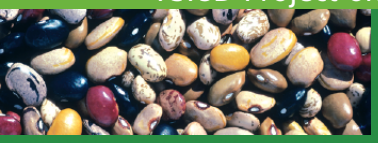
ICTSD Project on Special Products and a Special Safeguard Mechanism



Implications of Proposed Modalities for the Special Safeguard Mechanism

A Simulation Exercise

By **Raul Montemayor**
Federation of Free Farmers of the Philippines

ICTSD
International Centre for Trade and Sustainable Development

Issue Paper No. 10

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ICTSD welcomes feedback and comments on this document. These can be sent to Jonathan Hepburn at jhepburn@ictsd.ch

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LIST OF ACRONYMS AND ABBREVIATIONS

CIF	Price including cost, insurance and freight
FAO	Food and Agriculture Organization of the United Nations
Forex	Foreign exchange
G-20	Group of Twenty
G-33	Group of 33 bloc of developing countries (Doha Development Round)
ICTSD	International Centre for Trade and Sustainable Development
LDCs	Least-developed countries
MAVs	Minimum access volumes
MFN	Most-favoured nation
QRs	Quantitative restrictions
SPs	Special products
SSG	Special Safeguard
SSM	Special Safeguard Mechanism
TMTs	Thousand metric tons
TRQ	Tariff-rate quota
UR-AoA	GATT Uruguay Round Agreement on Agriculture (also referred to as UR)
WTO	World Trade Organization

FOREWORD

The world is producing more food than ever before. Yet, after decades of declining under-nourishment rates, the number of hungry people is on the increase again in several countries. Environmental degradation associated with intensive agricultural production – such as soil erosion, water pollution and biodiversity loss – remains at an unacceptable level. The major challenge today is, therefore, not so much to increase food production, but rather to ensure that agricultural production generates sufficient income for the poor, promotes equity and contributes to the sustainable use of natural resources.

The reform of the global agriculture trading system currently being negotiated in the context of the Doha Round – with the objective of establishing a "fair and market-oriented trading system" – will play a major role in this process. Over the last fifteen years, world agriculture trade has grown almost twice as fast as production. However, highly subsidised agricultural production and exports from member countries of the Organization of Economic Co-operation and Development (OECD) as well as the anti-competitive behaviour of trading firms are depressing world prices, thereby affecting development prospects in the South. Tariff peaks, tariff escalation and technical barriers to trade (such as sanitary and phyto-sanitary requirements) also limit market access and, thus, the potential gains from trade which developing countries are expecting.

While it is widely recognised that developing countries as a whole will benefit from freer agricultural trade, some fear that most of the new trading opportunities would be captured by a few middle-income countries and large food exporters. Lower income countries would gain only little and might even lose from further liberalisation. Many still have large rural populations composed of small and resource-poor farmers with limited access to infrastructure and few employment alternatives. Thus, these countries are concerned that domestic rural populations employed in import-competing sectors might be negatively affected by further trade liberalisation, becoming increasingly vulnerable to market instability and import surges as tariff barriers are removed.

A large number of countries still depend on the export of a few commodities, the prices of which show high volatility and long-term decline. Commodity dependence, the expected erosion of preferences that some countries depend on for their export earnings, as well as increased food import prices due to the elimination of export subsidies, will make it difficult for these countries to guarantee their growing populations the food they need. In this context, safeguarding domestic food production capacity has become an essential component of food security strategies in an increasing number of countries.

These concerns were first raised at the World Trade Organization (WTO) in the context of the "Development Box" debate, in which developing countries tabled a set of proposals aiming at providing flexibility for countries to enhance domestic food production and adopt measures to protect the livelihoods of resource-poor farmers. These proposals included concrete measures to address dumping and import surges. Some were eventually reflected in the so-called 2004 July package. The provisions for special and differential treatment under Paragraphs 41 and 42 of the Framework Agreement are probably the most innovative from a sustainable development perspective. They specify that "developing country Members will have the flexibility to designate an appropriate number of products as Special Products, based on criteria of food security, livelihood security and rural development needs. These products will be eligible for more flexible treatment." The Framework Agreement further states that a "Special Safeguard Mechanism (SSM) will be established for use by developing country Members."

However, key aspects of these instruments – such as the selection and treatment of Special Products (SPs), or specific modalities for a new SSM, including product coverage, possible trigger mechanisms and remedies – were left for future negotiations. As a contribution to this highly controversial debate, the International Centre for Trade and Sustainable Development (ICTSD) Project on Special Products and a Special Safeguard Mechanism aims to generate knowledge and options to better articulate and advance the concepts of SP and SSM from a sustainable development perspective.

The present Issue Paper (No. 10), on "Implications of proposed modalities for the Special Safeguard Mechanism: a simulation exercise", by Raul Montemayor seeks to evaluate various proposals for a Special Safeguard Mechanism (SSM) that would allow developing countries to defend themselves from import surges and prices depressions. The study aims to analyse the proposal made by the G-33 developing country group at the WTO, and those of other trading partners, by examining how the imposition of different requirements might affect the use of the safeguard in six different country case studies.

Ricardo Meléndez-Ortiz
Chief Executive, ICTSD

INTRODUCTION

This report presents the findings of an ICTSD-commissioned simulation exercise which seeks to evaluate various proposals for a Special Safeguard Mechanism (SSM) that would allow developing countries to defend themselves from import surges and prices depressions. The study aims to analyse the proposal made by the G-33 developing country group at the WTO[1], and those of other trading partners, by examining how the imposition of different requirements might affect the use of the safeguard in six different country case studies.

The simulation exercise seeks to shed light on three particular issues: 1). the historical frequency and severity of import surges and price depressions in the countries studied; 2). the extent to which countries would be able to access the safeguard, by quantifying how often temporary tariff increases or 'remedies' could be applied under different conditions[2], and 3). the effectiveness of the safeguard in bridging the gaps between import and domestic prices through the imposition of additional safeguard duties.

Methodology

A simulation model was developed for the study, using data on monthly import volumes and prices, and also on domestic prices. The data used was mainly from 2000 to 2005. 27 commodities were analysed in six countries: China, Ecuador, Fiji, Indonesia, the Philippines and Senegal. The study made use of available statistics on production and consumption, and data on tariff-rate quota (TRQ) commitments and most-favoured nation (MFN) tariffs. Any findings should be treated with some degree of caution, as data was sometimes incomplete, and the study was relatively limited in scope: the results should therefore be considered as primarily indicative rather than conclusive.

Frequency and Severity of Imports

The analysis revealed that the frequency of import volume surges and price depressions was significant among the commodities covered by the study, and in the countries analysed. On average, cumulative imports exceeded three-year import volume moving averages by more than ten percent in about one out of every six months. Price depressions occurred slightly more often, with import prices falling below a three-year moving average in a little over one out of every five months. When only import quantity surges and price depressions that exceeded historical averages by 30 percent were analysed, they still occurred with significant frequency in about one out of every ten months covered.

Accessing the Special Safeguard Mechanism

The simulations show that import volume increases would trigger the safeguard 29 percent of the time if the safeguard was only activated when imports exceeded the three-year moving average of import volumes by more than ten percent - a ten percent threshold. Import price declines could trigger the safeguard rather more often: the safeguard could be imposed 45 percent of the time when imports prices fell below three-year moving averages of import prices. The additional duties could still be levied almost as often even if thresholds were raised to 30 percent.

Although the G-33 has proposed that countries should be allowed to impose safeguard duties for up to twelve months, safeguard duties could still be accessed nearly as easily when this maximum period was reduced to six months, or only up to the end of the year. Access improved perceptibly

when a July-June implementation cycle was used instead of a calendar year, and more so when countries were also allowed to impose safeguard duties on in-quota imports.

The simulations showed that average import volumes tended to be lower, and therefore more susceptible to triggering safeguard duties, when they were based on data from a greater number of years. One possible explanation is that developing country imports are generally on the rise: averaging a longer series of data thus includes more years when import volumes were lower. In contrast, average import prices tended to be lower when fewer years of data were used. This could be due to the general downward trend in international commodity prices in the periods covered by the simulation (primarily 2000-2005).

Overall, however, a five instead of three-year base period for both volume and price import averages resulted in a slightly better access rate for the SSM (50 percent rather than 48 percent). While some Members could interpret this as a signal to push for five rather than three-year averages, this finding also suggests that protracted debates over the duration of the base period may be unnecessary, since each would allow safeguard duties to be imposed almost as often as the other. However, some caution should be used in analysing these results, both because data gaps might have compromised the accuracy of the computation and because the results for individual commodities vary widely.

If however domestic consumption rather than imports is used to calculate volume triggers, as has been the case for the existing Special Safeguard (SSG)[3], the SSM would probably be triggered less often. If the triggers were set to at least five percent of average domestic consumption in the preceding three years, the SSM could be accessed 45 percent of the time, as opposed to 48 percent of the time when three-year import averages were used solely to determine volume triggers. In many instances, however, historical import and consumption data were not available, so the resulting access levels were probably overstated. If complete data were available, it is likely that triggers would rise to at least five percent of historical consumption levels, and access rates would decline as a result.

The second critical factor affecting access to the SSM concerns thresholds, or the degree of deviation from the triggers that would allow the invocation of either volume or price-based safeguard duties. Simulation results suggest that higher volume thresholds will not significantly impair access to safeguard duties – although gaps in the data mean that these findings are only indicative. If the volume threshold is increased from ten percent to 30 percent while the price threshold is kept constant at ten percent, for example, overall access rates only decline from 48 percent to 44 percent of total months.

The simulations indicate that the maximum period for imposing SSM duties could be shortened without substantially sacrificing reasonable access to the safeguard. Even if the additional duties cannot be imposed for longer than six months, for example, they would still enable the safeguard to be used in 40 percent of total months – only slightly less often than the 48 percent access rate obtained if additional duties can be applied for a twelve month period, as proposed by the G-33. In fact, allowing SSM duties only up to the end of the year yielded a better result (42 percent) than when a six-month limit was imposed.

If a slight reduction in the access rate is acceptable to SSM proponents, the adoption of the end-of-year modality that was used for the Uruguay Round SSG may help speed up negotiations, and would ensure almost the same level of access as that provided by other proposed imposition periods. This could also help prevent SSM duties from leading to lower import levels in the following year, thereby unduly deflating the average import volumes for subsequent years – a concern expressed by some exporting countries, and echoed by the chair of the agriculture negotiations, Ambassador Crawford

Falconer[4]. Notably, the simulations seem to indicate that any losses in access from an end-of-year limit to imposition periods could be more than recovered by shifting from a calendar to a July-June implementation period.

The availability of the SSM was more than halved when so-called 'market tests' were imposed, i.e. when volume surges had to coincide with price depressions in order to trigger safeguard duties. The simulations showed that access to the measure declined very substantially from the baseline level of 48 percent to only 19 percent of total months if remedial duties were disallowed during periods when average prices and volumes did not deviate from corresponding averages in preceding years by more than ten percent. For several commodities, the market test effectively rendered the SSM useless. In this regard, it could be argued that the link between import volumes and prices is not always symmetrical, nor do abrupt movements in both volumes and prices need to coincide in order to result in serious harm to producers in importing countries.

Finally, the simulations clearly show that if countries are allowed to impose safeguard duties on in-quota imports, access rates improve dramatically. Overall access rates increased from 48 percent to 59 percent of total months when duties on in-quota imports were allowed, and would increase still further if the analysis were to be confined to countries and commodities with tariff quota commitments.

Effectiveness of the Special Safeguard Mechanism

On average, in six out of twelve months in a year, the prices of imports - inclusive of MFN bound duties - fell below corresponding domestic prices by more than ten percent. Safeguard duties were available in about four of these six "problematic" months, but were effective in reducing the price gaps to less than ten percent in only two of the months concerned.

When using the baseline threshold and remedy settings[5], soybeans came up with the best effectiveness rating, with safeguard duties being able to prop up import prices to more than 90 percent of domestic prices in 74 percent of the months when prices were cheaper by ten percent or more. Potatoes had a similar effectiveness rate, although had a much lower incidence of problematic months. Among the commodities that experienced episodes of imports priced at least ten percent below domestic prices, wheat flour, pork, vegetable oil, garlic, and wheat grain suffered from comparatively low effectiveness rates, with safeguard duties being able to provide sufficient remedies in less than ten percent of problematic months. Overall, SSM measures were effective in only 37 percent of problematic months.

Although price-based SSM measures were more accessible than volume-based remedies, the two were more or less as effective in addressing problems created by cheap imports. If only the volume-based safeguard is allowed, access is limited to 39 percent of problematic months, as against 64 percent in the baseline setting, while the effectiveness of the safeguard duties slid to 24 percent. If, on the other hand, only price-based measures were allowed, safeguard duties were available in a higher 55 percent of problematic months, during which they were effective only 23 percent of the time.

The effectiveness of the remedy did not appear to be considerably influenced by adjustments in the way import prices were converted to local currencies, or when imposition periods were adjusted from twelve to six months or only up to the end of each year. There also appeared to be some room for increasing thresholds and reducing remedies without unduly impairing the quality of the SSM. However, given the relatively low tariff profile of the countries included in the study, access and effectiveness rates deviated less abruptly from baseline results if safeguard duties and remedy caps were quoted in absolute percentage points instead of as percentages of bound tariffs.

Effectiveness rates improved when July to June was used as the annual implementation cycle, instead of a calendar year. Effectiveness was improved even more significantly when countries were allowed to impose safeguard duties on in-quota imports. The SSM became available in three out of every four months when duties could be applied to in-quota imports, compared to a little less than one-third in the baseline scenario, and was effective in addressing problematic price gaps in almost half of the problematic months, as against only 37 percent when countries were not allowed to impose the safeguard until the quota had been filled.

The simulations show that proposals to impose a 'market test' on the use of SSM duties would result in a drastic decline in effectiveness rates, which would be cut from 37 percent to 12 percent of problematic months. All commodities and countries covered by the study suffered noticeable declines in their individual effectiveness rates when this requirement was introduced.

Effectiveness rates would also be significantly impaired if the additional safeguard duties were not allowed to take overall tariff levels beyond the maximum permitted 'bound' rates agreed during the Uruguay Round[6]. If this limit was imposed, the SSM became virtually useless, becoming effective in only two percent of problematic months. Among the 20 commodities covered that registered positive effectiveness rates under the baseline scenario, eleven saw their effectiveness rates drop to zero, while the rest experienced declines of at least 88 percent compared to baseline levels. Ambassador Falconer's paper envisaged that least-developed countries (LDCs) would be exempt from this restriction: indeed, they would otherwise have had no access to SSM remedies, since their proposed exemption from any tariff reduction in the Doha Round would have meant that even the slightest safeguard duty application would have brought them over starting tariff levels. Notably, the SSG contains no such restriction on exceeding bound tariff levels.

The simulation results suggest that the quality of the SSM can be improved if five instead of three-year averages are used to determine triggers, and if countries retain the option to use a July-June implementation cycle. Where applicable and advisable, countries could also consider the implications of unilaterally lowering their bound tariffs on selected products to in-quota levels in exchange for enhanced access to the SSM. A legal opinion would however be needed to determine whether such a move would allow a country to start imposing safeguard duties on imports falling within their original TRQ commitments.

Additional Considerations

Product coverage

The simulation did not specifically address the issue of product coverage, but did demonstrate that commodities and countries vary greatly in their susceptibility to import surges and price depressions. These findings can however by complemented by a number of analytical observations.

While some WTO Members have suggested that exported commodities should be excluded from SSM coverage (on the basis that, if a country is able to export a commodity to the world market it is presumably competitive enough not to need protection from competing imports), it is also conceivable that, if a country's marketing infrastructure is weak, production in remote areas might have to be exported to nearby foreign markets while the same product is imported to satisfy demand in consumption areas. It is also conceivable that local produce is sometimes exported in exchange for similar imported products of a different grade, variety or quality.

Again, while some exporting countries have expressed concern that the SSM may be applied frequently and arbitrarily on a large number of agricultural products, limiting product coverage may not be a workable or effective solution to this. A better approach may be to retain the broad

product coverage proposed by the G-33, whilst ensuring that triggers, thresholds, and remedies are able to prevent arbitrary and unreasonable application of safeguard duties. This could ensure that countries can maintain the safeguard for all the commodities they need to cover, while providing exporting countries with reassurance that their exports will only be subject to additional duties in truly problematic situations.

If, however, product coverage is eventually restricted in some way, the simulation results could allow countries to identify specific commodities that tend to be particularly vulnerable to import surges and price depressions. These can then be cross-referenced with national lists of domestically produced commodities that are important for food security, livelihood security and rural development, as well as substitute products, before being ranked and a final selection made on the basis of the permitted number of products or permitted share of total tariff lines.

Preferential trade

Although some exporting countries have proposed that imports under preferential trade agreements be excluded from calculations of volume and price averages and from the determination of whether safeguard duties could be imposed, it was unfortunately not possible to model this proposed restriction in the simulations, as import statistics could not be disaggregated by source country. It was also impossible to separate those imports that are subject to MFN tariffs from those benefiting from preferential rates. This in itself raises questions about the extent to which such an approach could be put into practice in developing countries.

However, the simulation results do provide some indication of the possible effects of this proposal. When import levels had to exceed base period import volume averages by a minimum 30 percent threshold, safeguard duties could be imposed almost as often as when this threshold was only ten percent (keeping the price threshold constant at ten percent). Because increasing the threshold would have a similar effect to excluding preferential imports from the calculation of triggers, this result suggests that access to the safeguard might not decrease significantly.

It is not correct however to infer that excluding preferential imports from base period averages and minimum trigger thresholds can be accommodated without impairing the effectiveness of the safeguard. Preferential import volumes and prices vary greatly by country and commodity, and a uniform threshold adjustment will not be able to take into account all possible scenarios.

Conclusions

Although WTO Members appear to have substantial latitude to agree to higher threshold levels, and even to lower levels of safeguard duties, without reducing either the frequency with which the SSM can be triggered or its effectiveness in bridging price gaps, this does clearly have limits. Particular attention should be paid to proposals to introduce domestic consumption requirements for the calculation of triggers, or to require maximum permitted safeguard duties to be expressed as a percentage of bound tariffs – a requirement which could be particularly problematic if a country's bound tariffs are already low. Market tests could also have a significant impact on the usefulness of the mechanism, as could a requirement that safeguard duties must not exceed Uruguay Round tariff bindings. Priority should be given to price-based remedies, given their clear superiority over volume-based measures, and the fact that the harmful effects of imports (including volume surges) are normally expressed in the form of price depressions.

A potentially less controversial six-month limit to the period for imposing safeguard duties also appears to be bearable, as would a year-end limit modelled on the SSG. Proposed adjustments in foreign exchange rates in cases of severe depreciation also do not seem to have significant effects

on the quality of the mechanism - although it would not do harm to retain them if this does not meet opposition.

Developing countries have made only modest use of the SSG, and this fact may go some way towards assuaging exporters' fears that the SSM will be abused through over-frequent use. Furthermore, since SSM duties would be effective in bridging problematic price gaps in only two out of every six "problematic" months in a year, normal historical levels of market access are unlikely to be extraordinarily impaired.

If developing countries are to use and benefit from the SSM, they need to upgrade their capacity to collect accurate data in order to be able to detect import surges and price depressions promptly, and impose safeguard duties when necessary. When considering eventual compromises in the agriculture negotiations, developing country delegates may also need to take into consideration the relative benefits to be gained from flexibility for their 'special products' and the advantages of an effective SSM.

1 BACKGROUND OF SSM

The GATT Uruguay Round Agreement on Agriculture (UR-AoA) established the first comprehensive set of rules governing international trade in agricultural products. Prior to its adoption in 1994, countries were relatively free to utilise a variety of trade barriers and trade-distorting practices both to protect their local production sectors and to penetrate foreign markets. The UR-AoA initiated what was considered a radical reform process by enhancing market access through the removal of import restrictions, gradually reducing tariffs, and reducing distortions in global markets in the form of domestic supports to local producers and export subsidies.

A major focus of reform of the UR-AoA was the previously rampant use by countries of import bans and restrictions to protect their farmers from competing imports. As an initial reform agenda, the UR-AoA mandated that such quantitative restrictions (QRs) and other non-tariff barriers on imports of agricultural products be converted into tariffs[7], although the tariffs could initially be set to levels that would provide effective protection equivalent to those extended by the QRs in the past.

After this so-called tariffication process, the corresponding starting tariffs were subjected to the tariff reduction formula prescribed for such products. Specifically, deve-loped countries were required to reduce their agricultural tariffs by an average of 36 percent over six years, with a minimum cut of 15 percent for each tariff line. Developing countries, on the other hand, were obligated to phase down their tariffs by an average of 24 percent over a longer ten-year implementation period, with each tariff line being reduced by at least ten percent.

In most cases, products which previously enjoyed QRs and other non-tariff measures, and which had to undergo a tariffication process, corresponded to the more sensitive agricultural commodities of the countries concerned. As such, they ended up with relatively high and often-times prohibitive tariff rates at the start of the UR implementation period. Perhaps in anticipation of this eventuality, the UR-AoA included an additional stipulation that a certain volume of imports of each tariffied product, called a tariff rate quota or TRQ, would be allowed to enter a country at a lower in-quota rate, and any volume in excess of such TRQ would then be assessed at the higher, regular out-quota tariff.[8]

This TRQ level was initially set to a certain percentage of the volume of annual consumption of a country of such tariffied products during a historical base period, or its average annual volume of imports of such products during the same period, whichever was higher. It would then expand in graduated degrees during the UR implementation period. The basic rationale for this two-tiered tariff arrangement was to allow for at least some minimum access[9] for imports of sensitive products while at the same time enabling the importing country to maintain some protective control, through higher tariffs, over imports in excess of the TRQs.

The UR-AoA additionally gave countries the option to further protect their sensitive sectors through so-called special safeguard (SSG) duties. These were additional duties that countries could impose on imports in excess of TRQs in the event of a significant surge in the volume, or depression in the price, of imports of the sensitive products. Notably, only products which enjoyed QR protection at the time of accession and which were subsequently tariffied in the Uruguay Round could make use of the SSG privilege. Additionally, the country had to designate such products as SSG-eligible in its schedule of commitments at the start of the UR implementation period. These safeguard duties, which could be imposed for a limited period of time, were intended to arrest the volume surge or normalise the prices of imports and in the process mitigate the disruptive effect of such imports on domestic markets and local producers. Particularly for developing countries, this contingency measure was deemed to be

critical for domestic food security and rural employment, and necessary for sectors that were considered to be unprepared for competition under more liberalised market conditions.

Available data gathered by ICTSD[10] reveals that the use of the SSG remedial measure during the UR implementation period particularly by developing countries was surprisingly tame. Only 39 World Trade Organization (WTO) member-countries secured the privilege of invoking the SSG for 6,156 tariff lines, of which about half were attributable to 23 developing coun-tries. Reports and notifications submitted to the WTO as of October 2004 indicated that only 12 countries, mostly developed, actually invoked and utilised their SSG privileges between 1995 and 2003. The EU-15, US, Japan and Poland accounted for 87 percent of all SSG usage. Only six developing countries invoked the measure during the period, albeit sparingly. The ICTSD has estimated that developing countries which had recourse to the SSG during the UR implementation period actually utilised the remedy in only one percent of the instances when they could have done so.

An analysis of the experience with SSG measures since the UR points to various reasons for the surprisingly muted use of the trade remedy by developing countries, despite their recurrent complaints against the destructive impact of imports following the removal of QRs and lowering of tariffs. For one, due to the novelty and sophistication of the SSG provision, many developing countries failed to promptly enact the necessary domestic legislation and regulations to implement their domestic SSG measures.

Even when the proper statutes were finally passed, local officials and affected sectors were often unable to take advantage of the SSG provisions due to the lack of up-to-date data on import volumes, prices, and other information needed to invoke the SSG and compute the corresponding remedial duties. In the absence of firm statistical bases for using the SSG measures, some countries opted to waive their SSG privileges instead of risking disputes and retaliatory action from their trading partners. Even where data was available, local users of imported products often resisted attempts by producers and other affected sectors to invoke the SSG and were able to convince government officials not to make use of the trade remedy.

As mentioned earlier, SSG privileges could be accorded only to products that were tariffied during the UR, and only if the country involved decided to designate such products as SSG-eligible. Hence, products with no SSG designation could not make use of the remedy even if import surges or price depressions occurred and their producers were adversely affected during the UR implementation period. Some countries opted to convert their QRs into outright tariffs or so-called "ceiling bindings" without using the tariffication formula and establishing TRQs, and therefore had no chance whatsoever to designate any product under the SSG category.[11] Ironically, least-developed countries or LDCs that were exempted from tariffication and tariff reductions similarly had no access to any SSG remedy.

Admittedly, there were cases in some developing countries when bound tariffs were high enough to prevent import surges or the entry of exceptionally cheap imports, thereby making the use of SSG measures unnecessary. In other cases when applied tariffs were unilaterally set below bound levels, these countries had the option to adjust their duties up to the bound levels to address problems arising from imports. Nevertheless, the fact remained that many other countries either simply did not have access to the SSG or were unable to successfully invoke it even when import surges and price depressions occurred.

In addition to the restrictions on the use of the SSG, the SSG modality itself was perceived to be biased against developing countries. The complicated formulas – especially those for computing price-based SSG duties – probably discouraged many government officials from developing countries from pursuing opportunities for invoking the SSG. Many developing countries also typically lacked data gathering systems that could provide timely and accurate information needed to invoke the SSG for specific tariff lines. For example, while they may have had

data on volumes and prices of vegetables in general, they normally could not disaggregate the data to get specific information on carrots in particular, and therefore could not use the SSG to address problems arising from unusually large or cheap carrot imports.

The volume SSG triggers were computed using a formula which tended to inflate the triggers, and make them harder to breach, if consumption figures were on the rise, or import volumes were historically low, or data was not available – conditions which were typical in many developing countries. Further, the remedies available under the SSG modality were often inadequate to arrest the damage done by import surges and price depressions. Volume-based SSG duties for example could not exceed one-third of the applied, and not the bound, tariff rate existing at the time of imposition.[12] Both volume and price-based SSG duties could be imposed only up to the end of the year during which they were initiated. Since SSG duties could not be imposed on imports falling within annual TRQ commitments, this meant that the remedy was generally available only in the last few months of the year, and in many cases could not be invoked during the critical harvest months in the earlier parts of the year.

These limitations and perceived weaknesses of the SSG modality in the UR led many developing countries to advocate a more responsive and useful remedial tool to address import volume surges and price depressions during the Doha Development Round negotiations. This advocacy coincided with broader attempts to steer the negotiations on trade rules towards the particular concerns of developing countries, in response to complaints that the UR rules had been biased in favour of developed countries and that the immediate gains from trade liberalisation had been captured mostly by the advanced economies. The designation of the Doha Round as a "*development round*" provided additional impetus for strengthening the application of special and differential treatment for developing countries and the introduction of new modalities that would enable them to benefit more equitably from trade and at the same time address their peculiar developmental concerns and priorities.

Among the initiatives arising from these developments was the advocacy for what was initially called a "*development box*" by a group of developing countries that included Indonesia, the Philippines, China, India and some Latin American and African countries. Although the creation of a separate box of rules and privileges for developing countries was eventually abandoned in the run up to the formulation of the Harbinson draft text on modalities in early 2003, this group nevertheless pursued its campaign for specific mea-sures that would address the particular developmental concerns of developing countries.

Among the subsequent proposals of this group was the creation of a separate set of so-called "*strategic*" (later renamed "*special*") products or SPs that would receive special treatment because of their significant contribution to a developing country's food security, rural development and poverty alleviation programs. The group augmented this with a proposal to establish an improved SSG modality, tentatively called a Special Safeguard Mechanism or SSM, which would be more responsive to the needs and capacities of developing countries in addressing import surges and price depressions. The rejection of the Harbinson draft text on modalities in 2003 spurred the group to formalise their negotiating position and led to the creation of the so-called SP & SSM Alliance. This eventually metamorphosed, during the failed WTO ministerial meeting in 2003 in Cancun, Mexico, into what is currently known as the Group of 33 or G-33 negotiating bloc in the Doha Round negotiations.

In the WTO negotiations that ensued in Geneva after the Cancun stalemate, the G-33 pursued its advocacy of the SP and SSM modalities and was successful in having them included in the July Framework Agreement in 2005, albeit in very general language. During the WTO Ministerial Meeting in Hong Kong in December 2005, the G-33 gained another step forward with negotiators agreeing to the group's demand for self-designation of SPs based on general

indicators, and the accommodation of both volume and, more importantly, price-based triggers under the SSM modality. Although the language in the ministerial declaration still left many issues and details undefined, it was clear after the Hong Kong ministerial that the G-33's proposals for SP and SSM would become an integral part of any final agreement that would be reached in the Doha Development Round.

In preparation for the Ministerial Meeting in Hong Kong in December 2005, the G-33 presented a detailed proposal (Annex A) on how to implement the SSM and address the limitations of the UR SSG to make it more responsive to the needs of, and cons-traints faced by, developing countries. The proposal stipulated, for example, that the SSM be available as a trade remedy for all listed products of all developing countries, including LDCs, even if said countries were not eligible for SSG privileges in the past, or their products had not been subjected to tariffication in the UR. Additionally, the G-33 endorsed a simpler formula and procedure for determining volume and price triggers and computing the applicable safeguard duties in the event such triggers were breached. The safeguard duties were in turn configured to provide higher levels of protection and could also be applied for a longer and more flexible period than in the case of the UR SSG.

In the specific case of the volume-based SSM proposal of the G-33, the volume trigger for a particular product was set to the average volume of imports of that product by a country during the most recent three (3) years for which data was available. The UR SSG scaling factors which were based on consumption and import growth rates were discarded in obvious response to complaints that these were biased against developing countries and tended to make the volume triggers harder to breach. If cumulative imports during an implementation year exceeded the established volume trigger by a certain threshold percentage, a country could impose an SSM duty that could either be a percentage of the current bound tariff, or as an absolute number of percentage points, whichever was higher. Three bands were proposed, with the applicable SSM duty increasing as the gap between import levels and the volume trigger grew. The initial G-33 proposal was silent on the threshold level below which SSM duties could not be invoked, and the applicable SSM duties that could be imposed in the three bands. It did, however, state that a country had the option of imposing the SSM duties for a maximum of 12 months.

The price-based SSM trigger proposal of the G-33 was similarly computed using the average CIF monthly price of imports of each product, converted into domestic currency, during the most recent three (3) years for which data was available. In response to concerns that currency depreciation would tend to make the domestic prices of imports higher, and therefore make it harder to breach the price trigger, an additional stipulation was adopted to gives countries the option to use the average exchange rate during the most recent three-year period in converting import prices to domestic currencies. This adjustment could be made if the exchange rate depreciated by a certain percentage during a recent period.

Countries would have the option of imposing a price-based SSM on a shipment-by-shipment basis, with the additional duty equivalent to the difference between the import price of each succeeding shipment and the trigger price. Alternatively, the duty could be imposed on an ad *valorem* basis equivalent to the difference between the import price of the shipment and the trigger price expressed as a percentage of the import price. If prices of subsequent shipments went down further, a country could shift from an ad *valorem* to a shipment-by-shipment SSM duty to address the price deterioration. Like the volume-based SSM duty, the price-based remedy could be imposed for a maximum of 12 months.

The original proposals to allow countries to temporarily re-impose quantitative restrictions or QRs in the event of serious volume surges or price depressions was eventually withdrawn by the G-33. Apparently, the G-33 realised that too many concessions and too much negotiating effort would have had to be expended to push for such a proposal which had very slim chances of being adopted anyway.

The G-33 proposal served as the primary basis for discussions on the SSM during the negotiations that ensued in Geneva in early 2006 after the Hong Kong ministerial meeting. Understandably, it has received negative feedback from major exporting countries which see the SSM as proposed by the G-33 as a retrogressive constraint on free trade. Specific proposals have been presented to restrict both the coverage of, and the remedies available under, the proposed modality. In turn, the SSM proposal has received increasing support from developing and least-developed countries from outside the G-33.

In April 2006, the Chair of the Special (Negotiating) Session of the WTO Committee on Agriculture issued a Reference Paper (attached as Annex B) outlining the major issues to be resolved with respect to the SSM and proffering some options in resolving certain areas of disagreement. Subsequently, on 22 June 2006, the Chair released the "Draft Possible Modalities on Agriculture" containing several options for a draft text of a new agreement on agricultural trade rules under the Doha Round. Excerpts of this draft pertaining to the SSM are appended as Annex C; excerpts include Annex E of said draft, which contains a more detailed description of the proposed SSM modality.

As in many other portions of the draft text, the sections pertaining to the SSM contained many bracketed and frequently conflicting provisions, indicating that consensus on major issues such as product coverage, triggers, and remedies had yet to be generated. Although the draft generally followed the framework proposed by the G-33, it introduced additional options for parameter settings and modalities such as higher thresholds for invoking the SSM, the phasing down of SSM tariffs if they extend beyond the end of the year, and caps on allowable remedies.

As expected, WTO member countries were not able to reach a consensus on the draft modalities, as a result of which the Doha Round negotiations were subsequently suspended. Informal talks and consultations were, however, pursued and eventually led to a resumption of the negotiations in early 2007. On 30 April 2007, Ambassador Falconer of the Committee on Agriculture released the first instalment of a document which con-tained what he called potential "centres of gravity" that could be the basis for an eventual agreement on agricultural trade reform disciplines under the Doha Round. The second instalment, which contained a section on the SSM, was issued on 25 May 2007. Excerpts of the document alluding to SSM can be seen in Annex D.

