	Ding	0.00	0.00	0.00
South Africa	Ding	0.00	0.00	0.00
South Korea	Ding	0.00	0.00	0.00
Syria	Ding	0.00	0.00	0.00
Taiwan	Ding	0.00	-0.01	0.00
Thailand	Ding	0.00	0.00	0.00
Tunisia	Ding	0.00	0.00	0.00

Soybean
Meal

Turkey	Ding	0.00	0.00	0.00
United States	DC	0.00	-0.01	-0.01
Venezuela	Ding	0.00	0.00	0.00
Vietnam	Ding	0.00	-0.01	-0.01
World	n/a	0.00	-0.02	-0.01
Algeria	Ding	0.00	0.06	0.03
Americas Group	Ding	0.00	0.17	0.08
Argentina	Ding	0.00	0.20	0.10
Asia/Oceania Group	DC	0.00	0.09	0.05
Bangladesh	LDC	0.00	0.17	0.08
Brazil	Ding	0.00	0.00	0.00
Canada	DC	0.00	0.08	0.04
China	Ding	0.00	-0.06	-0.03
Colombia	Ding	0.00	0.06	0.03
Dominican Republic	Ding	0.00	0.12	0.06
Egypt	Ding	0.00	0.10	0.05
European Group	DC	0.00	0.05	0.02
European Union	DC	0.00	0.03	0.02
India	Ding	-0.01	-2.97	-1.49
Indonesia	Ding	-0.03	-4.07	-2.05
Iran	Ding	0.00	0.20	0.10
Japan	DC	0.00	0.02	0.01
Malaysia	Ding	0.00	0.20	0.10
Mexico	Ding	0.00	0.11	0.06
Middle East/African Group	Ding	0.00	0.20	0.10
Morocco	Ding	0.00	0.08	0.04
Paraguay	Ding	0.00	0.14	0.07
Peru	Ding	0.00	0.12	0.06
Philippines	Ding	0.00	0.06	0.03
South Africa	Ding	0.00	0.08	0.04
South Korea	Ding	0.00	0.02	0.01
Syria	Ding	0.00	0.13	0.06
Taiwan	Ding	0.00	0.08	0.04
Thailand	Ding	0.00	0.07	0.04
Tunisia	Ding	0.00	-0.10	-0.05
Turkey	Ding	0.00	0.13	0.06
United States	DC	0.00	0.20	0.10
Venezuela	Ding	0.00	0.07	0.03
Vietnam	Ding	0.00	0.20	0.10
World	n/a	0.00	-0.06	-0.03

Country	Development Status	Commodity	DDA Cuts- Volume SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	-0.81	182.40	68.05
Argentina	Ding		-0.52	16.93	8.13
Asia/Oceania Group	DC		-0.18	5.00	2.47
Bangladesh	LDC		-0.21	13.07	6.34
Brazil	Ding		-0.22	1.12	0.56
Canada	DC		-0.10	5.53	2.73
China	Ding		-0.16	16.94	8.14
Colombia	Ding		-0.26	5.31	2.62
Egypt	Ding		-0.23	7.15	3.51

European Group	DC	-0.26	3.59	1.78
European Union	DC	-0.21	2.07	1.03
India	Ding	-2.44	157.95	60.61
Indonesia	Ding	-0.08	1.20	0.60
Iran	Ding	-0.26	16.90	8.12
Japan	DC	-0.15	2.03	1.01
Malaysia	Ding	-0.26	16.93	8.13
Mexico	Ding	-0.16	9.39	4.59
Middle East/African Group	Ding	-0.16	17.07	8.20
Paraguay	Ding	-0.26	9.34	4.57
Peru	Ding	-0.16	10.40	5.07
Philippines	Ding	-0.25	3.72	1.85
South Africa	Ding	-0.07	-7.86	-4.01
South Korea	Ding	-0.10	1.97	0.98
Syria	Ding	-0.16	9.62	4.70
Taiwan	Ding	-0.13	10.68	5.20
Thailand	Ding	-0.26	-0.71	-0.36
Tunisia	Ding	-0.15	4.88	2.41
Turkey	Ding	-0.10	7.79	3.82
United States	DC	-0.08	16.93	8.13
Venezuela	Ding	-0.23	6.18	3.04
Vietnam	Ding	-0.08	16.93	8.13
World	n/a	-0.27	10.21	4.98
Algeria	Ding	-1.02	11.63	5.66
Americas Group	Ding	-0.61	58.16	25.76
Argentina	Ding	-2.69	93.05	38.94
Asia/Oceania Group	DC	-1.54	21.52	10.24
Bangladesh	LDC	-0.41	57.44	25.48
Brazil	Ding	-1.02	4.33	2.14
Canada	DC	-0.70	20.29	9.68
China	Ding	4.24	-68.56	-43.93
Colombia	Ding	-0.51	15.58	7.51
Dominican Republic	Ding	-1.02	13.66	6.61
Egypt	Ding	-0.20	27.27	12.81
European Group	DC	-1.02	5.79	2.85
European Union	DC	-1.43	0.97	0.48
India	Ding	-0.61	13.20	6.40
Indonesia	Ding	-0.81	4.98	2.46
Iran	Ding	-1.02	92.49	38.74
Japan	DC	-0.40	7.99	3.92
Malaysia	Ding	-0.20	93.05	38.94
Mexico	Ding	-0.40	40.79	18.66
Middle East/African Group	Ding	-0.41	95.57	39.85
Morocco	Ding	-0.29	11.24	5.47
Paraguay	Ding	-0.71	35.55	16.42
Peru	Ding	-0.51	42.79	19.50
Philippines	Ding	-0.30	11.36	5.53
South Africa	Ding	-0.51	9.92	4.84
South Korea	Ding	-0.22	7.87	3.86
Syria	Ding	-1.02	31.94	14.86
Taiwan	Ding	-0.30	41.94	19.14
Thailand	Ding	-0.39	18.32	8.78

Tunisia	Ding	-1.02	9.67	4.72
Turkey	Ding	-0.28	28.08	13.17
United States	DC	-0.24	93.05	38.94
Venezuela	Ding	-0.51	19.96	9.53
Vietnam	Ding	-0.51	93.05	38.94
World	n/a	0.37	-9.91	-5.08
Algeria	Ding	3.47	-11.03	-5.68
Americas Group	Ding	-1.04	1578.14	309.65
Argentina	Ding	1.59	-15.11	-7.86
Asia/Oceania Group	DC	5.21	-13.76	-7.14
Bangladesh	LDC	2.42	-14.11	-7.33
Brazil	Ding	3.03	-13.53	-7.01
Canada	DC	1.20	-14.02	-7.27
China	Ding	-4.04	65.63	28.70
Colombia	Ding	1.38	-12.24	-6.32
Dominican Republic	Ding	3.46	-13.52	-7.01
Egypt	Ding	0.41	382.77	119.72
European Group	DC	3.17	-10.80	-5.55
European Union	DC	3.50	-10.87	-5.59
India	Ding	-6.90	78.78	33.71
Indonesia	Ding	2.05	-13.89	-7.21
Iran	Ding	3.46	-14.94	-7.77
Japan	DC	0.94	-14.30	-7.43
Malaysia	Ding	-2.95	-15.88	-8.28
Mexico	Ding	-2.43	973.85	227.70
Middle East/African Group	Ding	3.43	-6.94	-3.53
Morocco	Ding	1.72	-11.91	-6.14
Paraguay	Ding	2.07	-14.48	-7.52
Peru	Ding	3.46	-13.07	-6.76
Philippines	Ding	-0.37	433.54	130.98
South Africa	Ding	3.45	-13.86	-7.19
South Korea	Ding	0.69	-14.12	-7.33
Syria	Ding	3.47	-13.12	-6.79
Taiwan	Ding	0.45	-25.25	-13.54
Thailand	Ding	0.86	-20.63	-10.91
Tunisia	Ding	2.44	7.27	3.57
Turkey	Ding	-5.74	28.30	13.27
United States	DC	2.07	-15.11	-7.86
Venezuela	Ding	1.03	-13.23	-6.85
Vietnam	Ding	2.63	-15.11	-7.86
World	n/a	-0.11	-10.81	-5.56

Country	Development Status	Commodity	%	DDA Cuts- Full SSM	
				% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	-0.80	179.89	67.30
Argentina	Ding		-0.52	16.91	8.13
Asia/Oceania Group	DC		-0.18	5.02	2.48
Bangladesh	LDC		-0.21	13.05	6.33
Brazil	Ding		-0.22	1.12	0.56
Canada	DC		-0.10	5.53	2.73

China	Ding	-0.16	16.92	8.13
Colombia	Ding	-0.26	5.31	2.62
Egypt	Ding	-0.23	7.15	3.51
European Group	DC	-0.26	3.56	1.76
European Union	DC	-0.21	2.05	1.02
India	Ding	-2.44	157.96	60.61
Indonesia	Ding	-0.08	1.20	0.60
Iran	Ding	-0.26	16.88	8.11
Japan	DC	-0.15	2.03	1.01
Malaysia	Ding	-0.26	16.91	8.13
Mexico	Ding	-0.16	9.39	4.59
Middle East/African Group	Ding	-0.16	17.05	8.19
Paraguay	Ding	-0.26	9.35	4.57
Peru	Ding	-0.16	10.38	5.06
Philippines	Ding	-0.25	3.73	1.85
South Africa	Ding	-0.07	-7.85	-4.01
South Korea	Ding	-0.10	1.98	0.99
Syria	Ding	-0.16	9.60	4.69
Taiwan	Ding	-0.13	10.68	5.21
Thailand	Ding	-0.26	-0.70	-0.35
Tunisia	Ding	-0.15	4.83	2.39
Turkey	Ding	-0.10	7.81	3.83
United States	DC	-0.08	16.91	8.13
Venezuela	Ding	-0.23	6.16	3.04
Vietnam	Ding	-0.08	16.91	8.13
World	n/a	-0.27	10.20	4.98
Algeria	Ding	-1.02	11.64	5.66
Americas Group	Ding	-0.61	58.18	25.77
Argentina	Ding	-2.69	93.02	38.93
Asia/Oceania Group	DC	-1.54	21.52	10.24
Bangladesh	LDC	-0.41	57.43	25.47
Brazil	Ding	-1.02	4.35	2.15
Canada	DC	-0.70	20.30	9.68
China	Ding	4.24	-68.58	-43.95
Colombia	Ding	-0.51	15.60	7.52
Dominican Republic	Ding	-1.02	13.64	6.60
Egypt	Ding	-0.20	27.25	12.80
European Group	DC	-1.02	5.82	2.87
European Union	DC	-1.43	0.99	0.49
India	Ding	-0.61	13.22	6.40
Indonesia	Ding	-0.81	4.98	2.46
Iran	Ding	-1.02	92.46	38.73
Japan	DC	-0.40	7.98	3.91
Malaysia	Ding	-0.20	93.02	38.93
Mexico	Ding	-0.40	40.83	18.67
Middle East/African Group	Ding	-0.41	95.54	39.83
Morocco	Ding	-0.30	11.21	5.46
Paraguay	Ding	-0.72	35.55	16.43
Peru	Ding	-0.51	42.80	19.50
Philippines	Ding	-0.30	11.40	5.54
South Africa	Ding	-0.51	9.95	4.86
South Korea	Ding	-0.22	7.88	3.86

Soybean
Meal

Syria	Ding	-1.03	31.97	14.88
Taiwan	Ding	-0.30	41.95	19.14
Thailand	Ding	-0.39	18.35	8.79
Tunisia	Ding	-1.02	9.67	4.72
Turkey	Ding	-0.28	28.08	13.17
United States	DC	-0.24	93.02	38.93
Venezuela	Ding	-0.51	19.96	9.53
Vietnam	Ding	-0.51	93.02	38.93
World	n/a	0.37	-9.86	-5.06
Algeria	Ding	3.47	-11.10	-5.72
Americas Group	Ding	-0.98	1580.50	309.94
Argentina	Ding	1.58	-15.17	-7.90
Asia/Oceania Group	DC	5.20	-13.77	-7.14
Bangladesh	LDC	2.42	-14.19	-7.36
Brazil	Ding	3.03	-13.48	-6.98
Canada	DC	1.20	-14.01	-7.27
China	Ding	-4.04	65.51	28.65
Colombia	Ding	1.38	-12.81	-6.63
Dominican Republic	Ding	3.46	-13.65	-7.08
Egypt	Ding	0.45	323.51	105.79
European Group	DC	3.17	-10.84	-5.58
European Union	DC	3.49	-10.90	-5.61
India	Ding	-6.90	78.71	33.68
Indonesia	Ding	1.97	-23.21	-12.37
Iran	Ding	3.46	-15.00	-7.81
Japan	DC	0.94	-14.31	-7.43
Malaysia	Ding	-2.94	-16.01	-8.35
Mexico	Ding	-2.41	1001.50	231.89
Middle East/African Group	Ding	3.42	-7.03	-3.58
Morocco	Ding	1.72	-12.02	-6.20
Paraguay	Ding	2.07	-14.46	-7.51
Peru	Ding	3.46	-13.11	-6.78
Philippines	Ding	-0.36	433.43	130.96
South Africa	Ding	3.45	-13.85	-7.18
South Korea	Ding	0.69	-14.08	-7.31
Syria	Ding	3.47	-13.13	-6.80
Taiwan	Ding	0.45	-25.24	-13.54
Thailand	Ding	0.86	-20.73	-10.97
Tunisia	Ding	2.44	4.29	2.12
Turkey	Ding	-5.74	28.32	13.28
United States	DC	2.07	-15.17	-7.90
Venezuela	Ding	1.03	-13.97	-7.25
Vietnam	Ding	2.63	-15.17	-7.90
World	n/a	-0.11	-10.82	-5.57

Country	Development Status	Commodity	DDA Cuts- Full SSM Bound to URAA		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	0.16	22.97	10.89
Argentina	Ding		0.50	-0.02	-0.01
Asia/Oceania Group	DC		0.18	-0.57	-0.29
Bangladesh	LDC		0.20	0.78	0.39
Brazil	Ding		0.21	-0.80	-0.40

Canada	DC	0.10	-0.24	-0.12
China	Ding	0.15	-0.02	-0.01
Colombia	Ding	0.25	-0.73	-0.36
Egypt	Ding	0.22	-0.71	-0.36
European Group	DC	0.24	0.14	0.07
European Union	DC	0.20	-0.19	-0.09
India	Ding	-2.58	168.00	63.71
Indonesia	Ding	0.07	-0.97	-0.48
Iran	Ding	0.25	0.06	0.03
Japan	DC	0.15	-0.85	-0.43
Malaysia	Ding	0.25	-0.02	-0.01
Mexico	Ding	0.15	-0.87	-0.44
Middle East/African				
Group	Ding	0.15	0.03	0.01
Paraguay	Ding	0.25	-0.54	-0.27
Peru	Ding	0.15	-0.41	-0.21
Philippines	Ding	0.24	-0.24	-0.12
South Africa	Ding	0.32	-3.61	-1.82
South Korea	Ding	0.10	-0.87	-0.43
Syria	Ding	0.15	-0.22	-0.11
Taiwan	Ding	0.12	0.52	0.26
Thailand	Ding	0.25	-2.34	-1.18
Tunisia	Ding	0.14	0.27	0.13
Turkey	Ding	0.10	-0.89	-0.44
United States	DC	0.07	-0.02	-0.01
Venezuela	Ding	0.22	-0.93	-0.47
Vietnam	Ding	0.07	-0.02	-0.01
World	n/a	0.05	-0.49	-0.25
Algeria	Ding	0.05	-0.51	-0.26
Americas Group	Ding	0.03	-0.25	-0.13
Argentina	Ding	0.12	-0.13	-0.06
Asia/Oceania Group	DC	0.07	-0.10	-0.05
Bangladesh	LDC	0.02	-0.14	-0.07
Brazil	Ding	0.04	-0.12	-0.06
Canada	DC	0.03	0.01	0.00
China	Ding	0.11	-0.13	-0.07
Colombia	Ding	0.02	-0.30	-0.15
Dominican Republic	Ding	0.05	-0.23	-0.11
Egypt	Ding	0.01	0.01	0.00
European Group	DC	0.05	-0.40	-0.20
European Union	DC	0.06	-0.39	-0.19
India	Ding	0.03	-0.36	-0.18
Indonesia	Ding	0.04	-0.15	-0.08
Iran	Ding	0.05	-0.12	-0.06
Japan	DC	0.02	-0.09	-0.04
Malaysia	Ding	0.01	-0.13	-0.06
Mexico	Ding	0.02	0.05	0.03
Middle East/African				
Group	Ding	0.02	-0.15	-0.07
Morocco	Ding	0.01	-0.40	-0.20
Paraguay	Ding	0.03	-0.09	-0.04
Peru	Ding	0.02	-0.39	-0.19
Philippines	Ding	0.01	-0.15	-0.07
South Africa	Ding	0.02	-0.28	-0.14

South Korea	Ding	0.01	-0.08	-0.04
Syria	Ding	0.05	-0.28	-0.14
Taiwan	Ding	0.01	-0.27	-0.13
Thailand	Ding	0.02	-0.23	-0.11
Tunisia	Ding	0.05	-0.51	-0.25
Turkey	Ding	0.01	-0.05	-0.02
United States	DC	0.01	-0.13	-0.06
Venezuela	Ding	0.02	-0.32	-0.16
Vietnam	Ding	0.02	-0.13	-0.06
World	n/a	0.05	-0.81	-0.41
Algeria	Ding	1.60	-2.98	-1.50
Americas Group	Ding	0.77	153.13	59.10
Argentina	Ding	0.73	1.03	0.51
Asia/Oceania Group	DC	2.40	-2.11	-1.06
Bangladesh	LDC	1.11	1.37	0.68
Brazil	Ding	1.40	-5.70	-2.89
Canada	DC	0.55	-1.10	-0.55
China	Ding	-1.23	28.31	13.27
Colombia	Ding	0.64	-4.10	-2.07
Dominican Republic	Ding	1.59	-1.92	-0.97
Egypt	Ding	0.31	-2.24	-1.12
European Group	DC	1.46	-2.96	-1.49
European Union	DC	1.61	-4.16	-2.10
India	Ding	-7.78	220.02	78.89
Indonesia	Ding	0.90	-11.74	-6.05
Iran	Ding	1.60	1.11	0.56
Japan	DC	0.43	-5.34	-2.71
Malaysia	Ding	0.43	14.12	6.82
Mexico	Ding	0.06	259.63	89.64
Middle East/African Group	Ding	1.60	0.99	0.50
Morocco	Ding	0.79	-2.64	-1.33
Paraguay	Ding	0.95	-2.34	-1.18
Peru	Ding	1.60	-1.31	-0.66
Philippines	Ding	0.87	-9.99	-5.12
South Africa	Ding	1.59	-3.40	-1.72
South Korea	Ding	0.32	-5.24	-2.65
Syria	Ding	1.60	-2.22	-1.12
Taiwan	Ding	0.13	-3.98	-2.01
Thailand	Ding	0.34	3.42	1.70
Tunisia	Ding	1.42	-8.04	-4.11
Turkey	Ding	-0.79	11.03	5.37
United States	DC	0.95	1.03	0.51
Venezuela	Ding	0.48	-4.41	-2.23
Vietnam	Ding	1.21	1.03	0.51
World	n/a	-0.16	-0.16	-0.08

Table Z: Full Stochastic Model DDA Tariff Cuts Soybean Crush Effects

Country	Development Status	Commodity	% Change	DDA Cuts- No SSM	
				% Change Variance	% Change St. Dev.
Americas Group	Ding	Crush	11.79	149.99	58.11

Argentina	Ding	Supply	7.61	1.11	0.56
Asia/Oceania Group	DC		6.13	4.76	2.35
Bangladesh	LDC		4.50	15.60	7.52
Brazil	Ding		7.59	18.24	8.74
Canada	DC		-5.52	-3.12	-1.57
China	Ding		-14.63	-21.47	-11.39
Colombia	Ding		4.97	17.82	8.54
Egypt	Ding		2.60	4.34	2.15
European Group	DC		-1.44	0.11	0.05
European Union	DC		-0.16	2.04	1.02
India	Ding		-7.49	-69.69	-44.95
Iran	Ding		3.14	23.70	11.22
Japan	DC		-11.90	-34.32	-18.96
Malaysia	Ding		2.79	5.65	2.79
Mexico	Ding		2.35	10.33	5.04
Middle East/African Group	Ding		4.64	1.99	0.99
Morocco	Ding		-1.13	-2.80	-1.41
Paraguay	Ding		7.26	9.98	4.87
Peru	Ding		7.17	10.07	4.92
Philippines	Ding		4.67	15.61	7.52
South Africa	Ding		3.20	10.91	5.31
South Korea	Ding		7.62	18.94	9.06
Syria	Ding		6.05	8.66	4.24
Taiwan	Ding		1.99	-97.52	-84.26
Thailand	Ding		-8.77	-70.24	-45.45
Tunisia	Ding		6.71	23.50	11.13
Turkey	Ding		-12.01	-44.99	-25.83
United States	DC		3.98	1.30	0.65
Venezuela	Ding		5.46	18.29	8.76
Vietnam	Ding		3.22	25.93	12.22
World	n/a		0.10	-0.32	-0.16

			DDA Cuts- Price SSM Only		
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding		0.00	0.08	0.04
Argentina	Ding		0.00	-0.16	-0.08
Asia/Oceania Group	DC		0.00	-0.22	-0.11
Bangladesh	LDC		0.00	-0.07	-0.03
Brazil	Ding		0.00	-0.14	-0.07
Canada	DC		0.00	-0.24	-0.12
China	Ding		0.00	-0.70	-0.35
Colombia	Ding		0.00	0.02	0.01
Egypt	Ding	Crush	0.00	-0.22	-0.11
European Group	DC	Supply	0.00	-0.09	-0.04
European Union	DC		0.00	-0.01	-0.01
India	Ding		0.04	-1.20	-0.60
Iran	Ding		0.00	0.31	0.15
Japan	DC		0.00	-0.06	-0.03
Malaysia	Ding		0.00	-0.18	-0.09
Mexico	Ding		0.00	0.00	0.00
Middle East/African Group	Ding		0.00	-0.12	-0.06

Morocco	Ding	0.00	0.01	0.01
Paraguay	Ding	0.00	-0.07	-0.03
Peru	Ding	0.00	-0.07	-0.03
Philippines	Ding	0.00	-0.06	-0.03
South Africa	Ding	0.00	0.00	0.00
South Korea	Ding	0.00	-0.11	-0.06
Syria	Ding	0.00	-0.09	-0.05
Taiwan	Ding	0.00	0.08	0.04
Thailand	Ding	0.00	0.07	0.04
Tunisia	Ding	0.00	-0.25	-0.13
Turkey	Ding	0.00	-0.02	-0.01
United States	DC	0.00	-0.16	-0.08
Venezuela	Ding	0.00	0.03	0.01
Vietnam	Ding	0.00	0.34	0.17
World	n/a	0.00	-0.03	-0.02

DDA Cuts- Volume SSM Only					
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Crush Supply	3.13	3785.02	523.30
Argentina	Ding		-11.42	25.73	12.13
Asia/Oceania Group	DC		-8.59	6.71	3.30
Bangladesh	LDC		-8.03	22.47	10.66
Brazil	Ding		-11.57	-35.99	-19.99
Canada	DC		-15.77	10.89	5.30
China	Ding		30.89	207.28	75.29
Colombia	Ding		-7.58	-13.51	-7.00
Egypt	Ding		-4.46	6802.28	730.80
European Group	DC		-7.59	-31.42	-17.19
European Union	DC		-3.95	-34.96	-19.35
India	Ding		17.40	662.62	176.15
Iran	Ding		-4.41	125.65	50.22
Japan	DC		-8.39	-22.27	-11.83
Malaysia	Ding		28.76	-84.86	-61.09
Mexico	Ding		23.72	8720.79	839.19
Middle East/African Group	Ding		-6.08	328.41	106.98
Morocco	Ding		-1.74	-7.28	-3.71
Paraguay	Ding		-10.82	8.11	3.98
Peru	Ding		-9.94	1.00	0.50
Philippines	Ding		4.73	6176.06	692.22
South Africa	Ding		-3.69	-16.06	-8.38
South Korea	Ding		-10.98	-20.29	-10.72
Syria	Ding		-9.00	-0.33	-0.17
Taiwan	Ding		-7.14	7395.33	765.76
Thailand	Ding		0.86	-20.63	-10.91
Tunisia	Ding		-2.04	275.48	93.77
Turkey	Ding		25.04	217.55	78.20
United States	DC		-6.06	30.80	14.37
Venezuela	Ding		-7.85	-9.24	-4.73
Vietnam	Ding		-4.96	105.41	43.32
World	n/a		0.29	-10.15	-5.21

Country	Development Status	Commodity	DDA Cuts- Full SSM		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Crush Supply	2.96	3770.57	522.14
Argentina	Ding		-11.40	24.68	11.66
Asia/Oceania Group	DC		-8.58	5.78	2.85
Bangladesh	LDC		-8.02	21.19	10.08
Brazil	Ding		-11.55	-35.86	-19.92
Canada	DC		-15.74	10.19	4.97
China	Ding		30.89	207.07	75.23
Colombia	Ding		-7.56	-14.78	-7.68
Egypt	Ding		-5.30	5889.44	673.91
European Group	DC		-7.58	-31.74	-17.38
European Union	DC		-3.95	-35.03	-19.40
India	Ding		17.40	663.12	176.25
Iran	Ding		-4.40	124.66	49.89
Japan	DC		-8.37	-22.48	-11.96
Malaysia	Ding		28.76	-84.88	-61.12
Mexico	Ding		23.49	8943.87	850.99
Middle East/African Group	Ding		-6.07	326.75	106.58
Morocco	Ding		-1.74	-7.50	-3.82
Paraguay	Ding		-10.80	7.52	3.69
Peru	Ding		-9.92	0.47	0.24
Philippines	Ding		4.71	6172.42	691.99
South Africa	Ding		-3.68	-16.02	-8.36
South Korea	Ding		-10.96	-20.41	-10.79
Syria	Ding		-8.99	-0.74	-0.37
Taiwan	Ding		-7.12	7347.30	762.98
Thailand	Ding		0.86	-20.73	-10.97
Tunisia	Ding		-2.04	263.28	90.60
Turkey	Ding		25.05	216.99	78.04
United States	DC		-6.05	29.69	13.88
Venezuela	Ding		-7.82	-10.84	-5.58
Vietnam	Ding		-4.95	104.50	43.00
World	n/a		0.29	-10.12	-5.20

Country	Development Status	Commodity	DDA Cuts- Full SSM Bound to URAA		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Crush Supply	-2.15	121.95	48.98
Argentina	Ding		-5.02	12.81	6.21
Asia/Oceania Group	DC		-3.88	5.48	2.70
Bangladesh	LDC		-3.51	6.01	2.96
Brazil	Ding		-5.07	-15.12	-7.87
Canada	DC		-7.07	6.31	3.11
China	Ding		12.74	63.19	27.75
Colombia	Ding		-3.46	-8.02	-4.09
Egypt	Ding		-4.45	8.68	4.25
European Group	DC		-3.24	-6.82	-3.47
European Union	DC		-1.82	-10.76	-5.53
India	Ding		16.94	682.51	179.73
Iran	Ding		-2.20	6.16	3.04
Japan	DC		-3.72	-11.70	-6.03

Malaysia	Ding	-0.97	-23.32	-12.43
Mexico	Ding	0.75	2750.21	433.87
Middle East/African Group	Ding	-2.90	16.34	7.86
Morocco	Ding	-1.18	-5.64	-2.86
Paraguay	Ding	-4.79	2.28	1.13
Peru	Ding	-4.48	3.26	1.62
Philippines	Ding	-2.37	204.56	74.52
South Africa	Ding	-2.04	-5.67	-2.88
South Korea	Ding	-4.87	-9.98	-5.12
Syria	Ding	-3.99	-0.65	-0.33
Taiwan	Ding	-0.73	2197.85	379.36
Thailand	Ding	0.34	3.42	1.70
Tunisia	Ding	-1.64	-12.44	-6.43
Turkey	Ding	4.03	20.59	9.81
United States	DC	-2.69	13.46	6.52
Venezuela	Ding	-3.60	-7.47	-3.81
Vietnam	Ding	-2.40	4.89	2.42
World	n/a	0.01	-0.74	-0.37

Table AA: Full Stochastic Model DDA Tariff Cuts Net Trade Effects

Country	Development Status	Commodity	%	DDA Cuts- No SSM	
				% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	-31.29	-5.23	-2.65
Argentina	Ding		-28.77	-2.44	-1.23
Asia/Oceania Group	DC		17.18	-1.20	-0.60
Bangladesh	LDC		4.14	13.28	6.43
Brazil	Ding		-8.79	-0.64	-0.32
Canada	DC		5.41	0.29	0.14
China	Ding		-15.67	12.32	5.98
Colombia	Ding		2.85	0.24	0.12
Egypt	Ding		2.59	3.56	1.76
European Group	DC		-4.71	0.33	0.16
European Union	DC		-0.18	0.86	0.43
India	Ding		126.23	99.75	41.33
Indonesia	Ding		-0.13	-0.14	-0.07
Iran	Ding		3.68	1.47	0.73
Japan	DC		-8.65	-28.71	-15.57
Malaysia	Ding		2.04	3.74	1.85
Mexico	Ding		2.40	8.22	4.03
Middle East/African Group	Ding		5.80	-1.29	-0.65
Morocco	Ding		-1.15	-2.80	-1.41
Paraguay	Ding		-3.22	-0.35	-0.18
Peru	Ding		4.59	0.02	0.01
Philippines	Ding		4.32	15.79	7.61
South Africa	Ding		-5.09	-4.02	-2.03
South Korea	Ding		5.56	9.09	4.45
Syria	Ding		6.06	8.53	4.18
Taiwan	Ding		1.79	-96.31	-80.78
Thailand	Ding		-8.02	15.92	7.66

Tunisia	Ding	8.45	0.04	0.02
Turkey	Ding	-4.41	3.73	1.85
United States	DC	-5.13	-0.35	-0.17
Venezuela	Ding	11.53	0.63	0.31
Vietnam	Ding	0.35	-0.62	-0.31
Algeria	Ding	-0.72	2.35	1.17
Americas Group	Ding	-12.94	60.99	26.88
Argentina	Ding	7.87	1.34	0.67
Asia/Oceania Group	DC	-2.34	4.47	2.21
Bangladesh	LDC	-1.77	12.15	5.90
Brazil	Ding	15.44	14.65	7.08
Canada	DC	5.26	-7.48	-3.81
China	Ding	308.00	-21.31	-11.29
Colombia	Ding	-1.29	7.70	3.78
Dominican Republic	Ding	-0.72	2.98	1.48
Egypt	Ding	-8.70	4.67	2.31
European Group	DC	0.71	-0.56	-0.28
European Union	DC	-1.42	2.22	1.10
India	Ding	-11.09	-67.11	-42.65
Indonesia	Ding	-0.57	2.87	1.43
Iran	Ding	-3.87	8.48	4.15
Japan	DC	13.49	-22.55	-12.00
Malaysia	Ding	-1.11	7.52	3.69
Mexico	Ding	-4.86	7.89	3.87
Middle East/African Group	Ding	-3.13	13.28	6.43
Morocco	Ding	2.33	-3.14	-1.58
Paraguay	Ding	7.99	10.49	5.11
Peru	Ding	-1.03	8.29	4.06
Philippines	Ding	-0.46	4.91	2.43
South Africa	Ding	-0.82	7.72	3.79
South Korea	Ding	-3.30	14.40	6.96
Syria	Ding	-5.55	9.75	4.76
Taiwan	Ding	-8.08	-98.16	-86.42
Thailand	Ding	7.70	-83.81	-59.77
Tunisia	Ding	-4.83	9.44	4.62
Turkey	Ding	14.93	-35.28	-19.55
United States	DC	18.64	2.93	1.46
Venezuela	Ding	-0.81	6.14	3.02
Vietnam	Ding	-0.40	3.99	1.97
Algeria	Ding	-0.94	6.34	3.12
Americas Group	Ding	-19.33	55.44	24.68
Argentina	Ding	9.42	2.51	1.25
Asia/Oceania Group	DC	-3.24	6.65	3.27
Bangladesh	LDC	-1.00	7.35	3.61
Brazil	Ding	25.20	14.65	7.08
Canada	DC	72.38	-5.49	-2.78
China	Ding	62.69	-36.53	-20.33
Colombia	Ding	-1.44	10.61	5.17
Dominican Republic	Ding	-0.95	5.02	2.48
Egypt	Ding	-2.30	6.06	2.99
European Group	DC	5.66	-5.93	-3.01
European Union	DC	5.86	-0.43	-0.21
India	Ding	12.05	-53.91	-32.11

Indonesia	Ding	-0.56	3.84	1.90
Iran	Ding	-3.30	10.25	5.00
Japan	DC	143.58	-30.59	-16.69
Malaysia	Ding	-27.59	13.49	6.53
Mexico	Ding	-9.93	11.34	5.52
Middle East/African Group	Ding	-4.19	16.05	7.73
Morocco	Ding	-0.34	3.78	1.87
Paraguay	Ding	8.75	12.01	5.83
Peru	Ding	-1.35	8.11	3.98
Philippines	Ding	-9.41	12.54	6.08
South Africa	Ding	-1.44	6.55	3.23
South Korea	Ding	-4.60	16.75	8.05
Syria	Ding	-58.99	17.39	8.35
Taiwan	Ding	-99.99	-100.00	-99.69
Thailand	Ding	-100.00	-100.00	-100.00
Tunisia	Ding	1.44	-3.33	-1.68
Turkey	Ding	20.71	-33.98	-18.75
United States	DC	37.93	23.22	11.01
Venezuela	Ding	-0.59	8.70	4.26
Vietnam	Ding	-0.94	7.34	3.61

DDA Cuts- Price SSM Only					
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	0.00	0.00	0.00
Argentina	Ding		0.01	-0.07	-0.04
Asia/Oceania Group	DC		0.00	0.00	0.00
Bangladesh	LDC		0.00	-0.11	-0.05
Brazil	Ding		0.00	-0.06	-0.03
Canada	DC		0.00	-0.01	0.00
China	Ding		0.00	-0.13	-0.07
Colombia	Ding		0.00	-0.01	0.00
Egypt	Ding		0.00	-0.14	-0.07
European Group	DC		0.00	0.00	0.00
European Union	DC		0.00	0.00	0.00
India	Ding		-0.28	-0.12	-0.06
Indonesia	Ding		0.00	0.00	0.00
Iran	Ding		0.00	0.03	0.01
Japan	DC		0.00	-0.10	-0.05
Malaysia	Ding		0.00	-0.19	-0.09
Mexico	Ding		0.00	0.00	0.00
Middle East/African Group	Ding		0.00	-0.03	-0.02
Morocco	Ding		0.00	0.01	0.01
Paraguay	Ding		0.00	-0.01	0.00
Peru	Ding		0.00	-0.06	-0.03
Philippines	Ding		0.00	-0.08	-0.04
South Africa	Ding		0.00	0.00	0.00
South Korea	Ding		0.00	-0.08	-0.04
Syria	Ding		0.00	-0.09	-0.05
Taiwan	Ding		0.00	0.07	0.03
Thailand	Ding		0.00	0.04	0.02
Tunisia	Ding		0.00	0.00	0.00

Turkey	Ding	0.00	-0.02	-0.01
United States	DC	0.00	-0.01	-0.01
Venezuela	Ding	0.00	0.01	0.00
Vietnam	Ding	0.00	-0.02	-0.01
Algeria	Ding	0.00	0.00	0.00
Americas Group	Ding	0.00	0.09	0.04
Argentina	Ding	0.00	-0.16	-0.08
Asia/Oceania Group	DC	0.00	0.00	0.00
Bangladesh	LDC	0.00	0.13	0.07
Brazil	Ding	0.00	-0.08	-0.04
Canada	DC	0.00	-0.09	-0.05
China	Ding	0.00	-0.17	-0.08
Colombia	Ding	0.00	0.02	0.01
Dominican Republic	Ding	0.00	0.00	0.00
Egypt	Ding	0.01	-0.17	-0.08
European Group	DC	0.00	0.00	0.00
European Union	DC	0.00	0.00	0.00
India	Ding	0.06	-1.52	-0.76
Indonesia	Ding	0.00	0.00	0.00
Iran	Ding	0.00	0.13	0.07
Japan	DC	0.00	-0.02	-0.01
Malaysia	Ding	0.00	-0.10	-0.05
Mexico	Ding	0.00	0.03	0.02
Middle East/African Group	Ding	0.00	0.17	0.08
Morocco	Ding	0.00	0.01	0.01
Paraguay	Ding	0.00	-0.06	-0.03
Peru	Ding	0.00	0.04	0.02
Philippines	Ding	0.00	0.00	0.00
South Africa	Ding	0.00	0.00	0.00
South Korea	Ding	0.00	-0.05	-0.02
Syria	Ding	0.00	0.04	0.02
Taiwan	Ding	0.00	0.00	0.00
Thailand	Ding	0.00	-0.02	-0.01
Tunisia	Ding	0.00	-0.09	-0.04
Turkey	Ding	0.00	0.02	0.01
United States	DC	0.00	-0.12	-0.06
Venezuela	Ding	0.00	0.02	0.01
Vietnam	Ding	0.00	0.00	0.00
Algeria	Ding	0.00	0.06	0.03
Americas Group	Ding	0.00	0.16	0.08
Argentina	Ding	0.00	-0.15	-0.07
Asia/Oceania Group	DC	0.00	0.09	0.05
Bangladesh	LDC	0.00	0.19	0.10
Brazil	Ding	-0.01	-0.08	-0.04
Canada	DC	0.02	-0.19	-0.10
China	Ding	0.00	-0.67	-0.34
Colombia	Ding	0.00	0.06	0.03
Dominican Republic	Ding	0.00	0.12	0.06
Egypt	Ding	0.00	-0.14	-0.07
European Group	DC	0.00	0.04	0.02
European Union	DC	0.01	0.02	0.01
India	Ding	-0.04	-3.01	-1.52
Indonesia	Ding	-0.03	-4.07	-2.05

Iran	Ding	0.00	0.25	0.13
Japan	DC	0.01	-0.03	-0.02
Malaysia	Ding	0.04	-0.04	-0.02
Mexico	Ding	0.01	0.05	0.03
Middle East/African Group	Ding	0.00	0.31	0.16
Morocco	Ding	0.00	0.07	0.03
Paraguay	Ding	0.00	-0.04	-0.02
Peru	Ding	0.00	0.13	0.06
Philippines	Ding	0.00	0.02	0.01
South Africa	Ding	0.00	0.06	0.03
South Korea	Ding	0.00	-0.06	-0.03
Syria	Ding	0.06	0.10	0.05
Taiwan	Ding	0.00	0.00	0.00
Thailand	Ding	2.48	2.96	1.47
Tunisia	Ding	0.00	-0.13	-0.06
Turkey	Ding	0.00	0.11	0.06
United States	DC	-0.01	0.16	0.08
Venezuela	Ding	0.00	0.07	0.03
Vietnam	Ding	0.00	0.22	0.11

DDA Cuts- Volume SSM Only

Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding		-9.34	30.19	14.10
Argentina	Ding		66.47	-6.09	-3.09
Asia/Oceania Group	DC		-24.70	2.57	1.27
Bangladesh	LDC		-7.47	19.19	9.17
Brazil	Ding		16.09	-8.04	-4.10
Canada	DC		13.29	-0.31	-0.15
China	Ding		33.35	72.59	31.37
Colombia	Ding		-4.88	-0.97	-0.49
Egypt	Ding		-4.47	5143.37	624.11
European Group	DC		-27.85	-0.08	-0.04
European Union	DC		-3.89	-16.88	-8.83
India	Ding		-95.12	-94.73	-77.05
Indonesia	Ding		-0.14	0.75	0.37
Iran	Ding		-5.20	14.43	6.97
Japan	DC		-5.91	-27.31	-14.74
Malaysia	Ding	Soybean	21.86	-71.14	-46.28
Mexico	Ding		24.29	6033.08	683.14
Middle East/African Group	Ding		-7.88	53.34	23.83
Morocco	Ding		-1.77	-7.28	-3.71
Paraguay	Ding		5.77	-0.74	-0.37
Peru	Ding		-6.91	-4.74	-2.40
Philippines	Ding		4.39	7576.65	776.16
South Africa	Ding		9.26	7.21	3.54
South Korea	Ding		-8.30	-10.83	-5.57
Syria	Ding		-9.02	-0.47	-0.23
Taiwan	Ding		-6.33	4800.59	600.04
Thailand	Ding		0.70	-14.73	-7.66
Tunisia	Ding		-2.25	8.08	3.96
Turkey	Ding		8.26	1.47	0.73