In his treatise, Ambassador Falconer noted that negotiating positions on the SSM were still too divergent for him to define a specific "centre of gravity" for the issue. He nevertheless reconfirmed the decision reached during the Hong Kong ministerial meeting to adopt both volume and price-based SSM modalities, and added that the SSM would presumably provide more flexibility to developing countries than the SSG. He noted that the "special" nature of the SSM implied that "normal" trade should not be disrupted by the measure and that the safeguard should address only genuinely "special" situations.

Falconer's paper also touched on issues involving SSM product coverage, proposals to exclude imports under preferential trade agreements in determining import volume surges or price depressions, simplification of quantity triggers, the effect of a 12-month SSM imposition period on average import levels and volume triggers in subsequent years, the proper basis for computing price triggers, the extend of thresholds for invoking the remedy, and the level of the remedies themselves.

In July 2007, a new "Draft Modalities for Agriculture" was issued by Ambassador Falconer after collating comments on his previous reference papers and communications and undertaking further consultations with negotiating parties. Paragraphs 98 to 110 of the draft refer to the SSM and are reproduced in Annex E. The document summarised what the Chair considered to be the result of "a much more constructive sense of practical engagement" on the issue. In addition to the issues and proposals he raised in his previous reference papers, Ambassador

Falconer noted the particular nature of the SSM in responding to the needs of farmers in developing countries, particularly in the areas of rural development, food security and livelihood security. He added that this would imply that SSM coverage should be limited to products that are locally produced and their substitutes. The draft included proposals that would: disallow the simultaneous application of volume and price-based SSM remedies; ensure that the triggers, remedies and mechanism were kept simple and thus easily accessible; limit SSM duties so that tariffs did not go beyond Uruguay Round bound levels except in extraordinary situations (with exemptions possible only for LDCs).

Negotiations are expected to resume in early September 2007 and urgent attempts will be made to generate a consensus before the so-called window of opportunity for concluding a round disappears later in the year. No clear conclusion is in sight yet, with many negotiating parties expressing their intent and commitment to hammer out an agreement even as they continue to express widely divergent views on the draft modalities and other key issues in the negotiations. Although the inclusion of some form of SSM modality in a final agreement is already assured, the exact configuration of such a modality and its responsiveness to the needs of developing countries is still unclear. Much will depend on how the intense and wide-ranging negotiations over a comprehensive set of trade reforms and rules eventually pan out.

2 OBJECTIVES OF THE STUDY

Although the SSM proposal has somewhat belatedly been subjected to intense and protracted debate and deliberations within the G-33 and the WTO as a whole, it is not clear whether the modalities that have been proposed so far were actually designed to address particular scenarios and contingencies prevalent in developing countries. It is possible that some of the proposals were crafted mainly in reaction to the perceived weaknesses and limitations of the UR SSG without adequately assessing whether these would in fact provide better remedies or more effectively address problematic situations in domestic markets.

Clearly, whatever is eventually agreed upon on the SSM will have varying applications to different countries even though each country will have to apply the same rules and procedures. Hence, it would be useful at this critical stage of the negotiations to simulate the effects and assess the defects and strengths of the proposed SSM modality and its variations based on country and product-specific situations. The results of such studies would provide a more factual, and perhaps more commonly acceptable, basis for determining the final configuration of the SSM modality. A thorough analysis will also increase the chances that any SSM outcome will in fact be a major improvement over the SSG modality, and will be able to address the major concerns of developing countries with respect to the potentially destructive effect of imports on their vulnerable sectors and their developmental programs and policies.

This study therefore aims to achieve the following major objectives:

a) Determination of the extent and magnitude of import surges and price depressions of agricultural imports for selected products and countries

   Various sectors in many developing countries have complained about cheap imports flooding their domestic markets and displacing local producers following the removal of QRs and lowering of tariffs since the UR. It would therefore be useful and important to verify and quantify the incidence and magnitude of such import volume surges or depressions of import prices and use the results as a basis for justifying the need for special safeguards and the SSM trade remedy. The output could also help in accumulating factual bases for determining the scope of the SSM in terms of product coverage.

b) Assessment of the relative ease by which SSM remedies could be invoked to address import surges and price depressions

   Assuming that import volume surges and price depressions are a valid concern and affect a significant range of products and countries, a further analysis can be made to gauge how easily the SSM and its variations can be invoked in such eventualities. Simulations can be undertaken to determine whether adjustments in the SSM parameters such as trigger levels, thresholds, caps, and other variables will make it easier or harder to access the SSM.

c) Assessment of the effectiveness of the SSM modality in addressing gaps between import and domestic prices that arise from, or coincide with, import surges and price depressions

   Assuming an SSM remedy is necessary and available, further analysis can determine whether such SSM modality and its variations will be effective in bridging any significant gap between domestic and import prices which may result from, or coincide with, a surge in import volumes or significant decline in import prices. Although it could be argued that the SSM is designed and intended to address the gaps only between domestic and trigger prices and between historical and current import volumes, the ultimate concern of deve-loping countries will be how such gaps affect local producers and prices

as reflected in the difference in prices between domestic and imported products. Specifically, the study will look at instances when the prices of imports plus MFN tariffs fall below domestic prices to a significant degree, and test if any additional SSM duty can be imposed and will be able to bring up the effective price of imports to within an acceptable range of domestic prices.

On the basis of these general objectives, the specific outputs of the study include recommendations on:

a) SSM product coverage;

b) Ways to improve access to the SSM trade remedy in the light of identified weaknesses of, or gaps in, the current proposals for the SSM modalities;

c) Options for improving the quality and effectiveness of the SSM trade remedy, particularly in addressing the negative effect of imports on domestic prices; and

d) Other relevant issues.

Chapter 3 below provides an explanation of the methodology used in the simulations, including a detailed description of the various parameter settings used in each simulation scenario. Chapter 4 enumerates certain limitations in the scope of the study and inferences than can be derived from the simulation results. Chapter 5 provides an overall analysis of the simulation results covering all countries and products included in the study. Finally, Chapter 6 discusses the conclusions and recommendations that can be made out of the results of the simulations.

Annex F contains the analysis and tabulated results of the simulations by country. Annex G includes the tables detailing the overall results of the simulations.

3 METHODOLOGY

A Microsoft Excel model was developed to simulate the behaviour of the SSM modality and its proposed variations using available historical data on selected products from a group of developing countries. In almost all cases, the analysis was limited to data from 2000 to 2005 so as to reflect the most recent import volume and price trends. Where available, data from earlier years were also used mainly to compute historical averages and reference figures.

As can be seen in Table 3.1, a total of 27 agricultural products from the Philippines, Fiji, Ecuador, Senegal, Indonesia, and China were included in the study. The table shows the number of data points, in the form of monthly averages for import volumes, import and domestic prices and other data that were available for each product and country. All in all, 4,044 monthly data points were used in determining the incidence of import volume surges and price depressions and the frequency of access to the SSM under various parameter settings, as explained in Sections 3.1 and 3.2 below. A relatively smaller set of 3,504 monthly data points were available for the simulations undertaken to test the effectiveness of the SSM, as explained in Section 3.3 below.

For each country and product, the following data sets were generated and used for the simulations:

a) Annual production
b) Annual utilisation, with a breakdown if available of volumes for domestic use and those for export; in cases where data was not complete, available data was used for extrapolations and estimates
c) Monthly volume of imports; if only annual figures were available, the average share of each month to annual imports during the period when monthly data was available was used to allocate the annual figure into monthly volumes
d) Monthly CIF value of imports; if only annual prices were available, these were assumed to be equivalent to monthly prices during the year
e) Monthly foreign exchange rates, used in part to convert the value of imports into domestic currency
f) Annual tariff rate quota or TRQ volume commitments if any since the UR; no adjustments were made in TRQ volumes during the simulations
g) Annual in-quota (TRQ) and out-quota bound tariff rates since the UR
h) Monthly wholesale domestic prices in area nearest entry point of imports

To the extent that necessary data was available, each of these products was subjected to about 75 simulations using different parameter settings, most of which were indicated in the Draft Special Safeguard Mechanism for Developing Country Members which was incorporated in the "Draft Possible Modalities on Agriculture" (Annex C) issued by the Chair of the WTO Committee on Agriculture (Special Session) last June 2006.

The following methodologies were used in the simulations:

3.1 Determination of the extent and magnitude of import surges and price depressions of agricultural imports

The following simulation results were generated to determine whether the selected agricultural products were in fact subjected to import surges and price depressions during the period of the study:

a) Incidence, in terms of percentage of total months covered by the study, during which the cumulative import volumes of a product exceeded the corresponding SSM volume triggers by a certain percentage

   As proposed by the G-33, the SSM volume trigger for a particular product was set

Table 3.1 Number of Monthly Data Points Used in Simulations, by Product and Country

PRODUCT	INCIDENCE/ACCESS RATES							EFFECTIVENESS RATES						
	Phil	Fiji	Ecua	Sene	Indo	Chin	Total	Phil	Fiji	Ecua	Sene	Indo	Chin	Total
Banana						48	48						48	48
Barley						48	48						48	48
Beans			48				48			48				48
Beef		72				48	120		72				48	120
Carrots	60	72					132	60	72					132
Chicken	60	72	72	72		48	324	60	0	60	72		0	192
Coconut	60						60	60						60
Coffee	60						60	60						60
Corn	60	72	72	72	72	48	396	60	0	72	72	72	48	324
Cotton						48	48						12	12
Garlic	60						60	60						60
Milk		72	72	72		48	264		0	60	72		0	132
Mutton		72				48	120		72				48	120
Onions	60	72	72	72			276	60	72	72	72			276
Palm Oil						48	48						48	48
Pork	60		72			48	180	60		60			48	168
Potato	60	72	72	72			276	60	72	72	72			276
Powder Milk		72					72		72					72
Rapeseed						48	48						0	0
Rice	60	72	72	72	72	48	396	60	72	72	72	72	48	396
Soya Oil		72				48	120		72				48	120
Soybean					72	48	120					72	48	120
Sugar	60				72	48	180	60				72	12	144
Tomato		72		72			144		72		72			144
Vege Oil			72	72		48	192			72	72		48	192
Wheat Flour		72					72		72					72
Wheat Grain		72	72			48	192		0	72			48	120
Total	660	1,008	696	576	288	816	4,044	660	720	660	576	288	600	3,504

to the average annual volume of imports of that product during the most recent three-year period prior to the year of importation for which data was available. If any of the years during the three-year reference period had zero imports, only the volumes during the years when imports were undertaken were averaged.

Cumulative monthly import volumes were then matched against the triggers, and the incidences of imports exceeding the triggers by ten percent, 20 percent and 30 percent were measured. (Note that the results from these simulations merely reflect the frequency of surges; these do not necessarily correspond to the frequency in which SSM remedies could be invoked on the basis of certain additional conditions.)

A similar analysis was done using five-year historical averages of annual imports.

b) Incidence, in terms of percentage of total months covered by the study, during which the monthly CIF import prices expressed in local currency fell below the corresponding SSM price triggers by a certain percentage

The SSM price trigger for a particular product was determined by averaging the weighted annual average price of imports of that product during the most recent three-year period prior to the year of importation for which data was available. If some of the years during the three-year

reference period contained zero import levels, only the prices during the years with positive import volumes were averaged in order to complete the analysis.

Monthly import prices were then matched against the price triggers, and the incidences of import prices falling below the triggers by ten percent, 20 percent and 30 percent were measured. As in the case of volume surges, the results do not reflect the frequency in which SSM price-based remedies could be invoked inasmuch as these are subjected to additional conditions and disciplines.

A similar analysis was done using five-year historical averages of annual import prices.

3.2 Assessment of the relative ease and frequency by which SSM remedies could be invoked to address import surges and price depressions

a) Frequency, in terms of percentage of total months covered by the study, during which the volume-based SSM modality could be invoked. Simulations were carried out using different settings for the following parameters:

   i. Thresholds for invoking the SSM remedy were set to ten percent and 30 percent of the volume trigger.[13]

      1. The volume trigger was set to the average annual import volume during the preceding three years as determined in Section 3.1.a above
      2. The volume trigger was adjusted in case the average import volume in a given three-year reference period was less than five percent of the average domestic consumption of the product during the same period. In such a case, the volume trigger was set to five percent of the average domestic consumption level during the three-year reference period. This adjustment was however made only if historical consumption data was available.
      3. Five instead of three-year reference periods were used

   ii. Using as a baseline the results arising from a ten percent threshold and with volume triggers based on unadjusted three-year averages of historical imports, further simulations were carried out:

      1. Using a July-June instead of the default January-December or calendar year as the implementation period
      2. Limiting the imposition of volume-based SSM duties to six instead of the default level of 12 months from the time of initiation[14]
      3. Limiting the imposition period further to three months
      4. Limiting the imposition of volume-based SSM duties to the end of the implementation year during which the remedy was initiated
      5. Suspending the application of the rule which prohibits the imposition of SSM duties on imports falling with TRQ commitments
      6. Applying a market test whereby volume-based SSM remedies could be imposed only if the average weighted price of imports during the preceding six months exceeded the average weighted price of imports during the same six-month period in the preceding year by at least five percent
      7. Applying the same market test but with a ten percent threshold

b) Frequency, in terms of percentage of total months covered by the study, during which the price-based SSM modality could be invoked. Simulations were carried out using different settings for the following parameters:

   i. Thresholds for invoking the SSM remedy were set to zero percent, ten percent, and 30 percent of the price trigger.[15]

1. The price trigger was set to the average of the weighted annual average import price during the preceding three years as determined in Section 3.1.b above
2. Five instead of three-year reference periods were used

ii. Using as a baseline the results arising from a zero percent threshold and price triggers based on three-year averages of historical import prices, further simulations were carried out:

1. Using a July-June instead of the default January-December or calendar year as the implementation period
2. Limiting the imposition of price-based SSM duties to six instead of the default level of 12 months from the time of initiation
3. Limiting the imposition period further to three months
4. Limiting the imposition of price-based SSM duties to the end of the implementation year during which the remedy was initiated
5. Suspending the application of the default modality whereby the average foreign exchange rate in the three years preceding the year of importation, instead of the current rate, could be used in converting import values if the domestic currency had depreciated against the import currency at any time by more than ten percent during the preceding 12 months
6. Using dollar values for imports instead of converting import values into domestic currency
7. Suspending the application of the rule which prohibits the imposition of SSM duties on imports falling with TRQ commitments
8. Applying a market test whereby price-based SSM remedies could be imposed only if the average monthly volume of imports during the preceding six months exceeded the average monthly volume of imports during the same six-month period in the preceding year by at least five percent
9. Applying the same market test but with a ten percent threshold

c) Frequency, in terms of percentage of total months covered by the study, during which either a volume or price-based SSM modality could be invoked.[16] Simulations were carried out using different settings for the following parameters:

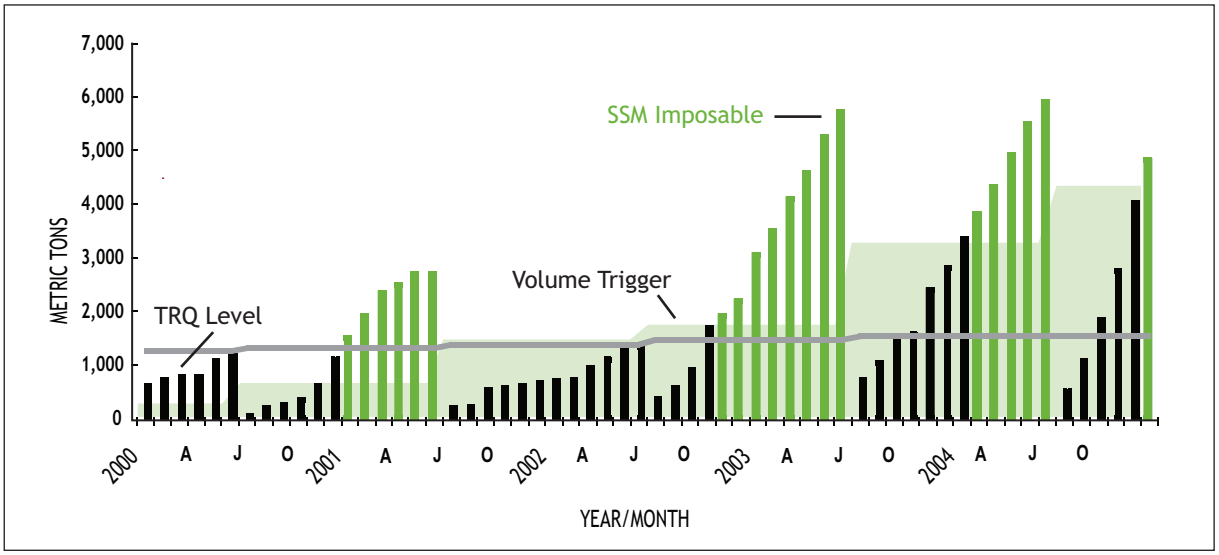
i. The threshold for invoking the price-based SSM remedy was set uniformly to ten percent while that for the volume-based SSM duty was varied from ten percent to 30 percent.

1. The volume trigger was set to the average annual import volume during the preceding three years as determined in Section 3.1.a above. Similarly, the price trigger was set to the average of the weighted annual average import price during the preceding three years as determined in Section 3.1.b above.
2. The volume trigger was adjusted in case the average import volume in a given three-year reference period was less than five percent of the average domestic consumption of the product during the same period. In such a case, and when data was available, the volume trigger was set to five percent of the average domestic consumption level during the three-year reference period.
3. Five instead of three-year reference periods were used

ii. Using as a baseline the results arising from a common ten percent threshold and volume and price triggers based on three-year historical averages, further simulations were carried out:

1. Using a July-June instead of the default January-December or calendar year as the implementation period
2. Limiting the imposition of any SSM duty to six instead of the default level of 12 months from the time of initiation

Graph 3.2.1 Frequency Plot of Volume SSM Access Rates

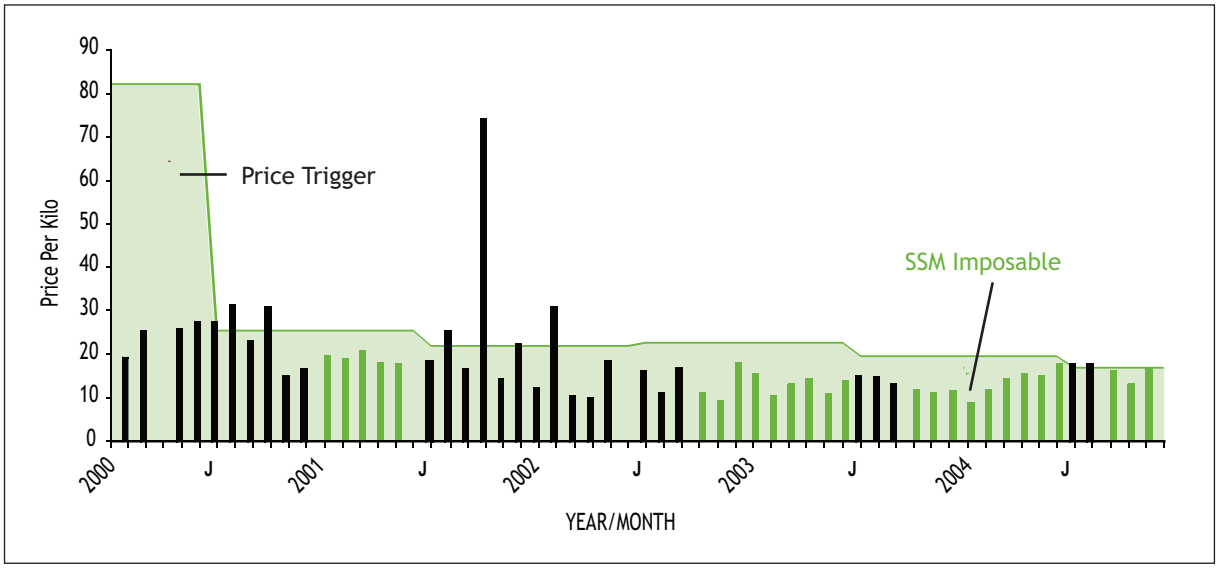


3. Limiting the imposition of any SSM duty to the end of the implementation year during which the remedy was initiated
4. Suspending the application of the default modality whereby the average foreign exchange rate in the three years preceding the year of importation, instead of the current rate, could be used in converting import values if the domestic currency had depreciated against the import currency at any time by more than ten percent during the preceding 12 months
5. Using dollar values for imports instead of converting import values into domestic currency
6. Applying a dual market test whereby volume-based SSM remedies could be imposed only if the weighted average price of imports during the preceding six months exceeded the weighted average price of imports during the same six-month period in the preceding year by at least ten percent; and, simultaneously, price-based SSM remedies could be imposed only if the average monthly volume of imports during the preceding six months exceeded the average monthly volume of imports during the same six-month period in the preceding year by at least ten percent
7. Suspending the application of the rule prohibiting the imposition of SSM duties on imports falling with TRQ commitments

Graph 3.2.1 illustrates the approach used to measure the extent to which the safeguard could be accessed under the volume trigger. The blue line represents the volume trigger, based on a three-year moving average, and the green line represents the TRQ level. The vertical bars for each month represent the cumulative volume of imports. The graph shows that when the cumulative volume of imports goes beyond the trigger level, the SSM can be imposed. These months are indicated in green. In some of the months in early 2000, the vertical bars are in black, indicating that the safeguard cannot be imposed, despite import volumes exceeding the trigger level. This is because in these months the TRQ has not yet been filled.

In graph 3.2.2, the green line represents the price trigger, using a three-year moving average, and the vertical bars represent monthly prices per kilogram. When the prices go below the price trigger, the SSM can be imposed: these months are shown in green. Again, the early months of 2000 are shown in black, even though prices are well below the trigger level, because the TRQ has not yet been filled, as shown in the previous graph.

Graph 3.2.2 Frequency Plot of Price SSM Access Rates



3.3 Assessment of the effectiveness of the SSM modality in addressing domestic price drops arising from, or coinciding with, import surges and price depressions

The final set of simulations gauged the effectiveness of the SSM trade remedy in bridging gaps between domestic and import prices which existed during the months when SSM duties could be imposed. The simulation first determined the frequency of months during which import CIF prices plus applicable out-quota MFN tariffs fell below domestic prices prevailing during the same months. A ten percent threshold[17] was used in determining whether a price gap was considered problematic or not. A month when the gap exceeded ten percent was deemed a "problematic" month for which the effectiveness of the SSM was subjected to further evaluation.

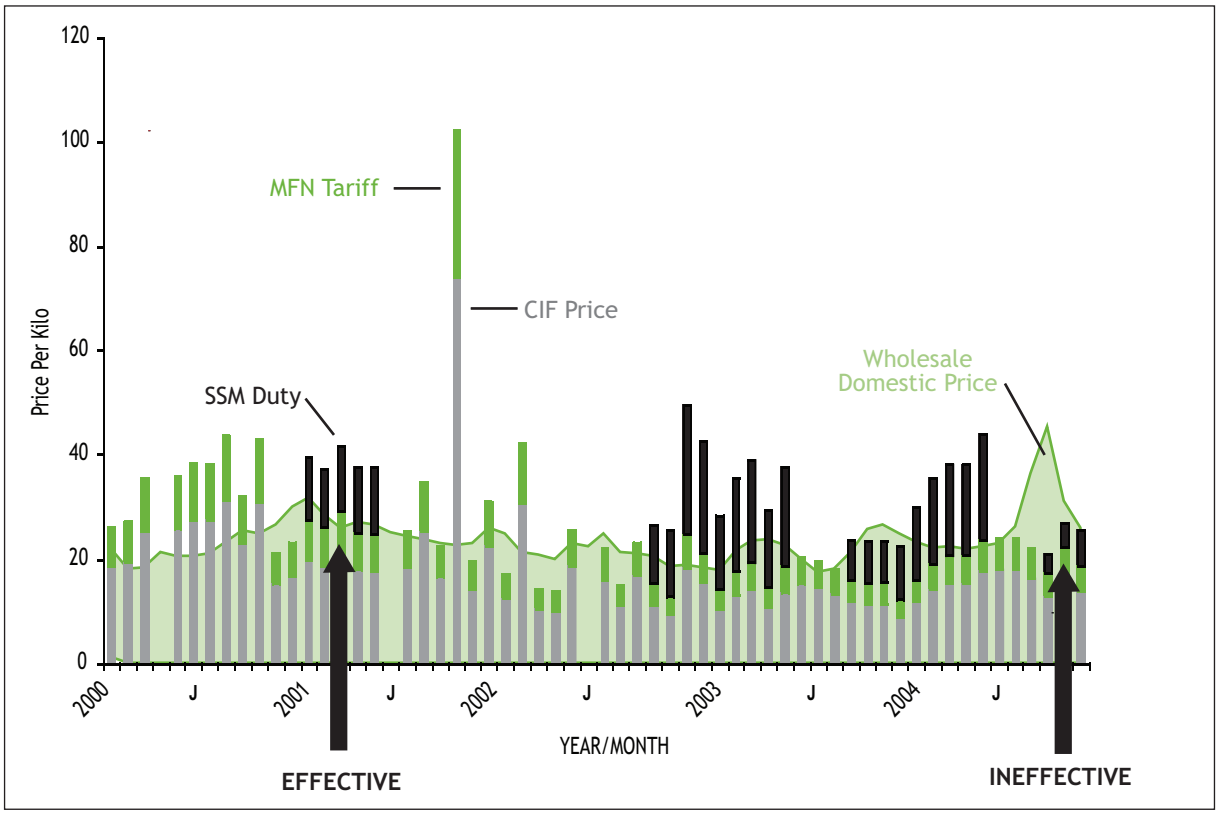
The simulation computed the percentage of the "problematic" months during which a volume or price-based SSM duty, whichever was higher, could have been invoked. Then, it determined the resultant prices of the imports during the "problematic" months when SSM could have been invoked and were assumed to have been applied, and determined whether the SSM duty was able to bring import prices (CIF prices + MFN duties + SSM duties) to within the desired ten percent threshold. The percentage of "problematic" months during which the SSM modality was effective in the bridging price gaps was then computed.

Graph 3.3.1 illustrates how effectiveness is measured. The green line represents the wholesale domestic price and the vertical bars represent the monthly import prices. On the latter, the grey segment represents the CIF price, the green segment represents the MFN tariff, and the black segment represents the additional SSM duty.

The most recent G-33 SSM proposal included a four-tier schedule of reme-dial duties in the event of an import volume surge, as shown in Table 3.3.1. No SSM duty could be imposed if cumulative imports did not exceed the trigger volume by more than five percent. Beyond that, escalating remedial duties could be applied depending on which of the next three tiers the import percentage fell into. Developing countries also had the option to impose duties equivalent to a certain percentage of the prevailing bound tariff, or set their SSM duty to absolute percentage points, whichever was deemed more appropriate.

In the case of the price-based SSM, the G-33 proposed a zero threshold; i.e., the trigger was breached when the CIF price of imports fell below the trigger. The additional duty was simply the difference in prices, and this

Graph 3.3.1 Frequency Plot of SSM Effectiveness Rates



specific amount was subsequently applied as a shipment-by-shipment SSM duty to each succeeding shipment. Alternatively, a country could compute the *ad valorem* tariff equivalent of the shipment-by-shipment duty at the time of initiation and apply this against the CIF price of succeeding imports.

The G-33 SSM additionally proposed that a country could shift from an *ad valorem* to a shipment-by-shipment remedy if prices of subsequent shipments continued to fall. However, this option could not be accommodated in the model since the simulation used monthly averages which were not broken down on a per-shipment basis. Accordingly, only *ad valorem* price-based SSM duties were used in the simulations.

The SSM Annex of the June 2006 draft text of agriculture modalities (Annex C) contained several bracketed versions of the schedule of remedial SSM duties, of which the matrix shown in Table 3.3.2 appeared closest to the original

Table 3.3.1 G–33 SSM Proposed Schedule of Remedial Tariffs

Cumulative Imports (M) as % of Trigger Volume			Volume SSM Duty (whichever is higher)	
			As % of Bound Tariff	As Absolute % Points
	M <=	105%	0%	0%
105%	< M <=	120%	50%	20%
120%	< M <=	150%	75%	25%
150%	< M		100%	30%
CIF vs. Trigger Price			Price SSM Duty	
CIF >= Trigger			0	0
CIF < Trigger			Trigger - CIF Price	Trigger - CIF Price CIF Price

Table 3.3.2 G–33 SSM Proposed Schedule of Remedial Tariffs Based on June 2006 Draft Modalities Text

Cumulative Imports (M) as % of Trigger Volume			Volume SSM Duty (whichever is higher)	
			As % of Bound Tariff	As Absolute % Points
	M <=	105%	0%	0%
105%	< M <=	110%	50%	40%
110%	< M <=	130%	75%	50%
130%	< M		100%	60%
CIF vs. Trigger Price			Price SSM Duty	
CIF >= Trigger			0	0
CIF < Trigger			Trigger – CIF Price	Trigger - CIF Price CIF Price

G-33 proposal. Although the thresholds between ranges were tightened, the volume-based remedies in terms of absolute percentage points were effectively doubled. The price-based SSM modalities were, however, retained.

For purposes of consistency, this revised schedule of remedial SSM duties as enumerated in the June 2006 draft modalities was used as the baseline set of parameter settings for the simulations on the effectiveness of the SSM modality.

Additionally, the following default settings were used:

a) A calendar year (January-December) was used as the implementation period

b) Both the volume and price triggers were set to the corresponding averages during the preceding three years as determined in Sections 3.1.a and 3.1.b above

c) The average foreign exchange rate in the three years preceding the year of importation, instead of the current rate, was used in converting import values if the domestic currency had depreciated against the import currency at any time by more than ten percent during the preceding 12 months

d) Imports were valued in domestic currencies

e) No caps or limits were applied on SSM duties

f) In cases where both a volume and a price-based SSM duty could be applied, the higher of the two was chosen

g) Similarly, in the case of the volume-based SSM, the higher of the remedies expressed as a percentage of bound tariffs or in the form of absolute percentage points, converted into *ad valorem* tariff rates, was selected

h) No SSM duty could be applied on imports falling within TRQ volume commitments; annual TRQ volume commitments were assumed to be the same as in the UR

i) SSM duties could be retained for a maximum of 12 months starting from the month of initiation; if a higher SSM duty could be applied before the end of the imposition period, it would be immediately imposed and a new 12 month imposition period would begin using the higher duty

j) The simulations used data starting from year 2000 up to the latest year where complete data was available; data from previous years, when available, were used to compute triggers and other reference parameters

k) The bound out-quota tariff rate for each product in year 2000 was set to the product's tariff rate at the end of the UR implementation period. Thereafter, it was reduced over a ten-year period in equal annual instalments based on the following G-20 proposal:

   i. If less than 30 percent, total reduction would be 25 percent;

   ii. If greater than 30 percent but less than 70 percent, reduction would be 30 percent;

Table 3.3.3 Schedule of Remedial Tariffs Using Higher Thresholds

Cumulative Imports (M) as % of Trigger Volume			Volume SSM Duty (whichever is higher)	
			As % of Bound Tariff	As Absolute % Points
	M <=	115%	0%	0%
115%	< M <=	130%	50%	40%
130%	< M <=	150%	75%	50%
150%	< M		100%	60%
CIF vs. Trigger Price			Price SSM Duty	
CIF >= 85% of Trigger			0	0
CIF < 85% of Trigger			Trigger – CIF Price	Trigger - CIF Price CIF Price

iii. If greater than 70 percent but less than 130 percent, reduction would be 35 percent; and

iv. If more than 130 percent, reduction would be 40 percent.

LDCs, however, would not be required to make any tariff cuts.

From the base scenario using the default parameter settings, the following additional simulations were undertaken:

a) Only volume-based SSM remedial duties were allowed, so as to gauge the effectiveness of volume-based remedies independent of price-based remedies

b) Only price-based SSM remedies were allowed

c) A higher threshold of 15 percent for imposing both volume and price-based remedies was used, as shown in Table 3.3.3

d) Even higher thresholds were used, as shown in Table 3.3.4

e) Higher volume-based remedial duties (double the base rates) were applied while keeping the thresholds to base levels, as shown in Table 3.3.5

f) Lower volume-based remedial duties (one-half of base rates) were applied, while keeping the thresholds to base levels, as shown in Table 3.3.6

g) Using the base-level schedule of remedial tariffs, price-based modalities were applied while volume-based remedies were limited to percentages of bound tariffs (while

Table 3.3.4 Schedule of Remedial Tariffs Using Very High Thresholds

Cumulative Imports (M) as % of Trigger Volume			Volume SSM Duty (whichever is higher)	
			As % of Bound Tariff	As Absolute % Points
	M <=	130%	0%	0%
130%	< M <=	150%	50%	40%
150%	< M <=	175%	75%	50%
175%	< M		100%	60%
CIF vs. Trigger Price			Price SSM Duty	
CIF >= 70% of Trigger			0	0
CIF < 70% of Trigger			Trigger – CIF Price	Trigger - CIF Price CIF Price

Table 3.3.5 Schedule of Remedial Tariffs Using Higher Remedies

Cumulative Imports (M) as % of Trigger Volume			Volume SSM Duty (whichever is higher)	
			As % of Bound Tariff	As Absolute % Points
	M <=	105%	0%	0%
105%	< M <=	110%	100%	80%
110%	< M <=	130%	150%	100%
130%	< M		200%	120%
CIF vs. Trigger Price			Price SSM Duty	
CIF >= Trigger			0	0
CIF < Trigger			Trigger – CIF Price	Trigger - CIF Price / CIF Price

suspending the possibility of remedies in the form of percentage points), as shown in Table 3.3.7

h) Using the base-level schedule of remedial tariffs, only volume-based remedies in terms of percentage points were used, as shown in Table 3.3.8

i) Allowable volume or price-based SSM duties were capped at 50 percent of bound tariffs

j) Allowable SSM duties were limited to a maximum of 50 percentage points

k) Allowable SSM duties were limited to the difference between the current bound tariff rate and the bound tariff at the start of the simulations; i.e., Doha starting rate

l) A dual market test was applied whereby volume-based SSM remedies could be imposed only if the weighted average price of imports during the preceding six months exceeded the weighted average price of imports during the same six-month period in the preceding year by at least 10 percent; and, simultaneously, price-based SSM remedies could be imposed only if the average monthly volume of imports during the preceding six months exceeded the average monthly volume of imports during the same six-month period in the preceding year by at least 10 percent

m) A July-June period instead of the default calendar year was used as the implementation period

Table 3.3.6 Schedule of Remedial Tariffs Using Lower Remedies

Cumulative Imports (M) as % of Trigger Volume			Volume SSM Duty (whichever is higher)	
			As % of Bound Tariff	As Absolute % Points
	M <=	105%	0%	0%
105%	< M <=	110%	25%	20%
110%	< M <=	130%	35%	25%
130%	< M		50%	30%
CIF vs. Trigger Price			Price SSM Duty	
CIF >= Trigger			0	0
CIF < Trigger			Trigger – CIF Price	Trigger - CIF Price / CIF Price

Table 3.3.7 Schedule of Remedial Tariffs Using Only Percentages of Bound Tariffs

Cumulative Imports (M) as % of Trigger Volume			Volume SSM Duty (whichever is higher)	
			As % of Bound Tariff	As Absolute % Points
	M <=	105%	0%	0%
105%	< M <=	110%	50%	0%
110%	< M <=	130%	75%	0%
130%	< M		100%	0%
CIF vs. Trigger Price			Price SSM Duty	
CIF >= Trigger			0	0
CIF < Trigger			Trigger – CIF Price	Trigger - CIF Price / CIF Price

Table 3.3.8 Schedule of Remedial Tariffs Using Only Absolute Percentage Points

Cumulative Imports (M) as % of Trigger Volume			Volume SSM Duty (whichever is higher)	
			As % of Bound Tariff	As Absolute % Points
	M <=	105%	0%	0%
105%	< M <=	110%	0%	40%
110%	< M <=	130%	0%	50%
130%	< M		0%	60%
CIF vs. Trigger Price			Price SSM Duty	
CIF >= Trigger			0	0
CIF < Trigger			Trigger – CIF Price	Trigger - CIF Price / CIF Price

n) The maximum period for imposing SSM duties was reduced from 12 to 6 months

o) SSM duties could be retained only up to the end of the year

p) The application of the rule prohibiting the imposition of SSM duties on imports falling within TRQ commitments was suspended

q) The foreign exchange adjustment modality was suspended; under this proposal, the average foreign exchange rate in the three years preceding the year of importation, instead of the current rate, could be used in converting import values if the domestic currency had depreciated against the import currency at any time by more than ten percent during the preceding 12 months

r) The US dollar, instead of the domestic currency, was used in pricing imports while domestic prices were converted to US dollars

The overall outcomes of the foregoing simulations are summarised and analysed in Chapter 5. The detailed explanation of the results for each country can be seen in Annex F.

4 LIMITATIONS

As mentioned earlier, the simulations utilised in this study were based exclusively on available historical data. No attempt was made to forecast prices, demand, consumption and other variables and use these to project SSM behaviour in future years. Neither did the model consider how import volumes and prices would have reacted to an imposition of SSM duties. The only exception was the application of presumed Doha Round starting tariff rates and tariff reduction schedules based on a G-20 proposal. However, historical data was still used to test the reaction of the SSM to such tariff rates. In general, therefore, the findings and conclusions from this study are based on the presumption that the movement in the near future of import volumes, prices, exchange rates and other variables relevant to the SSM modality will essentially be the same as in the historical period used for the simulations.

Average import volumes and prices for each month were used instead of data for each individual shipment in determining whether triggers were breached and what SSM duties could be imposed. These monthly figures were assumed to be single transactions or shipments for each month. In reality, individual shipments within each month could vary in terms of volume and price and may or may not necessarily trigger the SSM, even though averages for the month may indicate a breach. However, in the absence of data on individual shipments, monthly averages were considered to be close approximations of actual events and conditions within each given month.

Among the six countries covered by the study, only the Philippines, Ecuador and China had products with tariff rate quota (TRQ) commitments. No distinction or disaggregation was made in the study between in-quota (TRQ) and out-quota imports, although most imports for products with TRQ commitments probably came in at the lower in-quota tariffs. It could be argued that under current rules, safeguard measures like SSM could not be applied anyway to imports falling within TRQ commitments. Also, only bound tariffs were taken into consideration even though applied tariffs in some countries were lower, considering that it would be more logical for countries to raise their applied rates to bound levels before contemplating the use of SSM remedies. On the basis of these assumptions, domestic prices were compared to CIF import prices plus out-quota bound MFN tariffs when gauging the need for, and effectiveness of, SSM remedies.

Because of the lack of data, the analysis was limited either to relatively general product categories or to specific tariff lines for which data was available. In the first case, the simulation had to rely on data on import volumes and prices which were composites of several tariff lines under a general tariff heading. For example, imports of chilled, frozen or various cuts of chicken in some countries were lumped together, and the consolidated import data was then matched with domestic output and wholesale prices of specific products like dressed chicken.

In the second case, the import data was confined to a particular sub-product instead of the general product category. This was done in the case for example of coconut in the Philippines, for which there were many by-products, sub-products and substitutes, thus making the SSM analysis problematic. Hence, refined coconut oil was chosen as the particular product to be covered by the study and evaluated in relation to imports of palm oil as a substitute.

To the extent possible, data on imports were compared to domestic prices for essentially the same product and tariff lines. In some cases, however, where data sources were different or tariff line-specific data was not completely available, this correspondence may not have been strictly followed.

The SSM simulation was essentially confined to products for which data was made available or could be reasonably extrapolated from available information. The serious difficulties

encountered in securing the required data sets were such that only six countries could be accommodated in the study after more than a year of data gathering efforts. Attempts to complete the data series for products from Bangladesh, Honduras, Kenya, Nigeria, Tanzania and Uganda eventually proved futile, or data was provided at too late a stage for these countries to be included in the simulations. Given the limited scope of the simulations, any resultant findings should be treated with caution and should be considered as primarily indicative instead of conclusive. As more data becomes available in the future, efforts should be taken to include them in the simulations so as to incorporate a more representative sample and provide added credibility to the results. The Excel model developed for this exercise can easily accommodate such additional data.

5 OVERALL RESULTS

5.1 Extent of Volume Surges and Price Depressions

In general, the commodities covered by the study were only mildly subjected to frequent and severe volume surges and price depressions.

5.1.1 Incidence and Severity of Volume Surges

Table G1 shows that imports of covered commodities exceeded the three-year moving average of import volumes by at least ten percent in an average of 16 percent of the months covered by the study. As can be seen in Figure 5.1, cotton, coffee, wheat flour, coconut and tomatoes registered import surge incidence rates of 25 percent and above, while beef, mutton, bananas, and rapeseed did not appear to be particularly susceptible to import volume surges with incidence rates not exceeding five percent.

The incidence of import surges with a magnitude of at least ten percent increased slightly to 17 percent of total months if five instead of three-year historical moving averages of import volumes were used as reference points. This implies that a longer time span for computing averages tended to reduce the averages and increase the relative incidence of surges.[18] Beef and onions registered large increases in incidence rates, while wheat grain, and powdered milk in particular, reacted in the opposite direction as a result of this adjustment.

The overall incidence of import surges declined from 16 percent to 13 percent if the threshold for exceeding three-year averages was raised from ten percent to 20 percent. In turn, monthly import volumes exceeded the annual averages by 30 percent or more in only 11 percent of the months covered by the study. In general, the commodities with relatively high baseline incidence rates also exhibited the highest resiliency to increasing thresholds, indicating that the import surges that afflicted them were not only comparatively frequent but also characteristically severe. Notably, the number of commodities with import surge incidence rates of five percent and below increased only slightly from four to seven when the threshold was raised from ten percent to 30 percent. In turn, only four commodities (coconut oil, coffee, cotton and wheat flour) remained with incidence rates of at least 20 percent at the 30 percent threshold level, compared to ten when only surges of at least ten percent over three-year averages were counted.

On a country basis, the Philippines came out with the highest incidence rate of 19 percent when using three-year averages and a ten percent threshold, while Indonesia registered the lowest result. Table G2 and Figure 5.2 show that the Philippine products also appeared to be subjected the most to severe import surges, with the incidence rate declining only marginally to 16 percent when a 30 percent threshold was applied.

5.1.2 Incidence and Severity of Price Depressions

Table G3 reveals that, in general, price depressions occurred more frequently than volume surges for the commodities included in the simulations. Overall, monthly CIF import prices converted to local currencies were at least ten percent lower than three-year historical price averages in 21 percent, or about one out of every five, of the months covered by the study. Figure 5.1 shows that onions, coffee, corn, carrots, beans and coconut registered incidence rates of 30 percent and above, with coffee and onions topping the list with 47 percent. In turn, price depressions for barley, beef, cotton, mutton, palm oil, soybeans and wheat grain occurred in only five percent or less of the time.

Fourteen out of the 27 commodities reflected changes in incidence rates when five instead of three-year import price averages were used as a reference point. However, since most of

Figure 5.1 Incidence of Import Surges and Price Depressions, by Commodity and by Magnitude

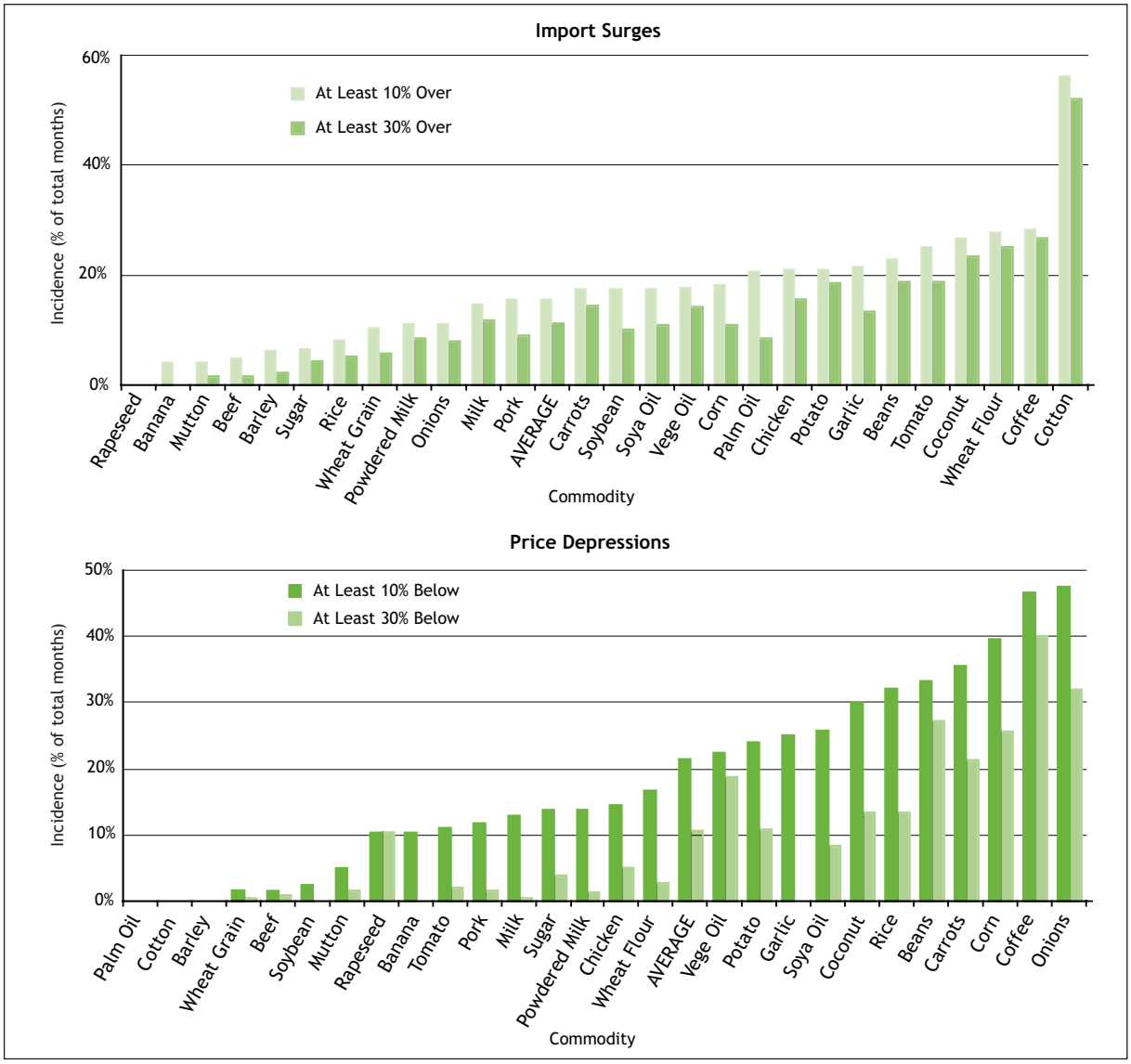
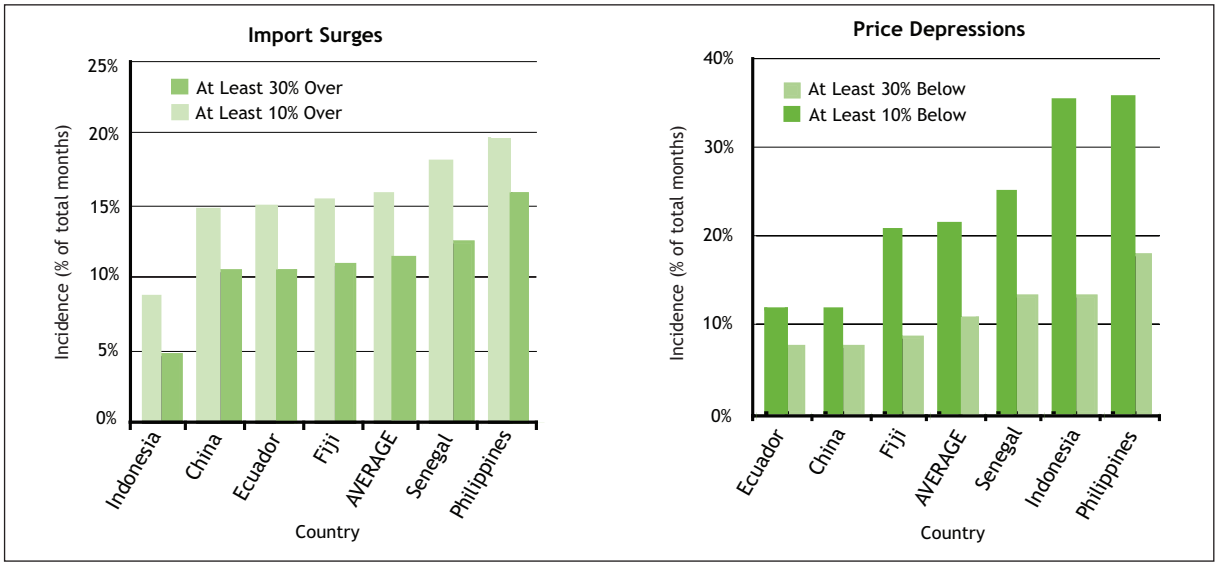


Figure 5.2 Incidence of Import Surges and Price Depressions, by Country and by Magnitude



the changes were minor, the overall rate stayed at 2 percent. As noted earlier however, the results may not be conclusive because the lack of complete price data series for a significantly large number of commodities limited the ability of the simulation model to compute true historical averages.

The incidence of price depressions tended to react more sharply to increases in thresholds compared to the case of volume surges. Only 16 percent of the months exhibited price depressions of at least 20 percent below three-year import price averages. A further adjustment of the threshold to 30 percent resulted in a virtual halving of the incidence rate to 11 percent. Of the nine commodities mentioned earlier with incidence rates of at least 20 percent under a 10 percent threshold, only four saw their incidence rates falling below 20 percent when the threshold was raised to 30 percent. However, the number of commodities with incidence rates of five percent and below increased from seven to 16 when the same adjustment was made. These results imply that the price depressions that affected the covered commodities were comparatively mild although they were more frequent than volume surges.

Among the countries covered by the study, Figure 5.2 shows that the Philippines, which encountered the most import volume surges, also registered the highest incidence of price depressions at 36 percent, followed by Indonesia with 35 percent. Table G4 in turn reveals that Ecuador and China appeared to be the least susceptible to price depressions, with incidence rates of only 12 percent when using a ten percent threshold. Notably, these two countries had higher incidences of import volume surges than price depressions. They also registered the lowest incidence rates for price depressions – seven percent when the threshold was raised to 30 percent and five-year averages were utilised.

The Philippine commodities also appeared to have experienced the most severe price depressions, with such situations still occurring frequently in 18 percent of the months even when only the months when import prices were lower by at least 30 percent compared to three-year averages were counted.

5.2 Accessibility of Safeguard Measures

5.2.1 Access to Volume–Based SSM at Various Parameter Settings

On average, the commodities covered by the study had access to a volume-based SSM remedy in 29 percent of months covered if volume triggers were set to the moving three-year historical average[19] of import volumes, and SSM duties could be imposed only if import volumes exceeded the triggers by more than ten percent. Table G5 and Figure 5.3 show that 14 of the 27 commodities registered access rates equal to, or more than, the average, with tomatoes, soybeans, garlic, carrots and corn having the opportunity to make use of SSM remedies in more than 4 percent of the months. In comparison, the access rates of sugar, barley, wheat grain and rapeseed did not exceed ten percent.

Access rates tended to decline if volume triggers were adjusted to five percent of three-year average historical domestic consumption in years when the three-year average import volumes fell below the same consumption average. Table G5 shows that overall access to the SSM fell from 29 percent to 21 percent of months, with the upper adjustment in triggers affecting carrots, beans, potatoes and pork the most. On the other hand, 15 of the 27 commodities appeared to be unaffected by this adjustment.

If a five instead of three-year unadjusted average was used, the percentage of months with access to SSM volume-based duties improved to 32 percent. Soybeans and wheat flour gained the most, with their access rates jumping by more than 30 percent. On the other hand, sugar, mutton, carrots, and powdered milk in particular,

saw their access to SSM falling as a result of this parameter change. Eleven of the 27 commodities appeared not to have been affected at all.

As in the case with three-year averages, adjusting the volume triggers to five percent of five-year consumption averages in cases where imports were less than such averages resulted in a decline in overall access rates to 25 percent. However, this result was better than the outcome when three-year adjusted triggers were applied, validating earlier indications that a longer time span for computing averages tended to improve access to volume-based remedies.

Table G5 further shows that the access rate went down from 29 percent to 20 percent overall, or by about one-third, when the threshold for invoking volume-based SSM remedies was raised from ten percent to 30 percent; i.e., safeguard duties could be imposed only when the import volumes exceeded the trigger by more than 30 percent. Bananas and carrots were the most severely affected by this adjustment. Tomatoes and garlic remained with access rates still exceeding 40 percent, indicating that they were the most susceptible to severe import surges. As in the case when a ten percent threshold was used, access rates when applying a 30 percent threshold tended to decline when triggers were adjusted in years when imports were less than five percent of consumption averages. They also improved slightly when five instead of three-year averages were applied.

Table G6 and Figure 5.4 show Senegal enjoying the highest access rate of 43 percent to volume-based SSM duties among the six countries covered by the study when a ten percent threshold was applied and three-year averages were used to compute volume triggers. China in turn had access to the remedy in only 13 percent of the months. Adjusting the triggers upwards in years when import volumes were considered minimal affected Fiji and Indonesia the least, while Senegal's access rate declined the most in percentage terms.

Indonesia reaped the highest gain when five instead of three-year averages were applied, but it also incurred the largest percentage drop in access rates when the threshold level was raised from ten percent to 30 percent. Still, it retained the highest access rate of 19 percent, together with Senegal, when three-year adjusted triggers were used and enjoyed the best access to the SSM when five-year triggers were applied, whether adjusted or unadjusted. In turn, China uniformly had the lowest access rate to volume-based SSM remedies under any trigger and threshold setting.

Table G7 shows the trends in access rates for volume-based SSM under additional parameter settings. If a July-June period instead of the calendar year were used as the implementation period, access rates improved significantly from the baseline result of 29 percent to 38 percent. Of the 27 commodities covered, only carrots, palm oil, beans, corn, and particularly powdered milk and cotton registered declines in access rates. All the rest, and especially coffee, bananas and mutton, gained from this parameter change.

Reducing the maximum period for imposing SSM duties from the baseline level of 12 to six or three months, or only up to the end of the year, had perceptibly negative effects on access to the volume SSM. Overall, the availability of the SSM declined from 29 percent to 20 percent if the remedial duties were allowed to be imposed for a maximum of only six months. Nineteen of the 27 commodities experienced varying degrees of reduction in access rates with powdered milk and soybeans being affected the most.

The availability of SSM remedies declined further to 15 percent if the imposition period was limited to three months. Coffee, palm oil, cotton and barley surprisingly remained unaffected by this change, but the number of affected commodities increased to 21. Soybeans continued to be the most severely affected although they still ended up with a relatively high access rate of 23 percent. Coconut registered the highest access rate under this scenario, at 30 percent.

Surprisingly, overall access rates when SSM remedies were allowed only up to the end of

Figure 5.3 Baseline Access Rates (% of Months) to Individual SSM Remedies, by Commodity

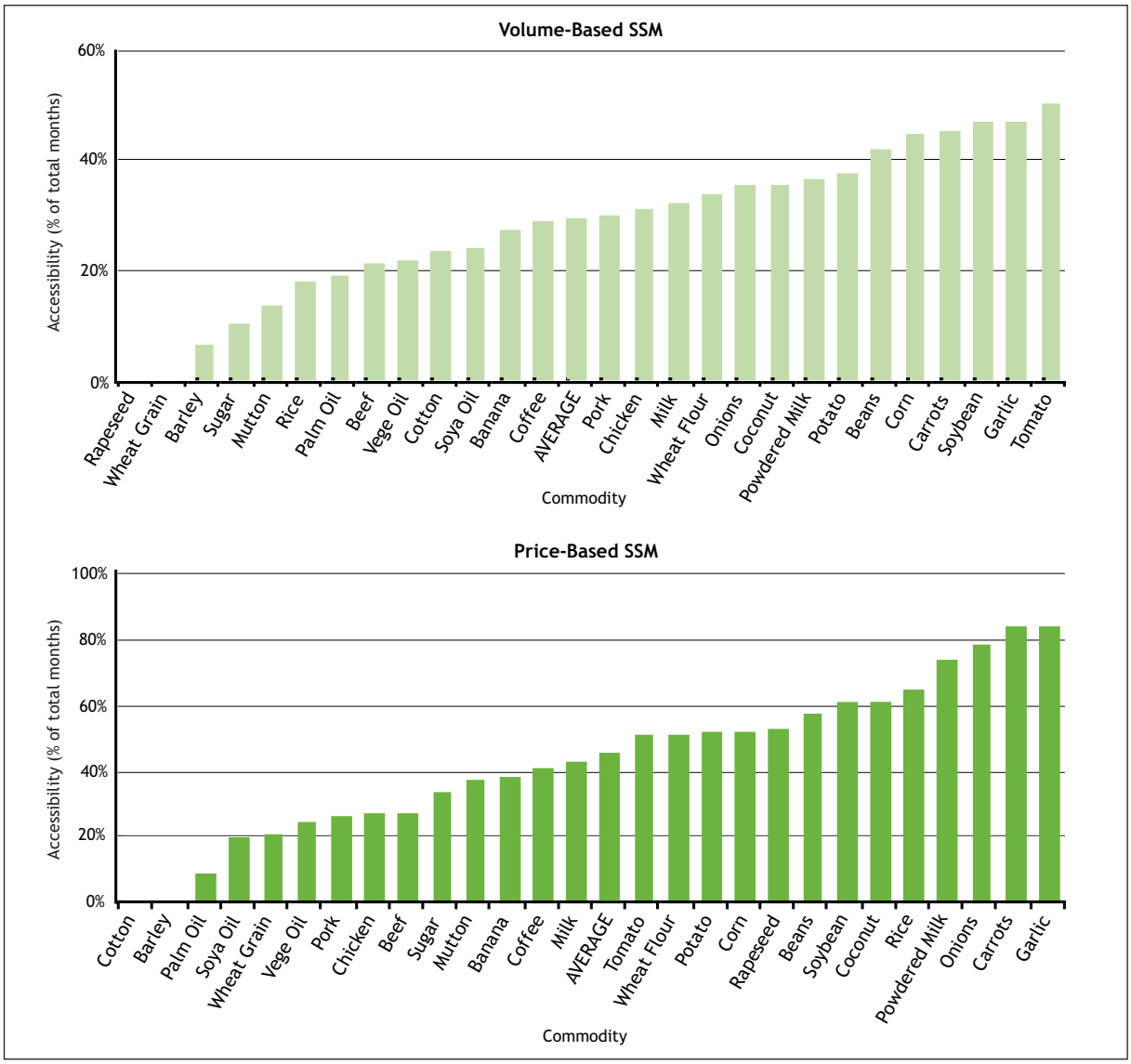
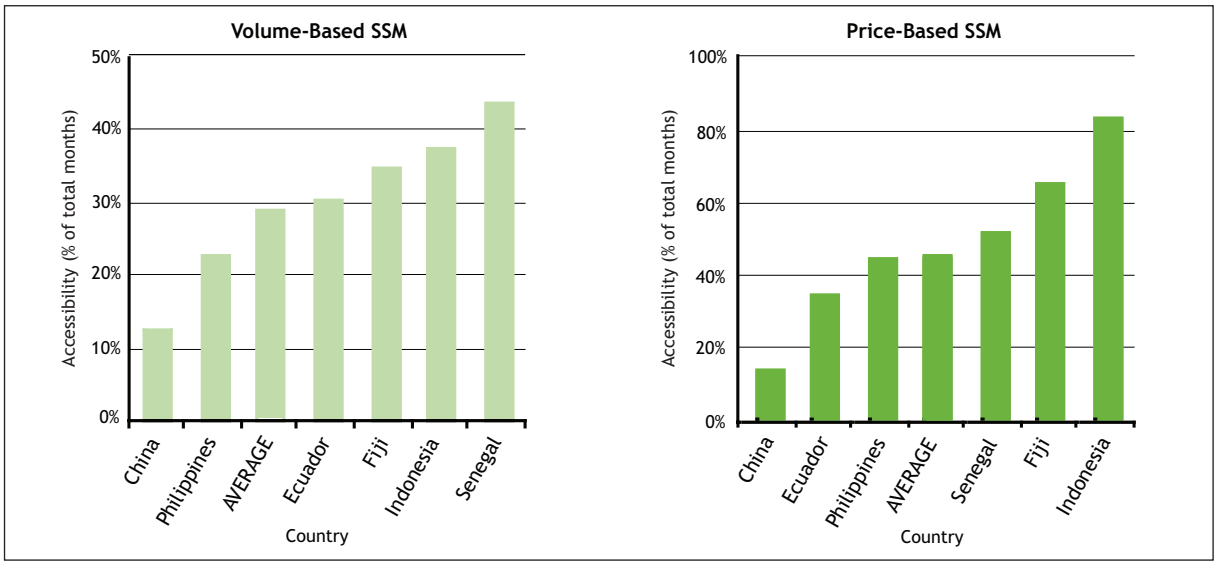


Figure 5.4 Baseline Access Rates (% of Months) to Individual SSM Remedies, by Country



each year (as in the SSG) matched the results when a maximum six-month imposition period was used, and were better than when a three-month limit was applied. This parameter setting in fact provided better access for eight commodities, and particularly bananas, when compared to the results under a six-month limit. On the other hand, 12 of the 27 commodities yielded inferior results when applying the end-of-year modality.

Only the Philippines, China and Ecuador have had TRQ commitments since the Uruguay Round. Nevertheless, overall access rates jumped significantly from 29 percent to 35 percent if safeguard duties were allowed to be imposed even on imports falling within TRQ levels. Cotton and palm oil in particular saw their access rates rising by 40 percentage points or more while ten other commodities experienced varying degrees of improvement in access rates.

In contrast, applying a market test on the use of volume-based SSM duties led to a drastic decline in the average access rate from 29 percent to only nine percent. Under said market test, the use of volume-based SSM remedies was disallowed in cases where the average monthly prices of imports during the preceding six months were within five percent of corresponding averages in the same period in the previous year. Soybeans and tomatoes were among the most severely affected, with their access rates going down by more than 40 percentage points. Access rates for barley, vegetable oil and bananas dropped to zero.

The availability of the volume-based SSM went down further to seven percent if the market test threshold was raised from a five percent to a ten percent deviation from historical prices. Sugar and beef joined the group of commodities whose access rates declined to zero. Only seven commodities remained with access rates exceeding ten percent, with beans topping the list with a residual rate of 25 percent.

On a country basis, all countries except Ecuador improved their access rates when a July-June instead of a calendar year implementation period was applied. Table G8 shows that Senegal gained the most with its access to SSM improving from 43 percent to 65 percent of total months. It also enjoyed the highest residual access rate when the imposition period for SSM duties was reduced from 12 to 6 or 3 months. China, in turn, characteristically had the lowest access under the various settings for imposition periods.

Understandably the Philippines and China, and to a much lesser extent, Ecuador, gained the most when the restrictions on the application of SSM duties on TRQ imports were suspended. In turn, China, and particularly Indonesia, suffered the most when market tests were imposed. The Philippines and Fiji appeared to be the least affected although their access rates still dropped to ten percent when a ten percent threshold was applied in the market test.

5.2.2 Access to Price–Based SSM at Various Parameter Settings

Access to price-based SSM remedies was conspicuously better than that to volume-based SSM duties. Table G9 shows that price-based SSM remedies could have been invoked in an average of 45 percent of the months under the baseline scenario where the threshold was zero percent; i.e., SSM duties could be imposed immediately when import prices fell below the three-year average price trigger. Figure 5.3 shows that carrots, garlic and onions enjoyed access rates exceeding 75 percent while the remedy could have been applied to palm oil, barley and cotton less than ten percent of the time.

Overall access rates declined slightly from 45 percent to 43 percent if five instead of three-year averages[20] were used to compute price triggers. Sixteen of the 27 commodities covered registered drops in their access rates, with soybeans and mutton being the most seriously affected. In turn, the parameter change did not affect eight commodities, while coffee, soya oil, and to a lesser extent, corn gained in terms of the availability of price-based SSM remedies.

The overall access rate declined from 45 percent to 36 percent if a higher 10 percent threshold was applied, and went further down to 22 percent at the 30 percent threshold level. Soybeans encountered the largest decline with their access rate dropping from its baseline level of 60 percent to zero when only price depressions exceeding 30 percent of triggers were considered. Bananas and palm oil also ended up with zero access rates although they started from lower levels. At the other extreme, soya oil, rapeseed and coffee essentially maintained their access to price-based SSM despite the higher threshold, confirming the findings on the severity of import price depressions for these commodities in Table G3. Twenty of the 27 commodities saw their access rates declining by more than 30 percent over their corresponding baseline levels when the 30 percent threshold was imposed.

Overall access rates did not seem to be significantly affected if five instead of three-year price averages were used as triggers under higher threshold levels. Onions, wheat flour and pork grained the most from this adjustment while the access rate for corn dropped by the largest magnitude of 13 percentage points.

On a per country basis, Table G10 and Figure 5.4 show that Indonesia registered the highest access rate for price-based SSM remedies, with its commodities having the opportunity to avail of the remedy in 82 percent of the months covered when applying a zero threshold and using three-year price averages as triggers. Indonesia still ended up with the highest access rate at the 30 percent threshold level, although the availability of the SSM remedy declined to only 33 percent. China, in turn, had the lowest access rate of 13 percent when a zero threshold was applied, which in turn declined to only 3 percent when only the months when import prices fell more than 30 percent below trigger prices were considered. All countries except China ended up with residual access rates exceeding 20 percent when the threshold was raised to 30 percent and three-year price averages were used as triggers.

Additional information from Table G9 reveals that overall access rates for SSM price-based duties would have improved from 45 percent to 52 percent of total months if a July-June implementation period was used instead of a calendar year. Access rates for coffee more than doubled to 90 percent while those for barley rose from zero percent to 31 percent. However, corn, palm oil, powdered milk and especially soybeans reacted negatively to such a parameter change. Table G10 shows that all countries improved their access rates in such a scenario except for Indonesia which saw its overall rate decline from 82 percent to 73 percent.

Understandably, access to the price-based SSM declined when the maximum period for imposition was reduced from the G-33-proposed 12 months to only six or three months, or when the Uruguay Round modality of allowing safeguard duties only up to the end of the year was applied. When imposing a six-month limit, access rates dipped by 12 percent on the average to 40 percent, with rapeseed, tomatoes and cotton experiencing the largest decline. Surprisingly however, soya oil and bananas actually improved their access rates in this scenario, apparently because of the more frequent changes of safeguard duty levels, and the consequent resetting of the monthly counter, when shorter imposition periods were applied. Garlic, wheat grain, powdered milk and palm oil were not affected by this parameter change.