United States	DC	9.88	-0.74	-0.37
Venezuela	Ding	-16.06	1.42	0.71
Vietnam	Ding	-1.25	7.89	3.87
Algeria	Ding	-1.02	11.63	5.66
Americas Group	Ding	-5.53	1330.46	278.21
Argentina	Ding	-11.66	29.08	13.61
Asia/Oceania Group	DC	-0.23	22.78	10.81
Bangladesh	LDC	2.11	84.04	35.66
Brazil	Ding	-20.17	-25.73	-13.82
Canada	DC	12.12	19.02	9.10
China	Ding	-100.00	-100.00	-100.00
Colombia	Ding	0.81	6.17	3.04
Dominican Republic	Ding	-1.04	13.66	6.61
Egypt	Ding	14.72	5703.84	661.83
European Group	DC	11.53	-19.48	-10.27
European Union	DC	-0.19	-5.62	-2.85
India	Ding	27.69	584.32	161.59
Indonesia	Ding	-0.81	4.98	2.46
Iran	Ding	1.95	127.79	50.93
Japan	DC	6.52	-9.54	-4.89
Malaysia	Ding	-10.06	-83.12	-58.91
Mexico	Ding	-50.39	4126.00	550.08
Middle East/African Group	Ding	3.13	442.60	132.94
Morocco	Ding	1.92	-1.76	-0.88
Paraguay	Ding	-11.70	9.25	4.52
Peru	Ding	0.40	42.62	19.43
Philippines	Ding	-0.58	-10.08	-5.17
South Africa	Ding	-0.07	-5.71	-2.90
South Korea	Ding	4.61	-11.39	-5.86
Syria	Ding	5.40	27.18	12.77
Taiwan	Ding	32.10	11000.43	953.59
Thailand	Ding	-0.94	33.17	15.40
Tunisia	Ding	-0.38	-26.80	-14.45
Turkey	Ding	-21.69	97.34	40.48
United States	DC	-23.33	56.49	25.10
Venezuela	Ding	0.10	14.79	7.14
Vietnam	Ding	-0.46	95.38	39.78
Algeria	Ding	3.43	-11.03	-5.68
Americas Group	Ding	-9.85	3036.18	460.02
Argentina	Ding	-14.09	29.84	13.95
Asia/Oceania Group	DC	9.10	-11.51	-5.93
Bangladesh	LDC	3.13	-12.90	-6.67
Brazil	Ding	-35.79	-30.32	-16.53
Canada	DC	121.13	11.75	5.71
China	Ding	-73.95	47.71	21.54
Colombia	Ding	3.27	-12.45	-6.43
Dominican Republic	Ding	3.46	-13.52	-7.01
Egypt	Ding	4.90	7236.40	756.53
European Group	DC	14.04	-21.15	-11.20
European Union	DC	42.36	-19.04	-10.02
India	Ding	-25.76	227.09	80.86
Indonesia	Ding	2.05	-13.89	-7.21
Iran	Ding	8.34	-0.32	-0.16

Soybean
Meal

Soybean Oil

Japan	DC	38.71	-20.82	-11.02
Malaysia	Ding	-449.83	-100.00	-100.00
Mexico	Ding	-111.43	6923.88	738.09
Middle East/African Group	Ding	9.47	76.31	32.78
Morocco	Ding	2.43	-10.37	-5.33
Paraguay	Ding	-13.08	8.94	4.37
Peru	Ding	4.09	-11.72	-6.04
Philippines	Ding	-10.19	2864.38	444.46
South Africa	Ding	4.35	-13.56	-7.03
South Korea	Ding	8.12	-19.67	-10.37
Syria	Ding	270.64	-1.80	-0.90
Taiwan	Ding	3131109.99	21826686.95	46619.15
Thailand	Ding	8.16	1.44	0.72
Tunisia	Ding	3.37	30.75	14.35
Turkey	Ding	-39.39	130.02	51.66
United States	DC	-49.75	60.30	26.61
Venezuela	Ding	1.53	-12.22	-6.31
Vietnam	Ding	3.02	-12.21	-6.31

DDA Cuts- Full SSM

Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding		-8.70	32.18	14.97
Argentina	Ding		66.36	-6.19	-3.14
Asia/Oceania Group	DC		-24.66	2.51	1.25
Bangladesh	LDC		-7.46	17.93	8.60
Brazil	Ding		16.06	-8.11	-4.14
Canada	DC		13.27	-0.32	-0.16
China	Ding		33.36	72.62	31.38
Colombia	Ding		-4.86	-1.21	-0.60
Egypt	Ding		-5.30	4454.13	574.84
European Group	DC		-27.81	0.00	0.00
European Union	DC		-3.88	-16.89	-8.84
India	Ding		-95.13	-94.75	-77.08
Indonesia	Ding		-0.14	0.74	0.37
Iran	Ding		-5.19	14.10	6.82
Japan	DC		-5.90	-27.35	-14.76
Malaysia	Ding	Soybean	21.86	-71.16	-46.30
Mexico	Ding		24.05	6184.12	692.72
Middle East/African Group	Ding		-7.87	53.20	23.78
Morocco	Ding		-1.77	-7.50	-3.82
Paraguay	Ding		5.76	-0.74	-0.37
Peru	Ding		-6.90	-4.90	-2.48
Philippines	Ding		4.37	7572.22	775.91
South Africa	Ding		9.24	7.21	3.54
South Korea	Ding		-8.29	-11.07	-5.70
Syria	Ding		-9.01	-0.88	-0.44
Taiwan	Ding		-6.30	4768.97	597.78
Thailand	Ding		0.70	-14.71	-7.65
Tunisia	Ding		-2.25	8.00	3.92
Turkey	Ding		8.26	1.45	0.72
United States	DC		9.86	-0.75	-0.37

Venezuela	Ding	-16.02	1.38	0.69
Vietnam	Ding	-1.25	7.83	3.84
Algeria	Ding	-1.02	11.64	5.66
Americas Group	Ding	-5.31	1324.11	277.37
Argentina	Ding	-11.64	27.99	13.13
Asia/Oceania Group	DC	-0.24	22.75	10.79
Bangladesh	LDC	2.11	83.45	35.44
Brazil	Ding	-20.14	-25.59	-13.74
Canada	DC	12.09	18.75	8.97
China	Ding	-100.00	-100.00	-100.00
Colombia	Ding	0.81	5.66	2.79
Dominican Republic	Ding	-1.04	13.64	6.60
Egypt	Ding	17.64	4933.99	609.51
European Group	DC	11.50	-19.51	-10.29
European Union	DC	-0.19	-5.60	-2.84
India	Ding	27.69	584.78	161.68
Indonesia	Ding	-0.81	4.98	2.46
Iran	Ding	1.94	127.58	50.86
Japan	DC	6.51	-9.62	-4.93
Malaysia	Ding	-10.06	-83.17	-58.98
Mexico	Ding	-49.91	4233.46	558.29
Middle East/African Group	Ding	3.12	440.69	132.53
Morocco	Ding	1.91	-1.92	-0.96
Paraguay	Ding	-11.68	8.67	4.25
Peru	Ding	0.40	42.57	19.40
Philippines	Ding	-0.57	-10.16	-5.21
South Africa	Ding	-0.08	-5.66	-2.87
South Korea	Ding	4.60	-11.40	-5.87
Syria	Ding	5.38	27.21	12.79
Taiwan	Ding	31.99	10934.48	950.45
Thailand	Ding	-0.94	33.14	15.39
Tunisia	Ding	-0.38	-27.90	-15.09
Turkey	Ding	-21.70	97.19	40.42
United States	DC	-23.29	55.18	24.57
Venezuela	Ding	0.10	14.35	6.93
Vietnam	Ding	-0.46	95.35	39.77
Algeria	Ding	3.43	-11.10	-5.72
Americas Group	Ding	-9.31	3034.50	459.87
Argentina	Ding	-14.07	28.74	13.46
Asia/Oceania Group	DC	9.09	-11.53	-5.94
Bangladesh	LDC	3.13	-12.98	-6.72
Brazil	Ding	-35.74	-30.16	-16.43
Canada	DC	120.93	11.18	5.44
China	Ding	-73.96	47.48	21.44
Colombia	Ding	3.27	-13.34	-6.91
Dominican Republic	Ding	3.46	-13.65	-7.08
Egypt	Ding	5.75	6257.74	697.35
European Group	DC	14.02	-21.19	-11.22
European Union	DC	42.31	-19.05	-10.03
India	Ding	-25.77	227.37	80.93
Indonesia	Ding	1.97	-23.21	-12.37
Iran	Ding	8.33	-0.41	-0.20
Japan	DC	38.65	-20.96	-11.10

Malaysia	Ding	-449.83	-100.00	-100.00
Mexico	Ding	-110.32	7102.84	748.70
Middle East/African Group	Ding	9.46	76.01	32.67
Morocco	Ding	2.42	-10.49	-5.39
Paraguay	Ding	-13.06	8.37	4.10
Peru	Ding	4.08	-11.76	-6.06
Philippines	Ding	-10.14	2862.92	444.33
South Africa	Ding	4.35	-13.51	-7.00
South Korea	Ding	8.11	-19.68	-10.38
Syria	Ding	270.26	-1.85	-0.93
Taiwan	Ding	3120773.71	21690869.78	46473.57
Thailand	Ding	-2.89	-5.60	-2.84
Tunisia	Ding	3.38	26.80	12.60
Turkey	Ding	-39.40	129.92	51.63
United States	DC	-49.68	59.16	26.16
Venezuela	Ding	1.53	-13.19	-6.83
Vietnam	Ding	3.02	-12.28	-6.34

DDA Cuts- Full SSM Bound to URAA					
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean	7.74	4.04	2.00
Argentina	Ding		28.54	1.99	0.99
Asia/Oceania Group	DC		-9.43	3.90	1.93
Bangladesh	LDC		-3.24	6.81	3.35
Brazil	Ding		6.89	-0.39	-0.20
Canada	DC		5.44	0.13	0.07
China	Ding		13.83	-3.76	-1.90
Colombia	Ding		-1.97	0.30	0.15
Egypt	Ding		-4.44	6.27	3.09
European Group	DC		-11.31	0.06	0.03
European Union	DC		-1.74	-4.94	-2.50
India	Ding		-89.98	-72.58	-47.63
Indonesia	Ding		0.13	0.80	0.40
Iran	Ding		-2.56	1.36	0.68
Japan	DC		-2.52	-13.31	-6.89
Malaysia	Ding		-0.66	-23.62	-12.61
Mexico	Ding		0.77	1900.42	347.26
Middle East/African Group	Ding		-3.53	2.69	1.34
Morocco	Ding		-1.20	-5.64	-2.86
Paraguay	Ding		2.30	0.20	0.10
Peru	Ding		-2.88	2.77	1.37
Philippines	Ding		-2.18	267.61	91.73
South Africa	Ding		3.07	2.48	1.23
South Korea	Ding		-3.60	-2.46	-1.24
Syria	Ding		-4.00	-0.55	-0.27
Taiwan	Ding		-0.63	1452.31	293.99
Thailand	Ding		0.37	-4.63	-2.34
Tunisia	Ding		-1.57	-0.55	-0.27
Turkey	Ding		1.41	-1.90	-0.96
United States	DC		3.64	0.51	0.26
Venezuela	Ding		-7.15	-0.25	-0.13

Vietnam	Ding	-0.20	0.97	0.48
Algeria	Ding	0.05	-0.51	-0.26
Americas Group	Ding	2.89	34.76	16.09
Argentina	Ding	-5.16	13.21	6.40
Asia/Oceania Group	DC	0.81	-0.78	-0.39
Bangladesh	LDC	1.18	-1.59	-0.80
Brazil	Ding	-9.23	-11.61	-5.98
Canada	DC	6.07	0.49	0.24
China	Ding	-49.26	27.51	12.92
Colombia	Ding	0.67	-3.23	-1.63
Dominican Republic	Ding	0.05	-0.23	-0.11
Egypt	Ding	15.64	5.98	2.95
European Group	DC	6.32	-6.38	-3.24
European Union	DC	1.00	-2.38	-1.20
India	Ding	26.60	593.23	163.29
Indonesia	Ding	0.04	-0.15	-0.08
Iran	Ding	2.02	0.60	0.30
Japan	DC	3.25	-7.09	-3.61
Malaysia	Ding	0.34	-14.61	-7.59
Mexico	Ding	-1.49	1269.17	270.02
Middle East/African Group	Ding	1.84	17.44	8.37
Morocco	Ding	1.83	-4.17	-2.11
Paraguay	Ding	-5.20	1.97	0.98
Peru	Ding	0.46	-0.87	-0.44
Philippines	Ding	0.14	-16.36	-8.55
South Africa	Ding	0.30	-3.50	-1.77
South Korea	Ding	2.21	-7.80	-3.98
Syria	Ding	3.29	-4.32	-2.18
Taiwan	Ding	3.53	3050.06	461.25
Thailand	Ding	-0.12	1.84	0.92
Tunisia	Ding	1.09	-6.47	-3.29
Turkey	Ding	-3.38	12.81	6.21
United States	DC	-10.71	15.80	7.61
Venezuela	Ding	0.32	-2.09	-1.05
Vietnam	Ding	0.05	-0.14	-0.07
Algeria	Ding	1.58	-2.98	-1.50
Americas Group	Ding	6.97	146.30	56.94
Argentina	Ding	-6.20	12.86	6.23
Asia/Oceania Group	DC	4.17	-3.47	-1.75
Bangladesh	LDC	1.43	0.77	0.38
Brazil	Ding	-15.80	-13.87	-7.19
Canada	DC	54.42	3.13	1.55
China	Ding	-29.18	86.90	36.71
Colombia	Ding	1.50	-6.61	-3.36
Dominican Republic	Ding	1.59	-1.92	-0.97
Egypt	Ding	4.71	3.20	1.59
European Group	DC	6.21	-7.59	-3.87
European Union	DC	19.49	-7.50	-3.82
India	Ding	-26.97	297.77	99.44
Indonesia	Ding	0.90	-11.74	-6.05
Iran	Ding	3.95	-0.10	-0.05
Japan	DC	17.24	-11.15	-5.74
Malaysia	Ding	20.18	-13.98	-7.25

Mexico	Ding	-2.82	2141.75	373.47
Middle East/African Group	Ding	4.45	-0.66	-0.33
Morocco	Ding	1.19	-3.80	-1.92
Paraguay	Ding	-5.79	1.01	0.51
Peru	Ding	1.88	-2.07	-1.04
Philippines	Ding	7.10	65.42	28.62
South Africa	Ding	2.05	-4.21	-2.13
South Korea	Ding	3.62	-10.90	-5.61
Syria	Ding	121.38	-8.37	-4.28
Taiwan	Ding	355189.85	5943160.36	24278.80
Thailand	Ding	1.76	2.47	1.23
Tunisia	Ding	2.05	-9.42	-4.83
Turkey	Ding	-6.07	20.08	9.58
United States	DC	-22.27	8.23	4.03
Venezuela	Ding	0.71	-5.89	-2.99
Vietnam	Ding	1.40	0.67	0.33

Table BB: Full Stochastic Model DDA Tariff Cuts Surplus Effects

Country	Development Status	Variable	% Change	DDA Cuts- No SSM	
				% Change Variance	% Change St. Dev.
Americas Group	Ding	Consumer	3.15	-0.60	-0.30
Argentina	Ding		-0.96	0.25	0.12
Asia/Oceania Group	DC		-0.35	0.81	0.40
Bangladesh	LDC		-0.39	0.61	0.30
Brazil	Ding		-0.41	0.61	0.31
Canada	DC		-0.19	0.77	0.38
China	Ding		-0.29	0.92	0.46
Colombia	Ding		-0.48	0.57	0.29
Egypt	Ding		-0.43	0.63	0.31
European Group	DC		0.41	-0.58	-0.29
European Union	DC		-0.39	0.43	0.22
India	Ding		0.45	-21.52	-11.41
Indonesia	Ding		-0.08	0.92	0.46
Iran	Ding		-0.48	0.70	0.35
Japan	DC		-0.29	0.62	0.31
Malaysia	Ding		-0.48	0.73	0.36
Mexico	Ding		-0.29	0.75	0.37
Middle East/African Group	Ding		-0.29	0.91	0.45
Paraguay	Ding		-0.48	0.62	0.31
Peru	Ding		-0.29	0.93	0.46
Philippines	Ding		-0.46	0.39	0.19
South Africa	Ding		-0.71	5.59	2.76
South Korea	Ding		-0.19	0.78	0.39
Syria	Ding		-0.29	0.82	0.41
Taiwan	Ding		0.71	-1.97	-0.99
Thailand	Ding		-0.48	0.70	0.35
Tunisia	Ding		2.81	-6.70	-3.41
Turkey	Ding		-0.19	0.99	0.49
United States	DC		-0.14	1.07	0.53
Venezuela	Ding		-0.43	0.68	0.34

Vietnam	Ding	-0.14	1.07	0.53
World	n/a	-0.13	-0.01	0.00
Americas Group	Ding	-3.78	-8.86	-4.53
Argentina	Ding	0.51	0.93	0.46
Asia/Oceania Group	DC	0.56	0.55	0.28
Brazil	Ding	0.50	1.02	0.51
Canada	DC	0.58	1.06	0.53
China	Ding	0.50	2.53	1.26
Colombia	Ding	0.55	0.95	0.47
Egypt	Ding	0.57	0.98	0.49
European Group	DC	-0.47	-0.88	-0.44
European Union	DC	0.57	0.96	0.48
India	Ding	-0.77	23.69	11.22
Indonesia	Ding	0.49	0.64	0.32
Iran	Ding	0.51	0.88	0.44
Japan	DC	0.60	1.29	0.64
Mexico	Ding	0.55	0.98	0.49
Middle East/African Group	Ding	0.52	1.10	0.55
Paraguay	Ding	0.54	0.96	0.48
Peru	Ding	0.65	1.12	0.56
South Africa	Ding	0.72	-1.25	-0.63
South Korea	Ding	0.59	0.93	0.46
Thailand	Ding	0.54	1.30	0.65
Tunisia	Ding	-5.17	-9.22	-4.72
Turkey	Ding	0.58	0.98	0.49
United States	DC	0.73	1.31	0.65
Venezuela	Ding	0.56	0.99	0.49
Vietnam	Ding	0.51	1.32	0.66
World	n/a	0.45	0.93	0.47
Americas Group	Ding	24.98	206.33	75.02
Argentina	Ding	15.79	17.04	8.19
Asia/Oceania Group	DC	12.64	18.00	8.63
Bangladesh	LDC	9.20	26.21	12.35
Brazil	Ding	15.76	36.84	16.98
Canada	DC	-10.72	-13.39	-6.94
China	Ding	-27.11	-42.73	-24.32
Colombia	Ding	10.20	29.86	13.96
Egypt	Ding	5.28	9.81	4.79
European Group	DC	-2.86	-2.74	-1.38
European Union	DC	-0.32	1.74	0.86
India	Ding	-14.62	-73.74	-48.76
Iran	Ding	6.37	31.58	14.71
Japan	DC	-22.40	-48.80	-28.45
Malaysia	Ding	5.67	11.60	5.64
Mexico	Ding	4.75	15.57	7.50
Middle East/African Group	Ding	9.49	11.64	5.66
Morocco	Ding	-2.24	-4.97	-2.52
Paraguay	Ding	15.05	26.48	12.46
Peru	Ding	14.86	26.45	12.45
Philippines	Ding	9.56	26.67	12.55
South Africa	Ding	6.58	19.06	9.12
South Korea	Ding	15.83	37.81	17.39

Syria	Ding	12.46	22.16	10.53
Taiwan	Ding	3.97	-97.38	-83.82
Thailand	Ding	-16.79	-75.44	-50.44
Tunisia	Ding	13.88	40.63	18.59
Turkey	Ding	-22.58	-57.41	-34.74
United States	DC	8.12	9.51	4.65
Venezuela	Ding	11.21	31.55	14.70
Vietnam	Ding	6.54	34.17	15.83
World	n/a	-4.43	14.31	6.92

DDA Cuts- Price SSM Only

Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Consumer	0.00	0.03	0.01
Argentina	Ding		0.00	0.04	0.02
Asia/Oceania Group	DC		0.00	0.02	0.01
Bangladesh	LDC		0.00	0.03	0.01
Brazil	Ding		0.00	0.00	0.00
Canada	DC		0.00	0.01	0.01
China	Ding		0.00	0.04	0.02
Colombia	Ding		0.00	0.01	0.01
Egypt	Ding		0.00	0.01	0.01
European Group	DC		0.00	0.01	0.00
European Union	DC		0.00	0.01	0.00
India	Ding		0.00	-0.03	-0.01
Indonesia	Ding		0.00	0.00	0.00
Iran	Ding		0.00	0.04	0.02
Japan	DC		0.00	0.00	0.00
Malaysia	Ding		0.00	0.04	0.02
Mexico	Ding		0.00	0.02	0.01
Middle East/African Group	Ding		0.00	0.04	0.02
Paraguay	Ding		0.00	0.02	0.01
Peru	Ding		0.00	0.02	0.01
Philippines	Ding		0.00	0.01	0.01
South Africa	Ding		0.00	0.01	0.00
South Korea	Ding		0.00	0.00	0.00
Syria	Ding		0.00	0.02	0.01
Taiwan	Ding		0.00	0.03	0.02
Thailand	Ding		0.00	0.01	0.01
Tunisia	Ding		0.00	0.01	0.01
Turkey	Ding		0.00	0.02	0.01
United States	DC		0.00	0.04	0.02
Venezuela	Ding		0.00	0.01	0.00
Vietnam	Ding		0.00	0.04	0.02
World	n/a		0.00	0.00	0.00
Americas Group	Ding	Producer	0.00	0.00	0.00
Argentina	Ding		0.00	0.01	0.01
Asia/Oceania Group	DC		0.00	0.00	0.00
Brazil	Ding		0.00	0.00	0.00
Canada	DC		0.00	0.00	0.00
China	Ding		0.00	0.01	0.01
Colombia	Ding		0.00	0.00	0.00
Egypt	Ding		0.00	0.00	0.00
European Group	DC		0.00	0.00	0.00

European Union	DC		0.00	0.00	0.00
India	Ding		0.00	-0.02	-0.01
Indonesia	Ding		0.00	0.00	0.00
Iran	Ding		0.00	0.00	0.00
Japan	DC		0.00	0.00	0.00
Mexico	Ding		0.00	0.00	0.00
Middle East/African					
Group	Ding		0.00	0.01	0.00
Paraguay	Ding		0.00	0.00	0.00
Peru	Ding		0.00	0.00	0.00
South Africa	Ding		0.00	0.00	0.00
South Korea	Ding		0.00	0.00	0.00
Thailand	Ding		0.00	0.02	0.01
Tunisia	Ding		0.00	0.00	0.00
Turkey	Ding		0.00	0.00	0.00
United States	DC		0.00	0.01	0.00
Venezuela	Ding		0.00	0.00	0.00
Vietnam	Ding		0.00	0.04	0.02
World	n/a		0.00	0.01	0.01
Americas Group	Ding		0.00	0.08	0.04
Argentina	Ding		0.00	-0.17	-0.08
Asia/Oceania Group	DC		0.00	-0.23	-0.12
Bangladesh	LDC		0.00	-0.07	-0.04
Brazil	Ding		0.00	-0.15	-0.08
Canada	DC		-0.01	-0.25	-0.12
China	Ding		0.00	-0.69	-0.34
Colombia	Ding		0.00	0.01	0.01
Egypt	Ding		0.00	-0.22	-0.11
European Group	DC		0.00	-0.09	-0.05
European Union	DC		0.00	-0.01	-0.01
India	Ding		0.08	-1.27	-0.64
Iran	Ding		0.00	0.30	0.15
Japan	DC		0.00	-0.07	-0.03
Malaysia	Ding		0.00	-0.18	-0.09
Mexico	Ding		0.00	0.00	0.00
Middle East/African		Crush			
Group	Ding		0.00	-0.12	-0.06
Morocco	Ding		0.00	0.01	0.01
Paraguay	Ding		0.00	-0.07	-0.03
Peru	Ding		0.00	-0.07	-0.04
Philippines	Ding		0.00	-0.06	-0.03
South Africa	Ding		0.00	0.00	0.00
South Korea	Ding		0.00	-0.12	-0.06
Syria	Ding		0.00	-0.09	-0.05
Taiwan	Ding		0.00	0.08	0.04
Thailand	Ding		0.00	0.08	0.04
Tunisia	Ding		0.00	-0.23	-0.12
Turkey	Ding		0.00	-0.02	-0.01
United States	DC		0.00	-0.16	-0.08
Venezuela	Ding		0.00	0.02	0.01
Vietnam	Ding		0.00	0.33	0.17
World	n/a		0.00	0.08	0.04
DDA Cuts- Volume SSM Only					
Country	Development	Variable	%	% Change	% Change St.

	Status		Change	Variance	Dev.
Americas Group	Ding		-1.59	170.78	64.55
Argentina	Ding		-1.03	15.69	7.56
Asia/Oceania Group	DC		-0.36	4.60	2.28
Bangladesh	LDC		-0.41	12.59	6.11
Brazil	Ding		-0.44	0.67	0.33
Canada	DC		-0.21	5.30	2.62
China	Ding		-0.31	16.56	7.96
Colombia	Ding		-0.52	4.73	2.34
Egypt	Ding		-0.46	6.62	3.26
European Group	DC		-0.51	3.03	1.51
European Union	DC		-0.41	1.64	0.82
India	Ding		-4.79	144.99	56.52
Indonesia	Ding		-0.09	1.17	0.58
Iran	Ding		-0.52	16.28	7.83
Japan	DC		-0.31	1.69	0.84
Malaysia	Ding		-0.52	16.31	7.85
Mexico	Ding	Consumer	-0.31	9.05	4.43
Middle East/African Group	Ding		-0.31	16.69	8.02
Paraguay	Ding		-0.52	8.76	4.29
Peru	Ding		-0.31	10.04	4.90
Philippines	Ding		-0.49	3.19	1.58
South Africa	Ding		-0.14	-7.64	-3.89
South Korea	Ding		-0.21	1.75	0.87
Syria	Ding		-0.31	9.27	4.53
Taiwan	Ding		-0.25	10.39	5.07
Thailand	Ding		-0.52	-0.05	-0.03
Tunisia	Ding		-0.29	4.57	2.26
Turkey	Ding		-0.21	7.56	3.71
United States	DC		-0.16	16.75	8.05
Venezuela	Ding		-0.47	5.66	2.79
Vietnam	Ding		-0.16	16.75	8.05
World	n/a		-0.25	-0.11	-0.05
Americas Group	Ding		1.83	-17.46	-9.15
Argentina	Ding		0.55	5.30	2.62
Asia/Oceania Group	DC		0.59	3.02	1.50
Brazil	Ding		0.54	2.24	1.11
Canada	DC		0.62	1.45	0.72
China	Ding		0.53	0.31	0.15
Colombia	Ding		0.60	1.69	0.84
Egypt	Ding		0.61	1.06	0.53
European Group	DC		0.59	1.20	0.60
European Union	DC		0.61	1.11	0.55
India	Ding	Producer	9.50	-51.41	-30.29
Indonesia	Ding		0.55	2.32	1.15
Iran	Ding		0.55	1.85	0.92
Japan	DC		0.62	0.25	0.13
Mexico	Ding		0.58	0.99	0.49
Middle East/African Group	Ding		0.56	5.88	2.90
Paraguay	Ding		0.59	2.33	1.16
Peru	Ding		0.69	2.38	1.18
South Africa	Ding		0.23	5.39	2.66

South Korea	Ding	0.64	1.68	0.84
Thailand	Ding	0.58	5.87	2.89
Tunisia	Ding	0.57	1.22	0.61
Turkey	Ding	0.62	1.07	0.53
United States	DC	0.78	4.59	2.27
Venezuela	Ding	0.57	0.70	0.35
Vietnam	Ding	0.55	17.07	8.20
World	n/a	0.95	6.91	3.40
Americas Group	Ding	7.14	4316.47	564.57
Argentina	Ding	-21.52	-1.31	-0.66
Asia/Oceania Group	DC	-16.44	-10.69	-5.50
Bangladesh	LDC	-15.41	3.57	1.77
Brazil	Ding	-21.83	-50.03	-29.31
Canada	DC	-29.02	-21.22	-11.24
China	Ding	71.33	425.98	129.34
Colombia	Ding	-14.59	-26.12	-14.04
Egypt	Ding	-6.85	8312.00	817.17
European Group	DC	-14.62	-41.41	-23.46
European Union	DC	-7.76	-40.03	-22.56
India	Ding	38.64	988.38	229.91
Iran	Ding	-8.61	106.41	43.67
Japan	DC	-16.08	-34.83	-19.27
Malaysia	Ding	65.75	-74.96	-49.96
Mexico	Ding	54.98	11657.04	984.30
Middle East/African Group	Ding	-11.77	340.62	109.91
Morocco	Ding	-3.46	-10.51	-5.40
Paraguay	Ding	-20.46	-13.89	-7.20
Peru	Ding	-18.88	-17.99	-9.44
Philippines	Ding	11.96	7784.56	787.95
South Africa	Ding	-7.41	-22.51	-11.97
South Korea	Ding	-20.75	-36.92	-20.58
Syria	Ding	-17.19	-17.58	-9.21
Taiwan	Ding	-13.71	6375.14	704.68
Thailand	Ding	1.72	-19.22	-10.12
Tunisia	Ding	-3.96	289.46	97.35
Turkey	Ding	56.36	398.54	123.28
United States	DC	-11.75	15.43	7.44
Venezuela	Ding	-15.07	-22.91	-12.20
Vietnam	Ding	-9.66	85.74	36.29
World	n/a	10.84	-4.08	-2.06

Crush

DDA Cuts- Full SSM

Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding		-1.57	168.42	63.84
Argentina	Ding		-1.03	15.68	7.55
Asia/Oceania Group	DC		-0.36	4.62	2.28
Bangladesh	LDC		-0.41	12.57	6.10
Brazil	Ding	Consumer	-0.44	0.68	0.34
Canada	DC		-0.21	5.31	2.62
China	Ding		-0.31	16.55	7.96
Colombia	Ding		-0.52	4.73	2.34
Egypt	Ding		-0.46	6.62	3.26
European Group	DC		-0.51	3.01	1.49

European Union	DC	-0.41	1.62	0.81
India	Ding	-4.79	145.00	56.52
Indonesia	Ding	-0.09	1.17	0.58
Iran	Ding	-0.52	16.26	7.82
Japan	DC	-0.31	1.69	0.84
Malaysia	Ding	-0.52	16.29	7.84
Mexico	Ding	-0.31	9.05	4.43
Middle East/African				
Group	Ding	-0.31	16.67	8.02
Paraguay	Ding	-0.52	8.76	4.29
Peru	Ding	-0.31	10.02	4.89
Philippines	Ding	-0.49	3.20	1.59
South Africa	Ding	-0.14	-7.63	-3.89
South Korea	Ding	-0.21	1.76	0.88
Syria	Ding	-0.31	9.26	4.53
Taiwan	Ding	-0.25	10.40	5.07
Thailand	Ding	-0.52	-0.03	-0.02
Tunisia	Ding	-0.29	4.52	2.24
Turkey	Ding	-0.21	7.58	3.72
United States	DC	-0.16	16.73	8.04
Venezuela	Ding	-0.47	5.65	2.78
Vietnam	Ding	-0.16	16.73	8.04
World	n/a	-0.25	-0.11	-0.06
Americas Group	Ding	1.82	-17.20	-9.01
Argentina	Ding	0.55	5.29	2.61
Asia/Oceania Group	DC	0.59	3.03	1.51
Brazil	Ding	0.54	2.24	1.12
Canada	DC	0.62	1.45	0.72
China	Ding	0.53	0.30	0.15
Colombia	Ding	0.60	1.69	0.84
Egypt	Ding	0.61	1.06	0.53
European Group	DC	0.59	1.20	0.60
European Union	DC	0.61	1.11	0.55
India	Ding	9.50	-51.40	-30.29
Indonesia	Ding	0.55	2.31	1.15
Iran	Ding	0.55	1.85	0.92
Japan	DC	0.62	0.25	0.13
Mexico	Ding	0.58	0.99	0.49
Middle East/African				
Group	Ding	0.56	5.86	2.89
Paraguay	Ding	0.59	2.33	1.16
Peru	Ding	0.69	2.38	1.18
South Africa	Ding	0.23	5.39	2.66
South Korea	Ding	0.64	1.68	0.84
Thailand	Ding	0.58	5.88	2.90
Tunisia	Ding	0.57	1.22	0.61
Turkey	Ding	0.62	1.07	0.54
United States	DC	0.78	4.60	2.27
Venezuela	Ding	0.57	0.70	0.35
Vietnam	Ding	0.55	17.05	8.19
World	n/a	0.95	6.91	3.40
Americas Group	Ding	6.78	4300.70	563.38
Argentina	Ding	-21.49	-2.07	-1.04
Asia/Oceania Group	DC	-16.41	-11.43	-5.89

Producer

Crush

Bangladesh	LDC	-15.39	2.52	1.25
Brazil	Ding	-21.79	-49.90	-29.22
Canada	DC	-28.97	-21.67	-11.50
China	Ding	71.34	425.65	129.27
Colombia	Ding	-14.55	-27.09	-14.61
Egypt	Ding	-8.69	7179.00	753.17
European Group	DC	-14.60	-41.67	-23.63
European Union	DC	-7.75	-40.09	-22.60
India	Ding	38.65	989.25	230.04
Iran	Ding	-8.60	105.53	43.36
Japan	DC	-16.05	-34.99	-19.37
Malaysia	Ding	65.75	-74.99	-49.99
Mexico	Ding	54.46	11938.82	997.22
Middle East/African Group	Ding	-11.75	339.17	109.56
Morocco	Ding	-3.45	-10.72	-5.51
Paraguay	Ding	-20.43	-14.31	-7.43
Peru	Ding	-18.85	-18.37	-9.65
Philippines	Ding	11.93	7782.74	787.85
South Africa	Ding	-7.40	-22.46	-11.94
South Korea	Ding	-20.72	-36.99	-20.62
Syria	Ding	-17.16	-17.87	-9.38
Taiwan	Ding	-13.67	6339.95	702.49
Thailand	Ding	1.72	-19.32	-10.18
Tunisia	Ding	-3.96	276.96	94.15
Turkey	Ding	56.38	397.72	123.10
United States	DC	-11.73	14.50	7.00
Venezuela	Ding	-15.03	-24.14	-12.90
Vietnam	Ding	-9.65	84.93	35.99
World	n/a	10.83	-4.10	-2.07

DDA Cuts- Full SSM Bound to URAA

Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Consumer	0.32	22.22	10.55
Argentina	Ding		1.00	0.94	0.47
Asia/Oceania Group	DC		0.36	-0.24	-0.12
Bangladesh	LDC		0.40	1.17	0.58
Brazil	Ding		0.42	-0.40	-0.20
Canada	DC		0.20	-0.04	-0.02
China	Ding		0.30	0.26	0.13
Colombia	Ding		0.50	-0.25	-0.13
Egypt	Ding		0.45	-0.29	-0.14
European Group	DC		0.49	0.58	0.29
European Union	DC		0.40	0.18	0.09
India	Ding		-5.07	153.84	59.32
Indonesia	Ding		0.08	-0.94	-0.47
Iran	Ding		0.50	0.53	0.26
Japan	DC		0.30	-0.58	-0.29
Malaysia	Ding		0.50	0.46	0.23
Mexico	Ding		0.30	-0.58	-0.29
Middle East/African Group	Ding		0.30	0.31	0.16
Paraguay	Ding		0.50	-0.06	-0.03
Peru	Ding		0.30	-0.14	-0.07

Philippines	Ding	0.48	0.22	0.11
South Africa	Ding	0.63	-2.89	-1.46
South Korea	Ding	0.20	-0.68	-0.34
Syria	Ding	0.30	0.09	0.04
Taiwan	Ding	0.24	0.75	0.37
Thailand	Ding	0.49	-2.43	-1.22
Tunisia	Ding	0.28	0.52	0.26
Turkey	Ding	0.20	-0.69	-0.35
United States	DC	0.15	0.12	0.06
Venezuela	Ding	0.45	-0.51	-0.26
Vietnam	Ding	0.15	0.12	0.06
World	n/a	0.07	-0.01	0.00
Americas Group	Ding	-0.43	-3.44	-1.74
Argentina	Ding	-0.52	-0.36	-0.18
Asia/Oceania Group	DC	-0.57	1.55	0.77
Brazil	Ding	-0.51	-0.68	-0.34
Canada	DC	-0.59	-1.09	-0.54
China	Ding	-0.51	-6.70	-3.41
Colombia	Ding	-0.56	-0.79	-0.39
Egypt	Ding	-0.59	-1.03	-0.52
European Group	DC	-0.57	-1.05	-0.52
European Union	DC	-0.58	-0.94	-0.47
India	Ding	10.05	-55.45	-33.25
Indonesia	Ding	-0.48	0.57	0.28
Iran	Ding	-0.52	-0.29	-0.14
Japan	DC	-0.63	-2.20	-1.11
Mexico	Ding	-0.57	-0.98	-0.49
Middle East/African Group	Ding	-0.54	-1.23	-0.62
Paraguay	Ding	-0.55	-0.80	-0.40
Peru	Ding	-0.66	-1.24	-0.62
South Africa	Ding	-0.64	0.37	0.18
South Korea	Ding	-0.60	-0.58	-0.29
Thailand	Ding	-0.55	-0.25	-0.13
Tunisia	Ding	-0.55	-0.99	-0.49
Turkey	Ding	-0.60	-1.06	-0.53
United States	DC	-0.74	-0.92	-0.46
Venezuela	Ding	-0.57	-1.10	-0.55
Vietnam	Ding	-0.52	-0.12	-0.06
World	n/a	-0.20	-0.43	-0.22
Americas Group	Ding	-4.23	145.25	56.61
Argentina	Ding	-9.78	1.77	0.88
Asia/Oceania Group	DC	-7.60	-2.52	-1.27
Bangladesh	LDC	-6.89	-1.32	-0.66
Brazil	Ding	-9.89	-23.61	-12.60
Canada	DC	-13.62	-8.12	-4.14
China	Ding	27.10	107.26	43.96
Colombia	Ding	-6.80	-14.24	-7.39
Egypt	Ding	-8.71	-0.75	-0.38
European Group	DC	-6.38	-12.73	-6.58
European Union	DC	-3.60	-13.97	-7.25
India	Ding	37.59	1018.18	234.39
Iran	Ding	-4.35	1.47	0.73
Japan	DC	-7.30	-18.11	-9.51

Malaysia	Ding	-1.94	-25.17	-13.49
Mexico	Ding	2.11	3254.93	479.22
Middle East/African Group	Ding	-5.71	9.68	4.73
Morocco	Ding	-2.34	-7.86	-4.01
Paraguay	Ding	-9.34	-7.24	-3.69
Peru	Ding	-8.75	-5.78	-2.93
Philippines	Ding	-4.60	224.69	80.19
South Africa	Ding	-4.07	-9.93	-5.10
South Korea	Ding	-9.51	-18.60	-9.78
Syria	Ding	-7.83	-8.41	-4.30
Taiwan	Ding	-1.43	2113.73	370.50
Thailand	Ding	0.68	4.07	2.02
Tunisia	Ding	-3.26	-15.17	-7.90
Turkey	Ding	8.23	30.51	14.24
United States	DC	-5.31	7.43	3.65
Venezuela	Ding	-7.07	-14.04	-7.28
Vietnam	Ding	-4.73	-0.13	-0.06
World	n/a	3.76	-7.09	-3.61