Table G11 shows that access rates declined further to 34 percent overall if price-based safeguard duties were allowed only for a maximum of three months. Beef, rapeseed and mutton were the most adversely affected in terms of percentage declines from their baseline access rates. Only palm oil, and to a minimal extent, coffee, remained unaffected by this change in parameters. Garlic and onions managed to retain high access rates of 70 percent although these were lower than their baseline rates.

Quite surprisingly, an end-of-year cut-off point for the imposition of safeguard duties yielded

a relatively better result than 3 or 6-month limits. Overall access rates went down only marginally from the baseline level of 45 percent to 42 percent. In fact, wheat grain, bananas, chicken, soya oil, beans and sugar saw their access rates surpassing baseline results when this parameter change was made. All in all, 14 of the 27 commodities covered were either unaffected by, or benefited from, the shift to an end-of-year limit. Milk and rapeseed, however, saw their rates plunging by more than 25 percent.

Overall access rates did not change significantly when the modality allowing for adjustments in foreign exchange rates in cases of severe currency devaluation was not applied. Table G11 shows that the availability of price-based SSM duties went down only by two percentage points to 43 percent as a result of this adjustment. Fourteen commodities were not affected. However, access rates particularly for vegetable oil and pork declined substantially, while those for soya oil and mutton improved.

Changes to access rates were more perceptible when import prices were quoted and evaluated in US dollars instead of domestic currencies. The availability of SSM remedies went down from 45 percent to 41 percent of total months, with powdered milk, wheat flour, sugar, and wheat grain experiencing reductions from their original access rates of 30 percent or more. In turn, potatoes, garlic, vegetable oil and tomatoes improved their access to the SSM under this parameter setting.

The most dramatic effect on access rates occurred when the Uruguay Round SSG rule prohibiting the imposition of special safeguard measures, including price-based duties, on imports falling within TRQ commitments was waived. Overall access rates gained ten percentage points to reach 55 percent. Palm oil, soya oil and pork more than doubled their access to the SSM, while more modest gains were registered by eight other commodities. Fourteen of the 27 commodities, however, were not affected by the TRQ adjustment primarily because they have had no TRQ commitments since the Uruguay Round.

At the other extreme, access to price-based SSM measures declined the most when simultaneous market tests were applied in addition to baseline conditions. For example, the overall access rate was more than halved from 45 percent to 22 percent if the use of price-based SSM duties during a certain month was disallowed in cases where the average monthly volume of imports during the preceding six months was within five percent of corresponding averages in the previous year. Rapeseed was the most seriously affected, with its access rate going down from 52 percent to zero. Interestingly, bananas and palm oil were not affected by this parameter change. However, all other commodities with positive baseline rates saw a deterioration in their access to price-based SSM measures. Increasing the market test threshold further to a ten percent deviation from historical price averages had negligible incremental effects, with overall access rates going down by only one more percentage point to 21 percent and individual commodities registering only slight additional reductions.

China appeared to be the most vulnerable to adjustments in SSM duty imposition periods based on the results in Tables G10 and G12, with its access rates to price-based remedies dropping to ten percent when a six-month limit was applied and then declining further to seven percent or almost half its baseline level if SSM usage was restricted to three months at the most. In contrast, the availability of the SSM to Philippine products went down only marginally from 44 percent in the baseline scenario to 39 percent in the three-month modality. The Philippines was also the only country that was not affected by a shift to the Uruguay Round end-of-year modality for imposing SSM duties.

Not applying the G-33 proposal to adjust foreign exchange rates in cases of severe currency fluctuations reduced overall access rates slightly from 45 percent to 43 percent. Ecuador was the most adversely affected while the baseline results for the Philippines, Fiji and China remained basically unchanged. Using US dollar instead of local currency values to price imports, in turn, led to a

higher eight percent decline in access rates. Percentage-wise, Senegal encountered the largest decline, while the Philippines and China again escaped relatively unscathed from this parameter adjustment.

China's overall access rate to price-based SSM remedies more than doubled to 35 percent in the scenario where restrictions on the use of safeguard duties on TRQ imports were suspended. Among the three countries with TRQ commitments, however, it was the Philippines which ended up with the highest access rate of 77 percent of total months when TRQ restraints were lifted.

The effects of a market test with a five percent threshold were more evenly spread among the six countries covered by the study. The percentage reductions from baseline results ranged from 40 percent to 60 percent, with Indonesia registering the highest, and Senegal the lowest, decline. At the ten percent threshold level, the Philippines replaced Senegal as the least affected country, although its access rate still dropped from 44 percent to 25 percent. Indonesia, however, ended up with the highest access rate in absolute percentage terms owing to its high baseline rate of 82 percent.

5.2.3 Combined Access to Volume or Price–Based SSM at Various Parameter Settings

Overall and individual commodity access rates were appreciably higher when combining volume and price-based SSM remedies as against utilising them exclusively of each other.

5.2.3.1 Baseline Results

Table G13 and Figure 5.5 show that either a volume or price-based SSM measure could have been applied in 48 percent, or almost half, of the months covered if three-year import price and volume averages were used as triggers and a common threshold of ten percent was required to breach the triggers. Garlic, carrots and onions topped the list with access rates exceeding 75 percent; barley registered the lowest result at only six percent. Thirteen of the 27 commodities registered access rates lower than the 48 percent average.

Table G14 and Figure 5.6 show that Indonesia and Fiji had relatively high combined access rates while China registered the lowest percentage access to any SSM measure.

5.2.3.2 Effect of Different Threshold and Trigger Settings

The availability of any SSM remedy deteriorated slightly if volume triggers were pegged to five percent of average historical annual consumption during years when three-year average import volumes fell below this level. Only beans gained from such an adjustment while access rates for chicken and pork declined substantially. Eighteen commodities did not appear to be affected, although this may again be due to the lack of long-term consumption and import data series that did not make it possible to compute accurate historical averages.

Using five instead of 3-year averages for price and volume triggers tended to improve access to the SSM, as can be seen in Figure 5.5. Overall, the access rate improved from 48 percent to 50 percent, with soybeans and sugar, and coconut in particular, gaining the most from such an adjustment. On the other hand, carrots, milk, rice, mutton, vegetable oil and powdered milk were adversely affected, with powdered milk suffering the largest percentage cut in access rates.

As in the case with three-year averages, adjusting five-year triggers based on consumption tended to reduce overall access rates. The number of gainers and losers under this scenario equalled ten each, although the losers experienced larger cuts in their access rates.

Quite surprisingly, raising the threshold for volume-based SSM duties to 30 percent, while retaining a ten percent price threshold, resulted in a relatively mild deterioration in access rates from 48 percent to 44 percent. This may be due to the fact that, once invoked, SSM duties could be retained for 12 months even if import prices subsequently failed to breach the 30 percent

Figure 5.5 Combined Access Rates to SSM Using Different Triggers and Thresholds, by Commodity

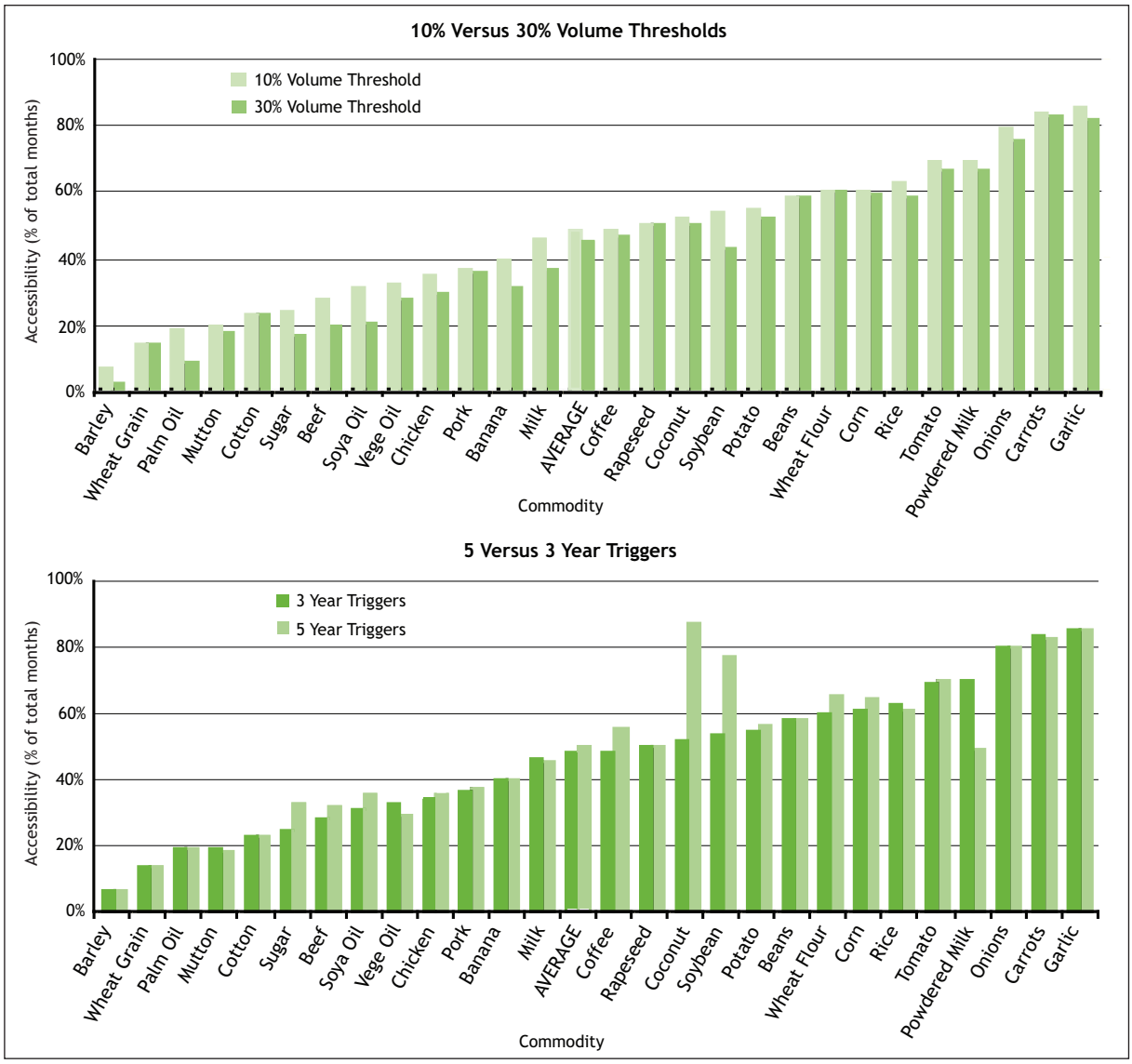
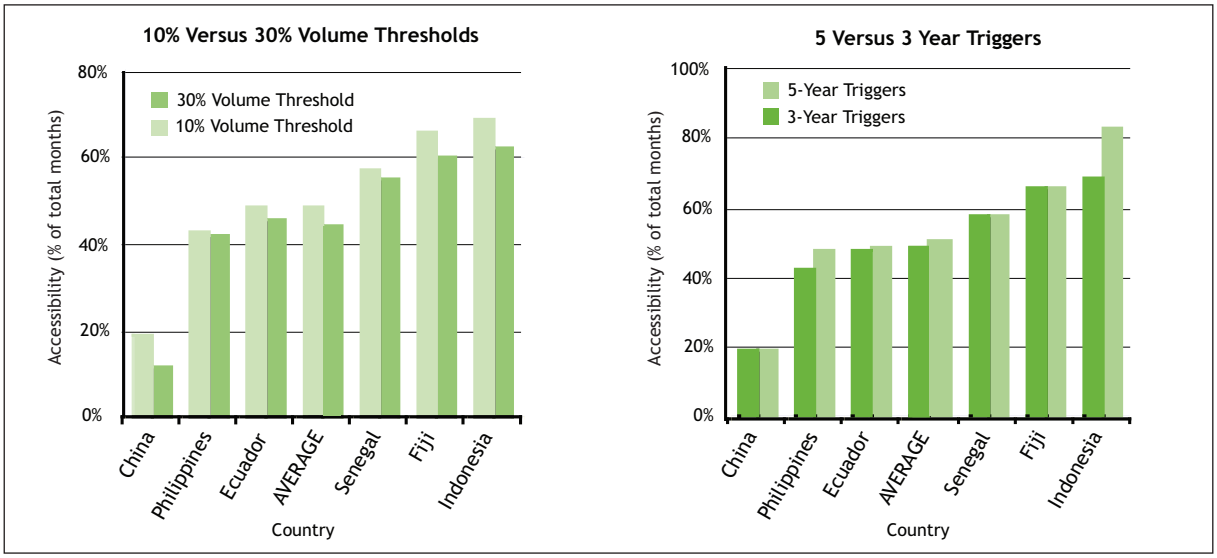


Figure 5.6 Combined Access Rates to SSM Using Different Triggers and Thresholds, by Country



threshold. Figure 5.5 shows that the rates for 17 out of the 27 commodities either did not change or declined by less than ten percent from baseline levels. Palm oil and barley, however, saw their access rates going down by more than 50 percent.

As in the case when a ten percent volume threshold was applied, the overall access rate declined slightly when trigger volumes were adjusted based on consumption patterns under a 30 percent threshold scenario. Using five instead of three-year averages also resulted in a slight improvement in access rates. In general however, the results did not behave as erratically as when ten percent thresholds were used.

Table G14 shows that adjusting the volume triggers when imports were low affected China the most in percentage terms, with its access rate dropping from 19 percent to 14 percent. In comparison, the Philippines was not affected by this adjustment. Using five instead of three-year averages as triggers, in turn, affected only the Philippines and Indonesia to a significantly positive degree, as illustrated in Figure 5.6.

All countries except China showed surprising resilience to higher volume thres-hold levels. Figure 5.6 shows that reductions in their combined access rates did not exceed ten percent from baseline levels when a higher 30 percent volume threshold was imposed, while China's rate declined by almost a third to 12 percent. A similar pattern arose when using five-year averages for both price and volume triggers.

5.2.3.3 Effect of Changes in Implementation Period

The simulations reveal surprisingly significant gains in access to SSM remedies when a July-June instead of a calendar year was used as the implementation period. Table G15 shows that the overall access rate improved from 48 percent to 57 percent when this adjustment was made. Twenty one out of the 27 commodities covered by the study improved their access rates. Barley, and to a lesser extent, mutton, benefited the most, as can be seen in Figure 5.7. In turn, garlic, powdered milk, corn, rapeseed, palm oil, and specially cotton, were adversely affected.

Table G16 on the other hand reveals that none of the six countries covered by the study was negatively affected by the change in implementation periods. Figure 5.8 further shows that China benefited the most, followed by Senegal and the Philippines. Only Ecuador was not affected by the parameter adjustment.

5.2.3.4 Effect of Changes in Duration of SSM Imposition Period

As can be seen in Table G15 and Figure 5.7, overall access rates went down by 16 percent, from 48 percent to 40 percent, when the G-33-proposed 12 month imposition period was pared down to six months. Twenty one commodities were unfavourably affected by this reduction, with rapeseed and wheat grain being affected the most. Surprisingly however, coconut improved its access rate from 52 percent to 55 percent, while barley, coffee, beans, palm oil and cotton were not affected at all.

The resultant access rates with the Uruguay Round SSG modality of limiting the im-position of safeguard duties to the end of the year also resulted in an overall decline from 48 percent to 42 percent, but this outcome was surprisingly better than when a six-month maximum imposition period was applied. Also, fewer commodities were adversely affected by this parameter change. Four commodities (sugar, bananas, mutton and garlic) in fact saw their corresponding access rates improve, while six other commodities were able to retain their baseline results. At the other extreme, vegetable oil, wheat grain and beef ended up with their access to the SSM declining by more than 40 percent.

All countries suffered declines in their access rates when a six-month imposition was applied, with China suffering the largest decline in access rates percentage-wise. In turn, an end-of-the-year limitation resulted in a one percent gain for Indonesia and had no effect on the Philippines' overall access rate. Ecuador

Figure 5.7 Access to SSM Using Different Implementation and Imposition Periods, by Commodity

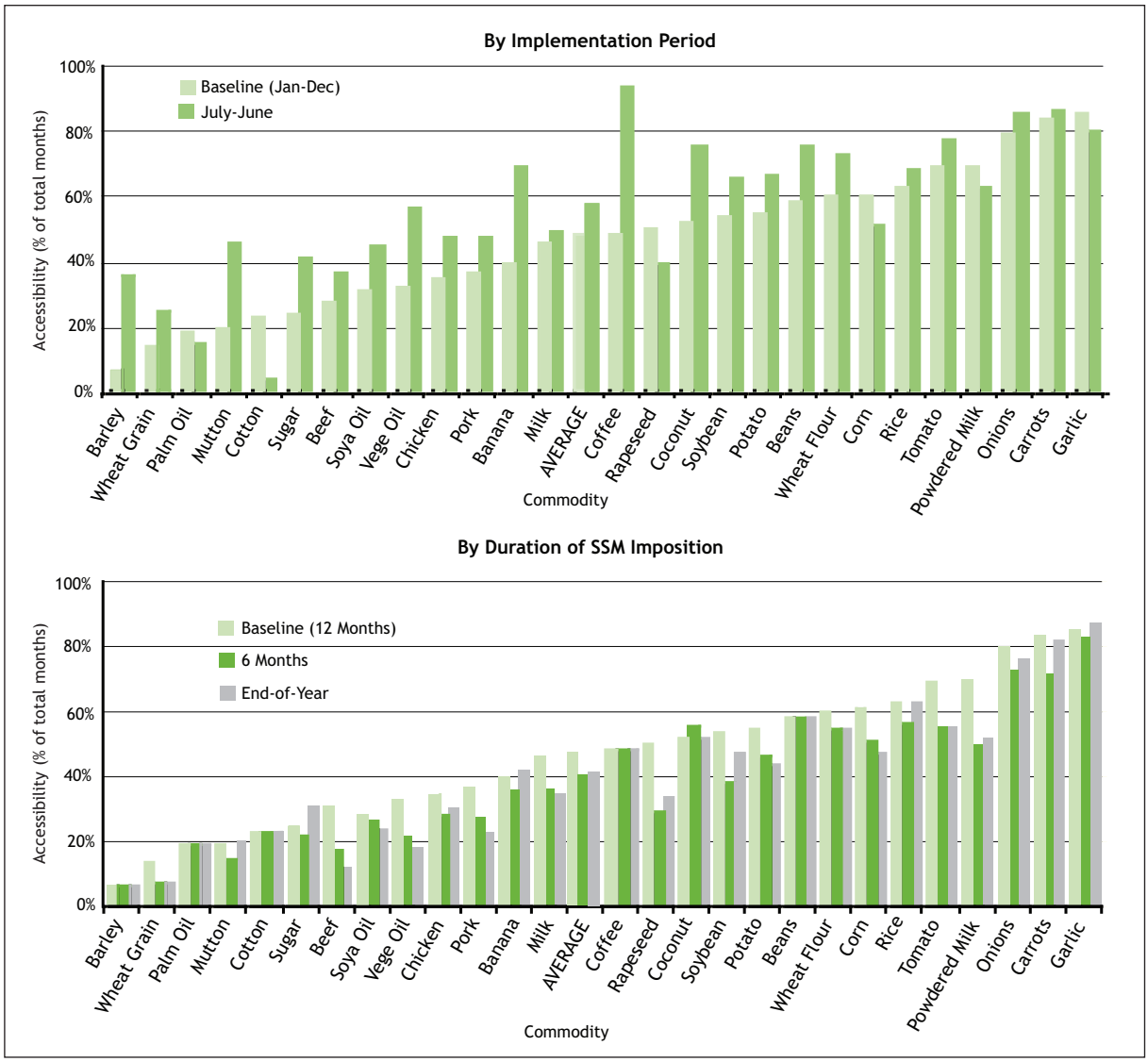
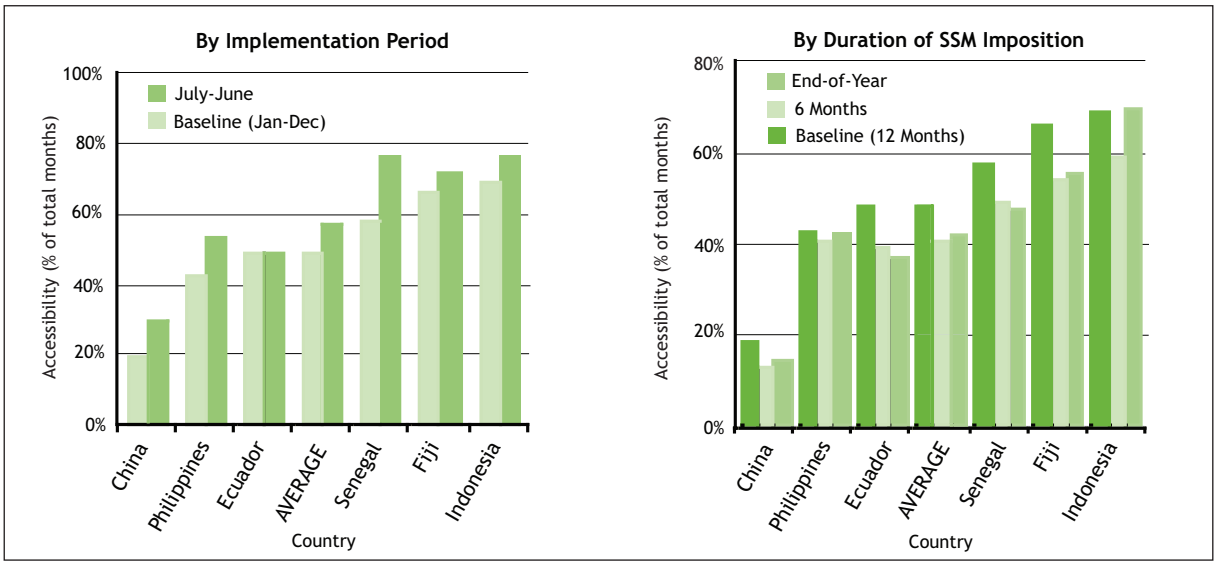


Figure 5.8 Access to SSM Using Different Implementation and Imposition Periods, by Country



eclipsed China as the most negatively affected in terms of the decline in access rates as a percentage of baseline levels, as can be seed in Figure 5.8.

5.2.3.5 Effect of Foreign Exchange Settings

Removing the option to adjust import prices in cases of severe currency deva-luation resulted in a slight decline in overall access rates from 48 percent to 47 percent. Under the G-33 proposal, developing countries had the choice of using the average foreign exchange rate in the three years prior to the year of importation, instead of the current rate, if the domestic currency had depreciated against the import currency at any time by more than ten percent during the preceding 12 months. Sixteen commodities were not affected at all by the removal of this option, and coconut surprisingly even saw its access rate rising from 52 percent to 55 percent. Only garlic and vegetable oil suffered appreciable declines in their access rates, although their residual rates were not more than 15 percent below baseline levels.

Table G15 additionally reveals that there would have been practically no change in overall access rates if imports were valued in US dollars instead of local currencies. Sixteen of the 27 commodities were not affected at all by this parameter change. Coconut, mutton and pork gained substantially, while wheat flour and powdered milk suffered from the largest decline in access rates.

The suspension of the foreign currency adjustment option had neutral effects on China and Fiji. Ecuador however saw its access rates declining the most, by ten percent. Table G16 further shows that Ecuador and the Philippines benefited from a shift to the US dollar instead of local currencies in valuating imports. The other countries showed declines in their access rates except for China which was not affected at all.

5.2.3.6 Effect of Market Tests

The most deleterious effect on SSM access rates arose from the application of market tests. Under this proposed modality, the use of volume-based SSM duties in a given month was disallowed if the average monthly prices of imports during the preceding six months were within ten percent of corresponding averages in the same period in the previous year. Simultaneously, price-based SSM duties could not be used in cases where the average monthly volume of imports during the preceding six months were within ten percent of corresponding averages in the previous year. These restrictions were in addition to the regular thresholds and other conditions set for the use of SSM measures.

Table G15 and Figure 5.9 show that overall access rates would have declined from 48 percent to only 19 percent if the market tests were imposed. The reductions ranged from a low of 26 percent for bananas to a high of 100 percent for barley and rapeseed whose access rates dropped to zero. Half of the 27 commodities experienced reductions of at least 65 percent from their baseline access rates.

Country-wise, Table G16 shows that China experienced the largest percentage drop in access rates from 19 percent to three percent. The Philippines was the least affected, although its access rate still went down sharply from 42 percent to 23 percent, as can be seen in Figure 5.10.

5.2.3.7 Effect of Suspending TRQ Limitations on SSM Usage

In contrast to market tests, suspending restrictions on the application of SSM duties on imports falling within TRQ commitments had the largest beneficial effect on access to either volume or price-based SSM remedies. Overall, access rates improved from 48 percent to 59 percent, representing a 23 percent improvement. As shown in Figure 5.9, palm oil, cotton and wheat grain more than doubled their access to the measure while nine other commodities, presumably those which have had TRQ commitments since the Uruguay Round, also registered positive results as a result of this parameter adjustment.

Table G16 and Figure 5.10 show that, predictably, the three countries that had TRQ commitments

Figure 5.9 SSM Access When Applying a Market Test or Suspending TRQ Constraints, by Commodity

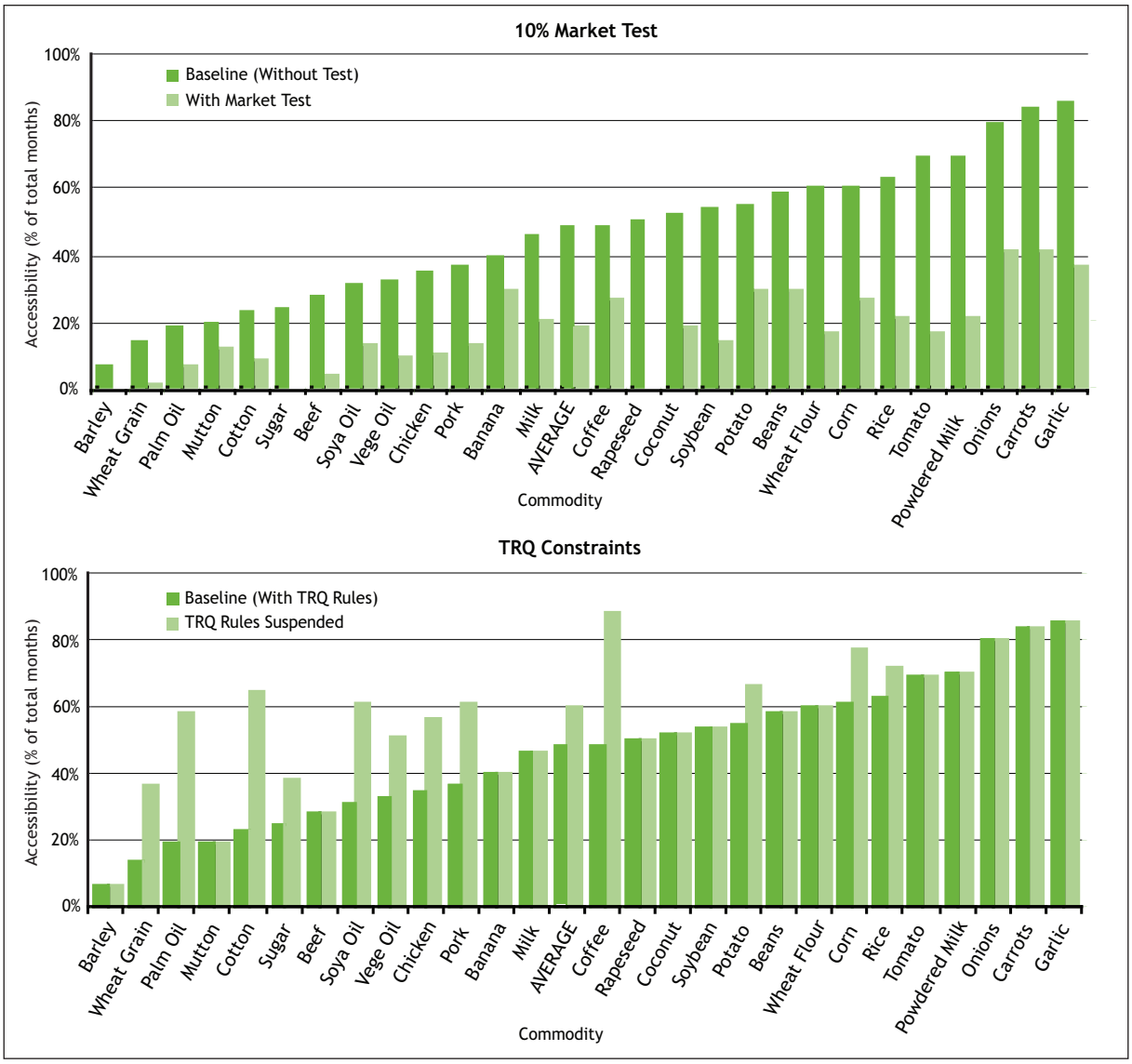
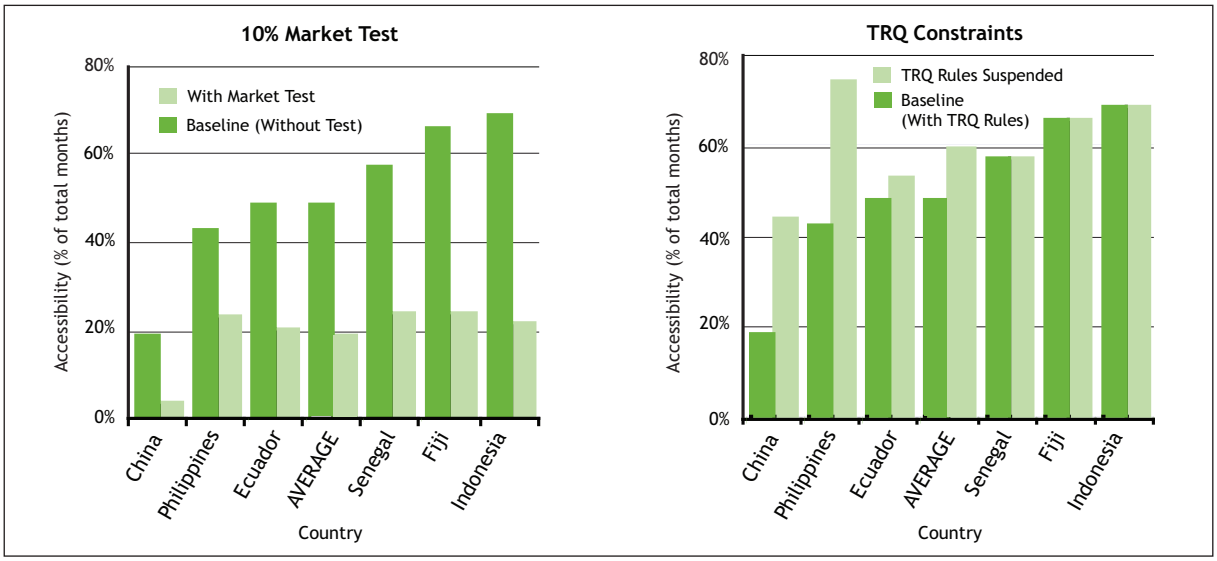


Figure 5.10 SSM Access When Applying a Market Test or Suspending TRQ Constraints, by Country



(China, the Philippines and Ecuador) enhanced their access to SSM measures, with China gaining the most by raising its access rate from 19 percent to 44 percent overall.

5.3 Effectiveness of Safeguard Remedies

Although the simulations showed that the baseline set of thresholds and remedies as shown in Table 3.3.2 would be able to accord significant levels of access to SSM measures, further tests indicate that the capacity of the SSM to address the problem of "cheap" imports was not as satisfactory.

In this analysis, "cheap" imports were defined as imports of a commodity whose CIF prices, converted to local currency, plus bound MFN duties, fell by more than ten percent below the corresponding monthly domestic price of that commodity. The months involving such occurrences were considered "problematic" months. Using various parameter settings, simulations were undertaken to determine how frequently SSM measures could be invoked in such instances, and how effectively the resultant SSM remedial duties would have been able to bring the total cost of imports (CIF plus MFN tariff plus SSM duty) over the ten percent threshold.

5.3.1 Baseline Results

Table G17 shows that import prices, inclusive of MFN duties, fell by more than ten percent below domestic prices of the commodities in 49 percent, or almost half, of the months covered by the study. This result is much higher than the recorded incidence of price depressions of at least ten percent below three-year import price averages, which was 21 percent of total months as reflected in Table G3, indicating that the problem of import prices undercutting those of local commodities was more serious than that of import prices falling below historical averages.

Figure 5.11 shows that, among the commodities, garlic registered the highest frequency of "problematic" months at 100 percent, meaning that it was subjected to cheaper import prices in all the months covered by the study. Seven other commodities had "problematic" incidence rates of 75 percent or more, while wheat grain ended up with the lowest incidence rate of 12 percent among the commodities that went through such "problematic" episodes. Only five commodities (barley, coffee, cotton, powdered milk and rapeseed) had zero incidences.