Table CC: Full Stochastic Model DDA Tariff Cuts Tariff Revenue Effects

Country	Development Status	Commodity	% Change	DDA Cuts- No SSM	
				% Change Variance	% Change St. Dev.
Asia/Oceania Group	DC		17.81	-0.14	-0.07
Bangladesh	LDC		4.65	18.18	8.71
China	Ding		-15.27	-34.44	-19.03
Colombia	Ding		3.35	8.44	4.14
Egypt	Ding		3.09	7.47	3.67
European Group	DC		-12.23	-11.57	-5.96
European Union	DC		-15.48	-5.80	-2.94
Indonesia	Ding		-29.19	-2.51	-1.26
Iran	Ding		4.18	7.40	3.64
Japan	DC		-184.56	-6.06	-3.08
Malaysia	Ding		n/a	n/a	n/a
Mexico	Ding		2.90	8.40	4.11
Middle East/African Group	Ding	Soybean	6.31	7.19	3.53
Morocco	Ding		-0.67	-1.61	-0.81
Peru	Ding		5.10	16.82	8.08
Philippines	Ding		4.83	14.25	6.89
South Korea	Ding		6.08	17.23	8.27
Syria	Ding		6.57	20.87	9.94
Taiwan	Ding		-38.62	-67.81	-43.26
Thailand	Ding		-7.64	-71.40	-46.52
Tunisia	Ding		-29.48	-56.47	-34.02
Turkey	Ding		-3.95	-13.79	-7.15
Venezuela	Ding		12.05	2.63	1.31
Vietnam	Ding		0.83	4.06	2.01
World	n/a		-10.06	-16.88	-8.83
Algeria	Ding	Soybean	0.71	-3.40	-1.72
Americas Group	Ding	Meal	-11.70	220.61	79.06
Asia/Oceania Group	DC		-0.94	-27.48	-14.84

Bangladesh	LDC	-0.36	-3.33	-1.68
Canada	DC	-46.61	-72.82	-47.86
China	Ding	2.67	-38.59	-21.64
Colombia	Ding	0.12	-6.27	-3.19
Dominican Republic	Ding	0.70	-2.95	-1.49
Egypt	Ding	-7.41	5.00	2.47
European Group	DC	2.15	2.77	1.37
European Union	DC	-46.02	-75.00	-50.00
Indonesia	Ding	18.91	-4.83	-2.45
Iran	Ding	-2.50	42.24	19.26
Japan	DC	39.20	-87.35	-64.43
Malaysia	Ding	n/a	n/a	n/a
Mexico	Ding	-8.86	7.25	3.56
Middle East/African Group	Ding	-1.74	-6.99	-3.56
Morocco	Ding	-2.86	-20.17	-10.65
Peru	Ding	0.39	-3.12	-1.57
Philippines	Ding	0.96	0.36	0.18
South Africa	Ding	0.60	1.46	0.73
South Korea	Ding	-1.93	-13.62	-7.06
Syria	Ding	-4.20	8.85	4.33
Taiwan	Ding	-44.06	-98.77	-88.92
Thailand	Ding	-31.69	32.23	14.99
Tunisia	Ding	-3.48	92.21	38.64
Turkey	Ding	-23.96	40.51	18.54
Venezuela	Ding	0.61	-2.19	-1.10
Vietnam	Ding	1.03	1.63	0.81
World	n/a	-2.43	17.82	8.54
Algeria	Ding	0.94	-1.34	-0.67
Americas Group	Ding	-17.83	288.43	97.09
Asia/Oceania Group	DC	-1.42	20.05	9.57
Bangladesh	LDC	0.88	-1.13	-0.57
Canada	DC	-11.94	-76.22	-51.23
China	Ding	177.11	-72.00	-47.09
Colombia	Ding	0.42	-3.41	-1.72
Dominican Republic	Ding	0.93	-2.66	-1.34
Egypt	Ding	-17.05	-32.15	-17.63
European Group	DC	-26.57	-61.36	-37.84
European Union	DC	-0.01	27.81	13.05
India	Ding	-23.86	-86.36	-63.07
Indonesia	Ding	-119.80	-1.30	-0.65
Iran	Ding	-1.47	-31.28	-17.10
Japan	DC	-42.39	-12.42	-6.42
Malaysia	Ding	-55.74	-58.97	-35.94
Mexico	Ding	-8.26	21.04	10.02
Middle East/African Group	Ding	-2.38	-24.90	-13.34
Morocco	Ding	1.55	2.75	1.37
Peru	Ding	0.52	-5.00	-2.53
Philippines	Ding	-7.73	43.97	19.99
South Africa	Ding	0.42	0.11	0.05
South Korea	Ding	-2.82	-20.17	-10.65
Syria	Ding	-58.55	38.60	17.73
Taiwan	Ding	-99.99	-100.00	-99.81

Soybean Oil

Tunisia	Ding	-32.58	-45.76	-26.35
Turkey	Ding	-16.34	-14.44	-7.50
Venezuela	Ding	1.30	2.69	1.33
Vietnam	Ding	0.93	-0.25	-0.13
World	n/a	-7.89	-37.81	-21.14

Country	Development Status	Commodity	DDA Cuts- Price SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Asia/Oceania Group	DC		0.00	0.00	0.00
Bangladesh	LDC		0.00	0.16	0.08
China	Ding		0.00	-0.16	-0.08
Colombia	Ding		0.00	0.02	0.01
Egypt	Ding		0.00	0.03	0.01
European Group	DC		-0.01	0.00	0.00
European Union	DC		-205.84	10.70	5.21
Indonesia	Ding		-101.30	4.13	2.05
Iran	Ding		0.00	0.08	0.04
Japan	DC		-27.34	-3.40	-1.71
Malaysia	Ding		n/a	n/a	n/a
Mexico	Ding		0.00	0.05	0.02
Middle East/African Group	Ding	Soybean	0.00	0.10	0.05
Morocco	Ding		0.00	0.02	0.01
Peru	Ding		0.00	0.08	0.04
Philippines	Ding		0.00	0.01	0.01
South Korea	Ding		0.00	-0.01	0.00
Syria	Ding		0.00	0.08	0.04
Taiwan	Ding		0.00	0.03	0.01
Thailand	Ding		0.00	0.00	0.00
Tunisia	Ding		0.00	-0.02	-0.01
Turkey	Ding		0.00	0.02	0.01
Venezuela	Ding		0.00	0.01	0.00
Vietnam	Ding		0.00	0.10	0.05
World	n/a		0.00	0.01	0.00
Algeria	Ding		0.00	0.00	0.00
Americas Group	Ding		0.00	0.04	0.02
Asia/Oceania Group	DC		0.00	-0.21	-0.10
Bangladesh	LDC		0.00	-0.07	-0.04
Canada	DC		0.00	-0.28	-0.14
China	Ding		0.00	-0.22	-0.11
Colombia	Ding		0.00	-0.02	-0.01
Dominican Republic	Ding		0.00	-0.01	0.00
Egypt	Ding		0.01	-0.24	-0.12
European Group	DC	Soybean Meal	0.00	-0.03	-0.02
European Union	DC		0.01	0.01	0.01
Indonesia	Ding		-13.42	10.29	5.02
Iran	Ding		0.00	0.26	0.13
Japan	DC		0.01	-0.08	-0.04
Malaysia	Ding		n/a	n/a	n/a
Mexico	Ding		0.00	-0.06	-0.03
Middle East/African Group	Ding		0.00	-0.15	-0.08
Morocco	Ding		0.00	-0.04	-0.02

Peru	Ding	0.00	-0.04	-0.02
Philippines	Ding	0.00	0.00	0.00
South Africa	Ding	0.00	-0.01	0.00
South Korea	Ding	0.00	0.00	0.00
Syria	Ding	0.00	-0.13	-0.06
Taiwan	Ding	0.00	0.06	0.03
Thailand	Ding	0.00	0.00	0.00
Tunisia	Ding	0.00	-0.15	-0.08
Turkey	Ding	0.00	-0.07	-0.03
Venezuela	Ding	0.00	-0.01	-0.01
Vietnam	Ding	0.00	-0.01	-0.01
World	n/a	0.00	-0.03	-0.02
Algeria	Ding	0.00	0.07	0.04
Americas Group	Ding	0.00	0.06	0.03
Asia/Oceana Group	DC	0.00	-0.13	-0.07
Bangladesh	LDC	0.00	0.16	0.08
Canada	DC	0.02	-0.22	-0.11
China	Ding	0.00	-0.19	-0.10
Colombia	Ding	0.00	0.02	0.01
Dominican Republic	Ding	0.00	0.14	0.07
Egypt	Ding	0.00	-0.03	-0.02
European Group	DC	0.00	-0.11	-0.05
European Union	DC	0.00	0.00	0.00
India	Ding	0.10	-4.43	-2.24
Indonesia	Ding	8.50E+17	3.92E+29	6.26E+15
Iran	Ding	0.00	-0.10	-0.05
Japan	DC	0.00	-0.06	-0.03
Malaysia	Ding	Soybean Oil	0.04	-0.09
Mexico	Ding	0.00	-0.03	-0.02
Middle East/African				
Group	Ding	0.00	-0.12	-0.06
Morocco	Ding	0.00	0.09	0.05
Peru	Ding	0.00	0.13	0.06
Philippines	Ding	0.00	-0.08	-0.04
South Africa	Ding	0.00	0.06	0.03
South Korea	Ding	0.00	0.01	0.01
Syria	Ding	0.05	0.07	0.04
Taiwan	Ding	0.00	0.00	0.00
Tunisia	Ding	0.01	-2.10	-1.05
Turkey	Ding	0.00	0.01	0.00
Venezuela	Ding	0.00	0.07	0.03
Vietnam	Ding	0.00	0.21	0.10
World	n/a	0.02	-0.75	-0.38

Country	Development Status	Commodity	DDA Cuts- Volume SSM Only		
			% Change	% Change	% Change St.
			Variance		Dev.
Asia/Oceania Group	DC		-24.38	3.49	1.73
Bangladesh	LDC		-6.99	10.53	5.13
China	Ding		34.03	4.02	1.99
Colombia	Ding	Soybean	-4.39	-6.74	-3.43
Egypt	Ding		-4.09	1101.66	246.65
European Group	DC		-28.15	-32.28	-17.71
European Union	DC		-90.80	-7.44	-3.79

Indonesia	Ding	1.45	5.71	2.81
Iran	Ding	-4.70	21.33	10.15
Japan	DC	230.51	-2.83	-1.43
Malaysia	Ding	n/a	n/a	n/a
Mexico	Ding	24.65	881.14	213.23
Middle East/African Group	Ding	-7.41	65.24	28.55
Morocco	Ding	-1.27	0.06	0.03
Peru	Ding	-6.43	3.82	1.89
Philippines	Ding	4.50	468.57	138.45
South Korea	Ding	-7.84	-17.65	-9.25
Syria	Ding	-8.55	0.19	0.10
Taiwan	Ding	-5.84	107.40	44.01
Thailand	Ding	1.22	15.97	7.69
Tunisia	Ding	-1.82	-5.37	-2.72
Turkey	Ding	8.82	34.16	15.83
Venezuela	Ding	-15.55	1.58	0.79
Vietnam	Ding	-0.74	20.76	9.89
World	n/a	16.82	9.94	4.85
Algeria	Ding	0.95	2.51	1.25
Americas Group	Ding	-3.47	5512.86	649.19
Asia/Oceania Group	DC	1.75	-3.37	-1.70
Bangladesh	LDC	4.15	45.74	20.72
Canada	DC	14.36	13.74	6.65
China	Ding	-28.98	1244.73	266.71
Colombia	Ding	2.83	21.86	10.39
Dominican Republic	Ding	0.94	3.97	1.97
Egypt	Ding	17.62	7259.62	757.88
European Group	DC	13.81	-35.38	-19.62
European Union	DC	33.54	-50.68	-29.77
Indonesia	Ding	304.19	7.84	3.85
Iran	Ding	3.97	126.86	50.62
Japan	DC	29.81	-58.60	-35.66
Malaysia	Ding	n/a	n/a	n/a
Mexico	Ding	-48.85	13818.17	1079.75
Middle East/African Group	Ding	5.19	94.54	39.48
Morocco	Ding	3.96	-28.67	-15.54
Peru	Ding	2.41	39.01	17.90
Philippines	Ding	1.43	70.43	30.55
South Africa	Ding	1.92	3.92	1.94
South Korea	Ding	6.72	33.39	15.50
Syria	Ding	7.50	-1.18	-0.59
Taiwan	Ding	34.69	5558.69	652.24
Thailand	Ding	1.04	8.77	4.29
Tunisia	Ding	1.65	1023.76	235.23
Turkey	Ding	-20.14	-30.44	-16.60
Venezuela	Ding	2.10	20.21	9.64
Vietnam	Ding	1.53	87.06	36.77
World	n/a	-9.44	162.81	62.11
Algeria	Ding	-3.54	15.35	7.40
Americas Group	Ding	8.76	2091.30	368.11
Asia/Oceania Group	DC	1.75	28.26	13.25
Bangladesh	LDC	-3.83	1.97	0.98

Soybean
Meal

Soybean Oil

Canada	DC	106.47	-10.98	-5.65
China	Ding	-100.00	-100.00	-100.00
Colombia	Ding	-3.69	3.34	1.65
Dominican Republic	Ding	-3.51	12.55	6.09
Egypt	Ding	18.22	17123.25	1212.37
European Group	DC	6.41	-30.91	-16.88
European Union	DC	1.81	-11.45	-5.90
India	Ding	74.86	8170.83	809.44
Indonesia	Ding	1.55E+17	3.63E+29	6.02E+15
Iran	Ding	1.04	147.04	57.17
Japan	DC	8.69	83.02	35.28
Malaysia	Ding	-2418.08	1310.21	275.53
Mexico	Ding	-171.73	35497.44	1786.73
Middle East/African Group	Ding	2.49	3073.00	463.29
Morocco	Ding	-4.48	1.75	0.87
Peru	Ding	-2.93	15.33	7.39
Philippines	Ding	16.81	7004.63	742.89
South Africa	Ding	-2.67	3.14	1.56
South Korea	Ding	0.85	21.14	10.06
Syria	Ding	248.81	-32.56	-17.88
Taiwan	Ding	2934987.57	18936941.26	43416.71
Tunisia	Ding	7.45	44214.57	2005.10
Turkey	Ding	90.62	1724.89	327.19
Venezuela	Ding	-5.31	-7.36	-3.75
Vietnam	Ding	-3.93	0.55	0.28
World	n/a	2.63	1494.26	299.28

Country	Development Status	Commodity	% Change	DDA Cuts- Full SSM	
				% Change Variance	% Change St. Dev.
Asia/Oceania Group	DC		-24.34	3.43	1.70
Bangladesh	LDC		-6.98	10.38	5.06
China	Ding		34.03	4.02	1.99
Colombia	Ding		-4.38	-7.15	-3.64
Egypt	Ding		-4.92	941.10	222.66
European Group	DC		-28.10	-32.19	-17.65
European Union	DC		-113.62	-7.77	-3.96
Indonesia	Ding		-11.08	12.65	6.14
Iran	Ding		-4.69	21.17	10.08
Japan	DC		-384.34	-16.56	-8.66
Malaysia	Ding		n/a	n/a	n/a
Mexico	Ding	Soybean	24.41	904.07	216.87
Middle East/African Group	Ding		-7.39	65.16	28.52
Morocco	Ding		-1.26	0.01	0.00
Peru	Ding		-6.41	3.82	1.89
Philippines	Ding		4.49	468.09	138.35
South Korea	Ding		-7.83	-17.61	-9.23
Syria	Ding		-8.53	0.25	0.13
Taiwan	Ding		-5.82	107.04	43.89
Thailand	Ding		1.22	16.00	7.71
Tunisia	Ding		-1.82	-5.38	-2.73
Turkey	Ding		8.83	34.18	15.84

Venezuela	Ding		-15.50	1.52	0.76
Vietnam	Ding		-0.74	20.75	9.89
World	n/a		16.77	8.81	4.31
Algeria	Ding		0.95	2.50	1.24
Americas Group	Ding		-3.24	5490.74	647.71
Asia/Oceania Group	DC		1.75	-4.10	-2.07
Bangladesh	LDC		4.15	45.71	20.71
Canada	DC		14.33	12.82	6.22
China	Ding		-29.00	1243.42	266.53
Colombia	Ding		2.83	22.28	10.58
Dominican Republic	Ding		0.94	3.95	1.95
Egypt	Ding		20.55	6273.57	698.35
European Group	DC		13.78	-35.53	-19.71
European Union	DC		33.50	-50.64	-29.74
Indonesia	Ding		-73.08	18.51	8.86
Iran	Ding		3.96	125.75	50.25
Japan	DC		29.76	-58.78	-35.80
Malaysia	Ding		n/a	n/a	n/a
Mexico	Ding	Soybean	-48.35	14169.85	1094.56
Middle East/African		Meal			
Group	Ding		5.18	94.29	39.39
Morocco	Ding		3.95	-29.28	-15.90
Peru	Ding		2.41	39.00	17.90
Philippines	Ding		1.44	70.46	30.56
South Africa	Ding		1.92	3.93	1.95
South Korea	Ding		6.72	33.29	15.45
Syria	Ding		7.48	-1.73	-0.87
Taiwan	Ding		34.57	5522.49	649.83
Thailand	Ding		1.04	8.79	4.30
Tunisia	Ding		1.65	991.68	230.41
Turkey	Ding		-20.15	-30.61	-16.70
Venezuela	Ding		2.10	20.41	9.73
Vietnam	Ding		1.54	87.03	36.76
World	n/a		-9.41	166.26	63.17
Algeria	Ding		-3.54	15.22	7.34
Americas Group	Ding		8.77	2069.77	365.81
Asia/Oceania Group	DC		1.75	27.48	12.91
Bangladesh	LDC		-3.82	1.88	0.94
Canada	DC		106.29	-11.61	-5.98
China	Ding		-100.00	-100.00	-100.00
Colombia	Ding		-3.66	-0.13	-0.06
Dominican Republic	Ding		-3.50	10.94	5.33
Egypt	Ding		16.04	14979.34	1127.98
European Group	DC		6.40	-31.35	-17.14
European Union	DC	Soybean Oil	1.81	-11.33	-5.84
India	Ding		74.85	8174.63	809.65
Indonesia	Ding		2.86E+18	1.65E+30	1.28E+16
Iran	Ding		1.03	145.54	56.70
Japan	DC		8.68	82.75	35.18
Malaysia	Ding		-2417.17	1298.26	273.93
Mexico	Ding		-170.22	36043.00	1801.13
Middle East/African					
Group	Ding		2.48	3072.89	463.28
Morocco	Ding		-4.48	1.52	0.76

Peru	Ding	-2.93	15.25	7.36
Philippines	Ding	16.71	7001.01	742.67
South Africa	Ding	-2.67	3.12	1.55
South Korea	Ding	0.85	20.98	9.99
Syria	Ding	248.46	-32.65	-17.93
Taiwan	Ding	2925405.90	18810376.56	43271.05
Tunisia	Ding	7.42	43005.53	1976.19
Turkey	Ding	90.59	1723.20	326.99
Venezuela	Ding	-5.28	-10.97	-5.64
Vietnam	Ding	-3.92	0.47	0.24
World	n/a	2.62	1504.11	300.51

DDA Cuts- Full SSM Bound to URAA					
Country	Development Status	Commodity	% Change	% Change Variance	% Change St. Dev.
Asia/Oceania Group	DC		-9.94	2.40	1.19
Bangladesh	LDC		-3.72	-8.08	-4.12
China	Ding		13.28	56.62	25.15
Colombia	Ding		-2.46	-5.59	-2.84
Egypt	Ding		-4.92	-9.59	-4.92
European Group	DC		-11.90	-14.76	-7.67
European Union	DC		-137.51	-6.84	-3.48
Indonesia	Ding		-83.66	1.03	0.51
Iran	Ding		-3.04	-4.19	-2.12
Japan	DC		29.24	3.07	1.52
Malaysia	Ding		n/a	n/a	n/a
Mexico	Ding		0.15	211.34	76.45
Middle East/African Group	Ding	Soybean	-4.00	-1.34	-0.67
Morocco	Ding		-1.68	-3.88	-1.96
Peru	Ding		-3.36	-6.47	-3.29
Philippines	Ding		-2.71	-16.42	-8.58
South Korea	Ding		-4.09	-10.62	-5.46
Syria	Ding		-4.48	-11.80	-6.08
Taiwan	Ding		-1.13	11.13	5.42
Thailand	Ding		-0.12	1.61	0.80
Tunisia	Ding		-2.06	-2.57	-1.29
Turkey	Ding		0.91	4.62	2.28
Venezuela	Ding		-7.59	-1.87	-0.94
Vietnam	Ding		-0.69	-0.64	-0.32
World	n/a		5.12	0.27	0.13
Algeria	Ding		-0.04	-0.15	-0.07
Americas Group	Ding		2.81	175.12	65.87
Asia/Oceania Group	DC		0.72	13.95	6.75
Bangladesh	LDC		1.09	4.71	2.33
Canada	DC		5.98	13.30	6.44
China	Ding	Soybean	10.80	89.46	37.64
Colombia	Ding	Meal	0.59	4.36	2.15
Dominican Republic	Ding		-0.04	0.15	0.07
Egypt	Ding		15.56	13.96	6.75
European Group	DC		6.25	-14.48	-7.53
European Union	DC		16.13	-24.31	-13.00
Indonesia	Ding		157.99	6.11	3.01
Iran	Ding		1.93	2.09	1.04

Japan	DC	13.82	-31.65	-17.33
Malaysia	Ding	n/a	n/a	n/a
Mexico	Ding	-1.35	4111.00	548.92
Middle East/African				
Group	Ding	1.74	6.10	3.00
Morocco	Ding	1.74	-17.03	-8.91
Peru	Ding	0.37	1.51	0.75
Philippines	Ding	0.05	6.24	3.07
South Africa	Ding	0.22	-0.52	-0.26
South Korea	Ding	2.13	12.64	6.13
Syria	Ding	3.20	0.66	0.33
Taiwan	Ding	3.44	1609.71	313.49
Thailand	Ding	-0.21	-0.53	-0.26
Tunisia	Ding	1.01	-9.02	-4.62
Turkey	Ding	-3.47	-21.47	-11.38
Venezuela	Ding	0.24	1.62	0.81
Vietnam	Ding	-0.04	0.08	0.04
World	n/a	-3.76	10.33	5.04
Algeria	Ding	-1.58	9.36	4.58
Americas Group	Ding	5.31	498.69	144.68
Asia/Oceania Group	DC	0.94	-7.91	-4.04
Bangladesh	LDC	-1.72	10.39	5.07
Canada	DC	49.79	-3.77	-1.90
China	Ding	-49.38	52.57	23.52
Colombia	Ding	-1.64	4.19	2.08
Dominican Republic	Ding	-1.56	10.65	5.19
Egypt	Ding	1.46	13.80	6.68
European Group	DC	2.93	-19.10	-10.06
European Union	DC	0.91	-15.15	-7.89
India	Ding	72.54	11128.08	959.63
Indonesia	Ding	1.47E+18	7.31E+29	8.55E+15
Iran	Ding	0.71	78.22	33.50
Japan	DC	3.18	36.41	16.79
Malaysia	Ding	Soybean Oil	128.93	51.30
Mexico	Ding		3277.49	481.16
Middle East/African				
Group	Ding	1.21	43.78	19.91
Morocco	Ding	-1.95	5.58	2.75
Peru	Ding	-1.29	14.18	6.86
Philippines	Ding	7.82	1555.30	306.85
South Africa	Ding	-1.12	4.89	2.41
South Korea	Ding	0.42	17.37	8.34
Syria	Ding	116.05	-22.69	-12.08
Taiwan	Ding	347748.01	5601766.26	23568.26
Tunisia	Ding	-0.60	568.59	158.57
Turkey	Ding	33.83	43.32	19.71
Venezuela	Ding	-2.42	-1.60	-0.80
Vietnam	Ding	-1.75	10.44	5.09
World	n/a	19.01	1378.00	284.45

Table DD: Full Stochastic Model DDA Tariff Cuts Net Welfare Effects

DDA Cuts- No SSM

Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Algeria	Ding	Net Welfare	0.83	-2.06	-1.03
Americas Group	Ding		-0.70	-7.33	-3.73
Argentina	Ding		1.43	1.13	0.56
Asia/Oceania Group	DC		0.40	0.96	0.48
Bangladesh	LDC		1.45	2.27	1.13
Brazil	Ding		1.08	2.12	1.05
Canada	DC		-0.25	0.98	0.49
China	Ding		-5.66	-0.31	-0.16
Colombia	Ding		0.75	1.68	0.84
Dominican Republic	LDC		0.90	-2.76	-1.39
Egypt	Ding		-1.02	1.71	0.85
European Group	DC		-2.96	0.19	0.09
European Union	DC		-0.65	2.78	1.38
India	Ding		-4.94	7.47	3.67
Indonesia	Ding		-0.07	1.01	0.50
Iran	Ding		1.23	0.95	0.47
Japan	DC		-4.11	5.98	2.95
Malaysia	Ding		0.29	3.15	1.56
Mexico	Ding		0.81	2.53	1.26
Middle East/African Group	Ding		0.70	1.57	0.78
Morocco	Ding		-0.71	1.33	0.66
Paraguay	Ding		0.92	1.01	0.51
Peru	Ding		0.66	2.46	1.22
Philippines	Ding		1.48	3.28	1.63
South Africa	Ding		0.52	0.83	0.42
South Korea	Ding		0.74	-1.08	-0.54
Syria	Ding		3.56	17.79	8.53
Taiwan	Ding		-5.22	-43.53	-24.85
Thailand	Ding		-17.34	-56.78	-34.26
Tunisia	Ding		-5.91	-0.56	-0.28
Turkey	Ding		-2.35	6.37	3.14
United States	DC		1.35	1.48	0.74
Venezuela	Ding		1.39	2.04	1.01
Vietnam	Ding		0.20	1.88	0.93

DDA Cuts- Price SSM Only					
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Algeria	Ding	Net Welfare	0.00	0.04	0.02
Americas Group	Ding		0.00	0.00	0.00
Argentina	Ding		0.00	0.02	0.01
Asia/Oceania Group	DC		0.00	0.00	0.00
Bangladesh	LDC		0.00	0.20	0.10
Brazil	Ding		0.00	0.00	0.00
Canada	DC		0.00	0.00	0.00
China	Ding		0.00	-0.05	-0.03
Colombia	Ding		0.00	0.00	0.00
Dominican Republic	LDC		0.00	0.13	0.06
Egypt	Ding		0.00	-0.03	-0.02
European Group	DC		0.00	0.00	0.00
European Union	DC		0.00	-0.02	-0.01

India	Ding	0.02	-0.25	-0.13
Indonesia	Ding	0.00	0.02	0.01
Iran	Ding	0.00	0.02	0.01
Japan	DC	0.00	0.00	0.00
Malaysia	Ding	0.00	-0.06	-0.03
Mexico	Ding	0.00	0.01	0.01
Middle East/African Group	Ding	0.00	0.01	0.01
Morocco	Ding	0.00	0.05	0.02
Paraguay	Ding	0.00	0.00	0.00
Peru	Ding	0.00	0.02	0.01
Philippines	Ding	0.00	0.00	0.00
South Africa	Ding	0.00	0.00	0.00
South Korea	Ding	0.00	-0.02	-0.01
Syria	Ding	0.00	0.00	0.00
Taiwan	Ding	0.00	0.04	0.02
Thailand	Ding	0.00	0.00	0.00
Tunisia	Ding	0.00	-0.05	-0.02
Turkey	Ding	0.00	0.01	0.00
United States	DC	0.00	0.01	0.01
Venezuela	Ding	0.00	0.00	0.00
Vietnam	Ding	0.00	0.04	0.02

DDA Cuts- Volume SSM Only					
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Algeria	Ding	Net Welfare	-1.51	10.87	5.29
Americas Group	Ding		2.51	-16.36	-8.54
Argentina	Ding		-1.04	7.62	3.74
Asia/Oceania Group	DC		-0.37	1.41	0.70
Bangladesh	LDC		-4.32	3.95	1.95
Brazil	Ding		-0.57	0.60	0.30
Canada	DC		-0.18	1.43	0.71
China	Ding		10.79	-11.75	-6.06
Colombia	Ding		-1.38	0.69	0.35
Dominican Republic	LDC		-3.04	11.84	5.75
Egypt	Ding		-0.21	2774.74	436.17
European Group	DC		-1.78	-3.19	-1.61
European Union	DC		-3.45	-4.25	-2.15
India	Ding		16.28	-42.81	-24.38
Indonesia	Ding		-0.08	0.86	0.43
Iran	Ding		-1.70	5.95	2.93
Japan	DC		-1.68	9.78	4.77
Malaysia	Ding		6.59	-0.84	-0.42
Mexico	Ding		15.19	652.00	174.23
Middle East/African Group	Ding		-0.54	31.58	14.71
Morocco	Ding		-2.29	-0.16	-0.08
Paraguay	Ding		-0.14	2.53	1.26
Peru	Ding		-0.84	11.44	5.57
Philippines	Ding		2.37	-32.64	-17.93
South Africa	Ding		-0.01	1.35	0.67
South Korea	Ding		-1.32	2.57	1.27
Syria	Ding		-4.64	1.98	0.99

Taiwan	Ding	-2.67	144.31	56.30
Thailand	Ding	0.74	0.24	0.12
Tunisia	Ding	0.56	146.16	56.90
Turkey	Ding	3.07	8.98	4.39
United States	DC	-0.73	5.72	2.82
Venezuela	Ding	-1.93	-0.79	-0.39
Vietnam	Ding	0.05	156.92	60.29

Country	Development Status	Variable	DDA Cuts- Full SSM		
			% Change	% Change Variance	% Change St. Dev.
Algeria	Ding	Net Welfare	-1.51	10.79	5.25
Americas Group	Ding		2.45	-16.87	-8.82
Argentina	Ding		-1.03	7.62	3.74
Asia/Oceania Group	DC		-0.37	1.42	0.71
Bangladesh	LDC		-4.31	3.84	1.90
Brazil	Ding		-0.57	0.61	0.31
Canada	DC		-0.18	1.44	0.71
China	Ding		10.79	-11.77	-6.07
Colombia	Ding		-1.37	0.91	0.45
Dominican Republic	LDC		-3.03	10.35	5.05
Egypt	Ding		-1.46	2404.26	400.43
European Group	DC		-1.77	-3.20	-1.61
European Union	DC		-3.44	-4.29	-2.17
India	Ding		16.28	-42.80	-24.37
Indonesia	Ding		-0.08	0.91	0.45
Iran	Ding		-1.69	6.03	2.97
Japan	DC		-1.68	9.73	4.75
Malaysia	Ding		6.59	-0.89	-0.44
Mexico	Ding		15.04	672.71	177.98
Middle East/African Group	Ding		-0.54	31.48	14.67
Morocco	Ding		-2.29	-0.32	-0.16
Paraguay	Ding		-0.14	2.53	1.26
Peru	Ding		-0.84	11.36	5.53
Philippines	Ding		2.37	-32.75	-17.99
South Africa	Ding		-0.01	1.35	0.67
South Korea	Ding		-1.32	2.57	1.28
Syria	Ding		-4.63	1.90	0.94
Taiwan	Ding		-2.66	143.24	55.96
Thailand	Ding		0.74	0.30	0.15
Tunisia	Ding		0.56	141.06	55.26
Turkey	Ding		3.08	8.96	4.38
United States	DC		-0.73	5.73	2.83
Venezuela	Ding		-1.91	-1.73	-0.87
Vietnam	Ding		0.05	156.73	60.23

Country	Development Status	Variable	DDA Cuts- Full SSM Bound to URAA		
			% Change	% Change Variance	% Change St. Dev.
Algeria	Ding	Net Welfare	-0.88	5.73	2.82
Americas Group	Ding		-0.64	-4.85	-2.46
Argentina	Ding		-1.15	-0.40	-0.20

Asia/Oceania Group	DC	-0.29	-0.41	-0.20
Bangladesh	LDC	-1.96	8.46	4.14
Brazil	Ding	-0.91	-1.60	-0.80
Canada	DC	-0.63	-1.11	-0.56
China	Ding	4.89	1.06	0.53
Colombia	Ding	-0.62	-1.06	-0.53
Dominican Republic	LDC	-1.40	9.53	4.66
Egypt	Ding	-4.07	-1.60	-0.81
European Group	DC	-1.29	-2.64	-1.33
European Union	DC	-1.55	-2.41	-1.21
India	Ding	16.25	-51.03	-30.02
Indonesia	Ding	0.08	-1.30	-0.65
Iran	Ding	-0.98	0.49	0.25
Japan	DC	-0.49	5.25	2.59
Malaysia	Ding	0.23	-11.08	-5.71
Mexico	Ding	0.63	282.47	95.57
Middle East/African Group	Ding	-0.44	-0.65	-0.33
Morocco	Ding	-1.33	-0.34	-0.17
Paraguay	Ding	-0.80	-0.83	-0.42
Peru	Ding	-0.47	1.03	0.51
Philippines	Ding	-0.27	-15.95	-8.32
South Africa	Ding	-0.32	-0.84	-0.42
South Korea	Ding	-0.50	-0.38	-0.19
Syria	Ding	-2.28	-7.54	-3.84
Taiwan	Ding	-0.13	65.61	28.69
Thailand	Ding	0.10	-3.64	-1.84
Tunisia	Ding	-0.40	0.98	0.49
Turkey	Ding	0.84	-1.56	-0.78
United States	DC	-1.10	-1.06	-0.53
Venezuela	Ding	-1.30	-2.18	-1.09
Vietnam	Ding	-0.05	4.46	2.20

Table EE: Full Stochastic Model DDA Tariff Cuts Price SSM Effects

Country	Development Status	Variable	Value	DDA Cuts- Price SSM Only		
				% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	392.20	0.00	0.04	0.02
World Prices	n/a	Soybean Meal	342.66	0.00	-0.01	-0.01
World Prices	n/a	Soybean Oil	894.57	0.00	0.20	0.10
Americas Group	Ding		0	n/a	n/a	n/a
Bangladesh	LDC		0	n/a	n/a	n/a
China	Ding		0	-36.38	-61.33	-37.82
Colombia	Ding		0	-33.36	-55.59	-33.36
Dominican Republic	Ding		0	n/a	n/a	n/a
Egypt	Ding		0	n/a	n/a	n/a
India	Ding	Price SSM	0	-38.71	-62.61	-38.86
Indonesia	Ding		1	-47.21	-72.60	-47.66
Malaysia	Ding		0	n/a	n/a	n/a
Mexico	Ding		0	n/a	n/a	n/a
Middle East/African Group	Ding		0	n/a	n/a	n/a
Morocco	Ding		0	n/a	n/a	n/a

Peru	Ding	0	n/a	n/a	n/a
Philippines	Ding	0	n/a	n/a	n/a
South Africa	Ding	0	n/a	n/a	n/a
South Korea	Ding	0	0.92	1.86	0.92
Taiwan	Ding	0	n/a	n/a	n/a
Tunisia	Ding	0	-42.56	-67.04	-42.59
Turkey	Ding	0	n/a	n/a	n/a
Venezuela	Ding	0	n/a	n/a	n/a
Vietnam	Ding	0	n/a	n/a	n/a
Americas Group	Ding	0	n/a	n/a	n/a
Bangladesh	LDC	0	n/a	n/a	n/a
China	Ding	4	0.00	0.00	0.00
Colombia	Ding	1	0.00	0.00	0.00
Dominican Republic	Ding	0	n/a	n/a	n/a
Egypt	Ding	0	n/a	n/a	n/a
India	Ding	53	0.00	0.00	0.00
Indonesia	Ding	45	0.00	0.00	0.00
Malaysia	Ding	0	n/a	n/a	n/a
Mexico	Ding	0	n/a	n/a	n/a
Middle East/African		Price SSM			
Group	Ding	Count	0	n/a	n/a
Morocco	Ding		0	n/a	n/a
Peru	Ding		0	n/a	n/a
Philippines	Ding		0	n/a	n/a
South Africa	Ding		0	n/a	n/a
South Korea	Ding		1	0.00	0.00
Taiwan	Ding		0	n/a	n/a
Tunisia	Ding		3	0.00	0.00
Turkey	Ding		0	n/a	n/a
Venezuela	Ding		0	n/a	n/a
Vietnam	Ding		0	n/a	n/a

Country	Development Status	Variable	Value	DDA Cuts- Volume SSM Only		
				% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	394.23	0.52	16.93	8.13
World Prices	n/a	Soybean Meal	349.53	2.01	93.05	38.94
World Prices	n/a	Soybean Oil	834.23	-6.75	-15.11	-7.86
Americas Group	Ding		0	n/a	n/a	n/a
Bangladesh	LDC		0	n/a	n/a	n/a
China	Ding		0	-100.00	-100.00	-100.00
Colombia	Ding		0	13407.73	520335.67	7114.12
Dominican Republic	Ding		0	n/a	n/a	n/a
Egypt	Ding		0	n/a	n/a	n/a
India	Ding		0	-100.00	-100.00	-100.00
Indonesia	Ding	Price SSM	7	224.44	241.12	84.69
Malaysia	Ding		0	n/a	n/a	n/a
Mexico	Ding		0	n/a	n/a	n/a
Middle East/African						
Group	Ding		0	n/a	n/a	n/a
Morocco	Ding		0	n/a	n/a	n/a
Peru	Ding		0	n/a	n/a	n/a
Philippines	Ding		0	n/a	n/a	n/a
South Africa	Ding		0	n/a	n/a	n/a

South Korea	Ding	1	69795.47	1691003.42	12904.24
Taiwan	Ding	0	n/a	n/a	n/a
Tunisia	Ding	1	2125.44	1457.08	294.60
Turkey	Ding	0	n/a	n/a	n/a
Venezuela	Ding	0	n/a	n/a	n/a
Vietnam	Ding	0	n/a	n/a	n/a
Americas Group	Ding	0	n/a	n/a	n/a
Bangladesh	LDC	0	n/a	n/a	n/a
China	Ding	0	-100.00	-100.00	-100.00
Colombia	Ding	7	600.00	595.78	163.78
Dominican Republic	Ding	4	n/a	n/a	n/a
Egypt	Ding	0	n/a	n/a	n/a
India	Ding	0	-100.00	-100.00	-100.00
Indonesia	Ding	143	217.78	185.17	68.87
Malaysia	Ding	0	n/a	n/a	n/a
Mexico	Ding	0	n/a	n/a	n/a
Middle East/African	Price SSM Count				
Group		0	n/a	n/a	n/a
Morocco		1	n/a	n/a	n/a
Peru		0	n/a	n/a	n/a
Philippines		0	n/a	n/a	n/a
South Africa		18	n/a	n/a	n/a
South Korea		45	4400.00	4201.75	555.88
Taiwan		0	n/a	n/a	n/a
Tunisia		82	2633.33	2416.79	401.68
Turkey		0	n/a	n/a	n/a
Venezuela	Ding	13	n/a	n/a	n/a
Vietnam	Ding	0	n/a	n/a	n/a

DDA Cuts- Full SSM

Country	Development Status	Variable	Value	% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	394.23	0.52	16.91	8.13
World Prices	n/a	Soybean Meal	349.54	2.01	93.02	38.93
World Prices	n/a	Soybean Oil	834.27	-6.74	-15.17	-7.90
Americas Group	Ding		0	n/a	n/a	n/a
Bangladesh	LDC		0	n/a	n/a	n/a
China	Ding		0	-100.00	-100.00	-100.00
Colombia	Ding		0	7883.87	179397.55	4136.72
Dominican Republic	Ding		0	n/a	n/a	n/a
Egypt	Ding		0	n/a	n/a	n/a
India	Ding		0	-100.00	-100.00	-100.00
Indonesia	Ding		4	71.65	-6.52	-3.31
Malaysia	Ding		0	n/a	n/a	n/a
Mexico	Ding	Price SSM	0	n/a	n/a	n/a
Middle East/African	Price SSM Count					
Group		0	n/a	n/a	n/a	n/a
Morocco		0	n/a	n/a	n/a	n/a
Peru		0	n/a	n/a	n/a	n/a
Philippines		0	n/a	n/a	n/a	n/a
South Africa		0	n/a	n/a	n/a	n/a
South Korea		1	69730.33	1689396.54	12898.06	
Taiwan		0	n/a	n/a	n/a	n/a
Tunisia		0	1226.02	445.16	133.49	