On average, volume or price-based SSM remedies were available in 64 percent, or about two out of every three, of the "problematic" months. This was consistent with earlier findings that the SSM measures as currently proposed were to a large extent accessible.[21] Figure 5.11 reveals that tomatoes registered the highest access rate of 94 percent of problematic months. Ten other commodities surpassed the 64 percent average. Among the commodities with positive incidences of problematic months, wheat grain had no access whatsoever to SSM remedies, while palm oil and pork could have availed of the remedy in less than one-fourth of the time.

In terms of effectiveness of the SSM when using the baseline threshold and remedy settings shown in Table 3.3.2, soybeans came up with the best rating, with SSM measures being able to prop up import prices to more than 90 percent of domestic prices in 74 percent of the months when prices were cheaper by ten percent or more. Potatoes had a similar effectiveness rate, although had a much lower incidence of problematic months, as can be seen in Figure 5.11. Among the commodities that experienced episodes of imports priced at least ten percent below domestic prices, wheat flour, pork, vegetable oil, garlic, and wheat grain suffered from comparatively low effectiveness rates, with SSM remedies being able to provide sufficient remedies in less than ten percent of their corresponding number of problematic months. Overall, SSM measures were effective in only 37 percent, or about one out of every three, problematic months.

Figure 5.11 Baseline Incidence of Problematic Months, Access and Effectiveness Rates, by Commodity

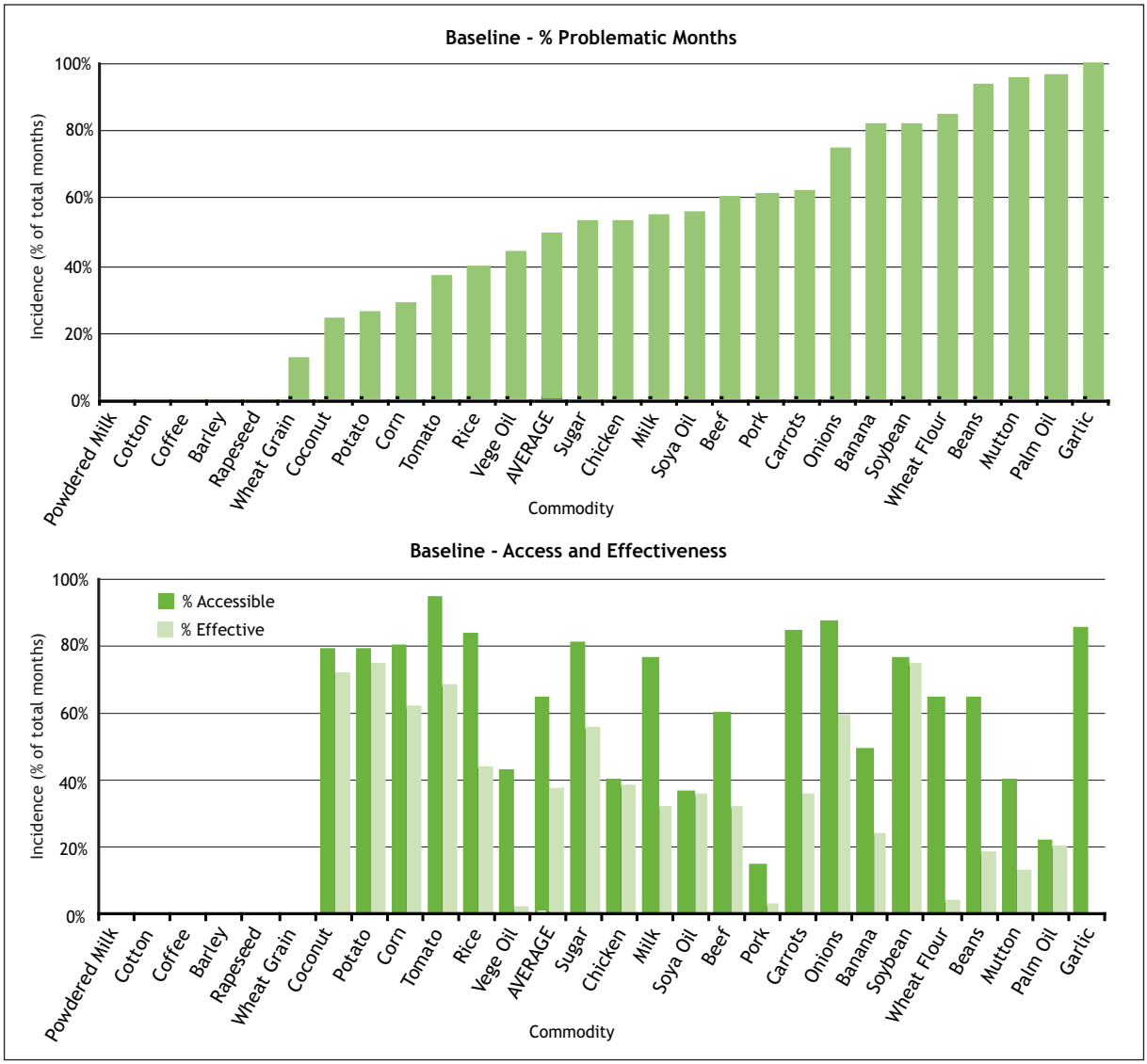


Figure 5.12 Baseline Incidence of Problematic Months, Access and Effectiveness Rates, by Country

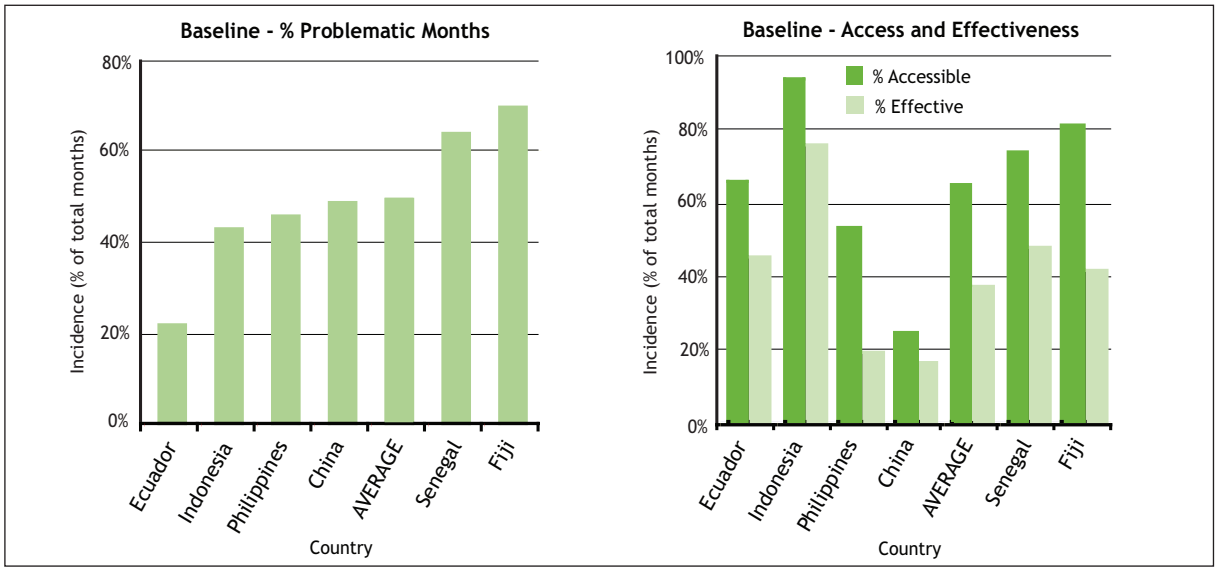


Figure 5.13 Comparative Effects of Volume & Price SSM on Access and Effectiveness, by Commodity

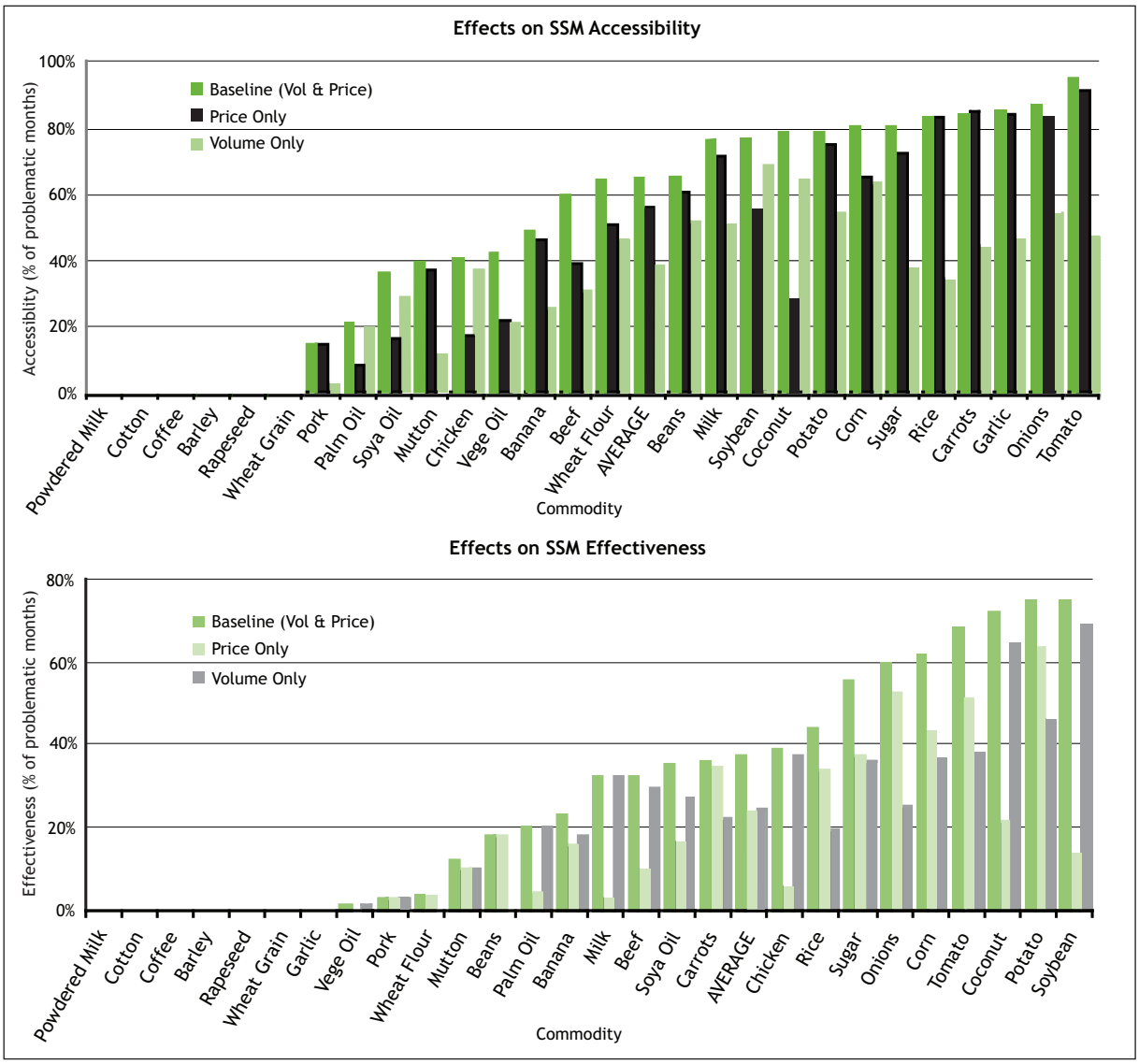
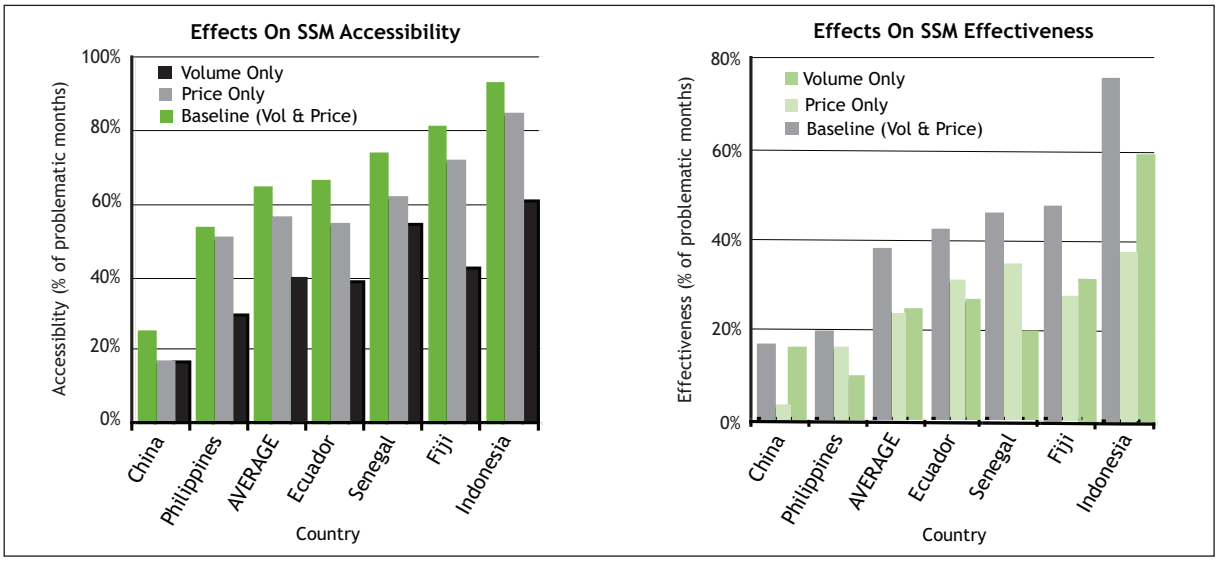


Figure 5.14 Comparative Effects of Volume & Price SSM on Access and Effectiveness, by Country



In summary, there were on average six "problematic" months out of every 12 months in a year. SSM measures were available in 64 percent of the six months, or about four out of every 12 months. In turn, they were effective in 37 percent of the six problematic months, or about two out of every 12 months covered by the study.

Among the countries, Fiji, followed by Senegal, had the highest frequency of "problematic" months while Ecuador registered the lowest incidence rate of 22 percent. Table G18 and Figure 5.12 further show that Indonesia enjoyed the best access to SSM in terms of percentages of problematic months, and also had the highest effectiveness rate of 76 percent. In contrast, China had both the lowest availability and effectiveness rates of 24 percent and 16 percent, respectively.

5.3.2 Effectiveness of Volume vs. Price–Based SSM

Further simulation results indicate that that while price-based SSM measures were more accessible than volume-based remedies, the two were more or less as effective in addressing problems created by cheap imports. Table G17 and Figure 5.13 show that if only the volume-based SSM remedies reflected in Table 3.3.2 were allowed, access to the remedy was limited to 39 percent of problematic months, as against 64 percent in the baseline setting, while the effectiveness of the applicable SSM duties slid to 24 percent. If, on the other hand, only price-based measures were allowed, SSM remedies were available in a higher 55 percent of problematic months but they ended up effectively addressing only 23 percent of these problematic months.

Percentage-wise, pork registered the largest decline in access rates when only volume-based remedies were allowed, although this was inconsequential because it still ended up with the same effectiveness rate of three percent of problematic months. The biggest casualties were wheat flour and beans which saw their effectiveness rates dropping to zero despite only slight declines in their access rates. Pork, vegetable oil, milk and palm oil did not register any changes in their effectiveness rates, although only milk and palm oil started out with significant effectiveness ratings. In absolute percentage terms, soybeans were able to retain the highest effectiveness rate of 68 percent, followed closely by coconut.

Vegetable oil was affected the most if only price-based remedies were allowed, with its effectiveness rate dropping to zero even as its access rate was effectively halved to 22 percent. Only pork was not affected by this parameter setting, although it started out with a relatively low three percent effectiveness rate. Coconut and palm oil experienced the largest decline in access rates while carrots and pork were able to maintain their original levels of access to the remedy.

Table G18 and Figure 5.14 show that only China was able to essentially retain its original effectiveness ratings if SSM remedies were limited to volume-based duties, although its access to the SSM still dropped significantly from 37 percent to 25 percent of problematic months. Ecuador and the Philippines in turn experienced the most severe decline in their effectiveness ratings under this parameter setting.

China absorbed the largest reduction in both access and effectiveness rates when only price-based SSM remedies were allowed, confirming that volume-based remedies were more useful to it in addressing import price problems. The Philippines was affected the least, although the effectiveness of the SSM still dropped from its baseline level of 19 percent to 16 percent of problematic months.

5.3.3 Effect of Different Threshold Settings

Increasing the volume threshold from five percent to 15 percent of the volume trigger, as reflected in Table 3.3.3, and allowing SSM remedies only when import prices fell below the price trigger by more than 15 percent (as against zero percent in the base scenario) surprisingly did not affect overall results significantly. Table G19 and Figure 5.15 show that while access rates went down from 64 percent to

52 percent, the effectiveness rate declined only slightly from 37 percent to 33 percent of problematic months. On the other hand, further increasing the thresholds to 30 percent of both volume and price triggers, in accordance with the parameters set in Table 3.3.4, had a more perceptible effect, with access to the SSM declining from 64 percent to 39 percent while effectiveness rates deteriorated from 37 percent to 25 percent of problematic months.

These results imply that thresholds of about ten percentage points beyond those proposed in the draft modalities could be accommodated without unduly compromising the availability, and particularly the effectiveness, of the SSM. Above these threshold levels, however, access to the SSM and its effectiveness will begin to significantly depreciate.

The results for individual commodities were, however, understandably mixed. At 15 percent thresholds, pork and vegetable oil experienced large drops in their access to the SSM but were able to retain their original effectiveness rates. Coconut was not affected at all by the higher thresholds. Soya oil suffered the most in terms of effectiveness rates, followed by beef and soybeans. Among the commodities with relatively high incidences of problematic months, milk and chicken were exceptional in being able to retain their baseline effectiveness rates of more than 30 percent despite increased thresholds.

Figure 5.15 shows further that bananas were the most seriously affected when applying 30 percent thresholds, with access and effectiveness rates both dropping to zero. All commodities with positive access rates in the baseline scenario experienced declines in the availability of the SSM. Vegetable oil, pork, wheat flour and beans were able to retain their original effectiveness ratings, although these commodities, except for beans, started out with very low levels of effectiveness. Among the commodities with relatively high baseline effectiveness rates, coconut fared the best and ended up with a relatively high rate of 64 percent even when access to SSM remedies was allowed only when monthly prices and import prices deviated from trigger levels by more than 30 percent.

Table G20 and Figure 5.16 reveal that Indonesia experienced the largest percentage decline in access and effectiveness rates under a 15 percent threshold scenario, with its overall effectiveness rate dropping from 76 percent to 50 percent of problematic months. Ecuador and the Philippines did not seem to be particularly affected by higher thresholds, while China and Senegal ended up with minor reductions in their effectiveness rates despite relatively large declines in their rates of access to SSM.

If the thresholds were further adjusted to 30 percent of both price and volume triggers, Indonesia and China practically equalled each other in registering the largest percentage declines in both access and effectiveness rates, although Indonesia ended up with a comparatively better effectiveness rating of 34 percent versus China's seven percent. Ecuador continued to show surprising resiliency to higher thresholds; it showed very little change in its access to the SSM and its overall effectiveness rate dropped only marginally from 45 percent to 44 percent.

5.3.4 Effect of Different SSM Remedy Modalities

Table G19 further reveals that overall effectiveness rates would have improved slightly from 37 percent to 41 percent of total months if all volume-based remedies as proposed in the draft modalities were doubled, as shown in parameter Table 3.3.5, while keeping the original price remedy modality unchanged. If suggested volume-based remedies were reduced instead to 50 percent of their original levels, as illustrated in Table 3.3.6, the resulting effectiveness rates decreased by the same four percentage points to 33 percent. These results imply that there could be some latitude for adjusting the level of remedial duties without unduly affecting the effectiveness of the SSM.

Figure 5.17 shows that among the commodities, vegetable oil gained the most when high levels

Figure 5.15 Comparative Effects of Higher Thresholds on SSM Access and Effectiveness, by Commodity

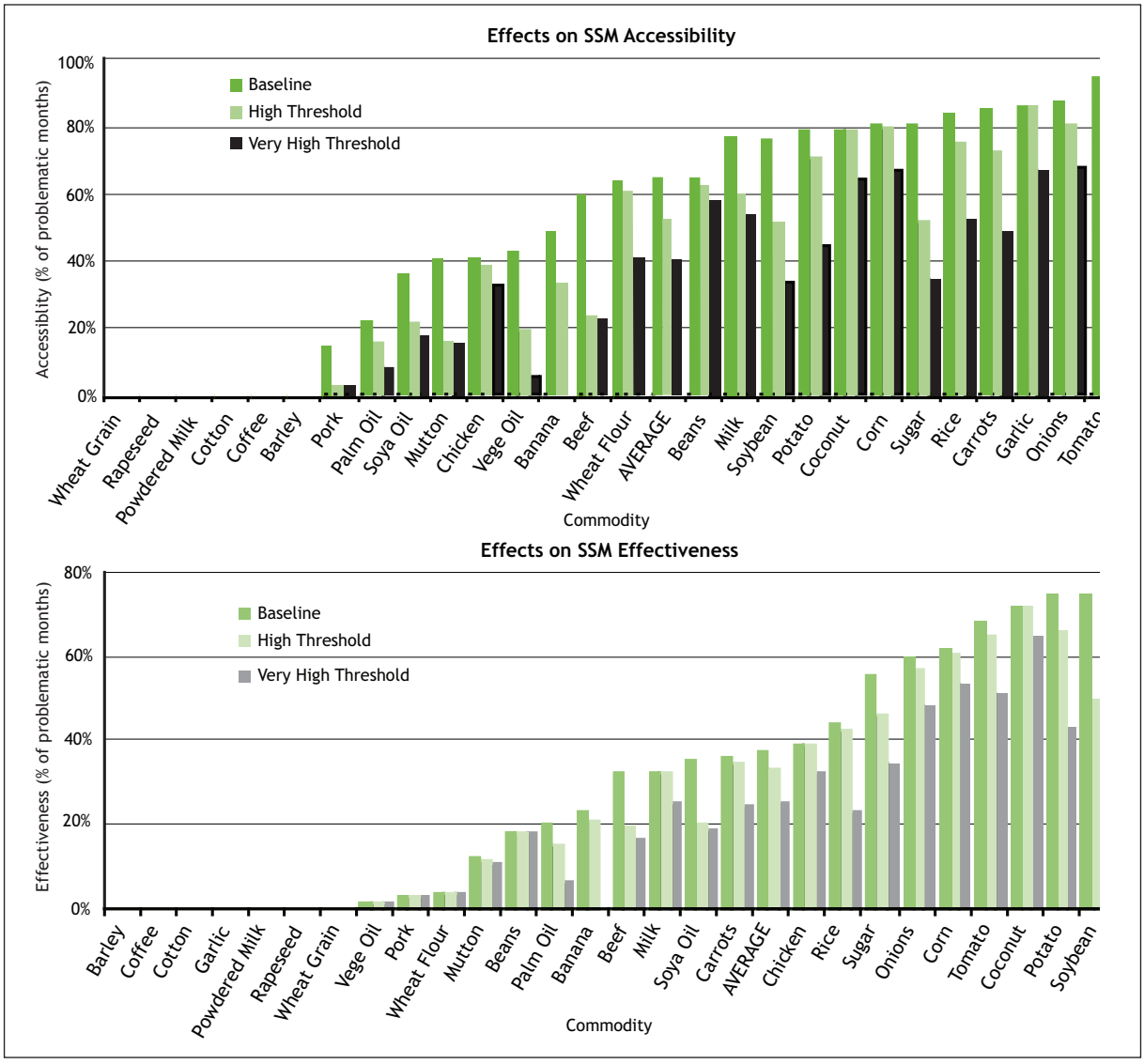
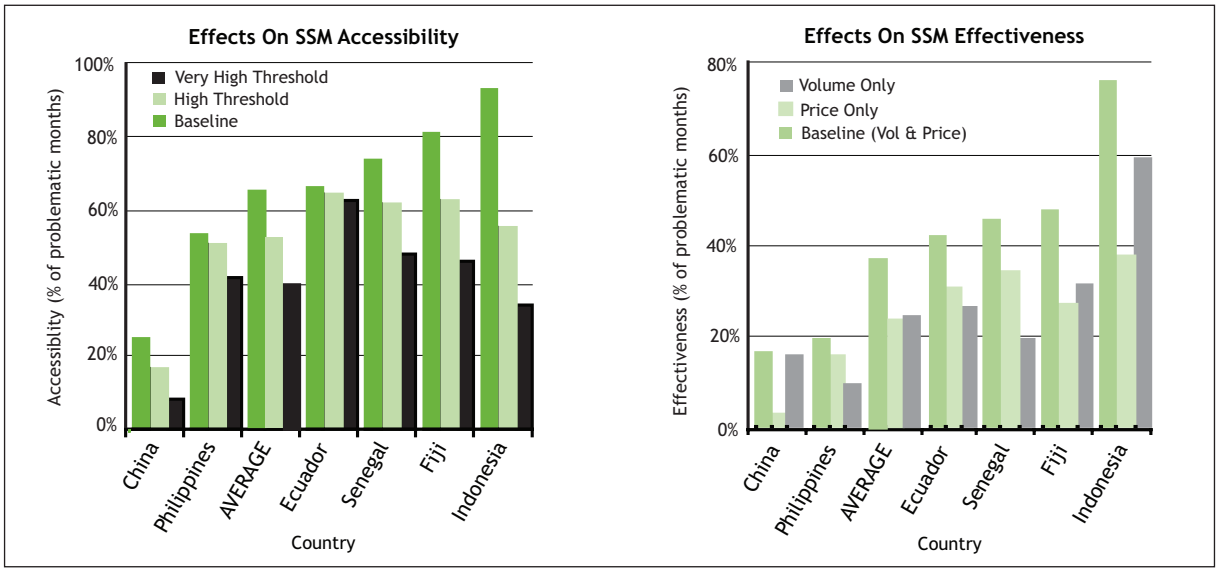


Figure 5.16 Comparative Effects of Higher Thresholds on SSM Access and Effectiveness, by Country



of remedies were applied. Its effectiveness rate jumped from a mere one percent to 20 percent of problematic months. Surprisingly, however, the parameter adjustment had no effect on nine commodities while five other commodities saw their effectiveness rates improving by less than five percent over baseline levels.

At the low remedy setting, milk suffered the most with its effectiveness rate plunging from 32 percent to seven percent. Six commodities with positive effectiveness rates in the baseline scenario were not affected by the parameter shift. Another six commodities underwent slight declines of less than ten percent from baseline levels. Chicken, rice, pork, wheat flour and beans did not register major changes in their effectiveness rates under either the high or low remedy parameter settings.

Based on Table G20 and Figure 5.18, only Senegal gained significantly from higher remedy settings with its effectiveness rate rising from 47 percent to 58 percent. Ecuador was not affected at all while the rest of the countries saw improvements in their effectiveness rates of less than eight percent. Lowering remedy levels in comparison had a more dispersed effect. China's effectiveness rate dropped the most by 19 percent while those of Indonesia and Senegal deteriorated by between 13 percent and 17 percent. Ecuador was consistent is registering the lowest change in its effectiveness rates at both the high and low remedy scenarios.

5.3.5 Comparative Effect of Percent of Bound vs. Percentage Point Remedies

Table G21 shows that effectiveness rates declined from 37 percent to 30 percent if volume-based SSM remedies were limited to the schedule of percentages of bound tariffs as depicted in parameter Table 3.3.7 while suspending recourse to remedies in the form of absolute percentage points. If the reverse were applied as illustrated in parameter Table 3.3.8, the baseline effectiveness rating of 37 percent was retained.

Figure 5.17 shows that the effectiveness rate of milk suffered the most, declining from 32 percent to three percent if only percentages of bound tariffs were allowed as volume-based remedies. Palm oil and soybeans were also significantly affected, while only five commodities (beans, chicken, pork, vegetable oil and wheat flour) did not react in any manner to this parameter change. By comparison, if only remedies in the form of fixed percentage points were permitted, all the original baseline effectiveness rates of the individual commodities were retained.

These results imply that percentage point remedies were superior, if not equally effective, in comparison to remedies in the form of percentages of bound tariffs in practically all incidences of problematic months. This is understandable considering that most of the tariffs of the commodities covered by the study were relatively low, so that remedies proportional to these tariffs would have yielded relatively limited relief from low import prices.

Table G22 and Figure 5.18 reveal that China, with its comparatively low tariff profile, suffered the most when volume-based remedies were limited to percentages of bound tariff rates. Under this scenario, China's effectiveness rate went down drastically from 16 percent to three percent. In comparison, the Philippines, Fiji and Ecuador ended up relatively unscathed, with their effectiveness rates dropping by less than ten percent from baseline levels. Overall and country-specific effectiveness rates were retained when remedies were limited to absolute percentage points based on the baseline parameter settings.

5.3.6 Effect on Caps on Allowable SSM Remedies

Consistent with the findings in the preceding section, caps on allowable remedies in the form of percentages of bound tariffs proved to be more deleterious in diluting the effectiveness of the SSM than caps in the form of absolute percentage points. Table G21 shows, for example, that overall effectiveness rates seriously declined from 37 percent to only 14 percent of problematic months if volume and price-based remedies were limited to 50 percent of bound tariff levels.[22] If remedies

Figure 5.17 Comparative Effects of Remedy Settings on SSM Access and Effectiveness, by Commodity

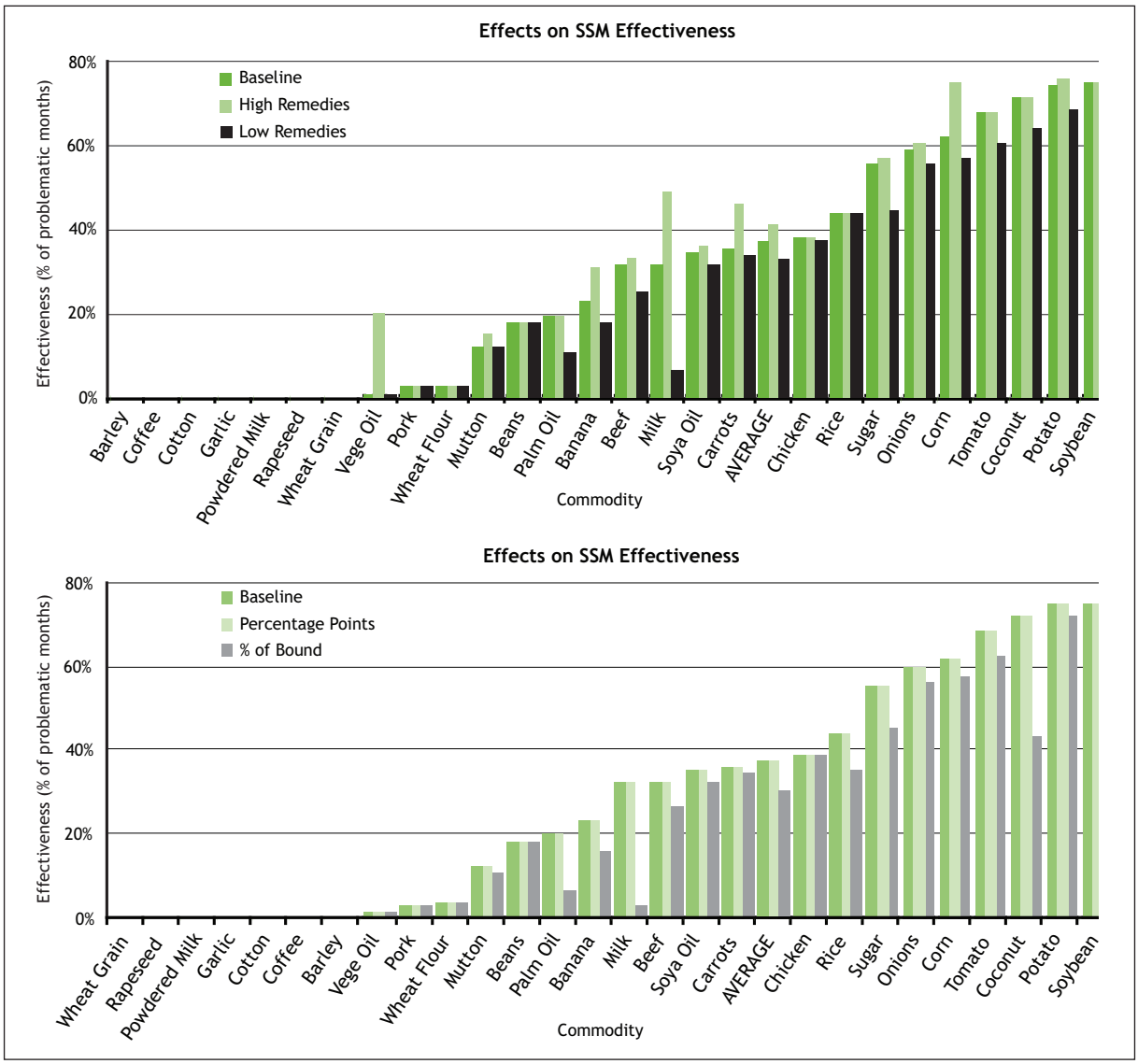
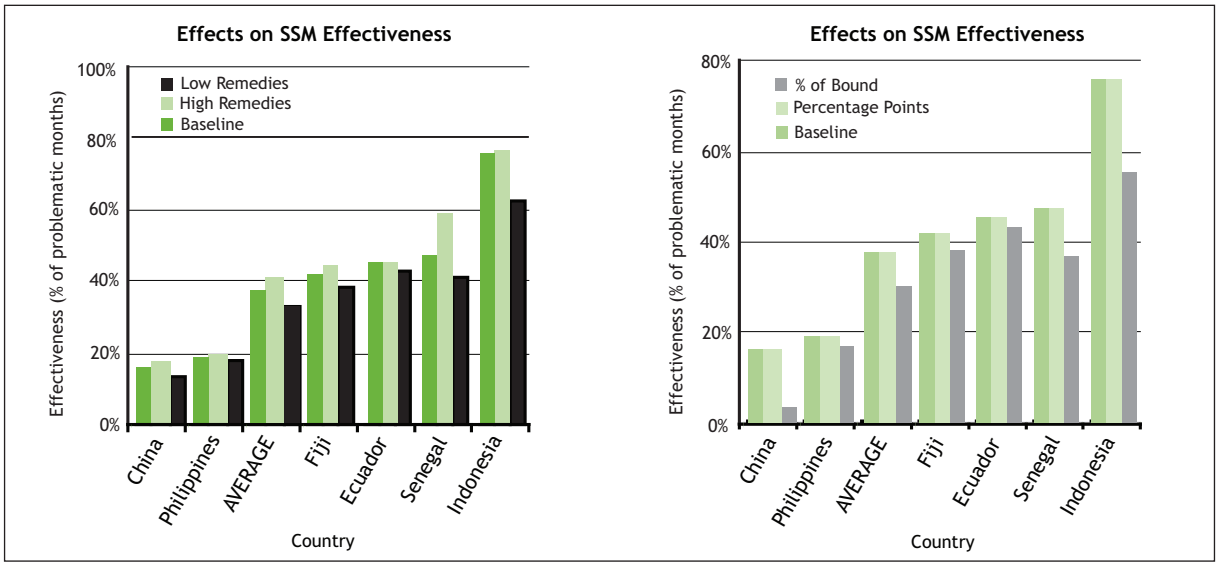


Figure 5.18 Comparative Effects of Remedy Settings on SSM Access and Effectiveness, by Country



were in turn capped at 50 percentage points, the effectiveness rate declined less significantly to 30 percent.

Figure 5.19 shows that milk, beans, pork and wheat flour were the most seriously affected, with their effectiveness rates dropping to zero if remedies were capped at 50 percent of bound tariffs. Among the 20 commodities that had positive baseline effectiveness rates, all but two experienced reductions of more than 30 percent from their original results. On the other hand, limiting remedies to absolute percentage points did not affect eight commodities in any way and reduced the effectiveness of another four commodities by no more than ten percent. Beans and wheat flour, however, ended up with the same zero effectiveness rates, indicating that these commodities were particularly vulnerable to any type of remedy cap.

All countries were seriously affected by a restriction to remedies based on bound tariff rates. China saw the biggest loss, with its effectiveness rate dropping to one percent of problematic months. Table G22 and Figure 5.20 show that even Fiji, which appeared to be the least affected, saw its rate declining by almost half to 22 percent. Only Indonesia managed to retain a respectable residual effectiveness rate of 33 percent under this scenario. If remedies were limited to absolute percentage points, Indonesia and China were able to effectively retain their baseline effectiveness rates, while Ecuador experienced the sharpest drop from 45 percent to 25 percent of problematic months.

5.3.7 Effect of Changes in Implementation Periods

Consistent with earlier simulation results, using a July-June instead of a calendar year implementation period improved both the access and effectiveness rates of the SSM in relation to the number of months with problematic price gaps. Table G23 shows that access to SSM remedies rose from 64 percent to 68 percent of problematic months when applying a July-June implementation period. Simultaneously, the effectiveness rate improved from 37 percent to 40 percent. Although this parameter adjustment also raised the incidence of problematic months slightly from 49 percent to 51 percent of total months, the higher access and effectiveness ratings enhanced the quality of the measure overall.

The individual commodity results were however understandably mixed, as can be seen in Figure 5.19. Ten of the 21 commodities which had incidences of problematic months saw their access to SSM remedies dropping as a result of this parameter change, with palm oil experiencing the worse decline. On the other hand, the other eleven com-modities gained from this adjustment, with pork in particular improving its access from 15 percent to 36 percent of problematic months.

Bananas, mutton, pork and vegetable oil more than doubled their effectiveness rates when the July-June modality was applied. Only six commodities were adversely affected, with beans losing the most and seeing effectiveness rates halved to nine percent. Only wheat flour was not affected in terms of effectiveness rates by this parameter setting.

Table G24 and Figure 5.20 show that China benefited the most from a shift to a July-June implementation cycle, with its access rates improving from 24 percent to 41 percent and its effectiveness rate more than doubling to 35 percent. Only Ecuador and Indonesia were negatively affected, with their effectiveness rates going down by approximately 18 percent each compared to baseline results.

5.3.8 Effect of Changes in Duration of SSM Imposition Period

Shortening the duration of the imposition of SSM remedies duties resulted in moderate declines in both access and effectiveness rates. Table G23, for example, shows that the availability of SSM remedies went down from the baseline level of 64 percent to 58 percent of problematic months if SSM duties were allowed to be imposed only up to six instead of 12 months as originally proposed by the G-33. The effectiveness rate in turn also deteriorated

Figure 5.19 Effects of Remedy Caps & Implementation Periods on SSM Access and Effectiveness, by Commodity

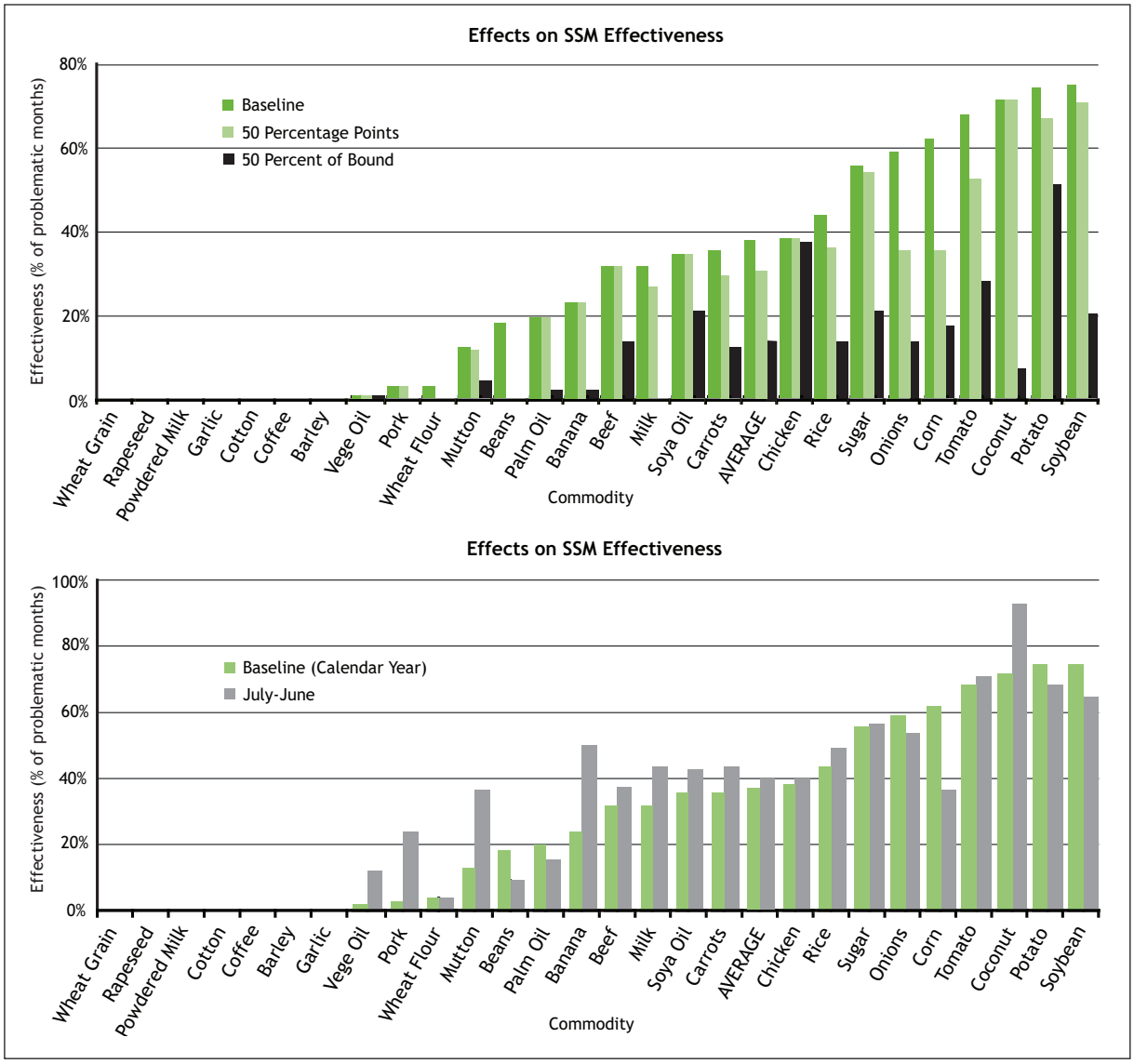
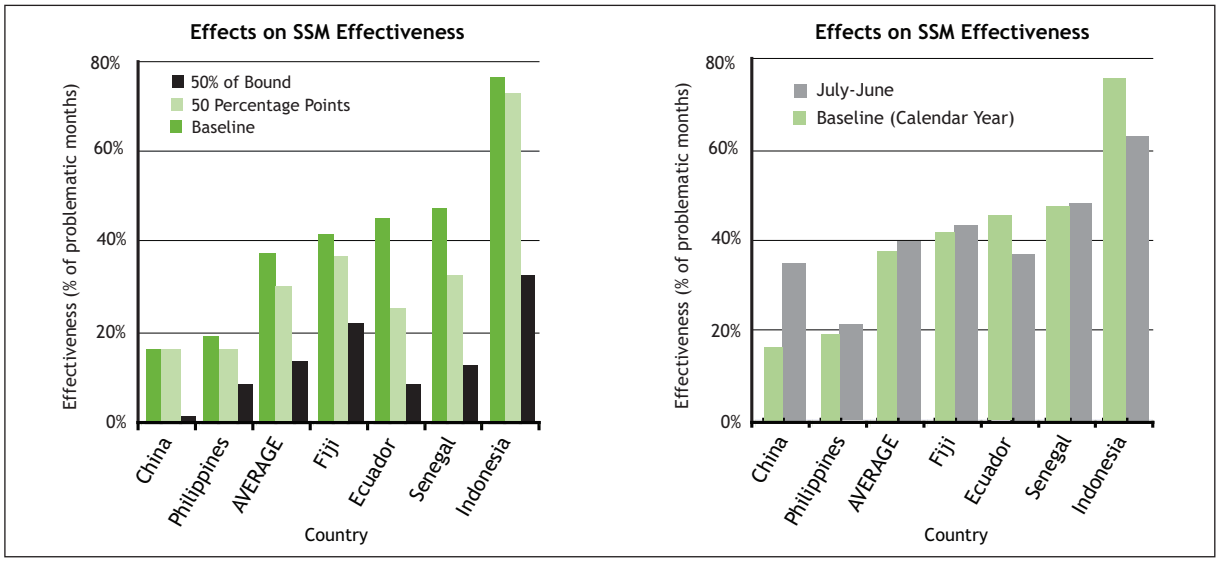


Figure 5.20 Effects of Remedy Caps & Implementation Periods on SSM Access and Effectiveness, by Country



from 37 percent to 29 percent of problematic months. An almost equivalent overall result arose when the Uruguay Round SSG modality of allowing SSM duties only up to the end of each implementation year was applied.

Figure 5.21 shows that five of the commodities that started out with positive access rates, namely beans, palm oil, coconut, bananas and garlic, did not show any change in their access rates when a maximum six-month imposition period was applied. The other commodities experienced varying degrees of decline in their access rates, with pork suffering the most with a 40 percent cut from 15 percent to nine percent. In turn, the effectiveness rates for pork, vegetable oil, palm oil and coconut were not affected while the 16 other commodities led by beans registered losses as a result of the parameter adjustment.

The effects were more disparate among commodities when an end-of-year restriction was put in place. Six commodities were not affected, while sugar and vegetable oil actually saw their access rates improving, but only marginally. Pork led the losers with a 60 percent decline in its access rates. Beans, potatoes, palm oil, coconut and vegetable oil retained their baseline effectiveness rates, while sugar surprisingly ended up with a more effective SSM when remedies were limited to the end of the year. Milk and beef lost the most in terms of effectiveness rates from this parameter adjustment.

Table G24 and Figure 5.22 show that China was the most heavily penalised by a shift to a six-month imposition period in terms of its access to the SSM. Only the Philippines appeared to be immune to this parameter shift, with its access rate effectively remaining constant and its effectiveness rate going down by only one percentage point. All the other countries saw their effectiveness rate declining by more than 20 percent from baseline levels.

China also ended up with the largest decline in access and effectiveness rates when an end-of-year modality was applied for the imposition of SSM remedial duties. Only the Philippines, and to a lesser degree, Ecuador and Indonesia, did not seem to be particularly affected by this parameter change.

5.3.9 Effect of Suspending TRQ Limitations on SSM Usage

Among all the parameter changes, the lifting of constraints on the imposition of SSM duties on imports falling within TRQ commitments had the most positive effect on both access and effectiveness rates. Table G23 shows that this adjustment increased the percentage of problematic months in which SSM remedies could have been invoked from 64 percent to 75 percent. In turn, the effective rate advanced from 37 percent to 46 percent of problematic months.

Figure 5.21 shows that soya oil, chicken, palm oil and pork were able to more than double their access rates as a result of this parameter setting. However, there were no changes in the access and effectiveness rates of 12 commodities, presumably those that have not had TRQ commitments since the Uruguay Round. In turn, the effectiveness rates of soya oil, pork, palm oil and vegetable oil more than doubled.

Understandably, as can be seen in Figure 5.22, only the Philippines, Ecuador and China gained from this adjustment since only these three countries have had TRQ commitments since the Uruguay Round. Table G24 shows that China, followed closely by the Philippines, appeared to have gained the most in terms of access and effectiveness rates.

5.3.10 Effect of Additional Conditions on SSM Usage

Table G25 shows the effects on SSM availability and effectiveness if a proposal to limit tariffs inclusive of SSM duties to their starting levels in the Doha Round was to be followed.[23] Based on the simulations, access to the SSM remedy would have declined from 64 percent to 40 percent; indeed, the measure would have been rendered almost useless with its effectiveness rate sliding from 37 percent to

Figure 5.21 Effects of Imposition Periods and TRQ Restrictions on SSM Access and Effectiveness, by Commodity

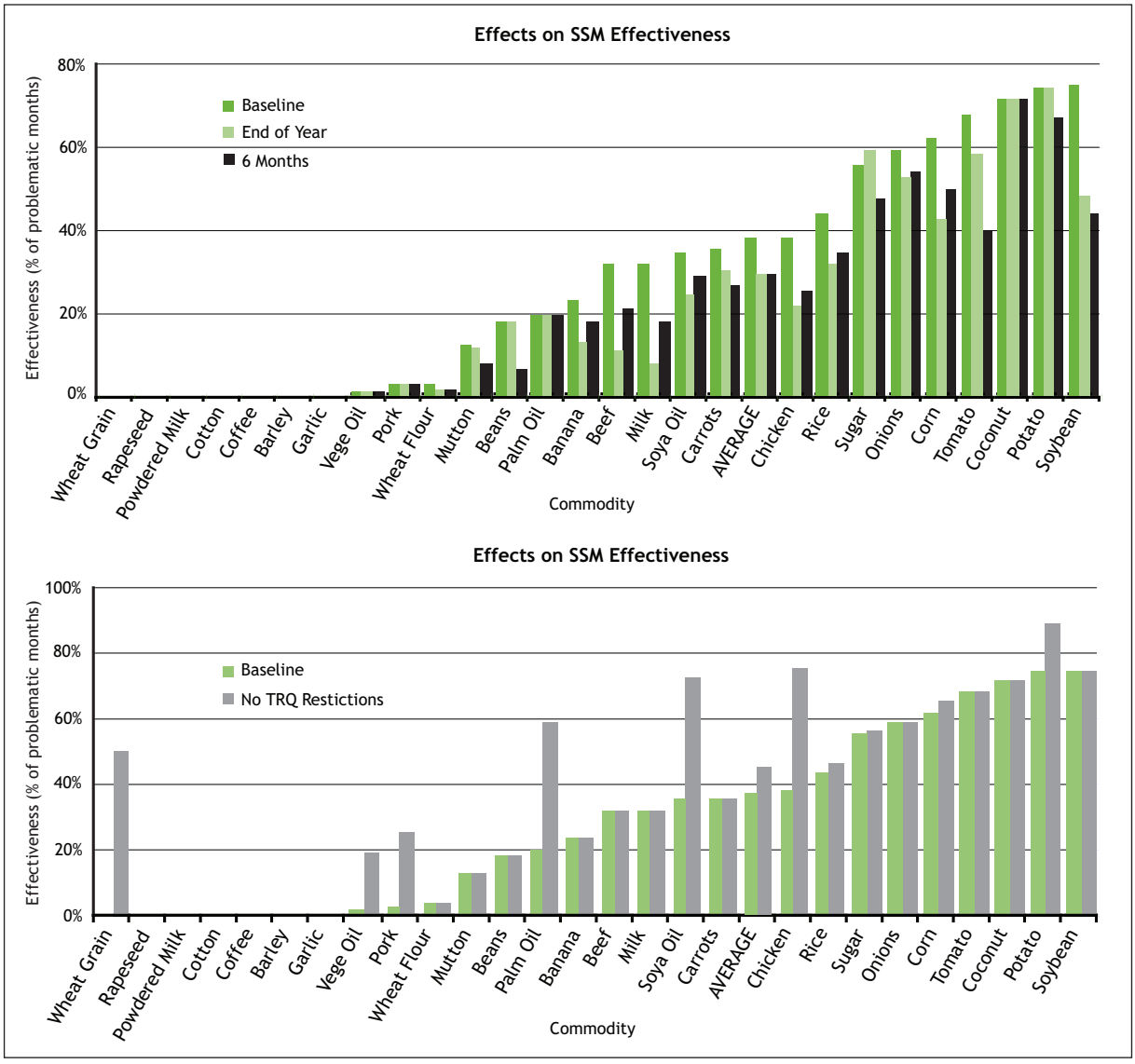
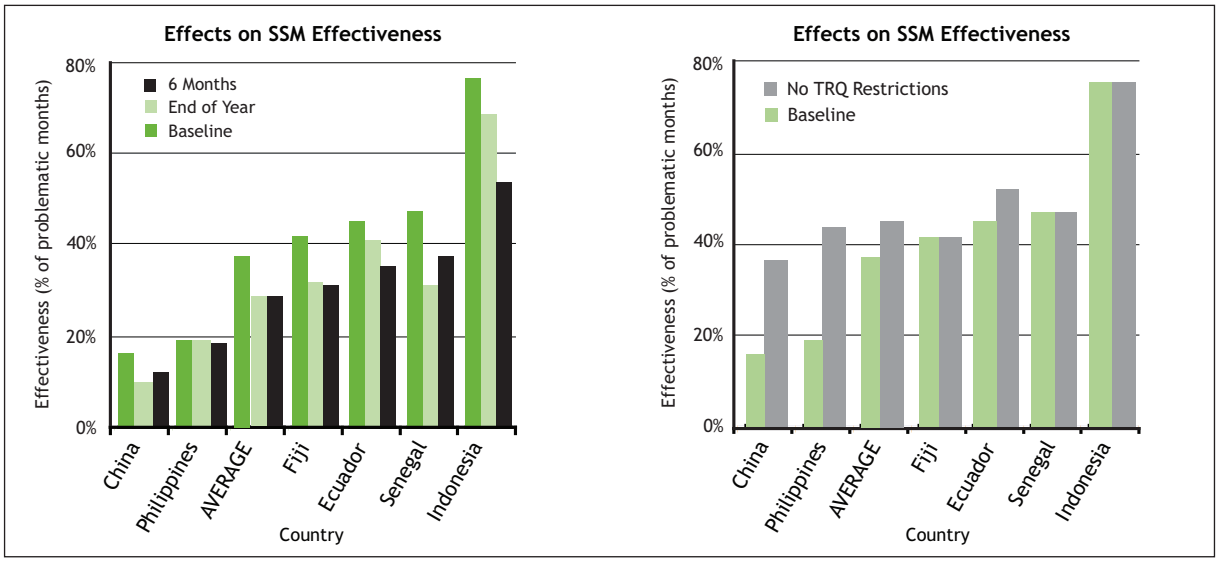


Figure 5.22 Effects of Imposition Periods and TRQ Restrictions on SSM Access and Effectiveness, by Commodity



only two percent of problematic months. This result logically arises from the fact that most of the tariffs on the commodities in question are relatively low, so that a reversion to Doha starting rates would have allowed only very small amounts of remedial duties to be imposed.[24]

Figure 5.23 shows that, under this parameter setting, chicken, milk and vegetable oil lost all their access to SSM remedies and were thus left with zero months during which SSM remedies were effective in addressing problematic price gaps.[25] Fourteen other commodities registered declines in their access to the SSM remedy. Among the 20 products that registered positive effectiveness rates under the baseline scenario, eleven saw their effectiveness rates drop to zero while the rest experienced declines of at least 88 percent compared to their baseline levels.

Table G26 shows that Senegal experienced a total cessation of SSM availability under this parameter setting. As can be seen in Figure 5.24, only China managed to escape major reductions in access rates, although its effectiveness rating was still seriously jeopardised together with those of other countries. Fiji and Indonesia, which absorbed the least cuts in their effectiveness rates, still absorbed a 92 percent decline compared to baseline levels.

The application of simultaneous market tests had similar, although less detrimental, effects on the availability and effectiveness of the SSM. As explained earlier, the proposed market test prohibited the use of volume-based SSM duties in a given month if the average monthly prices of imports during the preceding six months were within ten percent of corresponding averages in the same period in the previous year. Simultaneously, price-based SSM duties were disallowed in cases where the average monthly volume of imports during the preceding six months were within ten percent of corresponding averages in the previous year. Effectively therefore, import surges had to occur simultaneously with price depressions, and vice versa, in order for SSM remedies to be invoked.

Logically, access rates declined by a larger degree overall, considering that the primary effect of the market test was to impose additional and more restrictive conditions on the availability of SSM remedies. However, effectiveness rates ended up comparably higher (at 12 percent) than when the Doha tariff caps were imposed. Still, this amounted to a 68 percent drop in effectiveness rates compared to baseline results.

Figure 5.23 shows that all commodities that started out with positive access rates suffered deterioration in their access rates to the SSM, with pork and vegetable oil absorbing the largest percentage decline. Vegetable oil, wheat flour and beans saw their effectiveness rates dropping to zero as a result of the application of market tests. Another eight commodities ended up with effectiveness rates below ten percent of problematic months.

All six countries experienced reductions in their access rates by more than 40 percent when market tests were applied, with Indonesia absorbing the largest cut of 69 percent. Table G26 reveals that the Philippines suffered the least in terms of effectiveness rates, although it still endured a 37 percent reduction from baseline levels. Indonesia ended up with the largest decline in effectiveness rates in percentage terms, as can be seen in Figure 5.24.

5.3.11 Effect of Foreign Exchange Settings

Table G25 indicates that suspending the proposed modality that allowed foreign exchange rates to be adjusted in the event of severe currency depreciation did not have material effects. Access rates to SSM remedies declined marginally from 64 percent to 63 percent of problematic months, while effectiveness rates dropped by a similar single percentage point to 36 percent. Figure 5.23 shows that 13 commodities were not affected in any way by this parameter adjustment. Five other products experienced relatively minor declines in their access and effectiveness rates; milk was the most negatively affected, with its access rate going down from 76 percent to 64 percent.

Figure 5.23 Effects of Other Restrictions/Foreign Currency Rules on SSM Access and Effectiveness, by Commodity

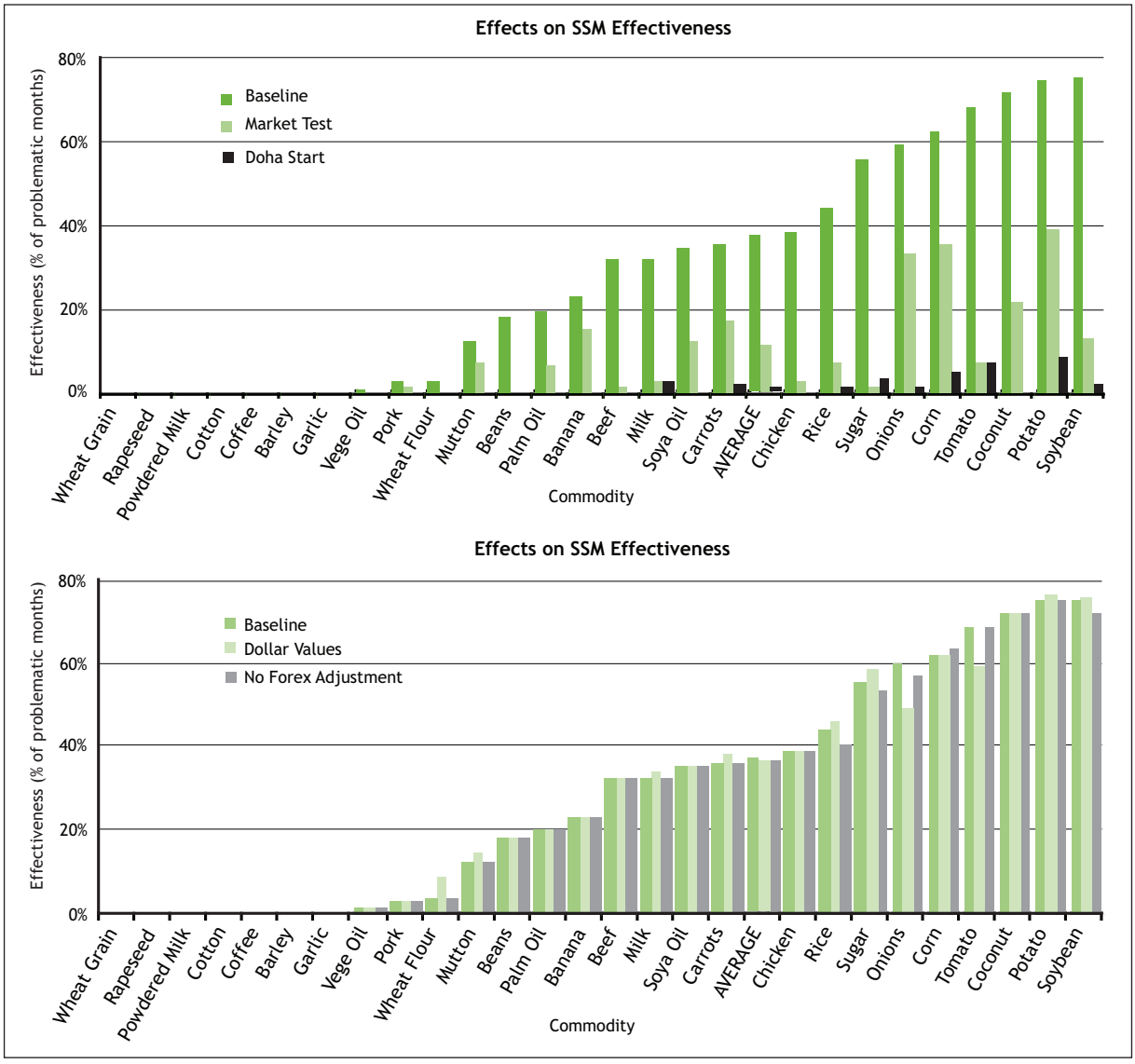
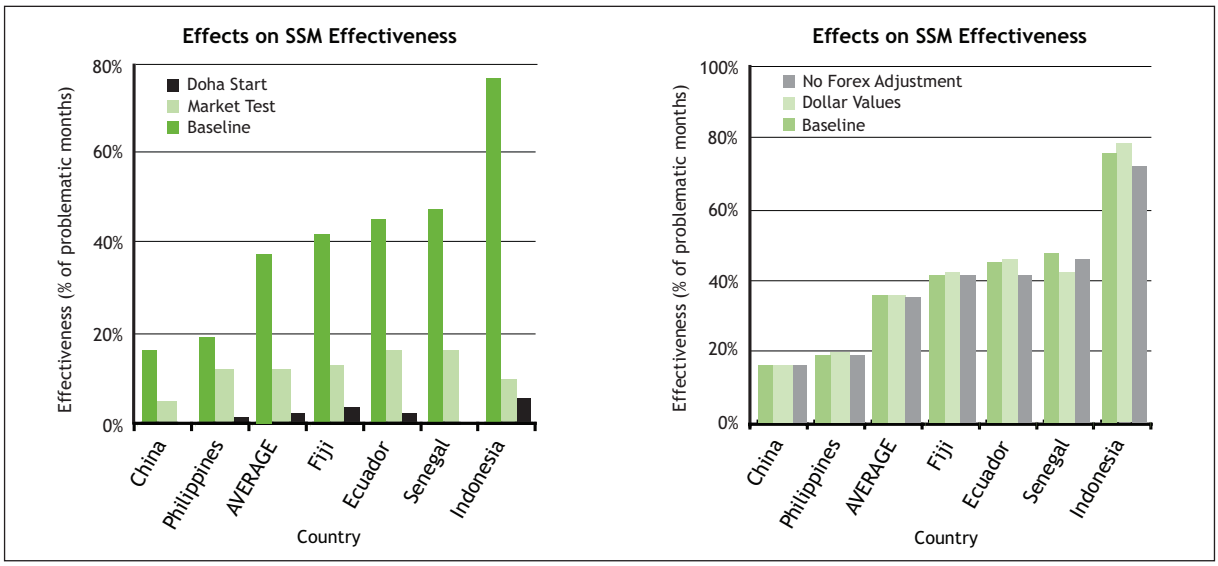


Figure 5.24 Effects of Other Restrictions/Foreign Currency Rules on SSM Access and Effectiveness, by Country



However, the suspension of the currency exchange adjustment modality had no effect on its effectiveness rates. In turn, improvements in access rates were registered for mutton and garlic although these were not complemented by changes in effectiveness rates.

Figure 5.24 reveals that, of the six countries, only China was not affected in both its access and effectiveness rates when the foreign currency adjustment modality was suspended. All the other countries, however, experienced only slight changes in their access to SSM remedies. Only the effectiveness rates of Senegal, Fiji and Indonesia went down, although by not more than eight percent.

Interestingly, Table G25 also shows that using US dollars instead of local curren-cies to value imports and peg domestic prices resulted in some access rates moving in a direction opposite to those of effectiveness rates. Figure 5.23 reveals, for example, that eleven commodities saw their access rates deteriorating as a result of this parameter adjustment, but half of these ended up with higher-than-baseline effectiveness rates. Wheat flour underwent the most drastic change, with its access rate going down by 28 percent even as the effectiveness of the SSM improved from three percent to eight percent of problematic months. In turn, onions saw their access rate improving by less than a percentage point but had to absorb an 18 percent decline in their effectiveness rate.

Table G26 and Figure 5.24 again show that China was the only country that did not react to a shift to US dollars in pricing both imports and domestic commodities. Fiji also maintained its effectiveness rates even though its access to the remedy improved by one percent. The other countries underwent minimal changes in their access and effectiveness rates.

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 SSM Product Coverage

Although the simulation did not address the issue of product coverage, the results reflect the wide divergence among commodities and countries in their susceptibility to import volumes surges and price depressions and their need for special safeguard measures. Aside from import patterns, various other factors such as domestic production and consumption trends, bound MFN and applied tariff levels, exchange rates, domestic price behaviour, and tariff rate quota commitments determine whether the SSM is needed by a particular commodity and whether it will be useful in addressing problematic price and supply situations confronting such a commodity.

Prescribing what products should or should not be provided SSM coverage is therefore inherently problematic, and even more so if the intent of the measure is to help address the particular needs of poor farmers in developing countries and allow their governments to pursue rural development, food security and livelihood security objectives. Even if a commodity is not widely produced or heavily imported in a developing country, or even if it is exported to some extent, there is no guarantee that it will not be subjected to harmful import surges or severe competition from cheap imports so as to seriously threaten the livelihood and welfare of a significantly large number of underprivileged farmers. Prescribing criteria for determining which sectors and commodities deserve to be covered by SSM, in turn, would only complicate the already fractious negotiations, as is currently happening in the talks involving special products or SPs.

There may be some merit to suggestions to exclude exported commodities from SSM coverage, as alluded to in Ambassador Falconer's draft modalities paper issued in July 2007.[26] One could argue that a country is presumably competitive enough in a commodity if it is able to export it to the world market, and therefore should not require protection from competing imports, if there are any. Additionally, a country could be said to have waived its right to protect itself against imports if it sold its stocks abroad because it should not have done so in the first place if it was to eventually import the commodity.

However, there are logically defensible situations in certain countries where the poor state of marketing infrastructure forces the production in a remote area to be exported to nearby foreign markets while imports are undertaken to satisfy demand in the consumption areas. In other cases, local produce is exported in exchange for similar imported products of a different grade, variety or quality. Some products produced by small farmers could be exported even at a loss just to alleviate supply gluts, or recover variable costs, or possibly other non-economic purposes. Imports in turn can be heavily subsidised and wreak havoc on local commodity markets even in situations where part of the local production is exported. Finally, imports may not necessarily occur every year, and a country that starts out as a net exporter may end up being a net importer in the course of time.