Turkey	Ding	0	n/a	n/a	n/a
Venezuela	Ding	0	n/a	n/a	n/a
Vietnam	Ding	0	n/a	n/a	n/a
Americas Group	Ding	0	n/a	n/a	n/a
Bangladesh	LDC	0	n/a	n/a	n/a
China	Ding	0	-100.00	-100.00	-100.00
Colombia	Ding	7	600.00	595.78	163.78
Dominican Republic	Ding	4	n/a	n/a	n/a
Egypt	Ding	0	n/a	n/a	n/a
India	Ding	0	-100.00	-100.00	-100.00
Indonesia	Ding	142	215.56	183.50	68.38
Malaysia	Ding	0	n/a	n/a	n/a
Mexico	Ding	0	n/a	n/a	n/a
Middle East/African					
Group	Ding	Price SSM			
Morocco	Ding	Count	0	n/a	n/a
Peru	Ding		1	n/a	n/a
Philippines	Ding		0	n/a	n/a
South Africa	Ding		0	n/a	n/a
South Korea	Ding		18	n/a	n/a
Taiwan	Ding		45	4400.00	4201.75
Tunisia	Ding		0	n/a	n/a
Turkey	Ding		83	2666.67	2444.70
Venezuela	Ding		0	n/a	n/a
Vietnam	Ding		13	n/a	n/a
			0	n/a	n/a

Country	Development Status	Variable	Value	DDA Cuts- Full SSM Bound to URAA		
				% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	390.26	-0.49	-0.02	-0.01
World Prices	n/a	Soybean Meal	342.35	-0.09	-0.13	-0.06
World Prices	n/a	Soybean Oil	866.78	-3.11	1.03	0.51
Americas Group	Ding		0	n/a	n/a	n/a
Bangladesh	LDC		0	n/a	n/a	n/a
China	Ding		0	-100.00	-100.00	-100.00
Colombia	Ding		0	1710.97	32655.89	1709.86
Dominican Republic	Ding		0	n/a	n/a	n/a
Egypt	Ding		0	n/a	n/a	n/a
India	Ding		0	-100.00	-100.00	-100.00
Indonesia	Ding		2	-7.81	-47.96	-27.86
Malaysia	Ding		0	n/a	n/a	n/a
Mexico	Ding		0	n/a	n/a	n/a
Middle East/African						
Group	Ding	Price SSM	0	n/a	n/a	n/a
Morocco	Ding		0	n/a	n/a	n/a
Peru	Ding		0	n/a	n/a	n/a
Philippines	Ding		0	n/a	n/a	n/a
South Africa	Ding		0	n/a	n/a	n/a
South Korea	Ding		0	13709.73	179617.07	4139.31
Taiwan	Ding		0	n/a	n/a	n/a
Tunisia	Ding		0	347.93	100.26	41.51
Turkey	Ding		0	n/a	n/a	n/a
Venezuela	Ding		0	n/a	n/a	n/a
Vietnam	Ding		0	n/a	n/a	n/a

Americas Group	Ding		0	n/a	n/a	n/a
Bangladesh	LDC		0	n/a	n/a	n/a
China	Ding		0	-100.00	-100.00	-100.00
Colombia	Ding		1	0.00	0.00	0.00
Dominican Republic	Ding		0	n/a	n/a	n/a
Egypt	Ding		0	n/a	n/a	n/a
India	Ding		0	-100.00	-100.00	-100.00
Indonesia	Ding		69	53.33	49.48	22.26
Malaysia	Ding		0	n/a	n/a	n/a
Mexico	Ding		0	n/a	n/a	n/a
Middle East/African		Price SSM				
Group	Ding	Count	0	n/a	n/a	n/a
Morocco	Ding		0	n/a	n/a	n/a
Peru	Ding		0	n/a	n/a	n/a
Philippines	Ding		0	n/a	n/a	n/a
South Africa	Ding		1	n/a	n/a	n/a
South Korea	Ding		14	1300.00	1281.76	271.72
Taiwan	Ding		0	n/a	n/a	n/a
Tunisia	Ding		28	833.33	809.94	201.65
Turkey	Ding		0	n/a	n/a	n/a
Venezuela	Ding		1	n/a	n/a	n/a
Vietnam	Ding		0	n/a	n/a	n/a

Table FF: Full Stochastic Model DDA Tariff Cuts Volume SSM Effects

Country	Development Status	Variable	Value	DDA Cuts- Price SSM Only		
				% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding		1	0.00	0.00	0.00
Bangladesh	LDC		0	n/a	n/a	n/a
China	Ding		500	0.00	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a
Dominican Republic	Ding		0	n/a	n/a	n/a
Egypt	Ding		0	n/a	n/a	n/a
India	Ding		212	0.00	0.00	0.00
Indonesia	Ding		0	n/a	n/a	n/a
Malaysia	Ding		1	0.00	0.00	0.00
Mexico	Ding		0	n/a	n/a	n/a
Middle East/African		Volume SSM				
Group	Ding		0	n/a	n/a	n/a
Morocco	Ding		0	n/a	n/a	n/a
Peru	Ding		0	n/a	n/a	n/a
Philippines	Ding		1	0.00	0.00	0.00
South Africa	Ding		0	0.00	0.00	0.00
South Korea	Ding		0	n/a	n/a	n/a
Taiwan	Ding		0	n/a	n/a	n/a
Tunisia	Ding		0	0.00	0.00	0.00
Turkey	Ding		399	0.00	0.00	0.00
Venezuela	Ding		0	n/a	n/a	n/a
Vietnam	Ding		0	n/a	n/a	n/a
Americas Group	Ding	Volume SSM 1	1	0.00	0.00	0.00
Bangladesh	LDC	Count	0	n/a	n/a	n/a

China	Ding	0	n/a	n/a	n/a
Colombia	Ding	0	n/a	n/a	n/a
Dominican Republic	Ding	0	n/a	n/a	n/a
Egypt	Ding	0	n/a	n/a	n/a
India	Ding	416	0.00	0.00	0.00
Indonesia	Ding	0	n/a	n/a	n/a
Malaysia	Ding	4	0.00	0.00	0.00
Mexico	Ding	0	n/a	n/a	n/a
Middle East/African Group	Ding	0	n/a	n/a	n/a
Morocco	Ding	0	n/a	n/a	n/a
Peru	Ding	0	n/a	n/a	n/a
Philippines	Ding	3	0.00	0.00	0.00
South Africa	Ding	1	0.00	0.00	0.00
South Korea	Ding	0	n/a	n/a	n/a
Taiwan	Ding	0	n/a	n/a	n/a
Tunisia	Ding	1	0.00	0.00	0.00
Turkey	Ding	9	0.00	0.00	0.00
Venezuela	Ding	0	n/a	n/a	n/a
Vietnam	Ding	0	n/a	n/a	n/a
Americas Group	Ding	1	0.00	0.00	0.00
Bangladesh	LDC	0	n/a	n/a	n/a
China	Ding	0	n/a	n/a	n/a
Colombia	Ding	0	n/a	n/a	n/a
Dominican Republic	Ding	0	n/a	n/a	n/a
Egypt	Ding	0	n/a	n/a	n/a
India	Ding	270	0.00	0.00	0.00
Indonesia	Ding	0	n/a	n/a	n/a
Malaysia	Ding	1	0.00	0.00	0.00
Mexico	Ding	0	n/a	n/a	n/a
Middle East/African Group	Ding	Volume SSM 2 Count		0	n/a
Morocco	Ding	0	n/a	n/a	n/a
Peru	Ding	0	n/a	n/a	n/a
Philippines	Ding	0	n/a	n/a	n/a
South Africa	Ding	0	n/a	n/a	n/a
South Korea	Ding	0	n/a	n/a	n/a
Taiwan	Ding	0	n/a	n/a	n/a
Tunisia	Ding	0	n/a	n/a	n/a
Turkey	Ding	991	0.00	0.00	0.00
Venezuela	Ding	0	n/a	n/a	n/a
Vietnam	Ding	0	n/a	n/a	n/a
Americas Group	Ding	0	n/a	n/a	n/a
Bangladesh	LDC	0	n/a	n/a	n/a
China	Ding	1000	0.00	n/a	n/a
Colombia	Ding	0	n/a	n/a	n/a
Dominican Republic	Ding	0	n/a	n/a	n/a
Egypt	Ding	Volume SSM 3 Count		0	n/a
India	Ding	0	n/a	n/a	n/a
Indonesia	Ding	0	n/a	n/a	n/a
Malaysia	Ding	0	n/a	n/a	n/a
Mexico	Ding	0	n/a	n/a	n/a
Middle East/African Group	Ding	0	n/a	n/a	n/a

Morocco	Ding	0	n/a	n/a	n/a
Peru	Ding	0	n/a	n/a	n/a
Philippines	Ding	0	n/a	n/a	n/a
South Africa	Ding	0	n/a	n/a	n/a
South Korea	Ding	0	n/a	n/a	n/a
Taiwan	Ding	0	n/a	n/a	n/a
Tunisia	Ding	0	n/a	n/a	n/a
Turkey	Ding	0	n/a	n/a	n/a
Venezuela	Ding	0	n/a	n/a	n/a
Vietnam	Ding	0	n/a	n/a	n/a

Country	Development Status	Variable	Value	DDA Cuts- Volume SSM Only		
				% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Volume SSM	147	22476.92	14624.87	1113.46
Bangladesh	LDC		0	n/a	n/a	n/a
China	Ding		500	0.00	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a
Dominican Republic	Ding		0	n/a	n/a	n/a
Egypt	Ding		32	n/a	n/a	n/a
India	Ding		456	115.12	-87.32	-64.39
Indonesia	Ding		0	n/a	n/a	n/a
Malaysia	Ding		500	35607.14	-97.55	-84.35
Mexico	Ding		295	n/a	n/a	n/a
Middle East/African Group	Ding		1	n/a	n/a	n/a
Morocco	Ding		0	n/a	n/a	n/a
Peru	Ding		0	n/a	n/a	n/a
Philippines	Ding		96	12760.00	11128.81	959.66
South Africa	Ding		7	2560.00	2587.69	418.43
South Korea	Ding		1	n/a	n/a	n/a
Taiwan	Ding		490	n/a	n/a	n/a
Tunisia	Ding		20	7900.00	7266.75	758.30
Turkey	Ding		404	1.37	95.94	39.98
Venezuela	Ding		0	n/a	n/a	n/a
Vietnam	Ding		0	n/a	n/a	n/a
Americas Group	Ding	Volume SSM 1 Count	255	25400.00	18916.22	1278.99
Bangladesh	LDC		0	n/a	n/a	n/a
China	Ding		0	n/a	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a
Dominican Republic	Ding		0	n/a	n/a	n/a
Egypt	Ding		129	n/a	n/a	n/a
India	Ding		11	-97.36	-95.52	-78.84
Indonesia	Ding		1	n/a	n/a	n/a
Malaysia	Ding		0	-100.00	-100.00	-100.00
Mexico	Ding		200	n/a	n/a	n/a
Middle East/African Group	Ding		4	n/a	n/a	n/a
Morocco	Ding		0	n/a	n/a	n/a
Peru	Ding		0	n/a	n/a	n/a
Philippines	Ding		221	7266.67	5655.98	658.68
South Africa	Ding		25	2400.00	2339.90	393.95
South Korea	Ding		2	n/a	n/a	n/a
Taiwan	Ding		0	n/a	n/a	n/a

Tunisia	Ding		80	7900.00	7267.27	758.33
Turkey	Ding		0	-100.00	-100.00	-100.00
Venezuela	Ding		0	n/a	n/a	n/a
Vietnam	Ding		0	n/a	n/a	n/a
Americas Group	Ding		80	7900.00	7267.27	758.33
Bangladesh	LDC		0	n/a	n/a	n/a
China	Ding		0	n/a	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a
Dominican Republic	Ding		0	n/a	n/a	n/a
Egypt	Ding		0	n/a	n/a	n/a
India	Ding		407	50.74	22.45	10.66
Indonesia	Ding		0	n/a	n/a	n/a
Malaysia	Ding		1	0.00	0.00	0.00
Mexico	Ding		607	n/a	n/a	n/a
Middle East/African		Volume SSM 2				
Group	Ding	Count	0	n/a	n/a	n/a
Morocco	Ding		0	n/a	n/a	n/a
Peru	Ding		0	n/a	n/a	n/a
Philippines	Ding		103	n/a	n/a	n/a
South Africa	Ding		1	n/a	n/a	n/a
South Korea	Ding		0	n/a	n/a	n/a
Taiwan	Ding		7	n/a	n/a	n/a
Tunisia	Ding		0	n/a	n/a	n/a
Turkey	Ding		959	-3.23	340.84	109.96
Venezuela	Ding		0	n/a	n/a	n/a
Vietnam	Ding		0	n/a	n/a	n/a
Americas Group	Ding		102	n/a	n/a	n/a
Bangladesh	LDC		0	n/a	n/a	n/a
China	Ding		1000	0.00	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a
Dominican Republic	Ding		0	n/a	n/a	n/a
Egypt	Ding		0	n/a	n/a	n/a
India	Ding		581	n/a	n/a	n/a
Indonesia	Ding		0	n/a	n/a	n/a
Malaysia	Ding		999	n/a	n/a	n/a
Mexico	Ding		4	n/a	n/a	n/a
Middle East/African		Volume SSM 3				
Group	Ding	Count	0	n/a	n/a	n/a
Morocco	Ding		0	n/a	n/a	n/a
Peru	Ding		0	n/a	n/a	n/a
Philippines	Ding		0	n/a	n/a	n/a
South Africa	Ding		0	n/a	n/a	n/a
South Korea	Ding		0	n/a	n/a	n/a
Taiwan	Ding		974	n/a	n/a	n/a
Tunisia	Ding		0	n/a	n/a	n/a
Turkey	Ding		41	n/a	n/a	n/a
Venezuela	Ding		0	n/a	n/a	n/a
Vietnam	Ding		0	n/a	n/a	n/a

Country	Development Status	Variable	Value	DDA Cuts- Full SSM		
				% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Volume SSM	144	22053.85	14619.01	1113.22
Bangladesh	LDC		0	n/a	n/a	n/a

China	Ding		500	0.00	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a
Dominican Republic	Ding		0	n/a	n/a	n/a
Egypt	Ding		28	n/a	n/a	n/a
India	Ding		456	115.12	-87.32	-64.39
Indonesia	Ding		0	n/a	n/a	n/a
Malaysia	Ding		500	35607.14	-97.55	-84.35
Mexico	Ding		292	n/a	n/a	n/a
Middle East/African Group	Ding		1	n/a	n/a	n/a
Morocco	Ding		0	n/a	n/a	n/a
Peru	Ding		0	n/a	n/a	n/a
Philippines	Ding		96	12726.67	11121.22	959.30
South Africa	Ding		7	2560.00	2587.69	418.43
South Korea	Ding		1	n/a	n/a	n/a
Taiwan	Ding		490	n/a	n/a	n/a
Tunisia	Ding		20	7700.00	7098.15	748.42
Turkey	Ding		404	1.37	95.94	39.98
Venezuela	Ding		0	n/a	n/a	n/a
Vietnam	Ding		0	n/a	n/a	n/a
Americas Group	Ding		246	24500.00	18466.70	1262.60
Bangladesh	LDC		0	n/a	n/a	n/a
China	Ding		0	n/a	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a
Dominican Republic	Ding		0	n/a	n/a	n/a
Egypt	Ding		110	n/a	n/a	n/a
India	Ding		11	-97.36	-95.52	-78.84
Indonesia	Ding		1	n/a	n/a	n/a
Malaysia	Ding		0	-100.00	-100.00	-100.00
Mexico	Ding		197	n/a	n/a	n/a
Middle East/African Group	Ding	Volume SSM 1 Count	4	n/a	n/a	n/a
Morocco	Ding		0	n/a	n/a	n/a
Peru	Ding		0	n/a	n/a	n/a
Philippines	Ding		220	7233.33	5637.31	657.45
South Africa	Ding		25	2400.00	2339.90	393.95
South Korea	Ding		2	n/a	n/a	n/a
Taiwan	Ding		0	n/a	n/a	n/a
Tunisia	Ding		78	7700.00	7098.71	748.45
Turkey	Ding		0	-100.00	-100.00	-100.00
Venezuela	Ding		0	n/a	n/a	n/a
Vietnam	Ding		0	n/a	n/a	n/a
Americas Group	Ding		80	7900.00	7267.27	758.33
Bangladesh	LDC		0	n/a	n/a	n/a
China	Ding		0	n/a	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a
Dominican Republic	Ding		0	n/a	n/a	n/a
Egypt	Ding	Volume SSM 2 Count	0	n/a	n/a	n/a
India	Ding		407	50.74	22.45	10.66
Indonesia	Ding		0	n/a	n/a	n/a
Malaysia	Ding		1	0.00	0.00	0.00
Mexico	Ding		603	n/a	n/a	n/a
Middle East/African Group	Ding		0	n/a	n/a	n/a

Morocco	Ding	0	n/a	n/a	n/a
Peru	Ding	0	n/a	n/a	n/a
Philippines	Ding	103	n/a	n/a	n/a
South Africa	Ding	1	n/a	n/a	n/a
South Korea	Ding	0	n/a	n/a	n/a
Taiwan	Ding	7	n/a	n/a	n/a
Tunisia	Ding	0	n/a	n/a	n/a
Turkey	Ding	959	-3.23	340.84	109.96
Venezuela	Ding	0	n/a	n/a	n/a
Vietnam	Ding	0	n/a	n/a	n/a
Americas Group	Ding	101	n/a	n/a	n/a
Bangladesh	LDC	0	n/a	n/a	n/a
China	Ding	1000	0.00	n/a	n/a
Colombia	Ding	0	n/a	n/a	n/a
Dominican Republic	Ding	0	n/a	n/a	n/a
Egypt	Ding	0	n/a	n/a	n/a
India	Ding	581	n/a	n/a	n/a
Indonesia	Ding	0	n/a	n/a	n/a
Malaysia	Ding	999	n/a	n/a	n/a
Mexico	Ding	4	n/a	n/a	n/a
Middle East/African		Volume SSM 3 Count			
Group	Ding		0	n/a	n/a
Morocco	Ding	0	n/a	n/a	n/a
Peru	Ding	0	n/a	n/a	n/a
Philippines	Ding	0	n/a	n/a	n/a
South Africa	Ding	0	n/a	n/a	n/a
South Korea	Ding	0	n/a	n/a	n/a
Taiwan	Ding	974	n/a	n/a	n/a
Tunisia	Ding	0	n/a	n/a	n/a
Turkey	Ding	41	n/a	n/a	n/a
Venezuela	Ding	0	n/a	n/a	n/a
Vietnam	Ding	0	n/a	n/a	n/a

Country	Development Status	Variable	Value	DDA Cuts- Full SSM Bound to URAA		
				% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding		9	1346.15	1755.87	330.80
Bangladesh	LDC		0	n/a	n/a	n/a
China	Ding		500	0.00	n/a	n/a
Colombia	Ding		0	n/a	n/a	n/a
Dominican Republic	Ding		0	n/a	n/a	n/a
Egypt	Ding		0	n/a	n/a	n/a
India	Ding		436	105.42	-56.96	-34.40
Indonesia	Ding		0	n/a	n/a	n/a
Malaysia	Ding	Volume SSM	383	27271.43	5533.76	650.58
Mexico	Ding		43	n/a	n/a	n/a
Middle East/African						
Group	Ding		0	n/a	n/a	n/a
Morocco	Ding		0	n/a	n/a	n/a
Peru	Ding		0	n/a	n/a	n/a
Philippines	Ding		9	1033.33	1158.62	254.77
South Africa	Ding		3	900.00	890.90	214.79
South Korea	Ding		0	n/a	n/a	n/a
Taiwan	Ding		83	n/a	n/a	n/a

Tunisia	Ding	2	800.00	792.73	198.79
Turkey	Ding	400	0.34	-100.00	-100.00
Venezuela	Ding	0	n/a	n/a	n/a
Vietnam	Ding	0	n/a	n/a	n/a
Americas Group	Ding	4	300.00	298.80	99.70
Bangladesh	LDC	0	n/a	n/a	n/a
China	Ding	0	n/a	n/a	n/a
Colombia	Ding	0	n/a	n/a	n/a
Dominican Republic	Ding	0	n/a	n/a	n/a
Egypt	Ding	0	n/a	n/a	n/a
India	Ding	36	-91.35	-85.72	-62.20
Indonesia	Ding	0	n/a	n/a	n/a
Malaysia	Ding	68	1600.00	1490.74	298.84
Mexico	Ding	90	n/a	n/a	n/a
Middle East/African		Volume SSM 1			
Group	Ding	Count	0	n/a	n/a
Morocco	Ding	0	n/a	n/a	n/a
Peru	Ding	0	n/a	n/a	n/a
Philippines	Ding	26	766.67	746.69	190.98
South Africa	Ding	10	900.00	890.99	214.80
South Korea	Ding	0	n/a	n/a	n/a
Taiwan	Ding	3	n/a	n/a	n/a
Tunisia	Ding	9	800.00	792.79	198.80
Turkey	Ding	0	-100.00	-100.00	-100.00
Venezuela	Ding	0	n/a	n/a	n/a
Vietnam	Ding	0	n/a	n/a	n/a
Americas Group	Ding	6	500.00	497.00	144.33
Bangladesh	LDC	0	n/a	n/a	n/a
China	Ding	0	n/a	n/a	n/a
Colombia	Ding	0	n/a	n/a	n/a
Dominican Republic	Ding	0	n/a	n/a	n/a
Egypt	Ding	0	n/a	n/a	n/a
India	Ding	385	42.59	20.13	9.60
Indonesia	Ding	0	n/a	n/a	n/a
Malaysia	Ding	438	43700.00	24539.86	1469.71
Mexico	Ding	51	n/a	n/a	n/a
Middle East/African		Volume SSM 2			
Group	Ding	Count	0	n/a	n/a
Morocco	Ding	0	n/a	n/a	n/a
Peru	Ding	0	n/a	n/a	n/a
Philippines	Ding	5	n/a	n/a	n/a
South Africa	Ding	0	n/a	n/a	n/a
South Korea	Ding	0	n/a	n/a	n/a
Taiwan	Ding	24	n/a	n/a	n/a
Tunisia	Ding	0	n/a	n/a	n/a
Turkey	Ding	1000	0.91	-100.00	-100.00
Venezuela	Ding	0	n/a	n/a	n/a
Vietnam	Ding	0	n/a	n/a	n/a
Americas Group	Ding	12	n/a	n/a	n/a
Bangladesh	LDC	0	n/a	n/a	n/a
China	Ding	Volume SSM 3	1000	0.00	n/a
Colombia	Ding	Count	0	n/a	n/a
Dominican Republic	Ding	0	n/a	n/a	n/a
Egypt	Ding	0	n/a	n/a	n/a

India	Ding	545	n/a	n/a	n/a
Indonesia	Ding	0	n/a	n/a	n/a
Malaysia	Ding	382	n/a	n/a	n/a
Mexico	Ding	0	n/a	n/a	n/a
Middle East/African Group	Ding	0	n/a	n/a	n/a
Morocco	Ding	0	n/a	n/a	n/a
Peru	Ding	0	n/a	n/a	n/a
Philippines	Ding	0	n/a	n/a	n/a
South Africa	Ding	0	n/a	n/a	n/a
South Korea	Ding	0	n/a	n/a	n/a
Taiwan	Ding	145	n/a	n/a	n/a
Tunisia	Ding	0	n/a	n/a	n/a
Turkey	Ding	0	n/a	n/a	n/a
Venezuela	Ding	0	n/a	n/a	n/a
Vietnam	Ding	0	n/a	n/a	n/a

Table GG: Full Stochastic Model Swiss-25 Tariff Cuts Price Effects

Country	Development Status	Variable	Swiss-25 Cuts- Price SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Price	-0.01	-0.09	-0.05
Argentina	Ding		-0.01	-0.10	-0.05
Asia/Oceania Group	DC		-0.01	-0.02	-0.01
Bangladesh	LDC		-0.01	-0.07	-0.04
Brazil	Ding		-0.01	0.01	0.00
Canada	DC		-0.01	-0.03	-0.01
China	Ding		-0.01	-0.10	-0.05
Colombia	Ding		-0.01	-0.04	-0.02
Egypt	Ding		-0.01	-0.05	-0.02
European Group	DC		-0.01	-0.03	-0.02
European Union	DC		-0.01	-0.02	-0.01
India	Ding		0.02	-0.63	-0.31
Indonesia	Ding		-0.01	-0.02	-0.01
Iran	Ding		-0.01	-0.11	-0.05
Japan	DC		-0.01	-0.01	0.00
Malaysia	Ding		-0.01	-0.10	-0.05
Mexico	Ding		-0.01	-0.07	-0.04
Middle East/African Group	Ding		-0.01	-0.11	-0.05
Morocco	Ding		-0.01	-0.03	-0.01
Paraguay	Ding		-0.01	-0.04	-0.02
Peru	Ding		-0.01	-0.09	-0.05
Philippines	Ding		-0.01	0.00	0.00
South Africa	Ding		-0.01	-0.02	-0.01
South Korea	Ding		-0.01	-0.01	0.00
Syria	Ding		-0.01	-0.05	-0.03
Taiwan	Ding		-0.01	0.16	0.08
Thailand	Ding		-0.01	0.08	0.04
Tunisia	Ding		-0.01	-0.05	-0.02
Turkey	Ding		-0.01	-0.03	-0.02
United States	DC		-0.01	-0.10	-0.05
Venezuela	Ding		-0.01	-0.01	-0.01

Vietnam	Ding	-0.01	-0.10	-0.05
World Prices	n/a	-0.01	-0.10	-0.05
Algeria	Ding	0.00	0.14	0.07
Americas Group	Ding	0.00	0.25	0.12
Argentina	Ding	0.00	0.42	0.21
Asia/Oceania Group	DC	0.00	0.08	0.04
Bangladesh	LDC	0.00	0.26	0.13
Brazil	Ding	0.00	-0.03	-0.01
Canada	DC	0.00	0.05	0.02
China	Ding	0.00	0.42	0.21
Colombia	Ding	0.00	0.08	0.04
Dominican Republic	Ding	0.00	-0.03	-0.02
Egypt	Ding	0.00	0.06	0.03
European Group	DC	0.00	0.09	0.05
European Union	DC	0.00	0.05	0.03
India	Ding	0.00	-0.09	-0.04
Indonesia	Ding	0.00	0.00	0.00
Iran	Ding	0.00	0.43	0.21
Japan	DC	0.00	0.00	0.00
Malaysia	Ding	0.00	0.42	0.21
Mexico	Ding	0.00	0.16	0.08
Middle East/African Group	Ding	0.00	0.44	0.22
Morocco	Ding	0.00	0.09	0.04
Paraguay	Ding	0.00	0.14	0.07
Peru	Ding	0.00	0.24	0.12
Philippines	Ding	0.00	0.06	0.03
South Africa	Ding	0.00	-0.03	-0.01
South Korea	Ding	0.00	-0.01	0.00
Syria	Ding	0.00	0.13	0.06
Taiwan	Ding	0.00	0.09	0.05
Thailand	Ding	0.00	0.03	0.01
Tunisia	Ding	0.00	0.14	0.07
Turkey	Ding	0.00	0.06	0.03
Venezuela	Ding	0.00	0.10	0.05
Vietnam	Ding	0.00	0.42	0.21
World Prices	n/a	0.00	0.42	0.21
Algeria	Ding	-0.12	2.63	1.31
Americas Group	Ding	-0.11	3.79	1.88
Argentina	Ding	-0.12	7.58	3.72
Asia/Oceania Group	DC	-0.12	3.64	1.80
Bangladesh	LDC	-0.12	6.63	3.26
Brazil	Ding	-0.12	-0.27	-0.13
Canada	DC	-0.02	0.44	0.22
China	Ding	0.48	-40.00	-22.54
Colombia	Ding	-0.10	0.32	0.16
Dominican Republic	Ding	-0.12	3.21	1.59
Egypt	Ding	-0.12	3.65	1.81
European Group	DC	-0.12	2.09	1.04
European Union	DC	-0.12	1.43	0.71
India	Ding	1.29	-48.09	-27.95
Indonesia	Ding	-0.06	-2.80	-1.41
Iran	Ding	-0.12	7.49	3.68
Japan	DC	-0.12	0.58	0.29

Malaysia	Ding	-0.12	7.58	3.72
Mexico	Ding	-0.12	4.54	2.25
Middle East/African Group	Ding	-0.12	7.53	3.70
Morocco	Ding	0.03	-10.63	-5.46
Paraguay	Ding	-0.12	4.71	2.33
Peru	Ding	-0.12	4.49	2.22
Philippines	Ding	-0.12	2.56	1.27
South Africa	Ding	-0.12	1.97	0.98
South Korea	Ding	-0.12	0.43	0.22
Syria	Ding	-0.12	4.32	2.14
Taiwan	Ding	-0.01	-0.23	-0.12
Thailand	Ding	-0.01	-0.19	-0.09
Tunisia	Ding	-0.12	2.21	1.10
Turkey	Ding	-0.12	4.14	2.05
Venezuela	Ding	-0.10	-0.18	-0.09
Vietnam	Ding	-0.08	0.93	0.47
World Prices	n/a	-0.12	7.58	3.72

Swiss-25 Cuts- Volume SSM Only					
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Price	0.42	32.89	15.28
Argentina	Ding		0.08	13.67	6.62
Asia/Oceania Group	DC		0.05	3.41	1.69
Bangladesh	LDC		0.08	10.60	5.17
Brazil	Ding		0.08	0.20	0.10
Canada	DC		0.08	4.35	2.15
China	Ding		0.08	13.68	6.62
Colombia	Ding		0.08	3.39	1.68
Egypt	Ding		0.08	5.60	2.76
European Group	DC		0.08	2.54	1.26
European Union	DC		0.08	0.98	0.49
India	Ding		5.30	117.37	47.43
Indonesia	Ding		0.08	0.59	0.29
Iran	Ding		0.08	13.61	6.59
Japan	DC		0.08	1.32	0.66
Malaysia	Ding		0.08	13.67	6.62
Mexico	Ding		0.08	7.79	3.82
Middle East/African Group	Ding		0.08	13.79	6.67
Morocco	Ding		0.08	3.99	1.97
Paraguay	Ding		0.08	7.03	3.46
Peru	Ding		0.08	8.25	4.04
Philippines	Ding		0.08	2.93	1.45
South Africa	Ding		-0.25	-8.69	-4.44
South Korea	Ding		0.08	1.18	0.59
Syria	Ding		0.08	6.48	3.19
Taiwan	Ding		0.08	8.14	3.99
Thailand	Ding		0.08	3.83	1.90
Tunisia	Ding		0.08	3.53	1.75
Turkey	Ding		0.08	5.58	2.75
United States	DC		0.10	13.67	6.62
Venezuela	Ding		-0.03	7.44	3.65

Vietnam	Ding	0.08	13.67	6.62
World Prices	n/a	0.08	13.67	6.62
Algeria	Ding	1.20	7.67	3.76
Americas Group	Ding	1.20	51.67	23.16
Argentina	Ding	1.20	83.88	35.60
Asia/Oceania Group	DC	1.20	18.71	8.95
Bangladesh	LDC	1.20	52.45	23.47
Brazil	Ding	1.20	3.47	1.72
Canada	DC	1.20	17.46	8.38
China	Ding	-2.00	-65.81	-41.53
Colombia	Ding	1.20	12.12	5.89
Dominican Republic	Ding	1.20	11.33	5.51
Egypt	Ding	1.21	24.24	11.46
European Group	DC	1.20	2.53	1.26
European Union	DC	1.19	-1.27	-0.64
India	Ding	1.20	11.03	5.37
Indonesia	Ding	1.20	3.21	1.59
Iran	Ding	1.20	83.07	35.30
Japan	DC	1.20	6.43	3.16
Malaysia	Ding	1.20	83.88	35.60
Mexico	Ding	1.20	33.65	15.61
Middle East/African Group	Ding	1.20	86.07	36.41
Morocco	Ding	1.20	9.76	4.77
Paraguay	Ding	1.20	31.11	14.50
Peru	Ding	1.20	36.18	16.70
Philippines	Ding	1.20	8.46	4.14
South Africa	Ding	1.20	7.88	3.86
South Korea	Ding	1.20	6.38	3.14
Syria	Ding	1.20	28.47	13.34
Taiwan	Ding	1.20	37.02	17.05
Thailand	Ding	1.20	15.51	7.48
Tunisia	Ding	1.20	6.00	2.96
Turkey	Ding	1.20	25.24	11.91
Venezuela	Ding	1.20	16.10	7.75
Vietnam	Ding	1.20	83.88	35.60
World Prices	n/a	1.20	83.88	35.60
Algeria	Ding	-7.84	-14.38	-7.47
Americas Group	Ding	32.57	58.34	25.83
Argentina	Ding	-7.84	-23.74	-12.67
Asia/Oceania Group	DC	-7.84	-16.88	-8.83
Bangladesh	LDC	-7.84	-19.93	-10.52
Brazil	Ding	-7.84	-14.47	-7.52
Canada	DC	-6.72	1.54	0.77
China	Ding	32.00	56.46	25.08
Colombia	Ding	-3.01	71.21	30.85
Dominican Republic	Ding	-7.84	-17.84	-9.36
Egypt	Ding	-6.32	217.10	78.07
European Group	DC	-7.84	-13.42	-6.95
European Union	DC	-7.83	-12.50	-6.46
India	Ding	31.07	40.93	18.71
Indonesia	Ding	-7.82	-15.46	-8.05
Iran	Ding	-7.84	-23.66	-12.63
Japan	DC	-7.84	-15.83	-8.26

Malaysia	Ding	7.00	-21.87	-11.61
Mexico	Ding	33.63	63.60	27.91
Middle East/African Group	Ding	25.22	42.50	19.37
Morocco	Ding	15.40	-4.37	-2.21
Paraguay	Ding	-7.84	-20.69	-10.94
Peru	Ding	-7.84	-18.99	-10.00
Philippines	Ding	26.83	17.94	8.60
South Africa	Ding	-7.84	-17.11	-8.96
South Korea	Ding	-7.84	-15.84	-8.26
Syria	Ding	-7.84	-20.02	-10.57
Taiwan	Ding	-3.93	-28.63	-15.52
Thailand	Ding	-1.22	-18.44	-9.69
Tunisia	Ding	12.30	75.18	32.36
Turkey	Ding	32.86	38.52	17.69
Venezuela	Ding	-7.84	-18.75	-9.86
Vietnam	Ding	-7.84	-23.74	-12.67
World Prices	n/a	-7.84	-23.74	-12.67

Country	Development Status	Variable	Swiss-25 Cuts- Full SSM		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Price	0.42	33.02	15.33
Argentina	Ding		0.08	13.80	6.68
Asia/Oceania Group	DC		0.05	3.43	1.70
Bangladesh	LDC		0.08	10.69	5.21
Brazil	Ding		0.07	0.19	0.09
Canada	DC		0.08	4.36	2.15
China	Ding		0.08	13.81	6.68
Colombia	Ding		0.08	3.44	1.71
Egypt	Ding		0.08	5.62	2.77
European Group	DC		0.07	2.58	1.28
European Union	DC		0.07	1.01	0.50
India	Ding		5.30	117.42	47.45
Indonesia	Ding		0.08	0.58	0.29
Iran	Ding		0.08	13.74	6.65
Japan	DC		0.08	1.30	0.65
Malaysia	Ding		0.08	13.80	6.68
Mexico	Ding		0.08	7.85	3.85
Middle East/African Group	Ding		0.08	13.92	6.74
Morocco	Ding		0.07	4.03	1.99
Paraguay	Ding		0.08	7.11	3.50
Peru	Ding		0.08	8.35	4.09
Philippines	Ding		0.08	2.94	1.46
South Africa	Ding		-0.25	-8.67	-4.43
South Korea	Ding		0.08	1.17	0.58
Syria	Ding		0.08	6.56	3.23
Taiwan	Ding		0.08	8.22	4.03
Thailand	Ding		0.08	3.87	1.91
Tunisia	Ding		0.08	3.58	1.78
Turkey	Ding		0.08	5.62	2.77
United States	DC		0.10	13.80	6.68
Venezuela	Ding		-0.02	6.23	3.07

Vietnam	Ding	0.08	13.80	6.68
World Prices	n/a	0.08	13.80	6.68
Algeria	Ding	1.20	7.70	3.78
Americas Group	Ding	1.21	51.62	23.14
Argentina	Ding	1.20	83.82	35.58
Asia/Oceania Group	DC	1.20	18.72	8.96
Bangladesh	LDC	1.20	52.46	23.47
Brazil	Ding	1.20	3.48	1.73
Canada	DC	1.20	17.45	8.37
China	Ding	-2.00	-65.84	-41.56
Colombia	Ding	1.20	12.11	5.88
Dominican Republic	Ding	1.20	11.32	5.51
Egypt	Ding	1.21	24.20	11.45
European Group	DC	1.20	2.56	1.27
European Union	DC	1.19	-1.24	-0.62
India	Ding	1.20	11.05	5.38
Indonesia	Ding	1.20	3.22	1.60
Iran	Ding	1.20	83.01	35.28
Japan	DC	1.21	6.43	3.16
Malaysia	Ding	1.20	83.82	35.58
Mexico	Ding	1.21	33.61	15.59
Middle East/African Group	Ding	1.20	86.01	36.39
Morocco	Ding	1.20	9.82	4.80
Paraguay	Ding	1.21	31.06	14.48
Peru	Ding	1.20	36.18	16.70
Philippines	Ding	1.20	8.48	4.15
South Africa	Ding	1.20	7.89	3.87
South Korea	Ding	1.21	6.38	3.14
Syria	Ding	1.20	28.43	13.33
Taiwan	Ding	1.20	36.98	17.04
Thailand	Ding	1.21	15.51	7.47
Tunisia	Ding	1.20	6.04	2.97
Turkey	Ding	1.21	25.22	11.90
Venezuela	Ding	1.21	16.08	7.74
Vietnam	Ding	1.20	83.82	35.58
World Prices	n/a	1.20	83.82	35.58
Algeria	Ding	-7.84	-14.21	-7.37
Americas Group	Ding	32.56	59.04	26.11
Argentina	Ding	-7.85	-23.35	-12.45
Asia/Oceania Group	DC	-7.84	-16.75	-8.76
Bangladesh	LDC	-7.84	-19.59	-10.33
Brazil	Ding	-7.84	-14.49	-7.53
Canada	DC	-6.72	1.63	0.81
China	Ding	31.99	57.25	25.40
Colombia	Ding	-2.97	65.45	28.63
Dominican Republic	Ding	-7.67	-29.45	-16.00
Egypt	Ding	-6.62	165.00	62.79
European Group	DC	-7.84	-13.29	-6.88
European Union	DC	-7.83	-12.39	-6.40
India	Ding	31.07	41.14	18.80
Indonesia	Ding	-7.58	-23.74	-12.67
Iran	Ding	-7.85	-23.29	-12.41
Japan	DC	-7.84	-15.86	-8.27

Malaysia	Ding	6.99	-21.71	-11.52
Mexico	Ding	33.62	64.01	28.07
Middle East/African Group	Ding	25.19	42.87	19.53
Morocco	Ding	15.39	-4.33	-2.19
Paraguay	Ding	-7.85	-20.45	-10.81
Peru	Ding	-7.84	-18.82	-9.90
Philippines	Ding	26.82	18.10	8.67
South Africa	Ding	-7.85	-17.05	-8.92
South Korea	Ding	-7.84	-15.87	-8.28
Syria	Ding	-7.85	-19.78	-10.43
Taiwan	Ding	-3.94	-28.38	-15.37
Thailand	Ding	-1.23	-18.35	-9.64
Tunisia	Ding	12.30	75.05	32.31
Turkey	Ding	32.85	38.88	17.85
Venezuela	Ding	-7.37	-42.24	-24.00
Vietnam	Ding	-5.99	-73.52	-48.54
World Prices	n/a	-7.85	-23.35	-12.45

Country	Development Status	Variable	Swiss-25 Cuts- Full SSM Bound to URAA		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Price	0.36	42.85	19.52
Argentina	Ding		-0.21	0.90	0.45
Asia/Oceania Group	DC		-0.22	-0.51	-0.26
Bangladesh	LDC		-0.21	0.79	0.39
Brazil	Ding		-0.21	-0.75	-0.37
Canada	DC		-0.21	-0.16	-0.08
China	Ding		-0.21	0.90	0.45
Colombia	Ding		-0.21	0.06	0.03
Egypt	Ding		-0.21	-0.29	-0.14
European Group	DC		-0.21	0.72	0.36
European Union	DC		-0.21	0.37	0.18
India	Ding		1.45	43.00	19.58
Indonesia	Ding		-0.21	-0.30	-0.15
Iran	Ding		-0.21	0.93	0.46
Japan	DC		-0.21	-0.35	-0.18
Malaysia	Ding		-0.21	0.90	0.45
Mexico	Ding		-0.21	0.43	0.21
Middle East/African Group	Ding		-0.21	0.97	0.48
Morocco	Ding		-0.21	0.62	0.31
Paraguay	Ding		-0.21	0.23	0.12
Peru	Ding		-0.21	0.67	0.34
Philippines	Ding		-0.21	0.28	0.14
South Africa	Ding		-0.42	-6.80	-3.46
South Korea	Ding		-0.21	-0.52	-0.26
Syria	Ding		-0.21	0.05	0.03
Taiwan	Ding		-0.21	0.23	0.11
Thailand	Ding		-0.21	-0.15	-0.08
Tunisia	Ding		-0.21	0.91	0.45
Turkey	Ding		-0.21	-0.49	-0.25
United States	DC		-0.27	0.90	0.45
Venezuela	Ding		-0.26	1.36	0.68

Vietnam	Ding	-0.21	0.90	0.45
World Prices	n/a	-0.21	0.90	0.45
Algeria	Ding	-0.08	-1.10	-0.55
Americas Group	Ding	-0.08	-0.46	-0.23
Argentina	Ding	-0.08	-0.63	-0.32
Asia/Oceania Group	DC	-0.08	-0.07	-0.04
Bangladesh	LDC	-0.08	-0.19	-0.09
Brazil	Ding	-0.07	0.13	0.06
Canada	DC	-0.08	0.03	0.02
China	Ding	-0.08	-0.64	-0.32
Colombia	Ding	-0.08	-0.52	-0.26
Dominican Republic	Ding	-0.08	-0.13	-0.06
Egypt	Ding	-0.08	0.09	0.05
European Group	DC	-0.08	-0.85	-0.43
European Union	DC	-0.08	-0.64	-0.32
India	Ding	-0.08	-0.09	-0.05
Indonesia	Ding	-0.08	-0.15	-0.08
Iran	Ding	-0.08	-0.65	-0.32
Japan	DC	-0.08	0.00	0.00
Malaysia	Ding	-0.08	-0.63	-0.32
Mexico	Ding	-0.08	-0.38	-0.19
Middle East/African Group	Ding	-0.08	-0.72	-0.36
Morocco	Ding	-0.08	-0.49	-0.25
Paraguay	Ding	-0.08	-0.34	-0.17
Peru	Ding	-0.08	-0.90	-0.45
Philippines	Ding	-0.08	-0.22	-0.11
South Africa	Ding	-0.08	-0.15	-0.08
South Korea	Ding	-0.07	0.06	0.03
Syria	Ding	-0.08	-0.25	-0.13
Taiwan	Ding	-0.08	-0.31	-0.16
Thailand	Ding	-0.08	-0.21	-0.10
Tunisia	Ding	-0.08	-1.08	-0.54
Turkey	Ding	-0.08	0.12	0.06
Venezuela	Ding	-0.08	-0.60	-0.30
Vietnam	Ding	-0.08	-0.63	-0.32
World Prices	n/a	-0.08	-0.63	-0.32
Algeria	Ding	-4.45	-6.07	-3.08
Americas Group	Ding	37.44	97.90	40.68
Argentina	Ding	-4.45	-2.67	-1.35
Asia/Oceania Group	DC	-4.45	-4.98	-2.52
Bangladesh	LDC	-4.45	-2.52	-1.27
Brazil	Ding	-4.45	-8.21	-4.19
Canada	DC	-3.29	17.22	8.27
China	Ding	17.30	46.67	21.11
Colombia	Ding	-3.66	-10.87	-5.59
Dominican Republic	Ding	-4.42	-10.69	-5.50
Egypt	Ding	-4.45	-5.76	-2.92
European Group	DC	-4.45	-6.41	-3.26
European Union	DC	-4.44	-6.48	-3.29
India	Ding	19.36	42.99	19.58
Indonesia	Ding	-4.31	-13.79	-7.15
Iran	Ding	-4.45	-2.80	-1.41
Japan	DC	-4.45	-7.74	-3.95

Malaysia	Ding	-4.10	1.65	0.82
Mexico	Ding	24.69	60.76	26.79
Middle East/African Group	Ding	20.78	203.26	74.14
Morocco	Ding	16.95	15.15	7.31
Paraguay	Ding	-4.45	-4.94	-2.50
Peru	Ding	-4.45	-5.00	-2.53
Philippines	Ding	13.00	31.38	14.62
South Africa	Ding	-4.45	-8.24	-4.21
South Korea	Ding	-4.45	-7.87	-4.02
Syria	Ding	-4.45	-5.14	-2.60
Taiwan	Ding	-0.73	-6.48	-3.29
Thailand	Ding	-0.23	2.22	1.10
Tunisia	Ding	0.91	-51.19	-30.13
Turkey	Ding	6.17	16.67	8.02
Venezuela	Ding	-4.29	-18.90	-9.94
Vietnam	Ding	-3.80	-49.13	-28.67
World Prices	n/a	-4.45	-2.67	-1.35

Table HH: Full Stochastic Model Swiss-25 Tariff Cuts Supply Effects

Country	Development Status	Variable	Swiss-25 Cuts- Price SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Supply	0.00	0.00	0.00
Argentina	Ding		0.00	0.00	0.00
Asia/Oceania Group	DC		0.00	0.01	0.00
Brazil	Ding		0.00	0.00	0.00
Canada	DC		0.00	0.00	0.00
China	Ding		0.00	-0.01	0.00
Colombia	Ding		0.00	0.00	0.00
Egypt	Ding		0.00	0.00	0.00
European Group	DC		0.00	0.00	0.00
European Union	DC		0.00	0.00	0.00
India	Ding		0.01	-0.39	-0.20
Indonesia	Ding		0.00	0.00	0.00
Iran	Ding		0.00	0.00	0.00
Japan	DC		0.00	-0.01	0.00
Mexico	Ding		0.00	0.00	0.00
Middle East/African Group	Ding		0.00	-0.01	0.00
Paraguay	Ding		0.00	0.00	0.00
Peru	Ding		0.00	0.00	0.00
Philippines	Ding		0.00	n/a	n/a
South Africa	Ding		0.00	0.01	0.01
South Korea	Ding		0.00	0.00	0.00
Syria	Ding		0.00	n/a	n/a
Thailand	Ding		0.00	0.08	0.04
Tunisia	Ding		0.00	0.00	0.00
Turkey	Ding		0.00	0.00	0.00
United States	DC		0.00	0.01	0.00
Venezuela	Ding		0.00	0.00	0.00
Vietnam	Ding		0.00	-0.10	-0.05

World	n/a		0.00	-0.01	-0.01
Americas Group	Ding		-0.12	-1.12	-0.56
Argentina	Ding		-0.26	-7.13	-3.63
Asia/Oceania Group	DC		-0.21	-9.91	-5.09
Bangladesh	LDC		-0.17	5.53	2.73
Brazil	Ding		-0.26	-7.50	-3.82
Canada	DC		-0.03	4.11	2.04
China	Ding		0.61	95.53	39.83
Colombia	Ding		-0.17	-5.21	-2.64
Egypt	Ding		-0.23	-10.56	-5.43
European Group	DC		-0.16	-2.68	-1.35
European Union	DC		-0.10	0.38	0.19
India	Ding		1.66	-35.33	-19.58
Iran	Ding		-0.11	19.00	9.09
Japan	DC		-0.18	-1.86	-0.93
Malaysia	Ding		-0.26	-8.52	-4.35
Mexico	Ding		-0.16	-1.70	-0.85
Middle East/African Group	Ding	Soybean Meal Supply	-0.16	-8.87	-4.54
Morocco	Ding		0.03	-19.13	-10.07
Paraguay	Ding		-0.24	-3.69	-1.86
Peru	Ding		-0.25	-5.08	-2.57
Philippines	Ding		-0.17	-1.56	-0.78
South Africa	Ding		-0.12	-0.47	-0.23
South Korea	Ding		-0.25	-5.54	-2.81
Syria	Ding		-0.22	-8.69	-4.45
Taiwan	Ding		0.00	-0.23	-0.12
Thailand	Ding		0.00	-0.19	-0.09
Tunisia	Ding		-0.11	0.30	0.15
Turkey	Ding		-0.10	-3.65	-1.84
United States	DC		-0.14	-6.78	-3.45
Venezuela	Ding		-0.15	-4.92	-2.49
Vietnam	Ding		-0.07	2.93	1.45
World	n/a		0.00	0.59	0.30
Americas Group	Ding		-0.12	-1.12	-0.56
Argentina	Ding		-0.26	-7.13	-3.63
Asia/Oceania Group	DC		-0.21	-9.91	-5.09
Bangladesh	LDC		-0.17	5.53	2.73
Brazil	Ding		-0.26	-7.50	-3.82
Canada	DC		-0.03	4.11	2.04
China	Ding		0.61	95.53	39.83
Colombia	Ding		-0.17	-5.21	-2.64
Egypt	Ding		-0.23	-10.56	-5.43
European Group	DC	Soybean Oil Supply	-0.16	-2.68	-1.35
European Union	DC		-0.10	0.38	0.19
India	Ding		1.66	-35.33	-19.58
Iran	Ding		-0.11	19.00	9.09
Japan	DC		-0.18	-1.86	-0.93
Malaysia	Ding		-0.26	-8.52	-4.35
Mexico	Ding		-0.16	-1.70	-0.85
Middle East/African Group	Ding		-0.16	-8.87	-4.54
Morocco	Ding		0.03	-19.13	-10.07
Paraguay	Ding		-0.24	-3.69	-1.86

Peru	Ding	-0.25	-5.08	-2.57
Philippines	Ding	-0.17	-1.56	-0.78
South Africa	Ding	-0.12	-0.47	-0.23
South Korea	Ding	-0.25	-5.54	-2.81
Syria	Ding	-0.22	-8.69	-4.45
Taiwan	Ding	0.00	-0.23	-0.12
Thailand	Ding	0.00	-0.19	-0.09
Tunisia	Ding	-0.11	0.30	0.15
Turkey	Ding	-0.10	-3.65	-1.84
United States	DC	-0.14	-6.78	-3.45
Venezuela	Ding	-0.15	-4.92	-2.49
Vietnam	Ding	-0.07	2.93	1.45
World	n/a	-0.01	-2.15	-1.08

Swiss-25 Cuts- Volume SSM Only					
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Supply	0.11	-2.58	-1.30
Argentina	Ding		0.01	0.48	0.24
Asia/Oceania Group	DC		0.01	0.15	0.08
Brazil	Ding		0.01	0.32	0.16
Canada	DC		0.02	0.03	0.02
China	Ding		0.00	-0.25	-0.13
Colombia	Ding		0.02	0.07	0.03
Egypt	Ding		0.02	0.00	0.00
European Group	DC		0.02	-0.01	0.00
European Union	DC		0.02	0.02	0.01
India	Ding		1.90	-24.67	-13.21
Indonesia	Ding		0.00	0.06	0.03
Iran	Ding		0.01	0.03	0.02
Japan	DC		0.03	-0.30	-0.15
Mexico	Ding		0.02	-0.04	-0.02
Middle East/African Group	Ding		0.01	0.08	0.04
Paraguay	Ding		0.02	0.23	0.12
Peru	Ding		0.04	0.08	0.04
Philippines	Ding		0.00	n/a	n/a
South Africa	Ding		-0.04	0.85	0.43
South Korea	Ding		0.03	0.15	0.07
Syria	Ding		0.00	n/a	n/a
Thailand	Ding		0.02	3.83	1.90
Tunisia	Ding		0.01	0.02	0.01
Turkey	Ding		0.03	0.01	0.00
United States	DC		0.03	0.64	0.32
Venezuela	Ding		-0.01	-0.37	-0.18
Vietnam	Ding		0.01	13.67	6.62
World	n/a		0.09	1.02	0.51
Americas Group	Ding	Soybean Meal Supply	40.87	1018.88	234.50
Argentina	Ding		-14.38	-12.16	-6.28
Asia/Oceania Group	DC		-11.32	-3.18	-1.61
Bangladesh	LDC		-9.98	-22.98	-12.24
Brazil	Ding		-14.51	-35.68	-19.80
Canada	DC		-15.04	1035.02	236.90
China	Ding		36.41	236.32	83.39

Colombia	Ding	-2.44	2997.97	456.59
Egypt	Ding	-9.49	3993.83	539.83
European Group	DC	-9.06	-44.79	-25.70
European Union	DC	-5.35	-40.56	-22.90
India	Ding	29.24	2763.65	435.13
Iran	Ding	-5.90	34.04	15.78
Japan	DC	-10.20	-28.48	-15.43
Malaysia	Ding	20.36	-84.74	-60.94
Mexico	Ding	52.54	221.34	79.26
Middle East/African				
Group	Ding	40.40	403.55	124.40
Morocco	Ding	12.49	1092.57	245.34
Paraguay	Ding	-13.69	-21.28	-11.28
Peru	Ding	-13.81	-26.62	-14.34
Philippines	Ding	43.55	286.74	96.66
South Africa	Ding	-6.51	-24.33	-13.01
South Korea	Ding	-13.91	-30.48	-16.62
Syria	Ding	-11.94	-21.28	-11.27
Taiwan	Ding	-5.95	5799.57	668.09
Thailand	Ding	0.67	-18.44	-9.69
Tunisia	Ding	13.93	2356.06	395.59
Turkey	Ding	32.17	283.42	95.81
United States	DC	-7.81	-10.56	-5.43
Venezuela	Ding	-10.46	23.29	11.03
Vietnam	Ding	-6.23	38.03	17.49
World	n/a	0.23	-9.25	-4.74
Americas Group	Ding	40.87	1018.88	234.50
Argentina	Ding	-14.38	-12.16	-6.28
Asia/Oceania Group	DC	-11.32	-3.18	-1.61
Bangladesh	LDC	-9.98	-22.98	-12.24
Brazil	Ding	-14.51	-35.68	-19.80
Canada	DC	-15.04	1035.02	236.90
China	Ding	36.41	236.32	83.39
Colombia	Ding	-2.44	2997.97	456.59
Egypt	Ding	-9.49	3993.83	539.83
European Group	DC	-9.06	-44.79	-25.70
European Union	DC	-5.35	-40.56	-22.90
India	Ding	29.24	2763.65	435.13
Iran	Ding	-5.90	34.04	15.78
Japan	DC	-10.20	-28.48	-15.43
Malaysia	Ding	20.36	-84.74	-60.94
Mexico	Ding	52.54	221.34	79.26
Middle East/African				
Group	Ding	40.40	403.55	124.40
Morocco	Ding	12.49	1092.57	245.34
Paraguay	Ding	-13.69	-21.28	-11.28
Peru	Ding	-13.81	-26.62	-14.34
Philippines	Ding	43.55	286.74	96.66
South Africa	Ding	-6.51	-24.33	-13.01
South Korea	Ding	-13.91	-30.48	-16.62
Syria	Ding	-11.94	-21.28	-11.27
Taiwan	Ding	-5.95	5799.57	668.09
Thailand	Ding	0.67	-18.44	-9.69
Tunisia	Ding	13.93	2356.06	395.59

Soybean Oil
Supply

Turkey	Ding	32.17	283.42	95.81
United States	DC	-7.81	-10.56	-5.43
Venezuela	Ding	-10.46	23.29	11.03
Vietnam	Ding	-6.23	38.03	17.49
World	n/a	-0.39	-9.52	-4.88

Country	Development Status	Variable	Swiss-25 Cuts- Full SSM		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Supply	0.11	-2.58	-1.30
Argentina	Ding		0.01	0.48	0.24
Asia/Oceana Group	DC		0.01	0.15	0.08
Brazil	Ding		0.01	0.32	0.16
Canada	DC		0.02	0.03	0.02
China	Ding		0.00	-0.25	-0.13
Colombia	Ding		0.02	0.07	0.03
Egypt	Ding		0.02	0.00	0.00
European Group	DC		0.02	-0.01	0.00
European Union	DC		0.02	0.02	0.01
India	Ding		1.90	-24.67	-13.21
Indonesia	Ding		0.00	0.06	0.03
Iran	Ding		0.01	0.03	0.02
Japan	DC		0.03	-0.30	-0.15
Mexico	Ding		0.02	-0.04	-0.02
Middle East/African Group	Ding		0.01	0.08	0.04
Paraguay	Ding		0.02	0.24	0.12
Peru	Ding		0.04	0.08	0.04
Philippines	Ding		0.00	n/a	n/a
South Africa	Ding		-0.04	0.85	0.43
South Korea	Ding		0.03	0.15	0.07
Syria	Ding		0.00	n/a	n/a
Thailand	Ding		0.02	3.87	1.91
Tunisia	Ding		0.01	0.02	0.01
Turkey	Ding		0.02	0.01	0.00
United States	DC		0.03	0.65	0.32
Venezuela	Ding		0.00	-0.33	-0.16
Vietnam	Ding		0.01	13.80	6.68
World	n/a		0.09	1.03	0.51
Americas Group	Ding	Soybean Meal Supply	40.87	1019.72	234.62
Argentina	Ding		-14.37	-13.19	-6.83
Asia/Oceana Group	DC		-11.31	-4.05	-2.05
Bangladesh	LDC		-9.98	-23.58	-12.58
Brazil	Ding		-14.50	-35.74	-19.83
Canada	DC		-15.03	1022.78	235.08
China	Ding		36.41	235.97	83.29
Colombia	Ding		-2.35	2963.17	453.46
Egypt	Ding		-10.09	3240.62	477.98
European Group	DC		-9.06	-44.97	-25.82
European Union	DC		-5.35	-40.52	-22.88
India	Ding		29.24	2763.96	435.16
Iran	Ding		-5.90	33.60	15.59
Japan	DC		-10.20	-28.69	-15.55
Malaysia	Ding		20.37	-84.71	-60.90

Mexico	Ding		52.54	221.16	79.21
Middle East/African Group	Ding		40.36	454.33	135.44
Morocco	Ding		12.50	1091.63	245.20
Paraguay	Ding		-13.68	-22.07	-11.72
Peru	Ding		-13.81	-27.14	-14.64
Philippines	Ding		43.55	286.43	96.58
South Africa	Ding		-6.51	-24.32	-13.01
South Korea	Ding		-13.90	-30.82	-16.82
Syria	Ding		-11.93	-22.01	-11.69
Taiwan	Ding		-5.94	5739.78	664.18
Thailand	Ding		0.67	-18.35	-9.64
Tunisia	Ding		13.93	2353.65	395.34
Turkey	Ding		32.17	283.11	95.73
United States	DC		-7.81	-11.63	-5.99
Venezuela	Ding		-9.67	-9.22	-4.72
Vietnam	Ding		-4.29	143.97	56.19
World	n/a		0.23	-9.33	-4.78
Americas Group	Ding		40.87	1019.72	234.62
Argentina	Ding		-14.37	-13.19	-6.83
Asia/Oceania Group	DC		-11.31	-4.05	-2.05
Bangladesh	LDC		-9.98	-23.58	-12.58
Brazil	Ding		-14.50	-35.74	-19.83
Canada	DC		-15.03	1022.78	235.08
China	Ding		36.41	235.97	83.29
Colombia	Ding		-2.35	2963.17	453.46
Egypt	Ding		-10.09	3240.62	477.98
European Group	DC		-9.06	-44.97	-25.82
European Union	DC		-5.35	-40.52	-22.88
India	Ding		29.24	2763.96	435.16
Iran	Ding		-5.90	33.60	15.59
Japan	DC		-10.20	-28.69	-15.55
Malaysia	Ding		20.37	-84.71	-60.90
Mexico	Ding		52.54	221.16	79.21
Middle East/African Group	Ding	Soybean Oil Supply	40.36	454.33	135.44
Morocco	Ding		12.50	1091.63	245.20
Paraguay	Ding		-13.68	-22.07	-11.72
Peru	Ding		-13.81	-27.14	-14.64
Philippines	Ding		43.55	286.43	96.58
South Africa	Ding		-6.51	-24.32	-13.01
South Korea	Ding		-13.90	-30.82	-16.82
Syria	Ding		-11.93	-22.01	-11.69
Taiwan	Ding		-5.94	5739.78	664.18
Thailand	Ding		0.67	-18.35	-9.64
Tunisia	Ding		13.93	2353.65	395.34
Turkey	Ding		32.17	283.11	95.73
United States	DC		-7.81	-11.63	-5.99
Venezuela	Ding		-9.67	-9.22	-4.72
Vietnam	Ding		-4.29	143.97	56.19
World	n/a		-0.39	-9.69	-4.97

Country	Development	Variable	Swiss-25 Cuts- Full SSM Bound to URAA %	% Change	% Change St.

	Status		Change	Variance	Dev.
Americas Group	Ding		0.09	-4.09	-2.06
Argentina	Ding		-0.02	0.07	0.03
Asia/Oceania Group	DC		-0.06	0.17	0.09
Brazil	Ding		-0.01	0.04	0.02
Canada	DC		-0.07	-0.01	0.00
China	Ding		-0.01	-0.16	-0.08
Colombia	Ding		-0.05	0.03	0.02
Egypt	Ding		-0.06	-0.01	0.00
European Group	DC		-0.05	0.02	0.01
European Union	DC		-0.07	0.02	0.01
India	Ding		0.52	-13.13	-6.79
Indonesia	Ding		-0.01	0.04	0.02
Iran	Ding		-0.03	0.01	0.01
Japan	DC		-0.08	-0.19	-0.09
Mexico	Ding	Soybean Supply	-0.05	-0.01	0.00
Middle East/African Group	Ding		-0.03	0.01	0.01
Paraguay	Ding		-0.04	0.03	0.01
Peru	Ding		-0.10	0.02	0.01
Philippines	Ding		0.00	n/a	n/a
South Africa	Ding		-0.07	0.55	0.28
South Korea	Ding		-0.08	0.05	0.02
Syria	Ding		0.00	n/a	n/a
Thailand	Ding		-0.04	-0.15	-0.08
Tunisia	Ding		-0.04	0.01	0.00
Turkey	Ding		-0.07	-0.01	0.00
United States	DC		-0.08	0.07	0.04
Venezuela	Ding		-0.06	-0.16	-0.08
Vietnam	Ding		-0.02	0.90	0.45
World	n/a		-0.02	0.03	0.02
Americas Group	Ding		44.62	1683.84	322.35
Argentina	Ding		-9.54	-2.62	-1.32
Asia/Oceania Group	DC		-7.70	-3.31	-1.67
Bangladesh	LDC		-6.41	-16.34	-8.53
Brazil	Ding		-9.59	-22.03	-11.70
Canada	DC		-8.90	1121.00	249.43
China	Ding		22.34	44.39	20.16
Colombia	Ding		-6.24	494.25	143.77
Egypt	Ding		-8.43	-4.88	-2.47
European Group	DC		-6.00	-21.68	-11.50
European Union	DC		-3.61	-20.39	-10.78
India	Ding	Soybean Meal Supply	21.80	1270.02	270.14
Iran	Ding		-4.02	-22.24	-11.82
Japan	DC		-6.74	-21.00	-11.12
Malaysia	Ding		-8.71	-48.40	-28.16
Mexico	Ding		37.11	108.27	44.31
Middle East/African Group	Ding		31.57	5825.58	669.78
Morocco	Ding		12.49	277.61	94.32
Paraguay	Ding		-9.11	-11.80	-6.08
Peru	Ding		-9.32	-10.98	-5.65
Philippines	Ding		20.32	692.77	181.56
South Africa	Ding		-4.51	-16.14	-8.42

South Korea	Ding	-9.35	-20.96	-11.10
Syria	Ding	-8.06	-5.42	-2.75
Taiwan	Ding	-0.96	2415.49	401.55
Thailand	Ding	0.13	2.22	1.10
Tunisia	Ding	1.24	560.94	157.09
Turkey	Ding	6.04	23.54	11.15
United States	DC	-5.21	-2.98	-1.50
Venezuela	Ding	-6.82	-16.47	-8.61
Vietnam	Ding	-3.61	113.52	46.12
World	n/a	0.04	-1.83	-0.92
Americas Group	Ding	44.62	1683.84	322.35
Argentina	Ding	-9.54	-2.62	-1.32
Asia/Oceana Group	DC	-7.70	-3.31	-1.67
Bangladesh	LDC	-6.41	-16.34	-8.53
Brazil	Ding	-9.59	-22.03	-11.70
Canada	DC	-8.90	1121.00	249.43
China	Ding	22.34	44.39	20.16
Colombia	Ding	-6.24	494.25	143.77
Egypt	Ding	-8.43	-4.88	-2.47
European Group	DC	-6.00	-21.68	-11.50
European Union	DC	-3.61	-20.39	-10.78
India	Ding	21.80	1270.02	270.14
Iran	Ding	-4.02	-22.24	-11.82
Japan	DC	-6.74	-21.00	-11.12
Malaysia	Ding	-8.71	-48.40	-28.16
Mexico	Ding	37.11	108.27	44.31
Middle East/African		Soybean Oil		
Group	Ding	Supply		
Morocco	Ding	31.57	5825.58	669.78
Paraguay	Ding	12.49	277.61	94.32
Peru	Ding	-9.11	-11.80	-6.08
Philippines	Ding	-9.32	-10.98	-5.65
South Africa	Ding	20.32	692.77	181.56
South Korea	Ding	-4.51	-16.14	-8.42
Syria	Ding	-9.35	-20.96	-11.10
Taiwan	Ding	-8.06	-5.42	-2.75
Thailand	Ding	-0.96	2415.49	401.55
Tunisia	Ding	0.13	2.22	1.10
Turkey	Ding	1.24	560.94	157.09
United States	Ding	6.04	23.54	11.15
Venezuela	DC	-5.21	-2.98	-1.50
Vietnam	Ding	-6.82	-16.47	-8.61
World	Ding	-3.61	113.52	46.12
	n/a	-0.36	-0.12	-0.06

Table II: Full Stochastic Model Swiss-25 Tariff Cuts Demand Effects

Country	Development Status	Variable	Swiss-25 Cuts- Price SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Demand	0.00	-0.09	-0.05
Argentina	Ding		0.01	-0.10	-0.05
Asia/Oceania Group	DC		0.00	-0.02	-0.01
Bangladesh	LDC		0.00	-0.07	-0.04

Brazil	Ding	0.00	0.01	0.00
Canada	DC	0.00	-0.03	-0.01
China	Ding	0.00	-0.10	-0.05
Colombia	Ding	0.00	-0.04	-0.02
Egypt	Ding	0.00	-0.05	-0.02
European Group	DC	0.00	-0.03	-0.02
European Union	DC	0.00	-0.02	-0.01
India	Ding	-0.01	-0.63	-0.31
Indonesia	Ding	0.00	-0.02	-0.01
Iran	Ding	0.00	-0.11	-0.05
Japan	DC	0.00	-0.01	0.00
Malaysia	Ding	0.00	-0.10	-0.05
Mexico	Ding	0.00	-0.07	-0.04
Middle East/African				
Group	Ding	0.00	-0.11	-0.05
Paraguay	Ding	0.00	-0.04	-0.02
Peru	Ding	0.00	-0.09	-0.05
Philippines	Ding	0.00	0.00	0.00
South Africa	Ding	0.01	-0.02	-0.01
South Korea	Ding	0.00	-0.01	0.00
Syria	Ding	0.00	-0.05	-0.03
Taiwan	Ding	0.00	0.16	0.08
Thailand	Ding	0.00	0.00	0.00
Tunisia	Ding	0.00	-0.05	-0.02
Turkey	Ding	0.00	-0.03	-0.02
United States	DC	0.00	-0.10	-0.05
Venezuela	Ding	0.00	-0.01	-0.01
Vietnam	Ding	0.00	-0.10	-0.05
World	n/a	0.00	-0.01	0.00
Algeria	Ding	0.00	0.14	0.07
Americas Group	Ding	0.00	0.25	0.12
Argentina	Ding	0.00	0.42	0.21
Asia/Oceania Group	DC	0.00	0.08	0.04
Bangladesh	LDC	0.00	0.26	0.13
Brazil	Ding	0.00	-0.03	-0.01
Canada	DC	0.00	0.05	0.02
China	Ding	0.00	0.42	0.21
Colombia	Ding	0.00	0.08	0.04
Dominican Republic	Ding	0.00	-0.03	-0.02
Egypt	Ding	0.00	0.06	0.03
European Group	DC	0.00	0.09	0.05
European Union	DC	0.00	0.05	0.03
India	Ding	0.00	-0.09	-0.04
Indonesia	Ding	0.00	0.00	0.00
Iran	Ding	0.00	0.43	0.21
Japan	DC	0.00	0.00	0.00
Malaysia	Ding	0.00	0.42	0.21
Mexico	Ding	0.00	0.16	0.08
Middle East/African				
Group	Ding	0.00	0.44	0.22
Morocco	Ding	0.00	0.09	0.04
Paraguay	Ding	0.00	0.14	0.07
Peru	Ding	0.00	0.24	0.12
Philippines	Ding	0.00	0.06	0.03

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South Africa	Ding	0.00	-0.03	-0.01
South Korea	Ding	0.00	-0.01	0.00
Syria	Ding	0.00	0.13	0.06
Taiwan	Ding	0.00	0.09	0.05
Thailand	Ding	0.00	0.03	0.01
Tunisia	Ding	0.00	0.14	0.07
Turkey	Ding	0.00	0.06	0.03
United States	DC	0.00	0.42	0.21
Venezuela	Ding	0.00	0.10	0.05
Vietnam	Ding	0.00	0.42	0.21
World	n/a	0.00	0.59	0.30
Algeria	Ding	0.06	2.63	1.31
Americas Group	Ding	0.03	3.79	1.88
Argentina	Ding	0.03	7.58	3.72
Asia/Oceania Group	DC	0.09	3.64	1.80
Bangladesh	LDC	0.04	6.63	3.26
Brazil	Ding	0.06	-0.27	-0.13
Canada	DC	0.00	0.44	0.22
China	Ding	-0.06	-40.00	-22.54
Colombia	Ding	0.02	0.32	0.16
Dominican Republic	Ding	0.06	3.21	1.59
Egypt	Ding	0.01	3.65	1.81
European Group	DC	0.06	2.09	1.04
European Union	DC	0.06	1.43	0.71
India	Ding	-0.30	-48.09	-27.95
Indonesia	Ding	0.02	-2.80	-1.41
Iran	Ding	0.06	7.49	3.68
Japan	DC	0.02	0.58	0.29
Malaysia	Ding	0.04	7.58	3.72
Mexico	Ding	0.02	4.54	2.25
Middle East/African Group	Ding	0.06	7.53	3.70
Morocco	Ding	-0.01	-10.63	-5.46
Paraguay	Ding	0.04	4.71	2.33
Peru	Ding	0.06	4.49	2.22
Philippines	Ding	0.04	2.56	1.27
South Africa	Ding	0.06	1.97	0.98
South Korea	Ding	0.01	0.43	0.22
Syria	Ding	0.06	4.32	2.14
Taiwan	Ding	0.00	-0.23	-0.12
Thailand	Ding	0.00	-0.19	-0.09
Tunisia	Ding	0.05	2.21	1.10
Turkey	Ding	0.03	4.14	2.05
United States	DC	0.04	7.58	3.72
Venezuela	Ding	0.01	-0.18	-0.09
Vietnam	Ding	0.03	0.93	0.47
World	n/a	-0.01	-2.15	-1.08

Country	Development Status	Variable	Swiss-25 Cuts- Volume SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Demand	-0.20	32.89	15.28
Argentina	Ding		-0.08	13.67	6.62
Asia/Oceania Group	DC		-0.02	3.41	1.69

Bangladesh	LDC	-0.03	10.60	5.17
Brazil	Ding	-0.03	0.20	0.10
Canada	DC	-0.02	4.35	2.15
China	Ding	-0.02	13.68	6.62
Colombia	Ding	-0.04	3.39	1.68
Egypt	Ding	-0.04	5.60	2.76
European Group	DC	-0.04	2.54	1.26
European Union	DC	-0.03	0.98	0.49
India	Ding	-1.60	117.37	47.43
Indonesia	Ding	-0.01	0.59	0.29
Iran	Ding	-0.04	13.61	6.59
Japan	DC	-0.02	1.32	0.66
Malaysia	Ding	-0.04	13.67	6.62
Mexico	Ding	-0.02	7.79	3.82
Middle East/African Group	Ding	-0.02	13.79	6.67
Paraguay	Ding	-0.04	7.03	3.46
Peru	Ding	-0.02	8.25	4.04
Philippines	Ding	-0.04	2.93	1.45
South Africa	Ding	0.13	-8.69	-4.44
South Korea	Ding	-0.02	1.18	0.59
Syria	Ding	-0.02	6.48	3.19
Taiwan	Ding	-0.02	8.14	3.99
Thailand	Ding	-0.04	-0.63	-0.31
Tunisia	Ding	-0.02	3.53	1.75
Turkey	Ding	-0.02	5.58	2.75
United States	DC	-0.01	13.67	6.62
Venezuela	Ding	0.01	7.44	3.65
Vietnam	Ding	-0.01	13.67	6.62
World	n/a	-0.09	8.68	4.25
Algeria	Ding	-0.61	7.67	3.76
Americas Group	Ding	-0.36	51.67	23.16
Argentina	Ding	-1.62	83.88	35.60
Asia/Oceania Group	DC	-0.90	18.71	8.95
Bangladesh	LDC	-0.24	52.45	23.47
Brazil	Ding	-0.61	3.47	1.72
Canada	DC	-0.43	17.46	8.38
China	Ding	2.57	-65.81	-41.53
Colombia	Ding	-0.29	12.12	5.89
Dominican Republic	Ding	-0.61	11.33	5.51
Egypt	Ding	-0.12	24.24	11.46
European Group	DC	-0.60	2.53	1.26
European Union	DC	-0.85	-1.27	-0.64
India	Ding	-0.37	11.03	5.37
Indonesia	Ding	-0.49	3.21	1.59
Iran	Ding	-0.62	83.07	35.30
Japan	DC	-0.24	6.43	3.16
Malaysia	Ding	-0.12	83.88	35.60
Mexico	Ding	-0.23	33.65	15.61
Middle East/African Group	Ding	-0.22	86.07	36.41
Morocco	Ding	-0.12	9.76	4.77
Paraguay	Ding	-0.43	31.11	14.50
Peru	Ding	-0.29	36.18	16.70

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Philippines	Ding	-0.18	8.46	4.14
South Africa	Ding	-0.28	7.88	3.86
South Korea	Ding	-0.13	6.38	3.14
Syria	Ding	-0.62	28.47	13.34
Taiwan	Ding	-0.18	37.02	17.05
Thailand	Ding	-0.21	15.51	7.48
Tunisia	Ding	-0.47	6.00	2.96
Turkey	Ding	-0.17	25.24	11.91
United States	DC	-0.15	83.88	35.60
Venezuela	Ding	-0.27	16.10	7.75
Vietnam	Ding	-0.31	83.88	35.60
World	n/a	0.23	-9.25	-4.74
Algeria	Ding	4.15	-14.38	-7.47
Americas Group	Ding	-8.49	58.34	25.83
Argentina	Ding	1.89	-23.74	-12.67
Asia/Oceania Group	DC	6.06	-16.88	-8.83
Bangladesh	LDC	2.88	-19.93	-10.52
Brazil	Ding	3.62	-14.47	-7.52
Canada	DC	1.23	1.54	0.77
China	Ding	-3.96	56.46	25.08
Colombia	Ding	0.56	71.21	30.85
Dominican Republic	Ding	3.69	-17.84	-9.36
Egypt	Ding	0.63	217.10	78.07
European Group	DC	3.63	-13.42	-6.95
European Union	DC	4.30	-12.50	-6.46
India	Ding	-7.35	40.93	18.71
Indonesia	Ding	2.45	-15.46	-8.05
Iran	Ding	4.14	-23.66	-12.63
Japan	DC	1.12	-15.83	-8.26
Malaysia	Ding	-2.18	-21.87	-11.61
Mexico	Ding	-4.81	63.60	27.91
Middle East/African Group	Ding	-11.97	42.50	19.37
Morocco	Ding	-3.29	-4.37	-2.21
Paraguay	Ding	2.47	-20.69	-10.94
Peru	Ding	3.93	-18.99	-10.00
Philippines	Ding	-8.73	17.94	8.60
South Africa	Ding	3.96	-17.11	-8.96
South Korea	Ding	0.80	-15.84	-8.26
Syria	Ding	3.79	-20.02	-10.57
Taiwan	Ding	0.39	-28.63	-15.52
Thailand	Ding	0.67	-18.44	-9.69
Tunisia	Ding	-5.66	75.18	32.36
Turkey	Ding	-7.23	38.52	17.69
United States	DC	2.47	-23.74	-12.67
Venezuela	Ding	1.09	-18.75	-9.86
Vietnam	Ding	2.51	-23.74	-12.67
World	n/a	-0.39	-9.52	-4.88

Country	Development Status	Variable	Swiss-25 Cuts- Full SSM		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Demand	-0.20	33.02	15.33
Argentina	Ding		-0.08	13.80	6.68

Asia/Oceania Group	DC	-0.02	3.43	1.70
Bangladesh	LDC	-0.03	10.69	5.21
Brazil	Ding	-0.03	0.19	0.09
Canada	DC	-0.02	4.36	2.15
China	Ding	-0.02	13.81	6.68
Colombia	Ding	-0.04	3.44	1.71
Egypt	Ding	-0.03	5.62	2.77
European Group	DC	-0.04	2.58	1.28
European Union	DC	-0.03	1.01	0.50
India	Ding	-1.60	117.42	47.45
Indonesia	Ding	-0.01	0.58	0.29
Iran	Ding	-0.04	13.74	6.65
Japan	DC	-0.02	1.30	0.65
Malaysia	Ding	-0.04	13.80	6.68
Mexico	Ding	-0.02	7.85	3.85
Middle East/African Group	Ding	-0.02	13.92	6.74
Paraguay	Ding	-0.04	7.11	3.50
Peru	Ding	-0.02	8.35	4.09
Philippines	Ding	-0.04	2.94	1.46
South Africa	Ding	0.13	-8.67	-4.43
South Korea	Ding	-0.01	1.17	0.58
Syria	Ding	-0.02	6.56	3.23
Taiwan	Ding	-0.02	8.22	4.03
Thailand	Ding	-0.04	-0.62	-0.31
Tunisia	Ding	-0.02	3.58	1.78
Turkey	Ding	-0.02	5.62	2.77
United States	DC	-0.01	13.80	6.68
Venezuela	Ding	0.01	6.23	3.07
Vietnam	Ding	-0.01	13.80	6.68
World	n/a	-0.09	8.74	4.28
Algeria	Ding	-0.61	7.70	3.78
Americas Group	Ding	-0.36	51.62	23.14
Argentina	Ding	-1.62	83.82	35.58
Asia/Oceania Group	DC	-0.90	18.72	8.96
Bangladesh	LDC	-0.25	52.46	23.47
Brazil	Ding	-0.61	3.48	1.73
Canada	DC	-0.43	17.45	8.37
China	Ding	2.56	-65.84	-41.56
Colombia	Ding	-0.29	12.11	5.88
Dominican Republic	Ding	-0.62	11.32	5.51
Egypt	Ding	-0.12	24.20	11.45
European Group	DC	-0.60	2.56	1.27
European Union	DC	-0.85	-1.24	-0.62
India	Ding	-0.37	11.05	5.38
Indonesia	Ding	-0.49	3.22	1.60
Iran	Ding	-0.62	83.01	35.28
Japan	DC	-0.24	6.43	3.16
Malaysia	Ding	-0.12	83.82	35.58
Mexico	Ding	-0.23	33.61	15.59
Middle East/African Group	Ding	-0.22	86.01	36.39
Morocco	Ding	-0.12	9.82	4.80
Paraguay	Ding	-0.43	31.06	14.48