Limiting SSM coverage to domestically produced commodities and their substi-tutes is also problematic. In some countries, almost all types and varieties of fruit are considered substitutes and competitors of the few locally produced fruit commodities on the grounds that a purchase of an imported commodity often results in the reduced purchase of locally produced items. There may also be imports of a certain commodity that will allow local food manufacturers to adopt a totally different process, and in the process, severely curtail the market of a different commodity that is produced by local farmers.

While there is therefore some merit to Ambassador Falconer's concerns that the SSM may be abused and applied arbitrarily and frequently on a large number of agricultural products, limiting the coverage of the SSM in

order to address such concerns does not seem to be workable and effective. At the same time, it will surely only provoke interminable debates between importing and exporting countries and, in the process, further jeopardise chances for a successful conclusion of the negotiations.

Perhaps a better approach to this issue is to be flexible and liberal in the matter of product coverage, as proposed by the G-33 which espouses universal product coverage, but at the same time ensure that triggers, thresholds, and remedies will be able to prevent the arbitrary and unreasonably excessive application of SSM measures. This will give enough leeway for countries to maintain the safeguard for all the commodities they see fit to cover with the SSM while providing confidence to exporting countries that their products will be not be blocked by safeguard duties except in truly problematic situations.

If, however, some form of product coverage restrictions is eventually agreed upon, the results of the simulation can be used by each country to identify specific commodities which tend to be particularly vulnerable to import surges and price depressions. This can then be cross-referenced with their list of domestically produced commodities and their substitutes which are deemed important for rural development and livelihood and food security objectives. The commodities that pass through this filtering process can then be ranked, and a final selection can be made based on the product coverage limits agreed upon, whether these are specific numbers or percentages of tariff lines.

6.2 Improving Access to the SSM

Clearly, access to the SSM is critical if developing countries are to be able to use it to pursue their rural development, livelihood security and food security objectives. Ambassador Falconer himself emphasised the need for the mechanism to be "usable" and not to be "unduly complicated or burdensome" for developing countries to use.[27]

It was prescient on the part of the G-33 aggressively to fend off attempts in the negotiations leading to, and including, the Hong Kong ministerial conference in late 2005 to exclude price-based measures from the SSM modality. In turn, opponents of the measure apparently saw in advance that price-based remedies would be more frequently accessed and could have a larger impact on imports than volume-based safeguards. This expectation was verified in the simulations, which showed that while volume-based SSM could be accessed in only 29 percent of the months when using a 10 percent threshold and basing triggers on three-year averages, price-based remedies could be invoked in 45 percent of total months when using three-year average import prices as triggers and applying the zero percent threshold as currently proposed under the June 2006 draft modalities text.

Ambassador Falconer has reconfirmed the Hong Kong consensus to allow for both volume and price-based remedies under the SSM, so the issue of excluding one of these is presumably out of the question now. The only additional relevant proviso that was included in Ambassador Falconer's draft modalities paper was that the two measures could not be applied simultaneously. A concurrent application was, however, apparently never part of the demands of the G-33, and the general presumption was that only one of the two measures could be applied as was the practice with the SGG since the Uruguay Round. The simulations also assumed that in months when both volume and price-based SSM duties are applicable, a country would choose to apply only the higher of the two remedies. Overall, this resulted in a 48 percent access rate, which was slightly higher than when only a price-based remedy was allowed.

Access to the SSM is inextricably linked to trigger levels and thresholds. The simulations showed that volume triggers tended to be lower, and therefore more susceptible to being breached, when they were based on import averages from a greater number of years, such as five instead of three years. One possible explanation is that imports of developing countries are generally

on the rise, so that averaging a longer series of import data included more years when volumes were lower. In contrast, when fewer years of data were used, price triggers became easier to overcome. This could be due to the general downward trend in international commodity prices in the periods covered by the simulation (between 2000 and 2005).

Overall, however, a five instead of three-year average for both volume and price triggers resulted in a slightly better access rate for any type of SSM (50 percent versus 48 percent). On the one hand, this could be interpreted as a signal to push for five instead of three-year averages. On the other hand, it could imply that protracted debates on the number of years to use for averages are unnecessary since they would yield essentially the same result, at least with respect to access to the SSM. However, in the light of data gaps which could have compromised the accuracy of the computation, some caution should again be used when analysing these results and arriving at certain conclusions. Also, the results for individual commodities varied widely.

More significant would be the introduction of consumption parameters in the computation of volume triggers, as was done in the case of the Uruguay Round SSG. The simulations show that overall access declined only slightly from 48 percent to 45 percent of total months if triggers based on three-year import averages were adjusted to equal five percent of average consumption during the same three years if the initial triggers fell below the average consumption level. In many instances, however, historical import and consumption data were not available so that the resultant triggers were probably understated. If complete data were available, it is highly likely that the triggers would rise to at least five percent of historical consumption, and access rates would commensurately decline in the process.

Some may wish to argue that volume-based safeguard duties are intended to address situations involving abrupt increases in the quantity of imports when compared to historical import patterns, and therefore should not be contingent on how these patterns compare to domestic consumption trends. A surge in imports could thus be harmful whether such imports are in excess of a threshold percentage of domestic usage or not. In turn, exporting countries do not necessarily lose much in terms of access because imports within the trigger level, which are equivalent to the average volume of imports during the base period, will still have to be imported before safeguard measures can be invoked. Adjusting for consumption in years when historical import averages are deemed low will therefore be tantamount to creating new market access for them. This is clearly beyond the purview and intent of the SSM which, in fact, is designed to provide safeguards to local producers when such new access is exploited by exporting countries.

The second critical factor affecting access to the SSM concerns thresholds, or the degree of deviation from the triggers that would allow the invocation of either volume or price-based safeguard duties. Although the results of the simulation should be considered to be only indicative in the light of data gaps, they nevertheless give signals that higher volume thresholds will not significantly impair access to the SSM. Raising the volume threshold from ten percent to 30 percent while keeping the price threshold constant at ten percent, for example, resulted in overall access rates declining only from 48 percent to 44 percent of total months. This implies that there may be room to accommodate Ambassador Falconer's assumptions that SSM measures should be invoked only in "extraordinary" and "special" cases, such as those involving large deviations from triggers. The apparent result, however – that the SSM could still be invoked in a high 44 percent of total months even when volume thresholds are raised to 30 percent – may not be enough to assuage fears of the SSM being "literally triggered hundreds or scores of times by developing country Members".[28]

The simulations indicate that proponents of the SSM could be more flexible in accommodating the concerns of exporting countries with respect to the maximum period for imposing SSM duties without substantially sacrificing reasonable access to the remedy. Reducing the imposition period from 12 to six months, for

example, resulted in a decline of the access rate from 48 percent to a still respectable 40 percent of total months. In fact, allowing SSM duties only up to the end of the year yielded a better result (42 percent) than when a six-month cap was imposed.

If a slight reduction in the access rate is acceptable to SSM proponents, a reversion to the Uruguay Round SSG end-of-year modality may help speed up negotiations on the SSM while providing more or less the same access as shorter imposition periods. This will also effectively address the concerns, echoed by Ambassador Falconer, that a 12-month imposition period can result in SSM duty imposition, and the resultant decline in imports, spilling into the succeeding year, thereby unduly deflating the import volume triggers for subsequent years.[29] Notably, the simulations seem to indicate that any losses in access from an end-of-year limit to imposition periods could be more than recovered by shifting from a calendar to a July-June implementation period. The resultant access rate of 57 percent was in fact higher than the baseline result of 48 percent, although both scenarios applied a 12-month imposition period.

The new proposal incorporated in the G-33 version of the SSM modality involving adjustments in foreign exchange rates in the event of severe currency fluctuations did not seem to have had a significant effect on overall access rates. Considering, however, that such a proposition has not met any major resistance from negotiating parties, it would still be advisable to retain the option to adjust conversion rates in order to address contin-gencies in the future.

Proposals to impose additional market tests on the use of safeguard remedies are likely to have a significant impact on access to the SSM, which the simulations can help to quantify. They in fact show that access to the measure declined very substantially from the baseline level of 48 percent to only 19 percent of total months if remedial duties were disallowed during periods when average prices and volumes did not deviate from corresponding averages in prior years by more than ten percent. For several commodities, the market test effectively rendered the SSM inutile.

It could be argued that the link between import volumes and prices is not always symmetrical, nor do abrupt movements in both volumes and prices need to coincide in order to result in serious harm to producers in importing countries. It could very well happen that a decline in import prices triggers the quantity surge instead of a sudden influx of imports causing a price depression. In turn, if import volumes surge while import prices are relatively steady compared to previous periods, they could exert a severe psychological if not a quantitative effect on domestic supply conditions that eventually results in major price disruptions. By the time import price and volume trends are able to simultaneously satisfy market test conditions so as to allow SSM remedies, the harm to domestic markets and local producers may already be irreparable. Further, previous episodes of sudden short-term surges in cheap imports, such as those involving surplus leg quarters and dumped excess sugar, have proven to have had widespread and protracted effects on the production cycles and markets of domestic producers.

There also does not appear to be any logic to imposing two sets of triggers and thresholds on volume and price-based remedies. If the intention is to restrict the use of the SSM only to instances with simultaneous volume surges and price depressions, then the original trigger and threshold modalities should be recast, or the market test should be adopted, instead of complicating the SSM with a second layer of restrictions. Arguably, it is difficult to justify imposing market tests of this sort on a measure that is designed mainly for resource-poor producers in developing countries while well-supported farmers in developed countries are able to avail themselves of the benefits of the SSG without any additional restrictions.

Finally, it is quite clear from the simulations that removing the constraints imposed by TRQs on the use of safeguard measures can have a dramatic effect on access rates. Overall access rates, for example, increased from 48 percent to 59 percent of total months when this adjustment was made, and would have been much higher if the analysis was confined to countries and commodities with TRQ commitments.

Intuitively, TRQ constraints can be removed by adjusting out-quota bound tariffs to their in-quota levels so that the TRQ tariff, and the TRQ classification system itself, become redundant. In effect, all imports become TRQ imports, or conversely, out-quota imports. There will effectively be no need to make TRQ commitments because all imports will be allowed to come in at in-quota tariff levels. In exchange for this adjustment, which would mean lowering the bound tariffs unilaterally, the SSM could be invoked at any time the volume and price triggers are breached whether cumulative import volumes were within original TRQ commitments or not.

Clearly, this option is beneficial primarily when the differential between the out-quota bound and the in-quota TRQ tariffs is relatively small. The cost of removing this gap by lowering out-quota tariffs to in-quota levels may be minimal compared to the benefits that can be gained in terms of enhanced access to the SSM. In this regard, countries contemplating making use of sensitive product flexibilities under the proposed Doha Round modalities may need to reassess the effect of expanding their TRQs as compensation for deviations from regular tariff reduction modalities. Exporting countries in turn may deem it preferable to enhance access to markets through lower tariffs than by way of TRQ commitments. However, a legal opinion may have to be secured to determine whether WTO rules will allow for a unilateral removal of TRQ commitments in exchange for a reduction of tariffs to in-quota levels.

6.3 Improving the Effectiveness of the SSM Modality

Ultimately, it is the effect of import surges and price depressions on domestic prices which is the primary concern of local producers. Large volumes of imports displace local production and/or could create supply gluts which result in market price declines which affect farmers' incomes and welfare. Cheap imports have a more direct effect by lowering domestic prices and displacing more expensive locally-produced stocks. In turn, one could argue that large quantities of imports, or even import prices lower than price triggers, may not be that problematic for as long as they do not unduly depress the prices received by domestic producers.

Hence, it is important not only to measure access to the SSM but also to determine whether it is effective in addressing situations where the entry of imports results in, or coincides with, a dampening of domestic prices. Although such a relationship between import prices and volumes and domestic prices is not included in any safeguard modality, access to the SSM clearly would be useless if the measure fails to rectify domestic price depressions arising from imports even if the measure is able to bridge gaps between import prices and triggers. Additional simulations could also help indicate which parameter settings would enhance or inhibit the effectiveness of the measure and accordingly guide negotiators in their deliberations. Further, these analyses may reveal parameter adjustments that appear benign and inconsequential to access rates but end up being deleterious to the effectiveness of the SSM.

The simulations indicate that out of every 12 months, there were on the average about six months during which monthly CIF import prices plus bound tariffs fell below corresponding domestic monthly prices by more than ten percent. The SSM was accessible in four of these six problematic months, and when it was imposed, it was effective in bridging the price gaps only in two of the six problematic months. Here, we can see a clear disparity in the results – while the SSM could be accessed in about half of total months and two-thirds of problematic months, it was effective in only one-sixth of total months and one-third of problematic months.

Countries may have different levels of satisfaction and ambition over the effectiveness of the SSM. Nevertheless, many of them are likely to consider that a modality that is ineffective two-thirds of the time when problematic price gaps arise does not adequately satisfy their needs. These countries may therefore find it important to identify modalities and

parameter settings that would provide them with greater flexibility.

Many of the findings and conclusions in the assessment of the accessibility of the SSM under various parameter settings were confirmed in the evaluation of the effectiveness of the SSM in addressing problematic price gaps. Price-based remedies also tended to be more accessible during problematic months than volume-based measures, although there was practically no difference in their individual effectiveness rates. However, allowing access to both measures dramatically increased overall access to 64 percent of all problematic months, while the effectiveness rate significantly increased from the 24 percent-24 percent level to 37 percent of problematic months. Clearly, retaining access to both types of safeguard measures was crucial in preserving the effectiveness of the SSM.

As in the case with access rates, higher thresholds did not appear to be exceptionally detrimental to the effectiveness of the SSM. When the volume threshold was raised from five percent to 15 percent above the trigger and only months when import prices fell by more than 15 percent below the price trigger were considered (compared to zero percent in the baseline scenario), the effectiveness rate went down only marginally from 37 percent to 33 percent of problematic months even though access rates declined more significantly from 64 percent to 52 percent. This provides some indication that threshold levels can be relaxed to assuage export-oriented negotiating blocs without unduly compromising the effectiveness of the SSM. However, there is clearly a limit to the exercise, as shown by the fact that a further adjustment of thresholds to 30 percent of both price and volume triggers resulted in a more discernable decline in effectiveness rates to 25 percent.

The simulations also point to some room for flexibility in the negotiations over the extent of remedies. When volume-based remedial tariffs were doubled while retaining baseline price-based remedies, effectiveness rates went up by four percentage points to 41 percent of problematic months. In turn, the effectiveness rates went down by the same percentage points when the volume-based tariffs were cut in half. These variations represent roughly a ten percent deviation from baseline results and thus do not seem to be overly significant.

Greater care and attention should be extended to attempts to impose caps and other restrictions on the SSM remedies available. For countries and commodities that have relatively low tariffs, the simulations validate the logical conclusion that volume-based remedies in the form of percentages of bound rates had comparatively inferior effects on SSM effectiveness rates than absolute percentage point duties. Based on the matrix of volume-based remedies in the baseline scenario, safeguard duties quoted as percentage of bound tariffs would be lower than the prescribed absolute percentage point remedies if bound tariffs were below the 60 percent-80 percent range. Only countries whose bound tariffs for SSM commodities generally exceed this range would correspondingly benefit from remedies quoted as percentages of bound tariffs.

By the same token, caps on allowable volume-based remedies which take the form of percentages of bound tariffs understandably produce inferior results when tariffs are at relatively low levels. The simulations for example revealed that effectiveness rates dropped from 37 percent to 14 percent of problematic months under this scenario, primarily because the commodities covered by the study had relatively low levels of tariff protection. In turn, limiting SSM duties to 50 percentage points, while still resulting in a decline in effectiveness rates to 30 percent, nevertheless produced a less inimical result.

Countries with relatively low tariffs therefore should lobby for high absolute percentage point remedies, while countries with tariffs generally above the 60 percent to 80 percent range would do well to work for higher percentages of bound tariffs as the basis for computing volume-based SSM duties.

Particular attention should be focused on proposals to impose additional market tests on the use of SSM duties, which the simulations show will result in a drastic decline not only in access rates but also a two-thirds cut in

effectiveness rates from 37 percent to 12 percent of problematic months. All commodities covered by the study suffered perceptible declines in their individual effectiveness rates when this parameter setting was introduced.

Another significant result arose from the application of a modality alluded to in Ambassador Falconer's draft modalities whereby Uruguay Round bound rates, equivalent to presumed starting rates in the Doha Round, could not be exceeded after applying SSM remedies.[30] In this scenario, the effectiveness rate plunged to two percent, thereby rendering the SSM virtually inutile. Among the 20 commodities covered that registered positive effectiveness rates under the baseline scenario, eleven saw their effectiveness rates drop to zero while the rest experienced declines of at least 88 percent compared to their baseline levels. Ambassador Falconer's paper envisaged that LDCs would be exempt from this restriction; indeed, they would otherwise have had no access to SSM remedies, since their proposed exemption from any tariff reduction in the Doha Round would have meant that even the slightest safeguard duty application would have brought them over starting tariff levels.

Some Members may question the logic behind the proposal to cap total tariffs (MFN plus SSM) to Uruguay Round bound levels. The SSG that both developed and developing countries have theoretically been able to access since the Uruguay Round - and which stands to be maintained in an eventual Doha Round agreement - does not incorporate any such provision. Several countries, many of them developed, have invoked the SSG since the Uruguay Round and were able to introduce additional safeguard duties that brought their total tariffs well over starting levels. This was never considered a regression from the market access reform process. On the basis of this, some Members might therefore question the extent to which it is fair or reasonable to deny this option to developing countries seeking to protect their small producers and pursuing food security, livelihood security and rural development objectives.

Arguably, therefore, the proposed restriction substantially undermines the utility of the SSM. A commodity with a relatively high tariff rate of 130 percent, for example, which occupies the highest tier in the G-20's proposed tariff reduction schedule and for which a 40 percent cut over ten years is recommended, would be entitled to an SSM remedy that would start from zero in the first year and increase by only five percentage points every year. A 50 percent starting level of tariffs in turn would allow only an increment of 1.5 percentage points of additional SSM tariffs every year.

The analysis of the effects of SSM imposition periods on the effectiveness of the measure generally mirrored the results arising from the evaluation on access rates. Effectiveness rates ended up the same whether a six-month period was imposed or SSM duties were allowed to be retained only up to the end of each year. However, in both cases, the effectiveness of the measure declined from the baseline level of 37 percent to 29 percent. This corresponded to a relatively substantial 22 percent deterioration. Nevertheless, as implied earlier, endless haggling over this issue could perhaps be forestalled without unduly harming effectiveness rates by accepting an end-of-the-year modality and then shifting to a July-June instead of calendar year implementation period. The net result may be very close to baseline levels considering that the application of a July-June implementation period appears to improve not only access but also effectiveness rates.

Also consistent with the findings on access rates, the removal of constraints on the use of safeguard measures on imports falling within TRQ commitments resulted in dramatic improvements in both access to, and the effectiveness of, the SSM. The SSM became available in three out of every four months when TRQ restrictions were lifted, compared to a little less than one-third in the baseline scenario. The SSM in turn proved to be effective in addressing problematic price gaps in almost one-half of the problematic months as against only 37 percent when the TRQ restrictions were retained.

As mentioned earlier, there does not seem to be any reason why countries cannot unilaterally

dismantle their TRQs by voluntarily bringing down their MFN bound rates to in-quota levels, and in the process enjoy greater access to a more effective SSM measure. However, some legal study has to be made whether a country's TRQ commitments can in fact be extinguished when such a unilateral adjustment is made.

6.4 Addressing Exporting Country Interests

Some export-oriented countries have proposed that imports under preferential trade agreements be excluded in computing volume and price triggers and in determining whether SSM remedies could be invoked or not. They argue that a country would normally first try to source most of its requirements from a preferential trading partner because of lower tariffs. This could very easily bring cumulative imports of a commodity to the brink of breaching triggers, so that other exporting countries who are not parties to the trade agreement will end up not only paying higher tariffs but also absorbing additional costs brought about by SSM duties. They contend further that countries that acceded to preferential trade agreements are presumed to have accepted the risks of import surges and price depressions arising from non-MFN imports, and that they should not be asked to shoulder the burden of addressing problems when these occur primarily due to imports coming in at preferential tariff rates.

Unfortunately, it was not possible to accommodate this proposed modality in the simulations. Limited as they already were, the import statistics could not be disaggregated by source country. It was also impossible to separate imports subjected to MFN tariffs from those benefiting from preferential rates under regional and similar trade agreements.

Nevertheless, the results of simulations when tweaking threshold levels could provide indications of the possible effects of such a proposal. Excluding non-MFN imports from trigger computations and threshold breaches would be similar to raising the minimum level of deviation from triggers before SSM duties can be invoked. In this regard, the simulations show that overall access to the SSM did not decrease significantly when the volume threshold was raised from ten percent to 30 percent, while keeping the price threshold constant at ten percent. If only problematic months were considered, a more perceptible decline in access rates was detected when volume and price thresholds were raised to 15 percent each (from five percent and zero percent respectively). Still, the eventual effectiveness rates did not differ much from baseline levels. Increasing the thresholds further to 30 percent, however, affected both access and effectiveness rates substantially, indicating that such adjustments could not be undertaken interminably without unduly affecting the quality of the SSM.

It is, however, improper to immediately infer from these simulation results that excluding non-MFN imports from triggers and threshold breaches can be accommodated to some extent without impairing the effectiveness of the SSM. The magnitude of the volumes and level of prices of imports under preferential trade agreements vary greatly by country and commodity, and a uniform threshold adjustment will not be able to take into account all possible scenarios. Arguably, it would also not be logical to allow only a portion of non-MFN imports to be excluded.

Some Members may contend that allowing such exclusions would undermine the SSM's objective of addressing import surges and price depressions irrespective of their origins or causes. According to this perspective, there is an even greater risk of market disruptions from non-MFN imports since they can come in at preferential tariff rates. Indeed, some developing countries are believed to favour the inclusion of an SSM modality in the Doha Round agreement precisely because the trade pacts they concluded with large trading partners effectively remove their recourse to special safeguard duties. For these countries, confining the application of the SSM to MFN imports in the Doha Round will not represent a solution to the problems they currently face.

Furthermore, the fears of many export-oriented countries that the SSM will be invoked "literally hundreds of times" and in an abusive manner are arguably to a large extent unfounded. ICTSD has determined, for example, that developing countries which had access to the SSG actually made use of the remedy in only one percent of the instances in which they could have done so since the Uruguay Round. At the same time, exporting countries have continued to seek some form of guarantee that the SSM will not be invoked indiscriminately. In practice, many developing countries lack the administrative capacity and financial resources to collect import data promptly and accurately, determine whether safeguard duties can be imposed, and actually implement such adjustments. In many cases, they resort to imports because of local supply deficits or to keep domestic prices within politically acceptable levels, and it would be illogical for them to impose additional tariffs on imports that they actually need and want to bring into the country. Governments also often have to consider the interests and political clout of importers and food processors who depend on imports, aside from those of local producers, in deciding whether to impose safeguard duties or not. Finally, the simulations show that on the average, SSM measures will be effective in only about one-third of instances when import prices fall below domestic rates by more than ten percent. In the two-thirds of cases where they are not effective, imports will continue to be cheaper than domestic produce even if SSM duties are imposed, and will therefore presumably continue to come in.

There is also no assurance that export-oriented countries that are not parties to a preferential trade agreement will gain greater market access when non-MFN imports are excluded from the SSM modality. Price triggers, for example, are based on historical CIF import prices. Imports from a preferential trading partner may cost more or less than competing MFN imports in CIF terms, but in any case could still enjoy better access because of the lower tariffs applied. Therefore, if price triggers are based exclusively on MFN imports, they will not necessarily end up higher and therefore harder to breach by the importing country. They could, in fact, end up lower if MFN imports were historically cheaper in CIF terms than imports coming in at preferential tariffs, in which case the probability of the SSM being invoked would increase to the possible detriment of MFN exporters.

Similarly, if non-MFN imports are excluded in computing the volume trigger, the residual trigger would potentially be much lower and therefore easier to breach. If an importing country, for example, averaged 100 thousand metric tons (TMTs) of imports of a certain commodity and excluded 60 TMTs coming from preferential trading partners, its volume trigger would be reduced to 40 TMTs. MFN exporters will have to compete against each other to access this residual volume before running the risk of being subjected to SSM duties. They will not necessarily gain new market access. In fact, the non-MFN exporters may eat into their share not only because they are eligible for preferential tariffs but also because they are effectively shielded from additional SSM duties. Additionally, once SSM remedies are imposed on MFN imports, there will be a tendency for MFN imports to go down during the imposition period. This will then translate to lower triggers in succeeding years, and therefore less SSM-free market access for MFN exporting countries.

6.5 Other Issues

In order to make full use of the benefits of any SSM modality that is eventually agreed upon, developing countries will have to ensure that the volume, price and other data that is needed to correctly invoke SSM remedies can be secured promptly, accurately, and in the correct form and frequency. In addition, governments must put in place the necessary legislation and administrative system to swiftly invoke SSM remedies when deemed necessary and then ensure that decisions are properly implemented when subsequent imports come in. It would indeed be unfortunate if, after all the discussions and debates on the SSM, WTO Members end up being

unable to access and benefit from the remedy because of data limitations or administrative deficiencies. The problems encountered in this study in trying to secure the proper data indicate that this outcome is not a remote possibility. Many developing countries clearly do not have the capacity to track volumes and prices of imports arriving in different ports of entry, or to disaggregate import data by tariff line and compare the data to comparable statistics on domestic products.

Finally, developing countries should not lose sight of the relative importance of the SSM in addressing their development objectives vis-à-vis their proposals on special products (SPs) and special and differential treatment in general. At present, for example, it appears that a disproportionate amount of negotiating capital is arguably being expended on securing a favourable SP outcome, while negotiations on the SSM have generally been deferred or sidelined. Developing country Members may wish to guard against the possibility that the final SSM configuration will be diluted in the end-game of the negotiations in exchange for an acceptable deal on SPs.

For many developing countries, particularly those whose residual tariffs are relatively low, the SSM will in fact be inherently more useful than any proposed SP modality. For example, a commodity with a 50 percent tariff will land in the second tier of normal tariff reduction schedules proposed by the G-20, and its tariff will have to be reduced to 35 percent or by one and a half percent per year over a ten-year implementation period. If the commodity qualifies for an SP and is, say, allowed to reduce its tariff by only ten percent, the annual descent in tariffs will be only one half a percent. Hence, there is a "gain" of one percent additional "protection" per year if the SP modality is enforced.

If, because of oversight or negligence, any meaningful SSM modality is not adopted in the negotiations in exchange for an SP arrangement, the benefit to the commodity will be limited to the one percent extra "protection" per year. There will, however, be no meaningful recourse to an additional safeguard duty in the event cheap or large volumes of imports come in and the tariff protection wall is not sufficient to fend off these imports.

On the other hand, even if the commodity does not qualify to be an SP but secures access to a meaningful SSM, the additional duty that could be imposed in case of problematic imports could potentially be much more than the one percent annual additional protection that could have been accorded if it were an SP. An SSM remedy level of 20 percent of bound tariffs, for example, would have resulted in an additional ten percent safeguard duty in the first year versus a one percent saving in tariff reduction under the SP mode. Countries may also have recourse to safeguard duties in the form of absolute percentage points which can still be superior to SP modalities in future years when bound tariff levels have gone down. The SSM therefore potentially provides developing countries wider latitude in protecting their producers, which is crucial considering that they often have access only to tariffs in providing such support due to the lack of resources to provide subsidies and other forms of assistance.

A very liberal SP modality is also not the only recourse for developing countries seeking to protect their small producers from harmful imports. Developing countries are also entitled to designate a certain percentage of sensitive products which can deviate from normal tariff reduction formulas, albeit at the cost of expanding TRQs. However, if bound tariffs are already relatively low, the difference between and 20 percent tariff cut for SPs and a 40 percent reduction for sensitive products may not be that substantial, especially if the reduction is to be spread over ten years. Designating a product as a sensitive product with access to an effective SSM may have more utility than having a favourable SP modality with a weak special safeguard mechanism.

Finally, the application of safeguard duties to address problematic situations is not only more useful to importing countries but also potentially more favourable to their trading partners. They can be imposed only when problematic situations arise, unlike bound tariffs which are applied uniformly and consistently whether there are import surges or price depressions or not.

APPENDIX A

G–33 PROPOSAL ON

ARTICLE ~~5~~ [...]

SPECIAL SAFEGUARD ~~PROVISIONS MECHANISM FOR DEVELOPING COUNTRIES~~

1. Notwithstanding the provisions of paragraph 1(b) of Article II and of Article XI of GATT 1994 or of Article 4 of this Agreement, any developing country Member may take recourse to the imposition of an additional duty in accordance with the provisions of paragraphs 4 and 5 below in connection with the importation of ~~an~~ any agricultural product listed in Annex 1 to this Agreement, ~~in respect of which measures referred to in paragraph 2 of Article 4 of this Agreement have been converted into an ordinary customs duty and which is designated in its Schedule with the symbol "SSG" as being the subject of a concession in respect of which the provisions of this Article may be invoked,~~ if:

(a) the volume of imports of that product entering the customs territory of ~~the~~ that developing country Member ~~granting the concession~~ during any year[31] exceeds a trigger level equal to the average annual volume of imports for the most recent three-year period preceding the year of importation for which data are available (hereinafter referred to as the "average import volume") ~~which relates to the existing market access opportunity~~ as set out in paragraph 4; or, but not concurrently:

(b) the c.i.f. import price, expressed in terms of the developing country Member's domestic currency, ~~-~~at which a shipment[32] of imports of that product ~~may enter~~ enters the customs territory of ~~the~~ that developing country Member during any year ~~granting the concession, as determined on the basis of the c.i.f. import price of the shipment concerned expressed in terms of its domestic currency~~ (hereinafter referred to as the "import price"), falls below a trigger price equal to the average ~~1986 to 1988~~ monthly ~~reference~~ price[33] for ~~the~~ that product ~~concerned~~ for the most recent three-year period preceding the year of importation for which data are available (hereinafter referred to as the "average monthly price"),

provided that, where the developing country Member's domestic currency has at the time of importation depreciated by at least 10 per cent over the preceding 12 months against the international currency or currencies against which it is normally valued the import price shall be computed using the average exchange rate of the domestic currency against such international currency or currencies for the three-year period referred to above.

2. Imports under any tariff rate quota ~~current and minimum access commitments established as part of a concession referred to in paragraph 1 above~~ shall be counted for the purpose of determining the volume of imports required for invoking the provisions of subparagraph 1(a) and paragraph 4, but imports within such ~~commitments~~ tariff rate quota shall not be affected by any additional duty imposed under either subparagraph 1(a) and paragraph 4 or subparagraph 1(b) and paragraph 5 below.

3. Any ~~supplies~~ shipments of the product in question which have been contracted and were en route after completion of custom clearance procedures in the exporting country before the additional duty is imposed either under subparagraph 1(a) and paragraph 4 or under subparagraph 1(b) and paragraph 5 shall be exempted from any such additional duty, provided that:

(a) ~~they~~ the volume of such shipments may be counted in the volume of imports of the product in question during the following year for the purposes of triggering the provisions of subparagraph 1(a) in that year; or~~.~~

(b) the price of any such shipment may be used during the following year in determining the average monthly trigger price for the purposes of triggering the provisions of subparagraphs 1(b) in that year.

4. (a) Any additional duty imposed under subparagraph 1(a) shall only be maintained for no more than 12 months after it has been imposed.

(b) An additional duty imposed under subparagraph 1(a) ~~until the end of the year in which it has been imposed, and~~ may only be levied at ~~a level~~ levels ~~which~~ that ~~shall~~ do not exceed ~~one third of the level of the ordinary customs duty in effect in the year in which the action is taken. The trigger level shall be set according to~~ those specified in the following schedule ~~based on market access opportunities defined as imports as a percentage of the corresponding domestic consumption[34] during the three preceding years for which data are available~~:

(~~a~~i) where ~~such market access opportunities for a product are less than or equal to 10 per cent, the base trigger level shall equal 125 per cent~~ level of imports during a year does not exceed 105 per cent of the average import volume, no additional duty may be imposed;

(~~b~~ii) where ~~such market access opportunities for a product are greater than 10 per cent but less than or equal to 30 per cent,~~ the ~~base trigger level shall equal 110~~ level of imports during a year exceeds 105 per cent but does not exceed 110 per cent of the average import volume, the maximum additional duty that may be imposed shall not exceed 50 per cent of the bound tariff or 40 percentage points, whichever is higher;

(~~c~~iii) where ~~such market access opportunities for a product are greater than 30 per cent, the base trigger level shall equal 105~~ level of imports during a year exceeds 110 per cent but does not exceed 130 per cent of the average import volume, the maximum additional duty that may be imposed shall not exceed 75 per cent of the bound tariffs or 50 percentage points, whichever is higher~~.~~;

(iv) where the level of imports during a year exceeds 130 per cent of the average import volume, the maximum additional duty that may be imposed shall not exceed 100 per cent of the bound tariff or 60 percentage points, whichever is higher.

In all cases the additional duty may be imposed in any year where the absolute volume of imports of the product concerned entering the customs territory of the Member granting the concession exceeds the sum of (x) the base trigger level set out above multiplied by the average quantity of imports during the three preceding years for which data are available and (y) the absolute volume change in domestic consumption of the product concerned in the most recent year for which data are available compared to the preceding year, provided that the trigger level shall not be less than 105 per cent of the average quantity of imports in (x) above.