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Peru	Ding	-0.29	36.18	16.70
Philippines	Ding	-0.18	8.48	4.15
South Africa	Ding	-0.28	7.89	3.87
South Korea	Ding	-0.13	6.38	3.14
Syria	Ding	-0.62	28.43	13.33
Taiwan	Ding	-0.18	36.98	17.04
Thailand	Ding	-0.21	15.51	7.47
Tunisia	Ding	-0.47	6.04	2.97
Turkey	Ding	-0.17	25.22	11.90
United States	DC	-0.15	83.82	35.58
Venezuela	Ding	-0.27	16.08	7.74
Vietnam	Ding	-0.31	83.82	35.58
World	n/a	0.23	-9.33	-4.78
Algeria	Ding	4.15	-14.21	-7.37
Americas Group	Ding	-8.49	59.04	26.11
Argentina	Ding	1.89	-23.35	-12.45
Asia/Oceania Group	DC	6.06	-16.75	-8.76
Bangladesh	LDC	2.88	-19.59	-10.33
Brazil	Ding	3.62	-14.49	-7.53
Canada	DC	1.23	1.63	0.81
China	Ding	-3.96	57.25	25.40
Colombia	Ding	0.55	65.45	28.63
Dominican Republic	Ding	3.61	-29.45	-16.00
Egypt	Ding	0.66	165.00	62.79
European Group	DC	3.63	-13.29	-6.88
European Union	DC	4.30	-12.39	-6.40
India	Ding	-7.35	41.14	18.80
Indonesia	Ding	2.37	-23.74	-12.67
Iran	Ding	4.14	-23.29	-12.41
Japan	DC	1.12	-15.86	-8.27
Malaysia	Ding	-2.18	-21.71	-11.52
Mexico	Ding	-4.81	64.01	28.07
Middle East/African Group	Ding	-11.95	42.87	19.53
Morocco	Ding	-3.29	-4.33	-2.19
Paraguay	Ding	2.47	-20.45	-10.81
Peru	Ding	3.93	-18.82	-9.90
Philippines	Ding	-8.72	18.10	8.67
South Africa	Ding	3.97	-17.05	-8.92
South Korea	Ding	0.80	-15.87	-8.28
Syria	Ding	3.79	-19.78	-10.43
Taiwan	Ding	0.39	-28.38	-15.37
Thailand	Ding	0.67	-18.35	-9.64
Tunisia	Ding	-5.65	75.05	32.31
Turkey	Ding	-7.23	38.88	17.85
United States	DC	2.47	-23.35	-12.45
Venezuela	Ding	1.02	-42.24	-24.00
Vietnam	Ding	1.92	-73.52	-48.54
World	n/a	-0.39	-9.69	-4.97

Country	Development Status	Variable	Swiss-25 Cuts- Full SSM Bound to URAA		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Demand	-0.17	42.85	19.52

Argentina	Ding	0.21	0.90	0.45
Asia/Oceania Group	DC	0.08	-0.51	-0.26
Bangladesh	LDC	0.08	0.79	0.39
Brazil	Ding	0.09	-0.75	-0.37
Canada	DC	0.04	-0.16	-0.08
China	Ding	0.06	0.90	0.45
Colombia	Ding	0.11	0.06	0.03
Egypt	Ding	0.09	-0.29	-0.14
European Group	DC	0.10	0.72	0.36
European Union	DC	0.08	0.37	0.18
India	Ding	-0.44	43.00	19.58
Indonesia	Ding	0.03	-0.30	-0.15
Iran	Ding	0.11	0.93	0.46
Japan	DC	0.06	-0.35	-0.18
Malaysia	Ding	0.11	0.90	0.45
Mexico	Ding	0.06	0.43	0.21
Middle East/African Group	Ding	0.06	0.97	0.48
Paraguay	Ding	0.11	0.23	0.12
Peru	Ding	0.06	0.67	0.34
Philippines	Ding	0.10	0.28	0.14
South Africa	Ding	0.22	-6.80	-3.46
South Korea	Ding	0.04	-0.52	-0.26
Syria	Ding	0.06	0.05	0.03
Taiwan	Ding	0.05	0.23	0.11
Thailand	Ding	0.10	-0.80	-0.40
Tunisia	Ding	0.06	0.91	0.45
Turkey	Ding	0.04	-0.49	-0.25
United States	DC	0.03	0.90	0.45
Venezuela	Ding	0.11	1.36	0.68
Vietnam	Ding	0.03	0.90	0.45
World	n/a	0.05	-0.11	-0.05
Algeria	Ding	0.04	-1.10	-0.55
Americas Group	Ding	0.02	-0.46	-0.23
Argentina	Ding	0.10	-0.63	-0.32
Asia/Oceania Group	DC	0.06	-0.07	-0.04
Bangladesh	LDC	0.02	-0.19	-0.09
Brazil	Ding	0.04	0.13	0.06
Canada	DC	0.03	0.03	0.02
China	Ding	0.10	-0.64	-0.32
Colombia	Ding	0.02	-0.52	-0.26
Dominican Republic	Ding	0.04	-0.13	-0.06
Egypt	Ding	0.01	0.09	0.05
European Group	DC	0.04	-0.85	-0.43
European Union	DC	0.05	-0.64	-0.32
India	Ding	0.02	-0.09	-0.05
Indonesia	Ding	0.03	-0.15	-0.08
Iran	Ding	0.04	-0.65	-0.32
Japan	DC	0.02	0.00	0.00
Malaysia	Ding	0.01	-0.63	-0.32
Mexico	Ding	0.01	-0.38	-0.19
Middle East/African Group	Ding	0.01	-0.72	-0.36
Morocco	Ding	0.01	-0.49	-0.25

Soybean Meal
Demand

Paraguay	Ding	0.03	-0.34	-0.17
Peru	Ding	0.02	-0.90	-0.45
Philippines	Ding	0.01	-0.22	-0.11
South Africa	Ding	0.02	-0.15	-0.08
South Korea	Ding	0.01	0.06	0.03
Syria	Ding	0.04	-0.25	-0.13
Taiwan	Ding	0.01	-0.31	-0.16
Thailand	Ding	0.01	-0.21	-0.10
Tunisia	Ding	0.03	-1.08	-0.54
Turkey	Ding	0.01	0.12	0.06
United States	DC	0.01	-0.63	-0.32
Venezuela	Ding	0.02	-0.60	-0.30
Vietnam	Ding	0.02	-0.63	-0.32
World	n/a	0.04	-1.83	-0.92
Algeria	Ding	2.35	-6.07	-3.08
Americas Group	Ding	-9.76	97.90	40.68
Argentina	Ding	1.07	-2.67	-1.35
Asia/Oceania Group	DC	3.44	-4.98	-2.52
Bangladesh	LDC	1.64	-2.52	-1.27
Brazil	Ding	2.05	-8.21	-4.19
Canada	DC	0.60	17.22	8.27
China	Ding	-2.14	46.67	21.11
Colombia	Ding	0.67	-10.87	-5.59
Dominican Republic	Ding	2.08	-10.69	-5.50
Egypt	Ding	0.45	-5.76	-2.92
European Group	DC	2.06	-6.41	-3.26
European Union	DC	2.44	-6.48	-3.29
India	Ding	-4.58	42.99	19.58
Indonesia	Ding	1.35	-13.79	-7.15
Iran	Ding	2.35	-2.80	-1.41
Japan	DC	0.64	-7.74	-3.95
Malaysia	Ding	1.28	1.65	0.82
Mexico	Ding	-3.53	60.76	26.79
Middle East/African				
Group	Ding	-9.86	203.26	74.14
Morocco	Ding	-3.62	15.15	7.31
Paraguay	Ding	1.40	-4.94	-2.50
Peru	Ding	2.23	-5.00	-2.53
Philippines	Ding	-4.23	31.38	14.62
South Africa	Ding	2.25	-8.24	-4.21
South Korea	Ding	0.45	-7.87	-4.02
Syria	Ding	2.15	-5.14	-2.60
Taiwan	Ding	0.07	-6.48	-3.29
Thailand	Ding	0.13	2.22	1.10
Tunisia	Ding	-0.42	-51.19	-30.13
Turkey	Ding	-1.36	16.67	8.02
United States	DC	1.40	-2.67	-1.35
Venezuela	Ding	0.60	-18.90	-9.94
Vietnam	Ding	1.21	-49.13	-28.67
World	n/a	-0.35	-0.12	-0.06

Table JJ: Full Stochastic Model Swiss-25 Tariff Cuts Soybean Crush Effects

Country	Development Status	Variable	Swiss-25 Cuts- Price SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Crush	-0.12	-1.12	-0.56
Argentina	Ding		-0.26	-7.13	-3.63
Asia/Oceania Group	DC		-0.21	-9.91	-5.09
Bangladesh	LDC		-0.17	5.53	2.73
Brazil	Ding		-0.26	-7.50	-3.82
Canada	DC		-0.03	4.11	2.04
China	Ding		0.61	95.53	39.83
Colombia	Ding		-0.17	-5.21	-2.64
Egypt	Ding		-0.23	-10.56	-5.43
European Group	DC		-0.16	-2.68	-1.35
European Union	DC		-0.10	0.38	0.19
India	Ding		1.66	-35.33	-19.58
Iran	Ding		-0.11	19.00	9.09
Japan	DC		-0.18	-1.86	-0.93
Malaysia	Ding		-0.26	-8.52	-4.35
Mexico	Ding		-0.16	-1.70	-0.85
Middle East/African Group	Ding		-0.16	-8.87	-4.54
Morocco	Ding		0.03	-19.13	-10.07
Paraguay	Ding		-0.24	-3.69	-1.86
Peru	Ding		-0.25	-5.08	-2.57
Philippines	Ding		-0.17	-1.56	-0.78
South Africa	Ding		-0.12	-0.47	-0.23
South Korea	Ding		-0.25	-5.54	-2.81
Syria	Ding		-0.22	-8.69	-4.45
Taiwan	Ding		0.00	-0.23	-0.12
Thailand	Ding		0.00	-0.19	-0.09
Tunisia	Ding		-0.11	0.30	0.15
Turkey	Ding		-0.10	-3.65	-1.84
United States	DC		-0.14	-6.78	-3.45
Venezuela	Ding		-0.15	-4.92	-2.49
Vietnam	Ding		-0.07	2.93	1.45
World	n/a		0.00	0.05	0.02

Country	Development Status	Variable	Swiss-25 Cuts- Volume SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Crush	40.87	1018.88	234.50
Argentina	Ding		-14.38	-12.16	-6.28
Asia/Oceania Group	DC		-11.32	-3.18	-1.61
Bangladesh	LDC		-9.98	-22.98	-12.24
Brazil	Ding		-14.51	-35.68	-19.80
Canada	DC		-15.04	1035.02	236.90
China	Ding		36.41	236.32	83.39
Colombia	Ding		-2.44	2997.97	456.59
Egypt	Ding		-9.49	3993.83	539.83
European Group	DC		-9.06	-44.79	-25.70
European Union	DC		-5.35	-40.56	-22.90
India	Ding		29.24	2763.65	435.13
Iran	Ding		-5.90	34.04	15.78
Japan	DC		-10.20	-28.48	-15.43

Malaysia	Ding	20.36	-84.74	-60.94
Mexico	Ding	52.54	221.34	79.26
Middle East/African Group	Ding	40.40	403.55	124.40
Morocco	Ding	12.49	1092.57	245.34
Paraguay	Ding	-13.69	-21.28	-11.28
Peru	Ding	-13.81	-26.62	-14.34
Philippines	Ding	43.55	286.74	96.66
South Africa	Ding	-6.51	-24.33	-13.01
South Korea	Ding	-13.91	-30.48	-16.62
Syria	Ding	-11.94	-21.28	-11.27
Taiwan	Ding	-5.95	5799.57	668.09
Thailand	Ding	0.67	-18.44	-9.69
Tunisia	Ding	13.93	2356.06	395.59
Turkey	Ding	32.17	283.42	95.81
United States	DC	-7.81	-10.56	-5.43
Venezuela	Ding	-10.46	23.29	11.03
Vietnam	Ding	-6.23	38.03	17.49
World	n/a	0.11	-9.28	-4.75

Swiss-25 Cuts- Full SSM

Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding		40.87	1019.72	234.62
Argentina	Ding		-14.37	-13.19	-6.83
Asia/Oceania Group	DC		-11.31	-4.05	-2.05
Bangladesh	LDC		-9.98	-23.58	-12.58
Brazil	Ding		-14.50	-35.74	-19.83
Canada	DC		-15.03	1022.78	235.08
China	Ding		36.41	235.97	83.29
Colombia	Ding		-2.35	2963.17	453.46
Egypt	Ding		-10.09	3240.62	477.98
European Group	DC		-9.06	-44.97	-25.82
European Union	DC		-5.35	-40.52	-22.88
India	Ding		29.24	2763.96	435.16
Iran	Ding		-5.90	33.60	15.59
Japan	DC		-10.20	-28.69	-15.55
Malaysia	Ding		20.37	-84.71	-60.90
Mexico	Ding	Soybean Crush	52.54	221.16	79.21
Middle East/African Group	Ding		40.36	454.33	135.44
Morocco	Ding		12.50	1091.63	245.20
Paraguay	Ding		-13.68	-22.07	-11.72
Peru	Ding		-13.81	-27.14	-14.64
Philippines	Ding		43.55	286.43	96.58
South Africa	Ding		-6.51	-24.32	-13.01
South Korea	Ding		-13.90	-30.82	-16.82
Syria	Ding		-11.93	-22.01	-11.69
Taiwan	Ding		-5.94	5739.78	664.18
Thailand	Ding		0.67	-18.35	-9.64
Tunisia	Ding		13.93	2353.65	395.34
Turkey	Ding		32.17	283.11	95.73
United States	DC		-7.81	-11.63	-5.99
Venezuela	Ding		-9.67	-9.22	-4.72

Vietnam	Ding	-4.29	143.97	56.19
World	n/a	0.11	-9.38	-4.81

Country	Development Status	Variable	Swiss-25 Cuts- Full SSM Bound to URAA		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Crush	44.62	1683.84	322.35
Argentina	Ding		-9.54	-2.62	-1.32
Asia/Oceania Group	DC		-7.70	-3.31	-1.67
Bangladesh	LDC		-6.41	-16.34	-8.53
Brazil	Ding		-9.59	-22.03	-11.70
Canada	DC		-8.90	1121.00	249.43
China	Ding		22.34	44.39	20.16
Colombia	Ding		-6.24	494.25	143.77
Egypt	Ding		-8.43	-4.88	-2.47
European Group	DC		-6.00	-21.68	-11.50
European Union	DC		-3.61	-20.39	-10.78
India	Ding		21.80	1270.02	270.14
Iran	Ding		-4.02	-22.24	-11.82
Japan	DC		-6.74	-21.00	-11.12
Malaysia	Ding		-8.71	-48.40	-28.16
Mexico	Ding		37.11	108.27	44.31
Middle East/African Group	Ding		31.57	5825.58	669.78
Morocco	Ding		12.49	277.61	94.32
Paraguay	Ding		-9.11	-11.80	-6.08
Peru	Ding		-9.32	-10.98	-5.65
Philippines	Ding		20.32	692.77	181.56
South Africa	Ding		-4.51	-16.14	-8.42
South Korea	Ding		-9.35	-20.96	-11.10
Syria	Ding		-8.06	-5.42	-2.75
Taiwan	Ding		-0.96	2415.49	401.55
Thailand	Ding		0.13	2.22	1.10
Tunisia	Ding		1.24	560.94	157.09
Turkey	Ding		6.04	23.54	11.15
United States	DC		-5.21	-2.98	-1.50
Venezuela	Ding		-6.82	-16.47	-8.61
Vietnam	Ding		-3.61	113.52	46.12
World	n/a		-0.03	-1.53	-0.77

Table KK. Full Stochastic Model Swiss-25 Tariff Cuts Net Trade Effects

Country	Development Status	Variable	Swiss-25 Cuts- Price SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Net Trade	0.18	-0.07	-0.03
Argentina	Ding		1.99	-4.99	-2.53
Asia/Oceania Group	DC		-0.56	-0.21	-0.10
Bangladesh	LDC		-0.16	3.21	1.59
Brazil	Ding		0.40	-4.52	-2.28
Canada	DC		0.02	0.02	0.01
China	Ding		0.67	35.93	16.59
Colombia	Ding		-0.09	-1.17	-0.59

Egypt	Ding	-0.23	-8.08	-4.13
European Group	DC	-0.50	-0.33	-0.16
European Union	DC	-0.09	0.01	0.00
India	Ding	-5.92	-1.05	-0.53
Indonesia	Ding	0.00	0.01	0.00
Iran	Ding	-0.13	2.14	1.06
Japan	DC	-0.13	-3.86	-1.95
Malaysia	Ding	-0.20	-10.91	-5.61
Mexico	Ding	-0.17	0.75	0.37
Middle East/African Group	Ding	-0.21	-3.75	-1.89
Morocco	Ding	0.03	-19.13	-10.07
Paraguay	Ding	0.13	-0.61	-0.31
Peru	Ding	-0.16	-5.60	-2.84
Philippines	Ding	-0.16	-3.06	-1.54
South Africa	Ding	0.17	0.11	0.06
South Korea	Ding	-0.19	-5.33	-2.70
Syria	Ding	-0.22	-8.78	-4.49
Taiwan	Ding	0.00	-0.12	-0.06
Thailand	Ding	0.00	-0.07	-0.04
Tunisia	Ding	-0.11	-0.20	-0.10
Turkey	Ding	-0.03	-0.91	-0.46
United States	DC	0.22	-0.91	-0.46
Venezuela	Ding	-0.35	0.45	0.22
Vietnam	Ding	-0.01	-0.72	-0.36
Algeria	Ding	0.00	0.14	0.07
Americas Group	Ding	0.09	2.30	1.14
Argentina	Ding	-0.26	-6.80	-3.46
Asia/Oceania Group	DC	0.04	0.61	0.30
Bangladesh	LDC	0.06	10.50	5.12
Brazil	Ding	-0.46	-4.46	-2.26
Canada	DC	0.03	4.83	2.39
China	Ding	-1.85	-30.74	-16.78
Colombia	Ding	0.02	-0.68	-0.34
Dominican Republic	Ding	0.00	-0.03	-0.02
Egypt	Ding	0.93	-7.96	-4.06
European Group	DC	0.35	1.17	0.58
European Union	DC	0.05	0.49	0.25
India	Ding	2.80	-49.26	-28.77
Indonesia	Ding	0.00	0.00	0.00
Iran	Ding	0.10	8.07	3.96
Japan	DC	0.18	-0.66	-0.33
Malaysia	Ding	0.10	-3.03	-1.53
Mexico	Ding	0.20	1.71	0.85
Middle East/African Group	Ding	0.08	6.22	3.06
Morocco	Ding	-0.01	-16.68	-8.72
Paraguay	Ding	-0.26	-3.29	-1.66
Peru	Ding	0.02	2.82	1.40
Philippines	Ding	0.01	0.58	0.29
South Africa	Ding	0.01	-0.11	-0.06
South Korea	Ding	0.12	-2.44	-1.23
Syria	Ding	0.15	0.84	0.42
Taiwan	Ding	0.00	-1.27	-0.64

Soybean Meal Net
Trade

Thailand	Ding	0.00	-0.51	-0.25
Tunisia	Ding	0.04	1.20	0.60
Turkey	Ding	0.08	0.21	0.10
United States	DC	-0.52	-4.32	-2.18
Venezuela	Ding	0.01	-0.53	-0.27
Vietnam	Ding	0.00	0.53	0.26
Algeria	Ding	0.06	2.63	1.31
Americas Group	Ding	0.18	6.21	3.06
Argentina	Ding	-0.31	-5.66	-2.87
Asia/Oceania Group	DC	0.17	4.90	2.42
Bangladesh	LDC	0.06	8.48	4.15
Brazil	Ding	-0.73	-4.25	-2.15
Canada	DC	22.97	20.34	9.70
China	Ding	-1.15	-2.49	-1.25
Colombia	Ding	0.05	-0.22	-0.11
Dominican Republic	Ding	0.06	3.21	1.59
Egypt	Ding	0.25	-4.01	-2.02
European Group	DC	0.29	2.92	1.45
European Union	DC	1.17	1.85	0.92
India	Ding	-1.51	-67.78	-43.24
Indonesia	Ding	0.02	-2.80	-1.41
Iran	Ding	0.17	11.43	5.56
Japan	DC	1.22	-0.78	-0.39
Malaysia	Ding	-41.72	4.75	2.35
Mexico	Ding	0.38	3.82	1.89
Middle East/African Group	Ding	0.17	16.56	7.96
Morocco	Ding	-0.01	-13.00	-6.72
Paraguay	Ding	-0.29	-2.14	-1.07
Peru	Ding	0.07	5.41	2.67
Philippines	Ding	0.35	3.03	1.50
South Africa	Ding	0.08	1.56	0.78
South Korea	Ding	0.19	-2.71	-1.36
Syria	Ding	1.73	3.88	1.92
Taiwan	Ding	2.45	6.10	3.01
Thailand	Ding	-1.50	10.74	5.23
Tunisia	Ding	0.08	2.52	1.25
Turkey	Ding	0.15	5.56	2.74
United States	DC	-0.95	14.58	7.04
Venezuela	Ding	0.02	-0.52	-0.26
Vietnam	Ding	0.03	1.23	0.62

Soybean Oil Net
Trade

Country	Development Status	Variable	Swiss-25 Cuts- Volume SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Net Trade	-61.81	-16.33	-8.53
Argentina	Ding		112.39	-3.56	-1.80
Asia/Oceania Group	DC		-31.33	-0.28	-0.14
Bangladesh	LDC		-9.28	-23.08	-12.30
Brazil	Ding		22.07	-5.31	-2.69
Canada	DC		15.78	0.29	0.15
China	Ding		39.60	66.81	29.16
Colombia	Ding		-1.38	446.13	133.69
Egypt	Ding		-9.48	3049.70	461.22

European Group	DC	-28.67	-0.81	-0.40
European Union	DC	-5.23	-21.37	-11.32
India	Ding	-93.90	-90.60	-69.33
Indonesia	Ding	-0.02	0.56	0.28
Iran	Ding	-6.91	5.65	2.79
Japan	DC	-7.25	-33.55	-18.48
Malaysia	Ding	15.77	-70.29	-45.49
Mexico	Ding	54.06	166.21	63.16
Middle East/African Group	Ding	52.31	62.27	27.39
Morocco	Ding	12.85	1092.57	245.34
Paraguay	Ding	7.51	-0.22	-0.11
Peru	Ding	-9.11	-9.86	-5.06
Philippines	Ding	40.47	347.67	111.58
South Africa	Ding	9.96	6.56	3.23
South Korea	Ding	-10.50	-18.41	-9.67
Syria	Ding	-11.96	-21.29	-11.28
Taiwan	Ding	-5.26	3782.51	523.10
Thailand	Ding	0.58	-12.48	-6.45
Tunisia	Ding	14.54	45.38	20.57
Turkey	Ding	10.37	4.63	2.29
United States	DC	12.78	-0.35	-0.18
Venezuela	Ding	-24.49	-7.35	-3.75
Vietnam	Ding	-1.12	6.82	3.36
Algeria	Ding	-0.61	7.67	3.76
Americas Group	Ding	-31.89	406.36	125.02
Argentina	Ding	-14.71	-11.21	-5.77
Asia/Oceania Group	DC	1.00	18.42	8.82
Bangladesh	LDC	3.09	42.57	19.40
Brazil	Ding	-25.03	-26.00	-13.98
Canada	DC	15.68	328.36	106.97
China	Ding	-99.99	-99.97	-98.24
Colombia	Ding	0.00	42.08	19.20
Dominican Republic	Ding	-0.62	11.33	5.51
Egypt	Ding	38.29	3287.11	481.99
European Group	DC	17.88	-27.93	-15.11
European Union	DC	1.43	-8.67	-4.44
India	Ding	49.67	1903.64	347.62
Indonesia	Ding	-0.49	3.21	1.59
Iran	Ding	4.19	90.52	38.03
Japan	DC	9.58	-14.12	-7.33
Malaysia	Ding	-7.75	-84.97	-61.23
Mexico	Ding	-66.30	201.49	73.63
Middle East/African Group	Ding	-20.51	687.70	180.66
Morocco	Ding	-6.98	257.96	89.20
Paraguay	Ding	-14.79	-20.71	-10.96
Peru	Ding	0.90	23.52	11.14
Philippines	Ding	-2.29	5.22	2.58
South Africa	Ding	0.43	-9.59	-4.92
South Korea	Ding	6.24	-18.42	-9.68
Syria	Ding	7.24	13.53	6.55
Taiwan	Ding	27.28	8617.83	833.69
Thailand	Ding	-0.57	28.92	13.54

Soybean Meal Net
Trade

Tunisia	Ding	-5.78	4.16	2.06
Turkey	Ding	-25.20	126.02	50.34
United States	DC	-28.75	-0.91	-0.46
Venezuela	Ding	0.44	7.76	3.81
Vietnam	Ding	-0.25	85.97	36.37
Algeria	Ding	4.10	-14.38	-7.47
Americas Group	Ding	-58.59	390.64	121.50
Argentina	Ding	-17.55	-11.98	-6.18
Asia/Oceania Group	DC	10.85	-16.18	-8.45
Bangladesh	LDC	3.79	-20.60	-10.89
Brazil	Ding	-41.07	-30.14	-16.42
Canada	DC	12452.17	1968.98	354.86
China	Ding	-69.26	86.06	36.40
Colombia	Ding	1.01	605.41	165.60
Dominican Republic	Ding	3.69	-17.84	-9.36
Egypt	Ding	10.59	4075.44	546.18
European Group	DC	17.66	-27.26	-14.71
European Union	DC	70.65	-22.06	-11.72
India	Ding	-29.74	567.60	158.38
Indonesia	Ding	2.45	-15.46	-8.05
Iran	Ding	10.63	-17.84	-9.36
Japan	DC	69.50	-25.80	-13.86
Malaysia	Ding	3215.25	-100.00	-100.00
Mexico	Ding	-119.30	247.02	86.28
Middle East/African Group	Ding	-38.22	224.94	80.26
Morocco	Ding	-5.03	48.23	21.75
Paraguay	Ding	-16.37	-21.72	-11.53
Peru	Ding	4.70	-19.81	-10.45
Philippines	Ding	-88.76	132.64	52.53
South Africa	Ding	5.09	-18.35	-9.64
South Korea	Ding	10.49	-27.52	-14.86
Syria	Ding	99.77	-23.25	-12.39
		-		
Taiwan	Ding	1.41E+16	1.36E+29	3.68E+15
Thailand	Ding	5.03	2.09	1.04
Tunisia	Ding	-8.63	181.74	67.85
Turkey	Ding	-46.17	172.58	65.10
United States	DC	-54.77	-12.40	-6.40
Venezuela	Ding	1.64	-20.64	-10.91
Vietnam	Ding	2.88	-22.55	-12.00

Country	Development Status	Variable	Swiss-25 Cuts- Full SSM		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Soybean Net Trade	-61.81	-16.33	-8.53
Argentina	Ding		112.34	-3.74	-1.89
Asia/Oceania Group	DC		-31.31	-0.32	-0.16
Bangladesh	LDC		-9.28	-23.74	-12.67
Brazil	Ding		22.06	-5.41	-2.74
Canada	DC		15.77	0.29	0.15
China	Ding		39.60	66.74	29.13
Colombia	Ding		-1.33	444.10	133.26
Egypt	Ding		-10.08	2473.95	407.34

European Group	DC	-28.66	-0.80	-0.40
European Union	DC	-5.22	-21.37	-11.33
India	Ding	-93.91	-90.60	-69.33
Indonesia	Ding	-0.02	0.56	0.28
Iran	Ding	-6.91	5.51	2.72
Japan	DC	-7.25	-33.86	-18.67
Malaysia	Ding	15.77	-70.23	-45.44
Mexico	Ding	54.06	166.28	63.18
Middle East/African Group	Ding	52.26	73.47	31.71
Morocco	Ding	12.85	1091.63	245.20
Paraguay	Ding	7.51	-0.25	-0.13
Peru	Ding	-9.11	-10.16	-5.22
Philippines	Ding	40.48	347.23	111.48
South Africa	Ding	9.95	6.55	3.22
South Korea	Ding	-10.49	-18.61	-9.78
Syria	Ding	-11.96	-22.02	-11.70
Taiwan	Ding	-5.26	3743.45	519.96
Thailand	Ding	0.59	-12.42	-6.42
Tunisia	Ding	14.54	45.34	20.56
Turkey	Ding	10.37	4.62	2.28
United States	DC	12.77	-0.37	-0.18
Venezuela	Ding	-22.64	-7.67	-3.91
Vietnam	Ding	-0.78	34.11	15.81
Algeria	Ding	-0.61	7.70	3.78
Americas Group	Ding	-31.90	406.67	125.09
Argentina	Ding	-14.70	-12.27	-6.33
Asia/Oceania Group	DC	0.99	18.42	8.82
Bangladesh	LDC	3.09	42.55	19.39
Brazil	Ding	-25.01	-25.99	-13.97
Canada	DC	15.67	326.33	106.48
China	Ding	-99.99	-99.97	-98.22
Colombia	Ding	-0.01	38.69	17.77
Dominican Republic	Ding	-0.62	11.32	5.51
Egypt	Ding	40.78	2659.37	425.30
European Group	DC	17.87	-27.86	-15.07
European Union	DC	1.43	-8.62	-4.41
India	Ding	49.67	1903.90	347.65
Indonesia	Ding	-0.49	3.22	1.60
Iran	Ding	4.18	90.42	37.99
Japan	DC	9.58	-14.22	-7.38
Malaysia	Ding	-7.75	-85.00	-61.27
Mexico	Ding	-66.30	201.35	73.59
Middle East/African Group	Ding	-20.50	736.51	189.23
Morocco	Ding	-6.98	257.82	89.16
Paraguay	Ding	-14.78	-21.49	-11.39
Peru	Ding	0.90	23.41	11.09
Philippines	Ding	-2.29	5.27	2.60
South Africa	Ding	0.43	-9.57	-4.91
South Korea	Ding	6.24	-18.58	-9.77
Syria	Ding	7.24	13.26	6.42
Taiwan	Ding	27.24	8530.19	828.99
Thailand	Ding	-0.58	28.83	13.50

Soybean Meal Net
Trade

Tunisia	Ding		-5.78	4.05	2.00
Turkey	Ding		-25.20	125.87	50.29
United States	DC		-28.74	-2.14	-1.08
Venezuela	Ding		0.38	-6.74	-3.43
Vietnam	Ding		-0.27	81.37	34.67
Algeria	Ding		4.10	-14.21	-7.37
Americas Group	Ding		-58.58	391.86	121.78
Argentina	Ding		-17.54	-13.02	-6.74
Asia/Oceania Group	DC		10.85	-16.05	-8.38
Bangladesh	LDC		3.79	-20.22	-10.68
Brazil	Ding		-41.06	-30.14	-16.42
Canada	DC		12447.01	1950.04	352.77
China	Ding		-69.26	86.24	36.47
Colombia	Ding		0.99	591.51	162.97
Dominican Republic	Ding		3.61	-29.45	-16.00
Egypt	Ding		11.25	3296.64	482.81
European Group	DC		17.66	-27.12	-14.63
European Union	DC		70.66	-21.93	-11.64
India	Ding		-29.74	567.80	158.42
Indonesia	Ding		2.37	-23.74	-12.67
Iran	Ding		10.63	-17.44	-9.13
Japan	DC		69.48	-25.95	-13.95
Malaysia	Ding	Soybean Oil Net	3215.25	-100.00	-100.00
Mexico	Ding	Trade	-119.30	247.19	86.33
Middle East/African					
Group	Ding		-38.18	236.91	83.55
Morocco	Ding		-5.03	48.23	21.75
Paraguay	Ding		-16.37	-22.46	-11.95
Peru	Ding		4.70	-19.64	-10.36
Philippines	Ding		-88.75	132.74	52.56
South Africa	Ding		5.09	-18.31	-9.62
South Korea	Ding		10.49	-27.73	-14.99
Syria	Ding		99.75	-23.50	-12.54
			-		
Taiwan	Ding		1.41E+16	1.34E+29	3.66E+15
Thailand	Ding		12.94	7.55	3.71
Tunisia	Ding		-8.63	181.49	67.78
Turkey	Ding		-46.17	172.92	65.20
United States	DC		-54.76	-12.95	-6.70
Venezuela	Ding		1.53	-50.22	-29.44
Vietnam	Ding		2.18	-78.42	-53.55

Country	Development Status	Variable	Swiss-25 Cuts- Full SSM Bound to URAA		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding		-67.56	-23.90	-12.76
Argentina	Ding		74.26	3.57	1.77
Asia/Oceania Group	DC		-20.71	1.14	0.57
Bangladesh	LDC		-5.95	-14.38	-7.47
Brazil	Ding	Soybean Net Trade	14.54	0.71	0.35
Canada	DC		9.13	0.75	0.38
China	Ding		24.33	-15.41	-8.03
Colombia	Ding		-3.38	80.82	34.47
Egypt	Ding		-8.42	-3.66	-1.85

European Group	DC	-18.81	-0.13	-0.07
European Union	DC	-3.51	-10.47	-5.38
India	Ding	-75.37	-62.45	-38.72
Indonesia	Ding	0.06	0.28	0.14
Iran	Ding	-4.69	-1.84	-0.93
Japan	DC	-4.75	-21.12	-11.19
Malaysia	Ding	-6.71	-37.89	-21.19
Mexico	Ding	38.19	84.24	35.74
Middle East/African				
Group	Ding	40.97	1157.18	254.57
Morocco	Ding	12.85	277.61	94.32
Paraguay	Ding	4.90	0.49	0.24
Peru	Ding	-6.06	1.05	0.52
Philippines	Ding	18.90	851.26	208.42
South Africa	Ding	6.32	4.21	2.08
South Korea	Ding	-7.03	-11.29	-5.81
Syria	Ding	-8.08	-5.26	-2.67
Taiwan	Ding	-0.84	1601.20	312.46
Thailand	Ding	0.14	-0.88	-0.44
Tunisia	Ding	1.37	16.07	7.74
Turkey	Ding	1.98	-2.89	-1.45
United States	DC	8.24	0.72	0.36
Venezuela	Ding	-15.88	-5.15	-2.61
Vietnam	Ding	-0.51	23.59	11.17
Algeria	Ding	0.04	-1.10	-0.55
Americas Group	Ding	-34.09	537.55	152.50
Argentina	Ding	-9.79	-2.98	-1.50
Asia/Oceania Group	DC	1.48	-1.70	-0.85
Bangladesh	LDC	2.22	-12.66	-6.55
Brazil	Ding	-16.88	-16.99	-8.89
Canada	DC	9.87	292.24	98.05
China	Ding	-67.30	39.30	18.02
Colombia	Ding	0.86	-17.58	-9.22
Dominican Republic	Ding	0.04	-0.13	-0.06
Egypt	Ding	34.62	-8.28	-4.23
European Group	DC	13.23	-15.03	-7.82
European Union	DC	1.91	-4.30	-2.17
India	Ding	36.82	887.22	214.20
Indonesia	Ding	0.03	-0.15	-0.08
Iran	Ding	3.72	-6.95	-3.54
Japan	DC	6.68	-12.52	-6.47
Malaysia	Ding	3.25	-55.32	-33.16
Mexico	Ding	-46.44	96.90	40.32
Middle East/African				
Group	Ding	-15.75	6591.58	718.02
Morocco	Ding	-6.79	79.96	34.15
Paraguay	Ding	-9.86	-12.23	-6.31
Peru	Ding	0.84	-8.09	-4.13
Philippines	Ding	-0.97	-7.98	-4.07
South Africa	Ding	0.53	-8.92	-4.56
South Korea	Ding	4.34	-15.21	-7.92
Syria	Ding	5.66	-8.31	-4.25
Taiwan	Ding	4.62	3364.11	488.57
Thailand	Ding	-0.03	2.49	1.24

Soybean Meal Net
Trade

Tunisia	Ding		-0.42	-55.47	-33.27
Turkey	Ding		-4.65	18.65	8.93
United States	DC		-19.47	-5.36	-2.72
Venezuela	Ding		0.49	-11.31	-5.83
Vietnam	Ding		0.05	-3.40	-1.72
Algeria	Ding		2.33	-6.07	-3.08
Americas Group	Ding		-64.97	592.12	163.08
Argentina	Ding		-11.61	-4.42	-2.23
Asia/Oceania Group	DC		6.47	-7.67	-3.91
Bangladesh	LDC		2.21	-4.38	-2.21
Brazil	Ding		-26.67	-19.94	-10.53
Canada	DC		7272.52	2029.39	361.45
China	Ding		-41.74	121.96	48.98
Colombia	Ding		1.72	66.07	28.87
Dominican Republic	Ding		2.08	-10.69	-5.50
Egypt	Ding		9.19	-14.99	-7.80
European Group	DC		10.98	-16.13	-8.42
European Union	DC		44.03	-12.47	-6.44
India	Ding		-20.71	313.19	103.27
Indonesia	Ding		1.35	-13.79	-7.15
Iran	Ding		6.46	-7.33	-3.73
Japan	DC		45.15	-19.00	-10.00
Malaysia	Ding	Soybean Oil Net	-1423.49	-67.01	-42.56
Mexico	Ding	Trade	-84.68	139.52	54.76
Middle East/African					
Group	Ding		-30.64	1766.71	332.05
Morocco	Ding		-5.40	29.59	13.84
Paraguay	Ding		-10.85	-13.78	-7.15
Peru	Ding		2.75	-7.24	-3.69
Philippines	Ding		-41.81	286.99	96.72
South Africa	Ding		2.98	-10.41	-5.35
South Korea	Ding		6.91	-20.44	-10.80
Syria	Ding		64.51	-18.90	-9.95
			-		
Taiwan	Ding		2.29E+15	5.19E+28	2.28E+15
Thailand	Ding		-0.64	10.15	4.95
Tunisia	Ding		-0.67	-33.86	-18.68
Turkey	Ding		-8.66	30.82	14.38
United States	DC		-35.42	-21.52	-11.41
Venezuela	Ding		0.95	-26.32	-14.16
Vietnam	Ding		1.43	-55.80	-33.52

Table LL: Full Stochastic Model Swiss-25 Tariff Cuts Surplus Effects

Country	Development Status	Variable	Swiss-25 Cuts- Price SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding		0.01	-0.09	-0.04
Argentina	Ding		0.01	-0.10	-0.05
Asia/Oceania Group	DC		0.00	-0.02	-0.01
Bangladesh	LDC	Consumer Surplus	0.00	-0.07	-0.03
Brazil	Ding		0.00	0.01	0.01
Canada	DC		0.00	-0.03	-0.01

China	Ding	0.00	-0.10	-0.05
Colombia	Ding	0.01	-0.04	-0.02
Egypt	Ding	0.01	-0.04	-0.02
European Group	DC	0.01	-0.03	-0.01
European Union	DC	0.00	-0.01	-0.01
India	Ding	-0.01	-0.63	-0.32
Indonesia	Ding	0.00	-0.02	-0.01
Iran	Ding	0.01	-0.11	-0.05
Japan	DC	0.00	0.00	0.00
Malaysia	Ding	0.01	-0.10	-0.05
Mexico	Ding	0.00	-0.07	-0.04
Middle East/African				
Group	Ding	0.00	-0.10	-0.05
Paraguay	Ding	0.01	-0.03	-0.02
Peru	Ding	0.00	-0.09	-0.04
Philippines	Ding	0.01	0.00	0.00
South Africa	Ding	0.01	0.00	0.00
South Korea	Ding	0.00	0.00	0.00
Syria	Ding	0.00	-0.05	-0.03
Taiwan	Ding	0.00	0.16	0.08
Thailand	Ding	0.01	0.02	0.01
Tunisia	Ding	0.00	-0.04	-0.02
Turkey	Ding	0.00	-0.03	-0.01
United States	DC	0.00	-0.10	-0.05
Venezuela	Ding	0.01	-0.01	0.00
Vietnam	Ding	0.00	-0.10	-0.05
World	n/a	0.00	0.00	0.00
Americas Group	Ding	-0.01	-0.01	0.00
Argentina	Ding	-0.01	-0.02	-0.01
Asia/Oceania Group	DC	-0.01	0.01	0.01
Brazil	Ding	-0.01	0.00	0.00
Canada	DC	-0.01	-0.01	0.00
China	Ding	-0.01	-0.10	-0.05
Colombia	Ding	-0.01	-0.01	-0.01
Egypt	Ding	-0.01	-0.01	-0.01
European Group	DC	-0.01	-0.02	-0.01
European Union	DC	-0.01	-0.01	0.00
India	Ding	0.02	-0.81	-0.40
Indonesia	Ding	-0.01	0.00	0.00
Iran	Ding	-0.01	-0.01	0.00
Japan	DC	-0.01	-0.03	-0.01
Mexico	Ding	-0.01	-0.01	0.00
Middle East/African				
Group	Ding	-0.01	-0.07	-0.03
Paraguay	Ding	-0.01	-0.02	-0.01
Peru	Ding	-0.01	-0.03	-0.01
South Africa	Ding	-0.01	0.07	0.04
South Korea	Ding	-0.01	-0.01	0.00
Thailand	Ding	-0.01	0.08	0.04
Tunisia	Ding	-0.01	-0.01	0.00
Turkey	Ding	-0.01	-0.01	-0.01
United States	DC	-0.01	0.00	0.00
Venezuela	Ding	-0.01	-0.03	-0.01
Vietnam	Ding	-0.01	-0.10	-0.05

Producer Surplus

World	n/a		-0.01	-0.03	-0.02
Americas Group	Ding		-0.24	-1.32	-0.66
Argentina	Ding		-0.51	-7.60	-3.87
Asia/Oceania Group	DC		-0.42	-10.32	-5.30
Bangladesh	LDC		-0.34	5.14	2.54
Brazil	Ding		-0.54	-8.17	-4.17
Canada	DC		-0.05	3.99	1.98
China	Ding		1.24	98.59	40.92
Colombia	Ding		-0.35	-5.38	-2.72
Egypt	Ding		-0.46	-11.01	-5.67
European Group	DC		-0.32	-3.00	-1.51
European Union	DC		-0.19	0.18	0.09
India	Ding		3.33	-34.05	-18.79
Iran	Ding		-0.21	18.67	8.94
Japan	DC		-0.37	-2.25	-1.13
Malaysia	Ding		-0.51	-8.98	-4.59
Mexico	Ding		-0.32	-2.01	-1.01
Middle East/African Group	Ding	Soybean Crush Surplus	-0.33	-9.17	-4.69
Morocco	Ding		0.05	-19.02	-10.01
Paraguay	Ding		-0.49	-4.13	-2.08
Peru	Ding		-0.50	-5.54	-2.81
Philippines	Ding		-0.33	-1.90	-0.96
South Africa	Ding		-0.24	-0.72	-0.36
South Korea	Ding		-0.51	-6.11	-3.10
Syria	Ding		-0.44	-9.12	-4.67
Taiwan	Ding		0.00	-0.23	-0.12
Thailand	Ding		0.01	-0.18	-0.09
Tunisia	Ding		-0.21	0.10	0.05
Turkey	Ding		-0.21	-3.86	-1.95
United States	DC		-0.28	-7.03	-3.58
Venezuela	Ding		-0.30	-4.98	-2.52
Vietnam	Ding		-0.15	2.77	1.38
World	n/a		0.13	5.31	2.62

Country	Development Status	Variable	Swiss-25 Cuts- Volume SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding		-0.40	31.94	14.87
Argentina	Ding		-0.15	13.45	6.51
Asia/Oceania Group	DC		-0.04	3.36	1.67
Bangladesh	LDC		-0.06	10.51	5.13
Brazil	Ding		-0.06	0.13	0.06
Canada	DC		-0.03	4.31	2.13
China	Ding		-0.05	13.61	6.59
Colombia	Ding		-0.08	3.28	1.63
Egypt	Ding	Consumer Surplus	-0.07	5.49	2.71
European Group	DC		-0.07	2.44	1.21
European Union	DC		-0.06	0.90	0.45
India	Ding		-3.16	109.60	44.78
Indonesia	Ding		-0.01	0.59	0.29
Iran	Ding		-0.08	13.50	6.54
Japan	DC		-0.05	1.24	0.62
Malaysia	Ding		-0.08	13.56	6.56

Mexico	Ding	-0.05	7.74	3.80
Middle East/African				
Group	Ding	-0.04	13.73	6.64
Paraguay	Ding	-0.08	6.92	3.40
Peru	Ding	-0.05	8.18	4.01
Philippines	Ding	-0.07	2.83	1.40
South Africa	Ding	0.25	-7.99	-4.08
South Korea	Ding	-0.03	1.14	0.57
Syria	Ding	-0.05	6.42	3.16
Taiwan	Ding	-0.04	8.09	3.96
Thailand	Ding	-0.08	0.05	0.02
Tunisia	Ding	-0.04	3.47	1.72
Turkey	Ding	-0.03	5.54	2.73
United States	DC	-0.02	13.64	6.60
Venezuela	Ding	0.03	7.43	3.65
Vietnam	Ding	-0.02	13.64	6.60
World	n/a	-0.08	0.02	0.01
Americas Group	Ding	0.41	-6.64	-3.38
Argentina	Ding	0.09	3.86	1.91
Asia/Oceania Group	DC	0.06	0.69	0.34
Brazil	Ding	0.08	1.09	0.55
Canada	DC	0.09	0.44	0.22
China	Ding	0.08	-0.16	-0.08
Colombia	Ding	0.09	0.57	0.28
Egypt	Ding	0.09	0.18	0.09
European Group	DC	0.09	0.33	0.17
European Union	DC	0.09	0.22	0.11
India	Ding	6.08	-45.33	-26.06
Indonesia	Ding	0.09	1.20	0.60
Iran	Ding	0.08	0.84	0.42
Japan	DC	0.08	-0.43	-0.22
Mexico	Ding	0.08	0.05	0.03
Middle East/African				
Group	Ding	0.08	4.30	2.13
Paraguay	Ding	0.10	1.36	0.68
Peru	Ding	0.10	1.21	0.61
South Africa	Ding	-0.18	3.98	1.97
South Korea	Ding	0.10	0.64	0.32
Thailand	Ding	0.09	3.87	1.92
Tunisia	Ding	0.09	0.36	0.18
Turkey	Ding	0.10	0.21	0.11
United States	DC	0.12	2.84	1.41
Venezuela	Ding	-0.14	-2.07	-1.04
Vietnam	Ding	0.08	13.69	6.63
World	n/a	0.32	5.30	2.62
Americas Group	Ding	98.54	1998.86	358.13
Argentina	Ding	-26.69	-35.69	-19.80
Asia/Oceania Group	DC	-21.35	-23.05	-12.28
Bangladesh	LDC	-18.97	-37.63	-21.02
Brazil	Ding	-26.92	-53.02	-31.45
Canada	DC	-27.76	731.53	188.36
China	Ding	86.08	525.05	150.01
Colombia	Ding	-2.72	3369.11	488.99
Egypt	Ding	-17.00	4600.60	585.61

European Group	DC	-17.31	-54.37	-32.45
European Union	DC	-10.42	-46.72	-27.01
India	Ding	68.10	4497.47	578.05
Iran	Ding	-11.45	18.70	8.95
Japan	DC	-19.37	-42.38	-24.09
Malaysia	Ding	44.84	-77.94	-53.04
Mexico	Ding	132.70	646.17	173.16
Middle East/African Group	Ding	97.15	810.15	201.69
Morocco	Ding	26.63	1445.58	293.14
Paraguay	Ding	-25.50	-41.38	-23.43
Peru	Ding	-25.72	-45.54	-26.20
Philippines	Ding	106.14	642.03	172.40
South Africa	Ding	-12.77	-34.35	-18.98
South Korea	Ding	-25.89	-48.58	-28.29
Syria	Ding	-22.45	-39.04	-21.92
Taiwan	Ding	-11.50	5121.04	622.57
Thailand	Ding	1.33	-17.30	-9.06
Tunisia	Ding	30.32	2812.56	439.68
Turkey	Ding	74.70	566.79	158.22
United States	DC	-15.01	-24.04	-12.84
Venezuela	Ding	-19.79	2.61	1.30
Vietnam	Ding	-12.07	21.34	10.15
World	n/a	11.96	-12.96	-6.71

Swiss-25 Cuts- Full SSM

Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Consumer Surplus	-0.40	32.07	14.92
Argentina	Ding		-0.15	13.59	6.58
Asia/Oceania Group	DC		-0.03	3.38	1.68
Bangladesh	LDC		-0.06	10.61	5.17
Brazil	Ding		-0.06	0.11	0.06
Canada	DC		-0.03	4.32	2.14
China	Ding		-0.05	13.75	6.65
Colombia	Ding		-0.07	3.33	1.65
Egypt	Ding		-0.07	5.52	2.72
European Group	DC		-0.07	2.48	1.23
European Union	DC		-0.06	0.93	0.47
India	Ding		-3.16	109.66	44.80
Indonesia	Ding		-0.01	0.58	0.29
Iran	Ding		-0.08	13.63	6.60
Japan	DC		-0.04	1.23	0.61
Malaysia	Ding		-0.08	13.69	6.63
Mexico	Ding		-0.04	7.80	3.83
Middle East/African Group	Ding		-0.04	13.86	6.71
Paraguay	Ding		-0.08	7.01	3.44
Peru	Ding		-0.04	8.28	4.06
Philippines	Ding		-0.07	2.85	1.41
South Africa	Ding		0.25	-7.98	-4.07
South Korea	Ding		-0.03	1.13	0.56
Syria	Ding		-0.05	6.50	3.20
Taiwan	Ding		-0.04	8.17	4.01

Thailand	Ding	-0.07	0.07	0.03
Tunisia	Ding	-0.04	3.53	1.75
Turkey	Ding	-0.03	5.58	2.75
United States	DC	-0.02	13.77	6.66
Venezuela	Ding	0.01	6.18	3.04
Vietnam	Ding	-0.02	13.77	6.66
World	n/a	-0.08	0.01	0.01
Americas Group	Ding	0.41	-6.63	-3.37
Argentina	Ding	0.09	3.90	1.93
Asia/Oceania Group	DC	0.06	0.69	0.34
Brazil	Ding	0.08	1.09	0.54
Canada	DC	0.09	0.44	0.22
China	Ding	0.07	-0.13	-0.06
Colombia	Ding	0.09	0.57	0.28
Egypt	Ding	0.09	0.17	0.09
European Group	DC	0.09	0.34	0.17
European Union	DC	0.09	0.22	0.11
India	Ding	6.08	-45.33	-26.06
Indonesia	Ding	0.09	1.19	0.59
Iran	Ding	0.08	0.84	0.42
Japan	DC	0.08	-0.44	-0.22
Mexico	Ding	0.08	0.05	0.02
Middle East/African Group	Ding	0.08	4.35	2.15
Paraguay	Ding	0.10	1.36	0.68
Peru	Ding	0.10	1.22	0.61
South Africa	Ding	-0.18	3.97	1.97
South Korea	Ding	0.10	0.64	0.32
Thailand	Ding	0.08	3.90	1.93
Tunisia	Ding	0.08	0.36	0.18
Turkey	Ding	0.09	0.21	0.11
United States	DC	0.12	2.87	1.42
Venezuela	Ding	-0.11	-1.84	-0.92
Vietnam	Ding	0.08	13.83	6.69
World	n/a	0.31	5.35	2.64
Americas Group	Ding	98.54	2000.56	358.32
Argentina	Ding	-26.68	-36.41	-20.26
Asia/Oceania Group	DC	-21.34	-23.71	-12.66
Bangladesh	LDC	-18.96	-38.10	-21.32
Brazil	Ding	-26.91	-53.06	-31.48
Canada	DC	-27.75	723.02	186.88
China	Ding	86.08	524.37	149.87
Colombia	Ding	-2.56	3335.15	486.10
Egypt	Ding	-18.30	3719.84	518.05
European Group	DC	-17.31	-54.52	-32.56
European Union	DC	-10.41	-46.69	-26.98
India	Ding	68.10	4497.89	578.08
Iran	Ding	-11.44	18.33	8.78
Japan	DC	-19.37	-42.54	-24.20
Malaysia	Ding	44.84	-77.90	-52.99
Mexico	Ding	132.70	645.74	173.08
Middle East/African Group	Ding	97.05	898.07	215.92
Morocco	Ding	26.64	1444.33	292.98

Paraguay	Ding	-25.50	-41.93	-23.80
Peru	Ding	-25.71	-45.91	-26.45
Philippines	Ding	106.14	641.47	172.30
South Africa	Ding	-12.76	-34.34	-18.97
South Korea	Ding	-25.88	-48.82	-28.46
Syria	Ding	-22.44	-39.58	-22.27
Taiwan	Ding	-11.48	5070.85	619.09
Thailand	Ding	1.34	-17.21	-9.01
Tunisia	Ding	30.32	2809.88	439.43
Turkey	Ding	74.71	566.25	158.12
United States	DC	-15.00	-24.93	-13.36
Venezuela	Ding	-18.39	-22.60	-12.02
Vietnam	Ding	-8.40	123.56	49.52
World	n/a	11.96	-12.99	-6.72

Country	Development Status	Variable	Swiss-25 Cuts- Full SSM Bound to URAA		
			% Change	% Change Variance	% Change St. Dev.
Americas Group	Ding	Consumer Surplus	-0.33	41.49	18.95
Argentina	Ding		0.43	1.34	0.67
Asia/Oceania Group	DC		0.16	-0.36	-0.18
Bangladesh	LDC		0.17	0.96	0.48
Brazil	Ding		0.18	-0.57	-0.28
Canada	DC		0.08	-0.08	-0.04
China	Ding		0.13	1.03	0.51
Colombia	Ding		0.21	0.26	0.13
Egypt	Ding		0.19	-0.10	-0.05
European Group	DC		0.20	0.91	0.45
European Union	DC		0.17	0.53	0.27
India	Ding		-0.87	41.18	18.82
Indonesia	Ding		0.04	-0.29	-0.15
Iran	Ding		0.21	1.15	0.57
Japan	DC		0.13	-0.23	-0.12
Malaysia	Ding		0.21	1.12	0.56
Mexico	Ding		0.13	0.56	0.28
Middle East/African Group	Ding		0.12	1.09	0.54
Paraguay	Ding		0.21	0.44	0.22
Peru	Ding		0.12	0.80	0.40
Philippines	Ding		0.20	0.48	0.24
South Africa	Ding		0.43	-6.08	-3.09
South Korea	Ding		0.08	-0.45	-0.22
Syria	Ding		0.13	0.18	0.09
Taiwan	Ding		0.10	0.34	0.17
Thailand	Ding		0.21	-0.82	-0.41
Tunisia	Ding		0.12	1.03	0.51
Turkey	Ding		0.08	-0.41	-0.21
United States	DC		0.06	0.97	0.48
Venezuela	Ding		0.21	1.56	0.78
Vietnam	Ding		0.06	0.97	0.48
World	n/a		0.05	0.01	0.00
Americas Group	Ding	Producer Surplus	0.29	-11.76	-6.06
Argentina	Ding		-0.22	0.14	0.07
Asia/Oceania Group	DC		-0.25	0.00	0.00

Brazil	Ding	-0.22	-0.48	-0.24
Canada	DC	-0.25	-0.46	-0.23
China	Ding	-0.22	-2.21	-1.11
Colombia	Ding	-0.24	-0.28	-0.14
Egypt	Ding	-0.25	-0.44	-0.22
European Group	DC	-0.24	-0.25	-0.13
European Union	DC	-0.25	-0.36	-0.18
India	Ding	1.54	-25.86	-13.90
Indonesia	Ding	-0.21	0.10	0.05
Iran	Ding	-0.22	-0.26	-0.13
Japan	DC	-0.27	-0.85	-0.42
Mexico	Ding	-0.24	-0.44	-0.22
Middle East/African Group	Ding	-0.23	0.02	0.01
Paraguay	Ding	-0.23	-0.26	-0.13
Peru	Ding	-0.28	-0.28	-0.14
South Africa	Ding	-0.40	1.90	0.94
South Korea	Ding	-0.25	-0.32	-0.16
Thailand	Ding	-0.23	-0.24	-0.12
Tunisia	Ding	-0.23	-0.33	-0.16
Turkey	Ding	-0.25	-0.43	-0.22
United States	DC	-0.32	-0.21	-0.11
Venezuela	Ding	-0.34	-1.45	-0.73
Vietnam	Ding	-0.22	0.85	0.43
World	n/a	-0.18	0.16	0.08
Americas Group	Ding	109.31	3379.36	489.86
Argentina	Ding	-18.17	-20.28	-10.71
Asia/Oceania Group	DC	-14.81	-17.61	-9.23
Bangladesh	LDC	-12.41	-26.71	-14.39
Brazil	Ding	-18.27	-36.29	-20.18
Canada	DC	-16.95	930.59	221.03
China	Ding	49.66	115.84	46.91
Colombia	Ding	-11.74	579.56	160.68
Egypt	Ding	-16.15	-20.17	-10.65
European Group	DC	-11.64	-30.80	-16.81
European Union	DC	-7.09	-25.94	-13.94
India	Ding	48.83	1798.98	335.77
Iran	Ding	-7.87	-28.38	-15.37
Japan	DC	-13.03	-31.30	-17.11
Malaysia	Ding	-16.66	-56.93	-34.37
Mexico	Ding	88.00	290.83	97.69
Middle East/African Group	Ding	73.78	10590.99	933.97
Morocco	Ding	26.57	390.98	121.58
Paraguay	Ding	-17.38	-27.09	-14.61
Peru	Ding	-17.76	-26.82	-14.46
Philippines	Ding	44.99	881.95	213.36
South Africa	Ding	-8.92	-24.08	-12.87
South Korea	Ding	-17.83	-35.09	-19.43
Syria	Ding	-15.47	-20.03	-10.57
Taiwan	Ding	-1.88	2319.85	391.92
Thailand	Ding	0.25	2.48	1.23
Tunisia	Ding	2.63	570.09	158.86
Turkey	Ding	12.44	38.85	17.84

Soybean Crush
Surplus

United States	DC	-10.14	-12.80	-6.62
Venezuela	Ding	-13.18	-26.36	-14.18
Vietnam	Ding	-7.09	99.21	41.14
World	n/a	6.61	-17.51	-9.18

Table MM: Full Stochastic Model Swiss-25 Tariff Cuts Tariff Revenue Effects

Country	Development Status	Variable	Swiss-25 Cuts- Price SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Asia/Oceania Group	DC		-0.56	-0.11	-0.06
Bangladesh	LDC		-0.16	9.28	4.54
China	Ding		0.65	-27.35	-14.77
Colombia	Ding		-0.10	-0.57	-0.29
Egypt	Ding		-0.23	1.65	0.82
European Group	DC		-0.48	-0.67	-0.34
European Union	DC		126.53	1.72	0.86
Indonesia	Ding		-145.14	7.82	3.84
Iran	Ding		-0.13	4.26	2.11
Japan	DC		-752.92	30.85	14.39
Malaysia	Ding		n/a	n/a	n/a
Mexico	Ding		-0.17	3.57	1.77
Middle East/African Group	Ding	Soybean Tariff Revenue	-0.21	3.13	1.55
Morocco	Ding		0.02	-7.56	-3.85
Peru	Ding		-0.16	3.97	1.96
Philippines	Ding		-0.16	1.48	0.74
South Korea	Ding		-0.20	-0.69	-0.35
Syria	Ding		-0.22	3.05	1.51
Taiwan	Ding		0.00	0.17	0.09
Thailand	Ding		0.00	0.06	0.03
Tunisia	Ding		-0.11	-0.02	-0.01
Turkey	Ding		-0.04	0.63	0.31
Venezuela	Ding		-0.35	0.42	0.21
Vietnam	Ding		-0.02	0.69	0.34
World	n/a		0.25	-10.72	-5.51
Algeria	Ding		0.00	0.15	0.08
Americas Group	Ding		0.09	-6.13	-3.11
Asia/Oceania Group	DC		0.04	-9.33	-4.78
Bangladesh	LDC		0.06	-3.11	-1.57
Canada	DC		0.03	-2.96	-1.49
China	Ding		3.07	67.59	29.46
Colombia	Ding		0.02	0.26	0.13
Dominican Republic	Ding		0.00	-0.03	-0.01
Egypt	Ding	Soybean Meal Tariff Revenue	0.93	-12.49	-6.45
European Group	DC		0.35	-0.30	-0.15
European Union	DC		1.03	1.08	0.54
Indonesia	Ding		-3417.32	16.73	8.04
Iran	Ding		0.10	18.16	8.70
Japan	DC		1.10	-2.76	-1.39
Malaysia	Ding		n/a	n/a	n/a
Mexico	Ding		0.20	-9.64	-4.94
Middle East/African	Ding		0.08	-6.91	-3.52

Group					
Morocco	Ding		-0.01	8.61	4.22
Peru	Ding		0.02	-1.30	-0.65
Philippines	Ding		0.01	-0.06	-0.03
South Africa	Ding		0.01	-0.17	-0.08
South Korea	Ding		0.12	0.10	0.05
Syria	Ding		0.15	-10.53	-5.41
Taiwan	Ding		-0.01	-0.09	-0.04
Thailand	Ding		0.00	0.07	0.03
Tunisia	Ding		0.04	-3.88	-1.96
Turkey	Ding		0.08	-2.07	-1.04
Venezuela	Ding		0.01	0.30	0.15
Vietnam	Ding		0.00	0.39	0.20
World	n/a		-0.22	-5.25	-2.66
Algeria	Ding		-0.06	3.28	1.63
Americas Group	Ding		0.16	-1.33	-0.67
Asia/Oceana Group	DC		0.05	-6.15	-3.12
Bangladesh	LDC		-0.06	5.89	2.90
Canada	DC		22.54	19.88	9.49
China	Ding		-1.83	-33.47	-18.43
Colombia	Ding		0.09	-6.44	-3.27
Dominican Republic	Ding		-0.06	2.85	1.41
Egypt	Ding		0.12	-6.43	-3.27
European Group	DC		0.17	-4.57	-2.31
European Union	DC		0.05	0.44	0.22
India	Ding		8.53	1211.31	262.12
			-		
Indonesia	Ding		6.45E+16	2.38E+29	4.88E+15
Iran	Ding		0.05	-2.19	-1.10
Japan	DC	Soybean Oil Tariff	0.18	-5.26	-2.67
Malaysia	Ding	Revenue	-40.65	4.43	2.19
Mexico	Ding		0.25	-9.86	-5.06
Middle East/African Group	Ding		0.04	-7.06	-3.60
Morocco	Ding		1.04	-11.24	-5.79
Peru	Ding		-0.05	4.13	2.04
Philippines	Ding		0.23	-5.62	-2.85
South Africa	Ding		-0.04	1.91	0.95
South Korea	Ding		0.07	-1.28	-0.64
Syria	Ding		1.58	0.54	0.27
Taiwan	Ding		-155.84	-10.01	-5.14
Tunisia	Ding		-0.01	-1.14	-0.57
Turkey	Ding		0.03	-3.86	-1.95
Venezuela	Ding		0.12	-9.68	-4.96
Vietnam	Ding		0.23	-12.02	-6.20
World	n/a		2.79	99.25	41.15

Country	Development Status	Variable	Swiss-25 Cuts- Volume SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Asia/Oceania Group	DC	Soybean Tariff Revenue	-31.35	-0.32	-0.16
Bangladesh	LDC		-9.21	-9.55	-4.90
China	Ding		39.69	2.89	1.43
Colombia	Ding		-1.57	93.01	38.93

Egypt	Ding	-9.49	574.90	159.79
European Group	DC	-29.35	-41.52	-23.53
European Union	DC	-114.74	-8.50	-4.34
Indonesia	Ding	-72.74	0.51	0.26
Iran	Ding	-6.83	7.97	3.91
Japan	DC	485.11	-5.49	-2.78
Malaysia	Ding	n/a	n/a	n/a
Mexico	Ding	54.23	239.96	84.38
Middle East/African Group	Ding	52.46	177.37	66.54
Morocco	Ding	12.86	-26.19	-14.09
Peru	Ding	-9.05	-15.67	-8.17
Philippines	Ding	40.56	99.35	41.19
South Korea	Ding	-10.45	-23.87	-12.75
Syria	Ding	-11.90	-17.37	-9.10
Taiwan	Ding	-5.19	70.11	30.43
Thailand	Ding	0.67	13.29	6.44
Tunisia	Ding	14.40	18.60	8.91
Turkey	Ding	10.46	40.05	18.34
Venezuela	Ding	-24.34	-7.98	-4.07
Vietnam	Ding	-1.04	16.62	7.99
World	n/a	24.51	-11.11	-5.72
Algeria	Ding	0.57	2.32	1.15
Americas Group	Ding	-31.11	650.30	173.92
Asia/Oceania Group	DC	2.20	7.80	3.82
Bangladesh	LDC	4.32	51.17	22.95
Canada	DC	17.02	236.04	83.31
China	Ding	18.74	1625.11	315.34
Colombia	Ding	1.26	210.06	76.08
Dominican Republic	Ding	0.56	5.51	2.72
Egypt	Ding	40.44	4303.17	563.56
European Group	DC	19.38	-49.72	-29.09
European Union	DC	58.95	-55.17	-33.04
Indonesia	Ding	-7851.30	14.21	6.87
Iran	Ding	5.42	18.84	9.01
Japan	DC	57.38	-65.19	-41.00
Malaysia	Ding	n/a	n/a	n/a
Mexico	Ding	-65.99	354.74	113.25
Middle East/African Group	Ding	-19.57	23.17	10.98
Morocco	Ding	-5.84	202.73	73.99
Peru	Ding	2.11	40.31	18.45
Philippines	Ding	-1.12	4.87	2.41
South Africa	Ding	1.64	7.00	3.44
South Korea	Ding	7.54	42.38	19.32
Syria	Ding	8.52	-11.63	-5.99
Taiwan	Ding	28.78	4529.10	580.38
Thailand	Ding	0.62	8.75	4.29
Tunisia	Ding	-4.59	1673.27	321.10
Turkey	Ding	-24.32	-44.46	-25.48
Venezuela	Ding	1.64	20.62	9.83
Vietnam	Ding	0.95	80.31	34.28
World	n/a	-17.97	45.78	20.74
Algeria	Ding	-4.05	17.22	8.27

Americas Group	Ding	Revenue	73.85	16413.25	1185.04
Asia/Oceania Group	DC		2.18	66.42	29.00
Bangladesh	LDC		-4.34	-0.08	-0.04
Canada	DC		11892.30	1515.95	301.99
China	Ding		-99.99	-99.96	-97.93
Colombia	Ding		34.61	36198.14	1805.21
Dominican Republic	Ding		-4.43	6.47	3.18
Egypt	Ding		16.35	18853.89	1276.73
European Group	DC		8.52	-52.36	-30.98
European Union	DC		2.66	-31.12	-17.00
India	Ding		162.36	20310.08	1328.64
			-		
Indonesia	Ding		1.66E+16	3.19E+29	5.65E+15
Iran	Ding		1.97	121.48	48.82
Japan	DC		10.96	132.09	52.34
Malaysia	Ding		15164.53	329.35	107.21
Mexico	Ding		-198.89	17553.68	1228.67
Middle East/African Group	Ding		166.20	3236.77	477.65
Morocco	Ding		160.67	12750.93	1033.62
Peru	Ding		-3.50	12.78	6.20
Philippines	Ding		-29.65	36821.98	1821.51
South Africa	Ding		-3.13	11.95	5.81
South Korea	Ding		1.87	32.34	15.04
Syria	Ding		84.46	-49.26	-28.77
Taiwan	Ding		3.31E+17	1.65E+30	1.28E+16
Tunisia	Ding		153.64	107999.52	3187.85
Turkey	Ding		146.48	2698.78	429.04
Venezuela	Ding		-6.33	-12.21	-6.30
Vietnam	Ding		-5.18	-11.41	-5.88
World	n/a		48.28	1567.83	308.39

Country	Development Status	Variable	Swiss-25 Cuts- Full SSM		
			% Change	% Change Variance	% Change St. Dev.
Asia/Oceania Group	DC	Soybean Tariff Revenue	-31.34	-0.36	-0.18
Bangladesh	LDC		-9.21	-9.30	-4.76
China	Ding		39.69	3.21	1.59
Colombia	Ding		-1.52	90.48	38.01
Egypt	Ding		-10.09	447.62	134.01
European Group	DC		-29.33	-41.48	-23.50
European Union	DC		-87.46	-5.93	-3.01
Indonesia	Ding		-161.19	5.18	2.56
Iran	Ding		-6.83	8.02	3.93
Japan	DC		-873.16	-5.23	-2.65
Malaysia	Ding		n/a	n/a	n/a
Mexico	Ding		54.22	240.22	84.45
Middle East/African Group	Ding		52.40	184.54	68.68
Morocco	Ding		12.86	-26.06	-14.01
Peru	Ding		-9.04	-15.77	-8.22
Philippines	Ding		40.55	99.49	41.24
South Korea	Ding		-10.44	-23.90	-12.77
Syria	Ding		-11.89	-17.50	-9.17

Taiwan	Ding	-5.19	69.53	30.20
Thailand	Ding	0.67	13.30	6.44
Tunisia	Ding	14.40	18.57	8.89
Turkey	Ding	10.46	40.11	18.37
Venezuela	Ding	-22.61	-8.92	-4.56
Vietnam	Ding	-0.71	-11.80	-6.09
World	n/a	24.49	-12.39	-6.40
Algeria	Ding	0.57	2.34	1.16
Americas Group	Ding	-31.11	650.95	174.03
Asia/Oceania Group	DC	2.20	7.18	3.53
Bangladesh	LDC	4.32	51.05	22.90
Canada	DC	17.01	231.70	82.13
China	Ding	18.75	1623.53	315.15
Colombia	Ding	1.25	209.90	76.04
Dominican Republic	Ding	0.56	5.49	2.71
Egypt	Ding	42.92	3481.37	498.45
European Group	DC	19.37	-49.75	-29.11
European Union	DC	58.95	-55.10	-33.00
Indonesia	Ding	-4033.96	11.01	5.36
Iran	Ding	5.42	18.42	8.82
Japan	DC	57.35	-65.34	-41.13
Malaysia	Ding	n/a	n/a	n/a
Mexico	Ding	-66.00	354.52	113.20
Middle East/African Group	Ding	-19.55	35.51	16.41
Morocco	Ding	-5.84	202.55	73.94
Peru	Ding	2.11	40.32	18.45
Philippines	Ding	-1.11	4.88	2.41
South Africa	Ding	1.64	7.01	3.45
South Korea	Ding	7.54	42.38	19.32
Syria	Ding	8.52	-12.28	-6.34
Taiwan	Ding	28.74	4483.41	577.01
Thailand	Ding	0.62	8.77	4.29
Tunisia	Ding	-4.59	1672.09	320.96
Turkey	Ding	-24.32	-44.47	-25.48
Venezuela	Ding	1.59	26.69	12.55
Vietnam	Ding	0.93	81.75	34.81
World	n/a	-17.97	45.63	20.68
Algeria	Ding	-4.05	17.48	8.39
Americas Group	Ding	73.85	16438.24	1186.01
Asia/Oceania Group	DC	2.18	66.04	28.86
Bangladesh	LDC	-4.34	0.31	0.16
Canada	DC	11886.73	1498.48	299.81
China	Ding	-99.99	-99.96	-97.90
Colombia	Ding	35.04	35670.27	1791.30
Dominican Republic	Ding	-2.62	146.32	56.94
Egypt	Ding	14.20	15506.52	1149.26
European Group	DC	8.52	-52.65	-31.19
European Union	DC	2.66	-31.03	-16.95
India	Ding	162.35	20312.31	1328.72
		-		
Indonesia	Ding	2.72E+17	1.31E+30	1.15E+16
Iran	Ding	1.97	120.52	48.50
Japan	DC	10.96	131.86	52.27

Malaysia	Ding	15162.92	324.40	106.01
Mexico	Ding	-198.88	17563.76	1229.05
Middle East/African Group	Ding	166.18	3343.21	486.79
Morocco	Ding	160.66	12746.42	1033.42
Peru	Ding	-3.49	11.21	5.46
Philippines	Ding	-29.63	36840.91	1822.00
South Africa	Ding	-3.13	12.06	5.86
South Korea	Ding	1.86	32.27	15.01
Syria	Ding	84.43	-49.66	-29.05
Taiwan	Ding	3.30E+17	1.63E+30	1.28E+16
Tunisia	Ding	153.64	107991.78	3187.73
Turkey	Ding	146.48	2696.17	428.79
Venezuela	Ding	-2.06	93.58	39.13
Vietnam	Ding	9.10	939.41	222.40
World	n/a	48.53	1599.86	312.29

Country	Development Status	Variable	Swiss-25 Cuts- Full SSM Bound to URAA		
			% Change	% Change Variance	% Change St. Dev.
Asia/Oceania Group	DC		-20.94	0.50	0.25
Bangladesh	LDC		-6.15	-18.58	-9.77
China	Ding		24.08	82.56	35.11
Colombia	Ding		-3.66	-6.74	-3.43
Egypt	Ding		-8.62	-21.39	-11.34
European Group	DC		-19.29	-28.43	-15.40
European Union	DC		21.39	-11.01	-5.67
Indonesia	Ding		-124.75	-0.51	-0.26
Iran	Ding		-4.89	-7.30	-3.72
Japan	DC		-480.47	-2.56	-1.29
Malaysia	Ding		n/a	n/a	n/a
Mexico	Ding		37.93	133.23	52.72
Middle East/African Group	Ding	Soybean Tariff Revenue	40.56	981.87	228.92
Morocco	Ding		12.60	21.72	10.33
Peru	Ding		-6.26	-17.99	-9.44
Philippines	Ding		18.58	77.95	33.40
South Korea	Ding		-7.24	-18.75	-9.86
Syria	Ding		-8.28	-22.24	-11.82
Taiwan	Ding		-1.06	7.50	3.68
Thailand	Ding		-0.07	0.56	0.28
Tunisia	Ding		1.03	1.65	0.82
Turkey	Ding		1.77	7.07	3.47
Venezuela	Ding		-16.07	-6.57	-3.34
Vietnam	Ding		-0.72	-25.81	-13.87
World	n/a		15.32	-14.03	-7.28
Algeria	Ding		-0.04	-0.80	-0.40
Americas Group	Ding		-34.16	1137.34	251.76
Asia/Oceania Group	DC		1.41	22.35	10.61
Bangladesh	LDC	Soybean Meal Tariff Revenue	2.14	7.82	3.83
Canada	DC		9.75	290.86	97.70
China	Ding		49.11	144.97	56.51
Colombia	Ding		0.81	49.25	22.17
Dominican Republic	Ding		-0.04	0.19	0.09

Egypt	Ding		34.58	4.97	2.46
European Group	DC		13.20	-30.82	-16.82
European Union	DC		38.69	-35.32	-19.57
Indonesia	Ding		-908.72	14.57	7.04
Iran	Ding		3.65	-28.92	-15.69
Japan	DC		39.50	-47.74	-27.71
Malaysia	Ding		n/a	n/a	n/a
Mexico	Ding		-46.53	115.37	46.75
Middle East/African Group	Ding		-15.79	1052.50	239.48
Morocco	Ding		-6.86	18.84	9.01
Peru	Ding		0.76	4.31	2.13
Philippines	Ding		-1.04	5.02	2.48
South Africa	Ding		0.46	0.78	0.39
South Korea	Ding		4.28	25.04	11.82
Syria	Ding		5.58	4.75	2.35
Taiwan	Ding		4.55	1853.88	342.03
Thailand	Ding		-0.11	-0.34	-0.17
Tunisia	Ding		-0.46	637.47	171.56
Turkey	Ding		-4.73	-28.38	-15.37
Venezuela	Ding		0.42	5.62	2.77
Vietnam	Ding		-0.02	0.54	0.27
World	n/a		-12.86	-14.60	-7.59
Algeria	Ding		-2.22	13.10	6.35
Americas Group	Ding		52.35	27936.26	1574.40
Asia/Oceania Group	DC		1.74	14.89	7.19
Bangladesh	LDC		-2.34	12.09	5.87
Canada	DC		7194.33	1858.08	342.50
China	Ding		-67.41	87.75	37.02
Colombia	Ding		4.06	6540.88	714.92
Dominican Republic	Ding		-2.12	-3.93	-1.98
Egypt	Ding		4.34	25.66	12.10
European Group	DC		6.09	-39.94	-22.50
European Union	DC		1.84	-25.87	-13.90
India	Ding		111.98	3640.52	511.60
			-		
Indonesia	Ding	Soybean Oil Tariff Revenue	1.45E+17	5.89E+29	7.67E+15
Iran	Ding		1.72	71.25	30.86
Japan	DC		6.64	80.09	34.20
Malaysia	Ding		-1474.16	-19.82	-10.45
Mexico	Ding		-41.28	5141.71	624.00
Middle East/African Group	Ding		142.25	14088.81	1091.17
Morocco	Ding		149.45	2978.53	454.84
Peru	Ding		-1.82	17.89	8.58
Philippines	Ding		113.75	12649.65	1029.14
South Africa	Ding		-1.59	9.92	4.84
South Korea	Ding		2.19	34.09	15.80
Syria	Ding		57.44	-35.18	-19.49
Taiwan	Ding		5.60E+16	6.78E+29	8.24E+15
Tunisia	Ding		44.31	39900.76	1900.02
Turkey	Ding		74.51	96.99	40.35
Venezuela	Ding		-2.08	-12.09	-6.24
Vietnam	Ding		2.15	525.04	150.01

World	n/a	50.12	262.20	90.32

Table NN: Full Stochastic Model Swiss-25 Tariff Cuts Net Welfare Effects

Country	Development Status	Variable	Swiss-25 Cuts- Price SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Algeria	Ding	Net Welfare	-0.03	2.08	1.03
Americas Group	Ding		-0.02	0.00	0.00
Argentina	Ding		-0.04	0.98	0.49
Asia/Oceana Group	DC		-0.01	0.00	0.00
Bangladesh	LDC		-0.08	9.31	4.55
Brazil	Ding		-0.03	0.04	0.02
Canada	DC		-0.01	0.00	0.00
China	Ding		0.28	-9.46	-4.85
Colombia	Ding		-0.01	1.45	0.72
Dominican Republic	Ding		-0.05	2.31	1.15
Egypt	Ding		-0.22	-0.60	-0.30
European Group	DC		-0.05	0.08	0.04
European Union	DC		-0.09	-0.36	-0.18
India	Ding		0.84	-4.70	-2.38
Indonesia	Ding		0.00	-0.01	-0.01
Iran	Ding		-0.04	0.85	0.42
Japan	DC		-0.03	-0.32	-0.16
Malaysia	Ding		-0.08	-6.52	-3.32
Mexico	Ding		-0.12	-0.27	-0.14
Middle East/African Group	Ding		-0.02	0.90	0.45
Morocco	Ding		0.49	-37.27	-20.80
Paraguay	Ding		-0.02	0.11	0.05
Peru	Ding		-0.02	0.02	0.01
Philippines	Ding		-0.03	0.46	0.23
South Africa	Ding		-0.01	0.00	0.00
South Korea	Ding		-0.03	-0.55	-0.27
Syria	Ding		-0.13	-2.41	-1.21
Taiwan	Ding		0.00	0.12	0.06
Thailand	Ding		0.00	-0.14	-0.07
Tunisia	Ding		-0.02	0.10	0.05
Turkey	Ding		-0.01	-0.45	-0.23
United States	DC		-0.04	0.49	0.25
Venezuela	Ding		0.03	-1.97	-0.99
Vietnam	Ding		0.00	-0.19	-0.09

Country	Development Status	Variable	Swiss-25 Cuts- Volume SSM Only		
			% Change	% Change Variance	% Change St. Dev.
Algeria	Ding	Net Welfare	-1.97	11.96	5.81
Americas Group	Ding		10.91	-2.84	-1.43
Argentina	Ding		-1.95	5.32	2.63
Asia/Oceana Group	DC		-0.62	0.25	0.12
Bangladesh	LDC		-5.09	-2.23	-1.12
Brazil	Ding		-1.30	-0.96	-0.48
Canada	DC		-0.59	0.63	0.32

China	Ding	13.42	-8.00	-4.08
Colombia	Ding	4.12	1563.65	307.88
Dominican Republic	Ding	-3.64	6.45	3.17
Egypt	Ding	-6.57	1695.63	323.75
European Group	DC	-2.71	-5.27	-2.67
European Union	DC	-4.70	-6.12	-3.11
India	Ding	19.62	-26.13	-14.05
Indonesia	Ding	-0.01	0.34	0.17
Iran	Ding	-2.35	3.45	1.71
Japan	DC	-1.93	10.82	5.27
Malaysia	Ding	4.64	-0.69	-0.35
Mexico	Ding	43.53	-2.96	-1.49
Middle East/African Group	Ding	13.24	23.39	11.08
Morocco	Ding	81.12	5052.61	617.82
Paraguay	Ding	-0.81	1.45	0.72
Peru	Ding	-1.18	-1.58	-0.80
Philippines	Ding	9.92	-22.20	-11.80
South Africa	Ding	-0.38	0.27	0.14
South Korea	Ding	-1.63	3.29	1.63
Syria	Ding	-6.70	-22.63	-12.04
Taiwan	Ding	-2.05	157.68	60.52
Thailand	Ding	0.49	-6.15	-3.12
Tunisia	Ding	20.40	351.36	112.45
Turkey	Ding	4.06	4.42	2.18
United States	DC	-1.62	3.47	1.72
Venezuela	Ding	-2.83	-2.15	-1.08
Vietnam	Ding	0.04	155.85	59.95

Country	Development Status	Variable	Swiss-25 Cuts- Full SSM		
			% Change	% Change Variance	% Change St. Dev.
Algeria	Ding	Net Welfare	-1.97	12.14	5.90
Americas Group	Ding		10.91	-2.84	-1.43
Argentina	Ding		-1.95	5.37	2.65
Asia/Oceania Group	DC		-0.62	0.25	0.12
Bangladesh	LDC		-5.10	-1.76	-0.88
Brazil	Ding		-1.30	-0.96	-0.48
Canada	DC		-0.59	0.63	0.31
China	Ding		13.42	-7.99	-4.08
Colombia	Ding		4.18	1543.99	305.46
Dominican Republic	Ding		-2.11	80.48	34.34
Egypt	Ding		-7.54	1378.96	284.57
European Group	DC		-2.71	-5.26	-2.66
European Union	DC		-4.70	-6.12	-3.11
India	Ding		19.62	-26.12	-14.05
Indonesia	Ding		-0.01	0.37	0.19
Iran	Ding		-2.35	3.50	1.74
Japan	DC		-1.93	10.82	5.27
Malaysia	Ding		4.64	-0.59	-0.30
Mexico	Ding		43.53	-3.05	-1.54
Middle East/African Group	Ding		13.23	25.29	11.93
Morocco	Ding		81.11	5050.55	617.67

Paraguay	Ding	-0.81	1.46	0.73
Peru	Ding	-1.18	-1.52	-0.76
Philippines	Ding	9.92	-22.18	-11.78
South Africa	Ding	-0.38	0.27	0.13
South Korea	Ding	-1.63	3.23	1.60
Syria	Ding	-6.69	-23.05	-12.28
Taiwan	Ding	-2.04	156.16	60.05
Thailand	Ding	0.49	-6.14	-3.12
Tunisia	Ding	20.40	351.28	112.43
Turkey	Ding	4.06	4.43	2.19
United States	DC	-1.62	3.50	1.73
Venezuela	Ding	-1.25	-10.50	-5.40
Vietnam	Ding	0.27	120.73	48.57

		Swiss-25 Cuts- Full SSM Bound to URAA			
Country	Development Status	Variable	% Change	% Change Variance	% Change St. Dev.
Algeria	Ding	Net Welfare	-1.24	8.01	3.93
Americas Group	Ding		11.15	-6.17	-3.13
Argentina	Ding		-1.57	-0.13	-0.07
Asia/Oceania Group	DC		-0.47	-0.44	-0.22
Bangladesh	LDC		-2.95	7.11	3.49
Brazil	Ding		-1.12	-2.08	-1.05
Canada	DC		-0.55	-0.28	-0.14
China	Ding		8.87	8.22	4.03
Colombia	Ding		-0.06	308.03	102.00
Dominican Republic	Ding		-1.79	-9.37	-4.80
Egypt	Ding		-7.83	-4.39	-2.22
European Group	DC		-1.99	-3.81	-1.93
European Union	DC		-3.19	-3.58	-1.80
India	Ding		12.19	-7.28	-3.71
Indonesia	Ding		0.03	-0.40	-0.20
Iran	Ding		-1.60	0.00	0.00
Japan	DC		-1.21	6.99	3.44
Malaysia	Ding		-2.61	-9.58	-4.91
Mexico	Ding		34.79	-0.82	-0.41
Middle East/African Group	Ding		10.61	305.96	101.48
Morocco	Ding		75.70	1208.31	261.71
Paraguay	Ding		-0.82	-0.33	-0.17
Peru	Ding		-0.80	-2.14	-1.07
Philippines	Ding		5.34	-11.76	-6.06
South Africa	Ding		-0.39	-0.42	-0.21
South Korea	Ding		-1.08	2.80	1.39
Syria	Ding		-4.72	-20.45	-10.81
Taiwan	Ding		-0.29	90.62	38.07
Thailand	Ding		0.05	-1.00	-0.50
Tunisia	Ding		5.34	107.65	44.10
Turkey	Ding		1.17	-2.77	-1.39
United States	DC		-1.37	-0.48	-0.24
Venezuela	Ding		-1.43	-7.96	-4.06
Vietnam	Ding		0.02	53.97	24.08

Table OO: Full Stochastic Model Swiss-25 Tariff Cuts Price SSM Effects

Country	Development Status	Variable	Value	Swiss-25 Cuts- Price SSM Only		
				% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	393.10	-0.01	-0.10	-0.05
World Prices	n/a	Soybean Meal	343.38	0.00	0.42	0.21
World Prices	n/a	Soybean Oil	910.47	-0.12	7.58	3.72
Americas Group	Ding		0.15	-13.61	-51.05	-30.04
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		7.08	-38.16	-62.82	-39.03
Colombia	Ding		0.23	-33.04	-63.29	-39.41
Dominican Republic	Ding		0.01	-18.00	-33.11	-18.21
Egypt	Ding		0.00	n/a	n/a	n/a
India	Ding		17.04	-41.18	-66.14	-41.81
Indonesia	Ding		0.81	-45.00	-71.40	-46.52
Malaysia	Ding		0.00	n/a	n/a	n/a
Mexico	Ding		0.00	n/a	n/a	n/a
Middle East/African Group	Ding	Price SSM	0.00	n/a	n/a	n/a
Morocco	Ding		1.80	-35.94	-62.32	-38.62
Peru	Ding		0.00	n/a	n/a	n/a
Philippines	Ding		0.00	n/a	n/a	n/a
South Africa	Ding		0.00	n/a	n/a	n/a
South Korea	Ding		0.00	110.32	121.14	48.71
Taiwan	Ding		0.00	n/a	n/a	n/a
Tunisia	Ding		0.04	-25.74	-55.78	-33.50
Turkey	Ding		0.00	n/a	n/a	n/a
Venezuela	Ding		0.30	-35.34	-62.10	-38.44
Vietnam	Ding		0.48	-18.24	-49.47	-28.92
Americas Group	Ding		33.00	32.00	30.92	14.42
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		608.00	0.83	-0.44	-0.22
Colombia	Ding		26.00	13.04	12.70	6.16
Dominican Republic	Ding		2.00	100.00	99.80	41.35
Egypt	Ding		0.00	n/a	n/a	n/a
India	Ding		726.00	0.14	-0.23	-0.11
Indonesia	Ding		36.00	0.00	0.00	0.00
Malaysia	Ding		0.00	n/a	n/a	n/a
Mexico	Ding		0.00	n/a	n/a	n/a
Middle East/African Group	Ding	Price SSM Count	0.00	n/a	n/a	n/a
Morocco	Ding		182.00	7.06	5.51	2.72
Peru	Ding		0.00	n/a	n/a	n/a
Philippines	Ding		0.00	n/a	n/a	n/a
South Africa	Ding		0.00	n/a	n/a	n/a
South Korea	Ding		2.00	100.00	99.80	41.35
Taiwan	Ding		0.00	n/a	n/a	n/a
Tunisia	Ding		7.00	16.67	16.55	7.96
Turkey	Ding		0.00	n/a	n/a	n/a
Venezuela	Ding		33.00	22.22	21.47	10.21
Vietnam	Ding		93.00	20.78	18.69	8.94

Swiss-25 Cuts- Volume SSM Only

Country	Development Status	Variable	Value	% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	393.43	0.08	13.67	6.62
World Prices	n/a	Soybean Meal	347.51	1.20	83.88	35.60
World Prices	n/a	Soybean Oil	840.09	-7.84	-23.74	-12.67
Americas Group	Ding		0.00	-100.00	-100.00	-100.00
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		0.00	-100.00	-100.00	-100.00
Colombia	Ding		1.52	353.27	94.61	39.50
Dominican Republic	Ding		4.10	46153.56	156320.25	3855.00
Egypt	Ding		0.00	n/a	n/a	n/a
India	Ding		0.00	-100.00	-100.00	-100.00
Indonesia	Ding		6.19	320.67	355.32	113.38
Malaysia	Ding		0.00	n/a	n/a	n/a
Mexico	Ding		0.00	n/a	n/a	n/a
Middle East/African Group	Ding	Price SSM	0.00	n/a	n/a	n/a
Morocco	Ding		0.00	-100.00	-100.00	-100.00
Peru	Ding		0.01	n/a	n/a	n/a
Philippines	Ding		0.00	n/a	n/a	n/a
South Africa	Ding		0.73	n/a	n/a	n/a
South Korea	Ding		1.61	284431.37	20325159.45	44983.54
Taiwan	Ding		0.00	n/a	n/a	n/a
Tunisia	Ding		0.00	-100.00	-100.00	-100.00
Turkey	Ding		0.00	n/a	n/a	n/a
Venezuela	Ding		11.03	2277.37	2932.26	450.66
Vietnam	Ding		41.17	6854.56	4826.11	601.86
Americas Group	Ding		0.00	-100.00	-100.00	-100.00
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		0.00	-100.00	-100.00	-100.00
Colombia	Ding		153.00	565.22	476.71	140.15
Dominican Republic	Ding		194.00	19300.00	15551.85	1151.07
Egypt	Ding		1.00	n/a	n/a	n/a
India	Ding		0.00	-100.00	-100.00	-100.00
Indonesia	Ding		129.00	258.33	223.77	79.93
Malaysia	Ding		0.00	n/a	n/a	n/a
Mexico	Ding		0.00	n/a	n/a	n/a
Middle East/African Group	Ding	Price SSM Count	0.00	n/a	n/a	n/a
Morocco	Ding		0.00	-100.00	-100.00	-100.00
Peru	Ding		2.00	n/a	n/a	n/a
Philippines	Ding		0.00	n/a	n/a	n/a
South Africa	Ding		47.00	n/a	n/a	n/a
South Korea	Ding		67.00	6600.00	6157.26	691.03
Taiwan	Ding		0.00	n/a	n/a	n/a
Tunisia	Ding		0.00	-100.00	-100.00	-100.00
Turkey	Ding		0.00	n/a	n/a	n/a
Venezuela	Ding		362.00	1240.74	779.13	196.50
Vietnam	Ding		989.00	1184.42	-84.69	-60.88

Swiss-25 Cuts- Full SSM						
Country	Development Status	Variable	Value	% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	393.42	0.08	13.80	6.68

World Prices	n/a	Soybean Meal	347.52	1.20	83.82	35.58
World Prices	n/a	Soybean Oil	840.05	-7.85	-23.35	-12.45
Americas Group	Ding		0.00	-100.00	-100.00	-100.00
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		0.00	-100.00	-100.00	-100.00
Colombia	Ding		0.86	155.95	-38.61	-21.65
Dominican Republic	Ding		2.31	25988.86	49279.19	2122.14
Egypt	Ding		0.00	n/a	n/a	n/a
India	Ding		0.00	-100.00	-100.00	-100.00
Indonesia	Ding		3.28	123.18	25.29	11.93
Malaysia	Ding		0.00	n/a	n/a	n/a
Mexico	Ding		0.00	n/a	n/a	n/a
Middle East/African						
Group	Ding	Price SSM	0.00	n/a	n/a	n/a
Morocco	Ding		0.00	-100.00	-100.00	-100.00
Peru	Ding		0.01	n/a	n/a	n/a
Philippines	Ding		0.00	n/a	n/a	n/a
South Africa	Ding		0.73	n/a	n/a	n/a
South Korea	Ding		1.61	284962.55	20375675.79	45039.53
Taiwan	Ding		0.00	n/a	n/a	n/a
Tunisia	Ding		0.00	-100.00	-100.00	-100.00
Turkey	Ding		0.00	n/a	n/a	n/a
Venezuela	Ding		6.22	1239.44	850.75	208.34
Vietnam	Ding		23.33	3841.22	1455.62	294.41
Americas Group	Ding		0.00	-100.00	-100.00	-100.00
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		0.00	-100.00	-100.00	-100.00
Colombia	Ding		154.00	569.57	479.79	140.79
Dominican Republic	Ding		194.00	19300.00	15551.85	1151.07
Egypt	Ding		1.00	n/a	n/a	n/a
India	Ding		0.00	-100.00	-100.00	-100.00
Indonesia	Ding		129.00	258.33	223.77	79.93
Malaysia	Ding		0.00	n/a	n/a	n/a
Mexico	Ding		0.00	n/a	n/a	n/a
Middle East/African						
Group	Ding	Price SSM	0.00	n/a	n/a	n/a
Morocco	Ding	Count	0.00	-100.00	-100.00	-100.00
Peru	Ding		2.00	n/a	n/a	n/a
Philippines	Ding		0.00	n/a	n/a	n/a
South Africa	Ding		48.00	n/a	n/a	n/a
South Korea	Ding		68.00	6700.00	6243.86	696.48
Taiwan	Ding		0.00	n/a	n/a	n/a
Tunisia	Ding		0.00	-100.00	-100.00	-100.00
Turkey	Ding		0.00	n/a	n/a	n/a
Venezuela	Ding		362.00	1240.74	779.13	196.50
Vietnam	Ding		988.00	1183.12	-83.32	-59.16

Swiss-25 Cuts- Full SSM Bound to URAA

Country	Development Status	Variable	Value	% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	392.29	-0.21	0.90	0.45
World Prices	n/a	Soybean Meal	343.12	-0.08	-0.63	-0.32
World Prices	n/a	Soybean Oil	870.99	-4.45	-2.67	-1.35
Americas Group	Ding	Price SSM	0.00	-100.00	-100.00	-100.00

Bangladesh	LDC	0.00	n/a	n/a	n/a
China	Ding	0.00	-100.00	-100.00	-100.00
Colombia	Ding	1.01	201.79	5.64	2.78
Dominican Republic	Ding	0.41	4571.62	6180.56	692.50
Egypt	Ding	0.00	n/a	n/a	n/a
India	Ding	0.00	-100.00	-100.00	-100.00
Indonesia	Ding	1.84	25.36	-27.36	-14.77
Malaysia	Ding	0.00	n/a	n/a	n/a
Mexico	Ding	0.00	n/a	n/a	n/a
Middle East/African Group	Ding	0.00	n/a	n/a	n/a
Morocco	Ding	0.00	-100.00	-100.00	-100.00
Peru	Ding	0.00	n/a	n/a	n/a
Philippines	Ding	0.00	n/a	n/a	n/a
South Africa	Ding	0.09	n/a	n/a	n/a
South Korea	Ding	0.41	72316.51	3474110.72	18539.23
Taiwan	Ding	0.00	n/a	n/a	n/a
Tunisia	Ding	0.00	-100.00	-100.00	-100.00
Turkey	Ding	0.00	n/a	n/a	n/a
Venezuela	Ding	2.06	342.89	199.18	72.97
Vietnam	Ding	8.04	1258.61	889.84	214.62
Americas Group	Ding	0.00	-100.00	-100.00	-100.00
Bangladesh	LDC	0.00	n/a	n/a	n/a
China	Ding	0.00	-100.00	-100.00	-100.00
Colombia	Ding	130.00	465.22	403.32	124.35
Dominican Republic	Ding	56.00	5500.00	5191.63	627.44
Egypt	Ding	0.00	n/a	n/a	n/a
India	Ding	0.00	-100.00	-100.00	-100.00
Indonesia	Ding	63.00	75.00	70.10	30.42
Malaysia	Ding	0.00	n/a	n/a	n/a
Mexico	Ding	0.00	n/a	n/a	n/a
Middle East/African Group	Ding	Price SSM Count	0.00	n/a	n/a
Morocco	Ding	0.00	-100.00	-100.00	-100.00
Peru	Ding	0.00	n/a	n/a	n/a
Philippines	Ding	0.00	n/a	n/a	n/a
South Africa	Ding	9.00	n/a	n/a	n/a
South Korea	Ding	22.00	2100.00	2053.73	364.08
Taiwan	Ding	0.00	n/a	n/a	n/a
Tunisia	Ding	0.00	-100.00	-100.00	-100.00
Turkey	Ding	0.00	n/a	n/a	n/a
Venezuela	Ding	150.00	455.56	385.33	120.30
Vietnam	Ding	655.00	750.65	217.96	78.31

Table PP: Full Stochastic Model Swiss-25 Tariff Cuts Volume SSM Effects

Country	Development Status	Variable	Swiss-25 Cuts- Price SSM Only			
			Value	% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	393.10	-0.01	-0.10	-0.05
World Prices	n/a	Soybean Meal	343.38	0.00	0.42	0.21
World Prices	n/a	Soybean Oil	910.47	-0.12	7.58	3.72
Americas Group	Ding	Volume SSM	500.00	0.00	n/a	n/a

Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		500.00	0.00	n/a	n/a
Colombia	Ding		0.25	0.00	0.00	0.00
Dominican Republic	Ding		0.00	n/a	n/a	n/a
Egypt	Ding		0.00	n/a	n/a	n/a
India	Ding		400.70	0.17	2.17E+26	1.47E+14
Indonesia	Ding		0.00	n/a	n/a	n/a
Malaysia	Ding		0.00	n/a	n/a	n/a
Mexico	Ding		499.90	0.00	0.00	0.00
Middle East/African Group	Ding		24.50	63.33	56.73	25.19
Morocco	Ding		242.90	0.00	0.00	0.00
Peru	Ding		0.00	n/a	n/a	n/a
Philippines	Ding		65.20	11.07	10.28	5.01
South Africa	Ding		0.75	0.00	0.00	0.00
South Korea	Ding		0.00	n/a	n/a	n/a
Taiwan	Ding		0.00	n/a	n/a	n/a
Tunisia	Ding		42.15	6.31	5.01	2.47
Turkey	Ding		400.00	0.00	0.00	0.00
Venezuela	Ding		0.00	n/a	n/a	n/a
Vietnam	Ding		0.00	n/a	n/a	n/a
Americas Group	Ding		0.00	n/a	n/a	n/a
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		0.00	n/a	n/a	n/a
Colombia	Ding		1.00	0.00	0.00	0.00
Dominican Republic	Ding		0.00	n/a	n/a	n/a
Egypt	Ding		0.00	n/a	n/a	n/a
India	Ding		0.00	n/a	n/a	n/a
Indonesia	Ding		0.00	n/a	n/a	n/a
Malaysia	Ding		0.00	n/a	n/a	n/a
Mexico	Ding		0.00	n/a	n/a	n/a
Middle East/African Group	Ding	Volume SSM 1 Count	98.00	63.33	56.73	25.19
Morocco	Ding		970.00	0.00	0.00	0.00
Peru	Ding		0.00	n/a	n/a	n/a
Philippines	Ding		176.00	6.02	4.75	2.35
South Africa	Ding		3.00	0.00	0.00	0.00
South Korea	Ding		0.00	n/a	n/a	n/a
Taiwan	Ding		0.00	n/a	n/a	n/a
Tunisia	Ding		167.00	6.37	5.11	2.52
Turkey	Ding		0.00	n/a	n/a	n/a
Venezuela	Ding		0.00	n/a	n/a	n/a
Vietnam	Ding		0.00	n/a	n/a	n/a
Americas Group	Ding		0.00	n/a	n/a	n/a
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		0.00	n/a	n/a	n/a
Colombia	Ding		0.00	n/a	n/a	n/a
Dominican Republic	Ding		0.00	n/a	n/a	n/a
Egypt	Ding		0.00	n/a	n/a	n/a
India	Ding		993.00	-0.70	n/a	n/a
Indonesia	Ding		0.00	n/a	n/a	n/a
Malaysia	Ding		0.00	n/a	n/a	n/a
Mexico	Ding		1.00	0.00	0.00	0.00
Middle East/African	Ding		0.00	n/a	n/a	n/a

Group					
Morocco	Ding	1.00	0.00	0.00	0.00
Peru	Ding	0.00	n/a	n/a	n/a
Philippines	Ding	53.00	23.26	21.97	10.44
South Africa	Ding	0.00	n/a	n/a	n/a
South Korea	Ding	0.00	n/a	n/a	n/a
Taiwan	Ding	0.00	n/a	n/a	n/a
Tunisia	Ding	1.00	0.00	0.00	0.00
Turkey	Ding	1000.00	0.00	n/a	n/a
Venezuela	Ding	0.00	n/a	n/a	n/a
Vietnam	Ding	0.00	n/a	n/a	n/a
Americas Group	Ding	1000.00	0.00	n/a	n/a
Bangladesh	LDC	0.00	n/a	n/a	n/a
China	Ding	1000.00	0.00	n/a	n/a
Colombia	Ding	0.00	n/a	n/a	n/a
Dominican Republic	Ding	0.00	n/a	n/a	n/a
Egypt	Ding	0.00	n/a	n/a	n/a
India	Ding	7.00	n/a	n/a	n/a
Indonesia	Ding	0.00	n/a	n/a	n/a
Malaysia	Ding	0.00	n/a	n/a	n/a
Mexico	Ding	999.00	0.00	0.00	0.00
Middle East/African		Volume SSM 3			
Group	Ding	Count	0.00	n/a	n/a
Morocco	Ding		0.00	n/a	n/a
Peru	Ding		0.00	n/a	n/a
Philippines	Ding		0.00	n/a	n/a
South Africa	Ding		0.00	n/a	n/a
South Korea	Ding		0.00	n/a	n/a
Taiwan	Ding		0.00	n/a	n/a
Tunisia	Ding		0.00	n/a	n/a
Turkey	Ding		0.00	n/a	n/a
Venezuela	Ding		0.00	n/a	n/a
Vietnam	Ding		0.00	n/a	n/a

Country	Development Status	Variable	Swiss-25 Cuts- Volume SSM Only			
			Value	% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	393.43	0.08	13.67	6.62
World Prices	n/a	Soybean Meal	347.51	1.20	83.88	35.60
World Prices	n/a	Soybean Oil	840.09	-7.84	-23.74	-12.67
Americas Group	Ding		500.00	0.00	n/a	n/a
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		500.00	0.00	n/a	n/a
Colombia	Ding		62.50	24900.00	18667.20	1269.93
Dominican Republic	Ding		0.00	n/a	n/a	n/a
Egypt	Ding		18.25	n/a	n/a	n/a
India	Ding	Volume SSM	490.60	22.65	2.66E+27	5.15E+14
Indonesia	Ding		0.25	n/a	n/a	n/a
Malaysia	Ding		498.25	n/a	n/a	n/a
Mexico	Ding		500.00	0.02	-100.00	-100.00
Middle East/African						
Group	Ding		397.60	2550.67	-89.95	-68.30
Morocco	Ding		290.65	19.66	149.08	57.82
Peru	Ding		0.00	n/a	n/a	n/a

Philippines	Ding		401.70	584.33	-92.45	-72.53
South Africa	Ding		26.40	3420.00	3089.99	464.80
South Korea	Ding		1.25	n/a	n/a	n/a
Taiwan	Ding		481.65	n/a	n/a	n/a
Tunisia	Ding		248.50	526.73	33.00	15.33
Turkey	Ding		497.00	24.25	9.08E+26	3.01E+14
Venezuela	Ding		0.00	n/a	n/a	n/a
Vietnam	Ding		0.00	n/a	n/a	n/a
Americas Group	Ding		0.00	n/a	n/a	n/a
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		0.00	n/a	n/a	n/a
Colombia	Ding		250.00	24900.00	18668.47	1269.98
Dominican Republic	Ding		0.00	n/a	n/a	n/a
Egypt	Ding		73.00	n/a	n/a	n/a
India	Ding		0.00	n/a	n/a	n/a
Indonesia	Ding		1.00	n/a	n/a	n/a
Malaysia	Ding		1.00	n/a	n/a	n/a
Mexico	Ding		0.00	n/a	n/a	n/a
Middle East/African		Volume SSM 1				
Group	Ding	Count	16.00	-73.33	-72.09	-47.17
Morocco	Ding		729.00	-24.85	578.90	160.56
Peru	Ding		0.00	n/a	n/a	n/a
Philippines	Ding		18.00	-89.16	-87.23	-64.27
South Africa	Ding		104.00	3366.67	3015.52	458.17
South Korea	Ding		5.00	n/a	n/a	n/a
Taiwan	Ding		5.00	n/a	n/a	n/a
Tunisia	Ding		706.00	349.68	56.83	25.23
Turkey	Ding		0.00	n/a	n/a	n/a
Venezuela	Ding		0.00	n/a	n/a	n/a
Vietnam	Ding		0.00	n/a	n/a	n/a
Americas Group	Ding		0.00	n/a	n/a	n/a
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		0.00	n/a	n/a	n/a
Colombia	Ding		0.00	n/a	n/a	n/a
Dominican Republic	Ding		0.00	n/a	n/a	n/a
Egypt	Ding		0.00	n/a	n/a	n/a
India	Ding		94.00	-90.60	n/a	n/a
Indonesia	Ding		0.00	n/a	n/a	n/a
Malaysia	Ding		15.00	n/a	n/a	n/a
Mexico	Ding		0.00	-100.00	-100.00	-100.00
Middle East/African		Volume SSM 2				
Group	Ding	Count	984.00	n/a	n/a	n/a
Morocco	Ding		271.00	27000.00	19675.44	1306.25
Peru	Ding		0.00	n/a	n/a	n/a
Philippines	Ding		933.00	2069.77	51.91	23.25
South Africa	Ding		1.00	n/a	n/a	n/a
South Korea	Ding		0.00	n/a	n/a	n/a
Taiwan	Ding		16.00	n/a	n/a	n/a
Tunisia	Ding		180.00	17900.00	14674.59	1115.51
Turkey	Ding		30.00	-97.00	n/a	n/a
Venezuela	Ding		0.00	n/a	n/a	n/a
Vietnam	Ding		0.00	n/a	n/a	n/a
Americas Group	Ding	Volume SSM 3	1000.00	0.00	n/a	n/a
Bangladesh	LDC	Count	0.00	n/a	n/a	n/a

China	Ding	1000.00	0.00	n/a	n/a
Colombia	Ding	0.00	n/a	n/a	n/a
Dominican Republic	Ding	0.00	n/a	n/a	n/a
Egypt	Ding	0.00	n/a	n/a	n/a
India	Ding	906.00	n/a	n/a	n/a
Indonesia	Ding	0.00	n/a	n/a	n/a
Malaysia	Ding	984.00	n/a	n/a	n/a
Mexico	Ding	1000.00	0.10	-100.00	-100.00
Middle East/African Group	Ding	0.00	n/a	n/a	n/a
Morocco	Ding	0.00	n/a	n/a	n/a
Peru	Ding	0.00	n/a	n/a	n/a
Philippines	Ding	48.00	n/a	n/a	n/a
South Africa	Ding	0.00	n/a	n/a	n/a
South Korea	Ding	0.00	n/a	n/a	n/a
Taiwan	Ding	948.00	n/a	n/a	n/a
Tunisia	Ding	0.00	n/a	n/a	n/a
Turkey	Ding	970.00	n/a	n/a	n/a
Venezuela	Ding	0.00	n/a	n/a	n/a
Vietnam	Ding	0.00	n/a	n/a	n/a

Swiss-25 Cuts- Full SSM						
Country	Development Status	Variable	Value	% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	393.42	0.08	13.80	6.68
World Prices	n/a	Soybean Meal	347.52	1.20	83.82	35.58
World Prices	n/a	Soybean Oil	840.05	-7.85	-23.35	-12.45
Americas Group	Ding		0.00	0.00	n/a	n/a
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		0.00	0.00	n/a	n/a
Colombia	Ding		11.70	24800.00	18617.33	1268.11
Dominican Republic	Ding		0.00	n/a	n/a	n/a
Egypt	Ding		3.47	n/a	n/a	n/a
India	Ding		0.85	22.65	2.66E+27	5.15E+14
Indonesia	Ding		0.06	n/a	n/a	n/a
Malaysia	Ding		0.21	n/a	n/a	n/a
Mexico	Ding		0.00	0.02	-100.00	-100.00
Middle East/African Group	Ding	Volume SSM	0.40	2548.67	-88.72	-66.41
Morocco	Ding		4.45	19.66	149.08	57.82
Peru	Ding		0.00	n/a	n/a	n/a
Philippines	Ding		1.04	584.33	-92.45	-72.53
South Africa	Ding		5.97	3420.00	3089.99	464.80
South Korea	Ding		0.31	n/a	n/a	n/a
Taiwan	Ding		7.89	n/a	n/a	n/a
Tunisia	Ding		11.18	526.73	33.00	15.33
Turkey	Ding		0.29	24.25	9.08E+26	3.01E+14
Venezuela	Ding		0.00	n/a	n/a	n/a
Vietnam	Ding		0.00	n/a	n/a	n/a
Americas Group	Ding		0.00	n/a	n/a	n/a
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		0.00	n/a	n/a	n/a
Colombia	Ding	Volume SSM 1 Count	187.19	24800.00	18618.34	1268.15
Dominican Republic	Ding		0.00	n/a	n/a	n/a

Egypt	Ding		55.57	n/a	n/a	n/a
India	Ding		0.00	n/a	n/a	n/a
Indonesia	Ding		1.00	n/a	n/a	n/a
Malaysia	Ding		1.00	n/a	n/a	n/a
Mexico	Ding		0.00	n/a	n/a	n/a
Middle East/African Group	Ding		17.69	-70.00	-68.66	-44.02
Morocco	Ding		197.76	-24.85	578.90	160.56
Peru	Ding		0.00	n/a	n/a	n/a
Philippines	Ding		17.69	-89.16	-87.23	-64.27
South Africa	Ding		93.28	3366.67	3015.52	458.17
South Korea	Ding		4.98	n/a	n/a	n/a
Taiwan	Ding		4.98	n/a	n/a	n/a
Tunisia	Ding		207.77	349.68	56.83	25.23
Turkey	Ding		0.00	n/a	n/a	n/a
Venezuela	Ding		0.00	n/a	n/a	n/a
Vietnam	Ding		0.00	n/a	n/a	n/a
Americas Group	Ding		0.00	n/a	n/a	n/a
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		0.00	n/a	n/a	n/a
Colombia	Ding		0.00	n/a	n/a	n/a
Dominican Republic	Ding		0.00	n/a	n/a	n/a
Egypt	Ding		0.00	n/a	n/a	n/a
India	Ding		85.25	-90.60	n/a	n/a
Indonesia	Ding		0.00	n/a	n/a	n/a
Malaysia	Ding		14.79	n/a	n/a	n/a
Mexico	Ding		0.00	-100.00	-100.00	-100.00
Middle East/African Group		Volume SSM 2				
	Ding	Count	17.69	n/a	n/a	n/a
Morocco	Ding		197.76	27000.00	19675.44	1306.25
Peru	Ding		0.00	n/a	n/a	n/a
Philippines	Ding		62.57	2069.77	51.91	23.25
South Africa	Ding		1.00	n/a	n/a	n/a
South Korea	Ding		0.00	n/a	n/a	n/a
Taiwan	Ding		15.76	n/a	n/a	n/a
Tunisia	Ding		147.75	17900.00	14674.59	1115.51
Turkey	Ding		29.13	-97.00	n/a	n/a
Venezuela	Ding		0.00	n/a	n/a	n/a
Vietnam	Ding		0.00	n/a	n/a	n/a
Americas Group	Ding		0.00	0.00	n/a	n/a
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		0.00	0.00	n/a	n/a
Colombia	Ding		0.00	n/a	n/a	n/a
Dominican Republic	Ding		0.00	n/a	n/a	n/a
Egypt	Ding		0.00	n/a	n/a	n/a
India	Ding		85.25	n/a	n/a	n/a
Indonesia	Ding	Volume SSM 3	0.00	n/a	n/a	n/a
Malaysia	Ding	Count	15.76	n/a	n/a	n/a
Mexico	Ding		0.00	0.10	-100.00	-100.00
Middle East/African Group						
	Ding		0.00	n/a	n/a	n/a
Morocco	Ding		0.00	n/a	n/a	n/a
Peru	Ding		0.00	n/a	n/a	n/a
Philippines	Ding		45.74	n/a	n/a	n/a

South Africa	Ding	0.00	n/a	n/a	n/a
South Korea	Ding	0.00	n/a	n/a	n/a
Taiwan	Ding	49.35	n/a	n/a	n/a
Tunisia	Ding	0.00	n/a	n/a	n/a
Turkey	Ding	29.13	n/a	n/a	n/a
Venezuela	Ding	0.00	n/a	n/a	n/a
Vietnam	Ding	0.00	n/a	n/a	n/a

Country	Development Status	Variable	Swiss-25 Cuts- Full SSM Bound to URAA			
			Value	% Change	% Change Variance	% Change St. Dev.
World Prices	n/a	Soybean	392.29	-0.21	0.90	0.45
World Prices	n/a	Soybean Meal	343.12	-0.08	-0.63	-0.32
World Prices	n/a	Soybean Oil	870.99	-4.45	-2.67	-1.35
Americas Group	Ding		500.00	0.00	n/a	n/a
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		500.00	0.00	n/a	n/a
Colombia	Ding		9.25	3600.00	3466.38	497.19
Dominican Republic	Ding		0.00	n/a	n/a	n/a
Egypt	Ding		0.00	n/a	n/a	n/a
India	Ding		448.90	12.23	7.79E+27	8.83E+14
Indonesia	Ding		0.00	n/a	n/a	n/a
Malaysia	Ding		167.25	n/a	n/a	n/a
Mexico	Ding		500.00	0.02	-100.00	-100.00
Middle East/African Group	Ding	Volume SSM	293.90	1859.33	37.81	17.39
Morocco	Ding		257.20	5.89	-42.39	-24.10
Peru	Ding		0.00	n/a	n/a	n/a
Philippines	Ding		354.60	504.09	-35.20	-19.50
South Africa	Ding		8.40	1020.00	1017.77	234.33
South Korea	Ding		0.00	n/a	n/a	n/a
Taiwan	Ding		101.05	n/a	n/a	n/a
Tunisia	Ding		153.05	286.00	106.64	43.75
Turkey	Ding		455.70	13.93	7.70E+27	8.77E+14
Venezuela	Ding		0.00	n/a	n/a	n/a
Vietnam	Ding		0.00	n/a	n/a	n/a
Americas Group	Ding		0.00	n/a	n/a	n/a
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		0.00	n/a	n/a	n/a
Colombia	Ding		37.00	3600.00	3466.61	497.21
Dominican Republic	Ding		0.00	n/a	n/a	n/a
Egypt	Ding		0.00	n/a	n/a	n/a
India	Ding		0.00	n/a	n/a	n/a
Indonesia	Ding		0.00	n/a	n/a	n/a
Malaysia	Ding	Volume SSM 1	129.00	n/a	n/a	n/a
Mexico	Ding	Count	0.00	n/a	n/a	n/a
Middle East/African Group	Ding		702.00	1070.00	270.91	92.59
Morocco	Ding		952.00	-1.86	57.03	25.31
Peru	Ding		0.00	n/a	n/a	n/a
Philippines	Ding		196.00	18.07	13.82	6.69
South Africa	Ding		32.00	966.67	935.65	221.82
South Korea	Ding		0.00	n/a	n/a	n/a
Taiwan	Ding		9.00	n/a	n/a	n/a

Tunisia	Ding		545.00	247.13	87.36	36.88
Turkey	Ding		0.00	n/a	n/a	n/a
Venezuela	Ding		0.00	n/a	n/a	n/a
Vietnam	Ding		0.00	n/a	n/a	n/a
Americas Group	Ding		0.00	n/a	n/a	n/a
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		0.00	n/a	n/a	n/a
Colombia	Ding		0.00	n/a	n/a	n/a
Dominican Republic	Ding		0.00	n/a	n/a	n/a
Egypt	Ding		0.00	n/a	n/a	n/a
India	Ding		511.00	-48.90	n/a	n/a
Indonesia	Ding		0.00	n/a	n/a	n/a
Malaysia	Ding		285.00	n/a	n/a	n/a
Mexico	Ding		0.00	-100.00	-100.00	-100.00
Middle East/African		Volume SSM 2				
Group	Ding	Count	296.00	n/a	n/a	n/a
Morocco	Ding		48.00	4700.00	4474.10	576.32
Peru	Ding		0.00	n/a	n/a	n/a
Philippines	Ding		759.00	1665.12	344.50	110.83
South Africa	Ding		1.00	n/a	n/a	n/a
South Korea	Ding		0.00	n/a	n/a	n/a
Taiwan	Ding		37.00	n/a	n/a	n/a
Tunisia	Ding		42.00	4100.00	3927.59	534.63
Turkey	Ding		443.00	-55.70	n/a	n/a
Venezuela	Ding		0.00	n/a	n/a	n/a
Vietnam	Ding		0.00	n/a	n/a	n/a
Americas Group	Ding		1000.00	0.00	n/a	n/a
Bangladesh	LDC		0.00	n/a	n/a	n/a
China	Ding		1000.00	0.00	n/a	n/a
Colombia	Ding		0.00	n/a	n/a	n/a
Dominican Republic	Ding		0.00	n/a	n/a	n/a
Egypt	Ding		0.00	n/a	n/a	n/a
India	Ding		489.00	n/a	n/a	n/a
Indonesia	Ding		0.00	n/a	n/a	n/a
Malaysia	Ding		42.00	n/a	n/a	n/a
Mexico	Ding		1000.00	0.10	-100.00	-100.00
Middle East/African		Volume SSM 3				
Group	Ding	Count	0.00	n/a	n/a	n/a
Morocco	Ding		0.00	n/a	n/a	n/a
Peru	Ding		0.00	n/a	n/a	n/a
Philippines	Ding		4.00	n/a	n/a	n/a
South Africa	Ding		0.00	n/a	n/a	n/a
South Korea	Ding		0.00	n/a	n/a	n/a
Taiwan	Ding		168.00	n/a	n/a	n/a
Tunisia	Ding		0.00	n/a	n/a	n/a
Turkey	Ding		557.00	n/a	n/a	n/a
Venezuela	Ding		0.00	n/a	n/a	n/a
Vietnam	Ding		0.00	n/a	n/a	n/a