5. (a) ~~The~~ Any additional duty imposed under subparagraph 1(b) ~~shall be set according to the following schedule:~~ may be assessed either on a shipment-by-shipment basis or on an ad *valorem* basis for a duration of no more than 12 months as defined in subparagraph 5(b) below.

(~~a~~b) In the event that the additional duty is assessed on that product:

(i) on a shipment-by-shipment basis, the additional duty shall not exceed ~~if~~ the difference between the ~~c.i.f.~~ import price of ~~the~~ each shipment ~~expressed in terms of the domestic currency (hereinafter referred to as the "import price")~~ and the trigger price ~~as defined under that subparagraph is less than or equal to 10 per cent of the trigger price, no additional duty shall be imposed;~~

~~(b)~~(ii) ~~if~~ on an *ad valorem* basis, the additional duty shall not exceed the difference between the import price of the shipment and the trigger price referred to in subparagraph 1(b) above, expressed as a percentage of ~~and~~ that ~~trigger~~ import price;

provided that if at least two subsequent shipments are at import prices that are 5 per cent or more lower than the trigger price referred to in subparagraph 1(b), the developing country Member may shift to the imposition of additional duty on a shipment-by-shipment basis as set out in subparagraph 5(b)(i) above. ~~(hereinafter referred to as the "difference") is greater than 10 per cent but less than or equal to 40 per cent of the trigger price, the additional duty shall equal 30 per cent of the amount by which the difference exceeds 10 per cent;~~

~~(c) if the difference is greater than 40 per cent but less than or equal to 60 per cent of the trigger price, the additional duty shall equal 50 per cent of the amount by which the difference exceeds 40 per cent, plus the additional duty allowed under (b);~~

~~(d) if the difference is greater than 60 per cent but less than or equal to 75 per cent, the additional duty shall equal 70 per cent of the amount by which the difference exceeds 60 per cent of the trigger price, plus the additional duties allowed under (b) and (c);~~

~~(e) if the difference is greater than 75 per cent of the trigger price, the additional duty shall equal 90 per cent of the amount by which the difference exceeds 75 per cent, plus the additional duties allowed under (b), (c) and (d).~~

6. For perishable and seasonal products, the conditions set out above shall be applied in such a manner as to take account of the specific characteristics of such products. In particular, shorter time periods under subparagraph 1(a) and paragraph 4 may be used in reference to the corresponding ~~periods~~ period in the ~~base~~ three-year period referred to in subparagraph 1(a) and different ~~reference~~ trigger prices for different periods may be used under subparagraph 1(b).

7. The operation of the special safeguard shall be carried out in a transparent manner. Any developing country Member taking action under subparagraph 1(a) above shall give notice in writing, indicating the tariff lines affected by the measure and including relevant data to the extent available, to the Committee on Agriculture as far in advance as may be practicable and in any event within ~~10~~ 30 days of the implementation of such action. ~~In cases where changes in consumption volumes must be allocated to individual tariff lines subject to action under paragraph 4, relevant data shall include the information and methods used to allocate these changes.~~ A developing country Member taking action under paragraph 4 shall afford any interested Members the opportunity to consult with it in respect of the conditions of application of such action. Any developing country Member taking action under subparagraph 1(b) above shall give notice in writing, indicating the tariff lines affected by the measure and including relevant data to the extent available, to the Committee on Agriculture within ~~10~~ 30 days of the implementation of the first such action or, for perishable and seasonal products, the first action in any period. Developing country Members undertake, as far as practicable, not to take recourse to the provisions of subparagraph 1(b) where the volume of

imports of the products concerned are declining. In either case a developing country Member taking such action shall afford any interested Members the opportunity to consult with it in respect of the conditions of application of such action.

8. Where measures are taken in conformity with paragraphs 1 through 7 above, Members undertake not to have recourse, in respect of such measures, to the provisions of paragraphs 1(a) and 3 of Article XIX of GATT 1994 or paragraph 2 of Article 8 of the Agreement on Safeguards.

9. ~~The provisions of this Article shall remain in force for the duration of the reform process as determined under Article 20.No developing country Member shall take recourse to measures under Article 5 in respect of any product on which it has imposed additional duties pursuant to the provisions of this Article.~~

APPENDIX B

Committee on Agriculture, Special Session 26 April 2006
Market Access

Chair's Reference Paper[35]

SPECIAL SAFEGUARD MECHANISM

Background

Paragraph 7 of the Hong Kong Ministerial Declaration states, *inter alia*, that:

> "…. We also note that there have been some recent movements on […] elements of the Special Safeguard Mechanism. […] Developing country Members will also have the right to have recourse to a Special Safeguard Mechanism based on import quantity and price triggers, with precise arrangements to be further defined. Special Products and the Special Safeguard Mechanism shall be an integral part of the modalities and the outcome of negotiations in agriculture."

Paragraph 42 of the Agreed Framework (Annex A of WT/L/579) states that:

> "A Special Safeguard Mechanism (SSM) will be established for use by developing country Members.

Structure for discussion

Introduction

The Agreed Framework states that a Special Safeguard Mechanism (SSM) will be introduced for developing countries. The Hong Kong Ministerial Declaration makes it clear that this SSM will be activated if either the price or quantity trigger is passed.

The SSM has been the subject of intensive discussion in various formats. The G-33 has made a number of proposals, the most recent (JOB(06)/64) is attached, which have used Article 5 as the basis for a suggested text. In practice, this approach has been used by many delegations in consultations although it could be noted that alternative approaches might be considered. For the time being, I consider it is useful to keep working off this format without prejudice to how we end up in formal terms.

If Article 5 is taken as the basis on which to structure discussion and the G-33 proposal is taken as a starting point the following points could be considered.

SSM as exception to general rules

Any special safeguard instrument will have to operate as an exception to the general rules of the GATT 1994 and the Agreement on Agriculture. The G-33 proposed that the list of rules notwithstanding which the SSM would operate should be paragraph 1(b) of Article II and Article XI of GATT or Article 4 of the Agreement on Agriculture. It is clear that Article II of GATT and Article 4 of the Agreement on Agriculture need to be on list – indeed Article 4.2 itself includes a reference to the current Article 5 of the Agreement on Agriculture. However, it is not so clear if the reference should be to Article 4 in its entirety or to Article 4.2 alone, like the current exemption in Article 4.2 for Article 5.

The case is perhaps less clear for Article XI of GATT. No current proposal refers to quantitative restrictions and earlier discussions suggested this reference was a carry over from an earlier stage of the negotiations.

Coverage

The basic issue concerning coverage is, whether it should be constrained a *priori* in any way, or whether it is purely and simply a question of satisfying the conditions laid down in the instrument for any particular product when and where the circumstances specified for application exist. It is clear that a number of Members do not favour any a *priori* constraint. A number of other Members do want some such restraint. Clearly, unless we resolve this issue one way or another, we will not get to closure on this particular item.

I do not want in any way to foreclose this discussion as there are strongly held views on both sides of the debate. What I would suggest, however, is that we come back to this issue ***after*** we have tried to specify the more substantive and operational aspects. The proponents of open-ended coverage are seeking to cover situations that are generalised and potentially likely to apply across the board. They are not seeking particular product-specific situations. That suggests that there is a certain logic to dealing with this directly as a matter of priority. In principle it should be perfectly feasible to determine what the objective need for a safeguard mechanism of this type would be without prejudice to how widely it should be applicable ultimately. Indeed, it might even help in resolving the latter point: once we see what the creature looks like, we may find it easier to decide whether or how far we would be happy to let it roam, as it were.

We also need to have some kind of general orientation of what the basic nature of this mechanism is. I have had the sense that delegations share the view that this is to be interpreted in the literal sense of "special" i.e. a mechanism that is not the "normal" way in which imports would be treated. I don't think we can, or should, attempt to define this in precise numerical terms. But it is central to bear this perspective in mind. If this is, indeed, something that is "special" rather than "usual", the instrument's detailed operational functioning should be likely to function in the real world in that sort of way. In other words, it should be able to genuinely deal with a special situation. But, viewed from the other end of the telescope, neither would it be an instrument that was of such a nature that it would be likely to be routinely triggered and applied. As I say, I have not to this point detected any other view, but if there is, indeed, such a divergence we would need to deal with this up front, otherwise purely technical elaboration would get us bogged down to no good purpose.

Triggers

For the purposes of discussion it might be useful to separate analytically the issues of trigger and remedy while noting that:

- The current quantity-based SSG has a fixed remedy ("one third of the level of the ordinary customs duty in effect in the year in which the action is taken") and a variable trigger;
- The current price-based SSG has a fixed trigger and a remedy that varies depending on the difference between import price and price trigger; and
- The new quantity- and price-based SSMs could, as proposed by G-33, have variable remedies and fixed triggers (or, to be more correct, the reference period for the trigger is fixed relative to the year in which the SSM might be applied).

Quantity-based trigger

It would seem quite clear that the quantity-based trigger would have to be based on total import volumes during some reference period. Although the current SSG requires an estimate of domestic consumption for both its x and y elements this notion has not figured significantly in negotiations

for the SSM and most recent positions have used import quantities as the basis for the trigger. If the trigger for the quantity-based SSM is to be import volume two questions that come to mind are:

- What is the reference period – should it be a straightforward base period of the average for years A to B – but if A and B are fixed does this allow for normal growth of trade? Or should it be a rolling average of the C most recent years – but does this take account of what should be considered to be "normal" import fluctuations arising in the normal course of commercial trade. Could it be a combination of the two – such as the higher level of average for fixed years A to B or most recent C years; and
- What imports should be included in calculating imports – should it be m.f.n. only trade or some other way of excluding certain imports – for example, imports under tariff quotas, free trade agreements or other kinds of concessional arrangements?

Price-based trigger

It would appear that the central issue for the price-based trigger is: below what level of price movement is it appropriate that the SSM should be able to be triggered? Although it seems to be accepted that the c.i.f. price of the shipment should be the basis the "import price" there is no convergence on other aspects of the trigger. The G-33 suggest that it should be the average monthly price for the most recent three-year period.

Others have pointed out that there can be significant fluctuations in monthly prices and import levels vary as a result. A simple average of monthly prices would mean weighting in favour of high price periods. This would imply it might be more representative to use trade-weighted or longer time-period averages and suggestions have been made for a three-year average or for annual averages.

As would be the case for the quantity trigger, an additional consideration is the type of imports to be included in calculating the historic average – should it be m.f.n. only trade or some other way of excluding certain imports – for example, imports under tariff quotas, free trade agreements or other kinds of concessional arrangements?

Remedies

There are two general issues to resolve for the remedies that could be applied once the trigger is breached – what is the remedy and for how long it can be applied. Some have added a third – to whom it should be applied. That is it should apply, subject to different triggering mechanism, to those that subsidise agriculture production. However, this could be taken as a change in the character of the SSM from safeguard to countervailing duty and goes beyond the narrow objective of protecting against import quantity and price fluctuations per se.

Quantity-based remedy

Several ideas have been put forward of what should be the remedy under the quantity-based SSM. As proposed by G-33 it is the higher of (i) a percentage of the current bound tariff or (ii) so many percentage points. The additional duty would vary from 0 percent for the first 5 percent of imports over the trigger and increase to 100 percent of the bound rate or 60 percentage points, whichever is the higher, when imports are 130 percent above the trigger volume.

Other ideas are to limit the additional duty to a proportion of the applied tariff or to put a cap on the total duty (such as the UR bound level).

Two general options have been suggested for the duration of the quantity-based SSM – the G-33 suggest it should be applied for 12 months year after the trigger is breached and others that it should be applied for the rest of the calendar or marketing year.

Price-based remedy

The result of the remedy proposed by the G-33 is to apply an additional duty to the c.i.f. import price which could make up for all of the difference between the import price and the trigger price.

One specific alternative proposal suggests that the price-based remedy should be linked to the tariff cut by saying that it should not be more than half the difference between the Uruguay Round bound rate and the new bound rate. In consultations, other delegations have suggested caps on the remedy e.g. to prevent total duty rising above UR bound rates. We will indeed need to deal with the more general question of whether this instrument is applicable for all products (i.e. including products for which no tariff reduction commitments in this round are made – including Special Products) or only for those where tariff reduction commitments in this Round are made. I would propose that, as a matter of working in the period ahead, this is an issue we return to once we have developed the shape of the measure as it is without prejudice to that position. Suffice it to say at this point that, that said, it seems to me already clear at the very least we would need to deal with the situation of least-developed countries – when it is specifically provided that no tariff cuts are envisaged by them. They would surely be entitled also to access to the special safeguard mechanism should they choose to do so, in line with paragraph 45 of the Agreed Framework.

Additional conditions

It would seem to be generally accepted that products en route after the quantity-based SSM has been triggered would be exempt from additional duties. The quantity in the shipment and its price would be used, however, for estimating triggers.

For perishable and seasonal products, the current provisions of Article 5.6 have been adapted to match their proposal by the G-33. However, no other detailed suggestions have been made.

Concurrent use of safeguard actions under the WTO

Most participants seem to support the view that this mechanism should not be employed concurrently with certain other WTO measures, at least with respect to the provisions of paragraphs 1(a) and 3 of Article XIX of GATT 1994 or paragraph 2 of Article 8 of the Agreement on Safeguards. However, the list of WTO-consistent measures which should not apply concurrently varies.

Exchange rate fluctuations

This aspect has only been taken up by the G-33 in their proposal. There has been no reaction so far.

Transparency provisions

There seems to be no dissent from the view that operation of the SSM should be carried out in a transparent manner and appropriate provisions should be developed to that effect.

APPENDIX C

JOB(06)/199 22 June 2006

Committee on Agriculture

Special Session

DRAFT POSSIBLE MODALITIES ON AGRICULTURE (Excerpts)

1 Definitions

1.1 .....

2 Market Access

Tiered Formula for Tariff Reductions

.....

Tariff Cap

2.1.1 .....
Sensitive Products

2.1.2 .....
Other Issues

2.1.3 .....
Special and differential treatment

2.1.4 .....
Special Product

2.1.5 .....
Special Safeguard Mechanism

Selection

Each developing country Member [shall have access to a Special Safeguard Mechanism for all agricultural products] [shall have the right to designate up to [ ] [per cent of] tariff lines [at the HS 6-digit level] as "SSM" in column [ ] in Part I, Section I of its Schedule] [may designate as "SSM" in its Schedule those products which have undertaken tariff reductions greater than [ ] per cent. [Products designated as "Special Products" may not be designated as "SSM".]

Trigger and Remedy

The quantity and price triggers under which the Special Safeguard Mechanism may be invoked and the additional duties that may be charged are set out in Annex E.

Annex E

Draft

Special Safeguard Mechanism for Developing Country Members

1. Notwithstanding the provisions of paragraph 1(b) of Article II of GATT 1994 or of Article 4 of this Agreement, any developing country Member may take recourse to the imposition of an additional duty in accordance with the provisions of paragraphs 4 and 5 below in connection with the importation of any agricultural product [which is designated in its Schedule with the symbol "SSM"] if:

(a) the quantity of imports of that product entering the customs territory of that developing country Member [during any year] exceeds a trigger level equal to [130 per cent of] the average yearly quantity of imports [on a most-favoured-nation basis] for the [36 month] period preceding the year of importation for which data are available [or 130 per cent of the average yearly import quantity on a most-favoured-nation basis for the base period of [ ] to [ ], whichever is the greater] (hereinafter referred to as the "average import volume")[.] [and domestic prices are declining.] [and unit import value of trade on a most-favoured-nation basis are declining relative to the base period.]

[Where there are no, or minimal, levels of imports in the base period or the most recent three-year period for which data are available, [ ] per cent of domestic consumption of the product shall be used as a proxy for "average import volume". Where historical trade patterns have been disrupted due to historical circumstances, an alternative representative base period shall be used];

or, but not concurrently:

(b) the c.i.f. import price, expressed in terms of the developing country Member's domestic currency, at which a shipment[36] of imports of that product enters the customs territory of that developing country Member during any year (hereinafter referred to as the "import price"), falls below a trigger price equal to [70 per cent of] the average [monthly price[37]] [annual price] for that product [on a most-favoured-nation basis] [for the most recent three-year period preceding the year of importation for which data are available] [for the previous 36 month period] [or 70 per cent of the average price of imports of that product on a most-favoured-nation basis for the base period of [ ] to [ ], whichever is the greater] (hereinafter referred to as the "average [import] [monthly] price")[.] [and imports are increasing.]

[Provided that, where the developing country Member's domestic currency has at the time of importation depreciated by at least 10 per cent over the preceding 12 months against the international currency or currencies against which it is normally valued the import price shall be computed using the average exchange rate of the domestic currency against such international currency or currencies for the three-year period referred to above.]

2. Imports under any [bound] tariff quota shall be counted for the purpose of determining the volume of imports required for invoking the provisions of subparagraph 1(a) and paragraph 4, but imports within such [bound] tariff quota shall not be affected by any additional duty imposed under either subparagraph 1(a) and paragraph 4 or subparagraph 1(b) and paragraph 5 below.

3. Any shipments of the product in question which have been contracted and were en route after completion of custom clearance procedures in the exporting country before the additional duty is imposed either under subparagraph 1(a) and paragraph 4 or under subparagraph 1(b) and paragraph 5 shall be exempted from any such additional duty, provided that:

(a) the volume of such shipments may be counted in the volume of imports of the product in question during the following year for the purposes of triggering the provisions of subparagraph 1(a) in that year; or

(b) the price of any such shipment may be used during the following year in determining the average [import] [monthly] price trigger for the purposes of triggering the provisions of subparagraphs 1(b) in that year.

4. (a) Any additional duty imposed under subparagraph 1(a) shall be maintained [for no more than

12 months after it has been imposed] [only until the end of the year in which it has been imposed]. [If, import quantities are such that an additional duty under subparagraph 1(a) is applicable in two consecutive years the additional duty in the second year shall be two thirds that applicable in the first year. If, import quantities are such that an additional duty under subparagraph 1(a) is applicable in three consecutive years the additional duty in the third year shall be one third that applicable in the first year. No additional duty under subparagraph 1(a) may be imposed until [ ] years have passed after the third consecutive year of application of additional duties.

[(b) An additional duty imposed under subparagraph 1(a) may only be levied at levels that do not exceed [20 per cent of the current bound duty.] [those specified in the following schedule:

(i) where the level of imports during a year does not exceed 105 per cent of the average import volume, no additional duty may be imposed;

(ii) where the level of imports during a year exceeds 105 per cent but does not exceed 110 per cent of the average import volume, the maximum additional duty that may be imposed shall not exceed 50 per cent of the bound tariff or 40 percentage points, whichever is higher;

(iii) where the level of imports during a year exceeds 110 per cent but does not exceed 130 per cent of the average import volume, the maximum additional duty that may be imposed shall not exceed 75 per cent of the bound tariffs or 50 percentage points, whichever is higher; and

(iv) where the level of imports during a year exceeds 130 per cent of the average import volume, the maximum additional duty that may be imposed shall not exceed 100 per cent of the bound tariff or 60 percentage points, whichever is higher.]]

[(b) An additional duty under subparagraph 1(a) may be invoked if imports over the previous six months are [ ] per cent greater than imports over the same six months period in the preceding twelve months.

Any additional duty under subparagraph 1(a) and 1(b) above shall not exceed [ ] per cent of the difference between the Final Bound Rate of duty of the Uruguay Round and the current Bound Rate in the developing country Member's Schedule. Least-developed country Members may apply an additional duty of [ ].]

5. [(a) Any additional duty imposed under subparagraph 1(b) may be assessed either on a shipment-by-shipment basis or on an ad valorem basis for a duration of no more than 12 months as defined in subparagraph 5(b) below.

(b) In the event that the additional duty is assessed on that product:

(i) on a shipment-by-shipment basis, the additional duty shall not exceed the difference between the import price of each shipment and the trigger price;

(ii) on an *ad valorem* basis, the additional duty shall not exceed the difference between the import price of the shipment and the trigger price referred to in subparagraph 1(b) above, expressed as a percentage of that import price;

provided that if at least two subsequent shipments are at import prices that are 5 per cent or more lower than the trigger price referred to in subparagraph 1(b), the developing country Member may shift to the imposition of additional duty on a shipment-by-shipment basis as set out in subparagraph 5(b)(i) above.]

[(a) An additional duty under subparagraph 1(a) may be invoked if the average domestic prices over the previous [ ] months are [ ] per cent lower than the average domestic prices over the same six month period in the preceding twelve months.

(b) Any additional duty under subparagraph 1(a) and 1(b) above shall not exceed [ ] per cent of the difference between the Final Bound Rate of duty of the Uruguay Round and the current Bound Rate in the developing country Member's Schedule. Least-developed country Members may apply an additional duty of [ ].]

[(a) Any additional duty under subparagraph 1(b) shall apply on a shipment-by-shipment basis according to the following schedule:

(i) no additional duty may be applied if the import price is less than 20 per cent below the trigger price defined in subparagraph 1(b);

(ii) an additional duty of up to 15 per cent of the difference between the import price and the trigger price may be applied if the import price is more than 20 per cent but less than, or equal to, 30 per cent below the trigger price;

(iii) an additional duty of up to 20 per cent of the difference between the import price and the trigger price may be applied if the import price is more than 30 per cent but less than, or equal to, 40 per cent below the trigger price;

(iv) an additional duty of up to 25 per cent of the difference between the import price and the trigger price may be applied if the import price is more than 40 per cent but less than, or equal to, 50 per cent below the trigger price;

(v) an additional duty of up to 30 per cent of the difference between the import price and the trigger price may be applied if the import price is more than 50 per cent below the trigger price.

6. [The trigger levels under paragraphs 1(a) may be decreased by [20] per cent and under paragraph 1(b) may be reduced by [20] per cent and the additional duty under subparagraphs 1(a) and 1(b) may be increased by [20] per cent for products the export of which was subsidized by a developed country Member.]

7. [Any additional duty under subparagraphs 1(a) or 1(b) shall not exceed [ ] per cent of the difference between the bound duty applicable in [2007] and the current bound duty.]

8. For perishable and seasonal products, the conditions set out above shall be applied in such a manner as to take account of the specific characteristics of such products. In particular, shorter time periods under subparagraph 1(a) and paragraph 4 may be used in reference to the corresponding period in the three-year period referred to in subparagraph 1(a) and different trigger prices for different periods may be used under subparagraph 1(b).

9. The operation of the special safeguard shall be carried out in a transparent manner. Any developing country Member taking action under subparagraph 1(a) above shall give notice in writing, indicating the tariff lines affected by the measure and including relevant data to the extent available, to the Committee on Agriculture as far in advance as may be practicable and in any event within 30 days of the implementation of such action. A developing country Member taking action under paragraph 4 shall afford any interested Members the opportunity to consult with it in respect of the conditions of application of such action. Any developing country Member taking action under subparagraph 1(b) above shall give notice in writing, indicating the tariff lines affected by the measure and including relevant data to the extent available, to the Committee on Agriculture within 30 days of the implementation of the first such action or, for perishable and seasonal products, the first action in any period. Developing country Members undertake, as far

as practicable, not to take recourse to the provisions of subparagraph 1(b) where the volume of imports of the products concerned are declining. In either case a developing country Member taking such action shall afford any interested Members the opportunity to consult with it in respect of the conditions of application of such action.

10. Where measures are taken in conformity with paragraphs 1 through 7 above, Members undertake not to have recourse, in respect of such measures, to the provisions of paragraphs 1(a) and 3 of Article XIX of GATT 1994 or paragraph 2 of Article 8 of the Agreement on Safeguards.

[11. No developing country Member shall take recourse to measures under Article 5 in respect of any product on which it has imposed additional duties pursuant to the provisions of this Article.]

[12. This Article shall expire [ ].]

APPENDIX D

COMMUNICATION FROM THE CHAIRMAN OF THE COMMITTEE ON AGRICULTURE, SPECIAL SESSION
(Excerpts)

SECOND INSTALMENT[38]

A. SPECIAL SAFEGUARD MECHANISM

1 There are, frankly, too many variables on this issue with positions that are too wide apart for me to be in a position to even begin to define a centre of gravity on this issue. It will remain that way unless and until there is at least some material convergence in positions. Here we are effectively still facing ambit claims. The most I can offer is a few observations or suggestions.

2 First, I hope we have finally put behind us various efforts to renegotiate what was clearly agreed in Hong Kong. There is no question that what was clearly agreed and understood was that there are two distinct triggers: import volume and price.

3 Second, I take it as axiomatic that if we retain a current special safeguard, the terms of an SSM will, in broad terms, give greater flexibility to a developing Member for SSM use than would be the case for use of the SSG. This I won't even begin to argue on any technical or legalistic grounds. Irrespective of any such considerations, it reflects a political reality in my view. Mind you, I would not necessarily read overly much into that. As you will be aware, my sense is that even if the SSG is retained, it will be, at the very least, very sharply reduced in its coverage.

4 Moreover, there are some important factors to take into account. The SSG was not just a blanket "let out" for developed countries as sometimes seems to be perceived these days in casual conversation. It reflected a certain rationale – or at least it had a certain restriction for eligibility. The product coverage of the SSG was only for those products that were tariffied in the Uruguay Round and not for all products. And, the reason why a number of developing countries did not have access to it was because they had the option of going for ceiling bindings instead of tariffying – and a considerable number certainly availed themselves of that. There may be some analogies here that will eventually prove useful to us if and when we get into a more serious effort to converge.

5 Third, the plain language is that this is to be a "Special" Safeguard Mechanism. If this is a mechanism which would, when applied, be capable of being triggered literally hundreds of times in any given year, how is this to be reconciled with something that is "special"? My simple observation is that, as a pure negotiating matter, I find it difficult to see that there will ever be agreement from Members that there will be an unconstrained entitlement to use of a measure that could impose tariff increases – including increases above existing Uruguay Round rates – applicable to hundreds of tariff lines in any given year by each and every developing country Member. This is simply an observation, but I think it reflects a certain negotiating reality that we should try to deal with. I would hope that we could more seriously deal with this in a spirit that aims to make this instrument workable and responsive to genuine need. I suspect that the concept to focus on is how to reasonably ensure that "normal" trade is not disrupted while genuinely "special" situations are able to be responded to flexibly.

6 Fourth, the object is to provide a special safeguard that responds to the needs of farmers in developing countries, that is, rural development, food security and livelihood security needs. While I have not heard any compelling argument for arbitrarily restricting the coverage of the SSM (i.e. a priori numerical constraint), I have not heard any compelling argument why the Measure should

be an entitlement simply to raise tariffs based on price and volume movements per se (i.e. a pure measure of protection unrelated to the criteria for special and differential treatment in paragraph 39 of the framework referred to above). I suggest we work on narrowing this. I would suggest we look seriously at the concept that it should be in principle applicable anywhere there is domestic or substitutable production. Absent that, the rationale for having an SSM seems less clear.

7 Fifth, I would offer the view that, at least as Chair, I remain to be persuaded of the view that non – preferential mfn suppliers should be obliged to bear the "cost" of any import surges or price declines attributable to preferential sources. I have yet to hear a convincing explanation of why increased imports from a preference receiver can get counted "in" when calculating whether you have a global surge or not but then the measure is not applied to those sources but only to mfn sources. If preferential suppliers get counted in for one, they should be counted in for the other. If they get counted out for the purposes of the initial calculation, fine; then they can be counted out for application of the measure also.

8 Sixth, as regards the quantity trigger, one basic choice delegations face is whether to have a simple single trigger and single remedy or a number of triggers and an escalating series of remedies. I cannot help but observe that if the aim is to have something simple (which I thought it was) then a single trigger/single remedy approach would seem more appropriate. The current Article 5 has a default trigger of 125 per cent of imports compared to the most recent 3 year period for which data are available.

9 The duration of application of the remedy under the SSG is for the rest of the year in question. I think there is a certain logic to this that is of more general application. If it was for 12 months after initial application, it would have the effect of reducing the annual average for imports for the following periods.

10 Seventh, as regards the price-based SSM, the idea that the price-based Special Safeguard Mechanism should depend on the CIF import price of a consignment compared to some average price appears to be generally accepted. It also appears to be generally accepted that the remedy would be based on the difference between the import price and the trigger price, that is the lower the import price relative to the trigger the greater the additional duty that could be imposed. The two main ideas that have been put forward are for an annual average or a monthly average both based on import prices for the previous three years for which data are available. I would feel that an annual average would be more representative than a monthly average.

11 It also appears to be generally accepted that the remedy would be based on the difference between the import price and the trigger price. That is, the lower the import price relative to the trigger the greater the additional duty that could be imposed. However, that leads to two further questions: (i) should the price be allowed to fall by x per cent below the trigger before any remedy could be applied; and (ii) should the remedy fully or partially offset the decline in price. The current SSG does require that the import price be more than 10 per cent below the trigger price and the remedy does not fully offset the difference between trigger minus 10 per cent and the actual import price.

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ANNEX E

JOB(07)/128 17 July 2007

Committee on Agriculture
Special Session

DRAFT MODALITIES FOR AGRICULTURE

The attached document sets out my first revision of the draft Modalities for preparing the Schedules for the Agriculture negotiations.

It is in the form (roughly but not entirely) of a draft text. It is, therefore, inevitably a technical - looking document. For that reason, it is still not an easy read to the layperson. It has to be like that. To anyone that cares to compare it with the original draft, it represents considerable progress in my view. But there is a reason for that. Despite all the setbacks, failures and deadlocks that we have experienced over the past year, the underlying fact remains that under the surface very considerable progress has been made on all areas of this negotiation since that last draft. There are, in fact, relatively few square brackets now. They remain in places, but they are now narrowed down to what I would consider to be the essentials - either in the form of a relatively narrow range within which we need to (and in my view we can) settle, or on a precise number which, albeit not agreed, I think could serve as a reasonable target in the circumstances we now find ourselves in. The negotiating linkages that they imply are there for all who have eyes to see (not that everything is crudely linked, although I will confess that one pair of numbers that appears to be similar in two separate parts of the text is not coincidentally or randomly so, at least to my mind).

Of course, this is my effort as Chair at providing a revised draft text based on what I am hearing from Members in the multilateral process. It doesn't represent precise pre-agreement from the Membership to what is in there: that agreement is something that can come only from you as Members. But precisely in order to optimize our chances for getting to that agreement, I am taking the initiative of providing something that you can, hopefully, work off and refine from here on in. I know very well that Members have vastly varied and contradictory positions. But all Members know that any agreement requires compromise. And that can only be achieved by movement from established and preferred positions. Sometimes – and I have had the clear sense from Members that now is precisely such a time – that can be galvanised by having an independent third party express a view on the scope for compromise that no Member can quite bring themselves to articulate. I would have to say that, even had that not been the case, there comes a moment (and this is just such a moment) when the time for cutting to the chase is in fact upon us, and no other option is available.

Either way, this needs to be done. We have frankly exhausted all other avenues and the prospect of failure is, as a consequence, now so familiar to us that it can almost present itself seductively to us as our friend. We owe it to ourselves to at least now make the effort for a sustained and serious multilateral engagement on the basis of a working document.

I feel that this is all the more so incumbent upon us when in fact we have over the past period actually made very serious and valuable progress. So, above all, I would hope that what the revised draft text does is to demonstrate, as fairly and as adequately as I can find it in my powers to express it as Chair, just what is potentially on offer as we move into what could be -with the right political will - a serious closing zone for this negotiation. It should underline just how relatively narrow the differences are now. Of course, as is always the case, that the last effort is always the most difficult even if it is a relatively narrow difference that remains to be bridged. But

it is essential to emphasise that we can still do this if we give the genuinely multilateral process a fair chance.

As a textual document, it is not an appropriate place to editorialise within it on the political and commercial issues at stake in those remaining zones for decision in the way that has been done, for instance, in the challenges papers or the earlier reference papers. They have served their purpose. This is now where, as it were, the rubber hits the road. Suffice it to say that this document is intended to take everyone out of their comfort zones. That has to happen if we are ever to get an agreement. Some of those narrow ranges or target numbers or technical draft text will be very painful, for sure. But that pain will be required to get agreement. I have done my level best to ensure that at least that pain is spread in a reasonably balanced way within the terms of the framework. Where there are narrow ranges, there is still in my view a bit of room (but not much to be sure) for some crucial negotiating to be done (and you should not just breezily assume that I am implying in each and every case that all that is needed is to split the difference). In some areas I have not shrunk from acknowledging that we are further apart, and I have not proposed precise drafting. To have done so would have been arbitrary or artificial. I would of course have preferred to have a document with the same level of precision on everything, but the variability of precision reflects the reality of where we are. But nor would it have been responsible to deliberately understate my sense of where we can in fact get to a large range of issues just because some have not yet got to that level on some others. Of course it is clear that nothing can or will be finalised until we get to the point where everything is developed to the same level of specificity.

Indeed, the document cannot foist anything on anyone. It is there to be worked on by you as Members. Any ultimate agreement is under your control- not mine. As Don and I have made clear, we are not presenting our texts as some kind of tablets of stone descended from on high - and even if we did, you as Members would hardly treat them that way in any case. I am certain that you will make clear which numbers or which parts of the draft you reject or wish to amend. I am pretty sure, in fact, that I can guess now the interventions of many of you in advance on nearly all of the issues! That is exactly as it should be. But the crucial thing is to be working off a reference point to make subsequent progress rather than multiple options. So, this revision is intended to be the next step in the process. We set to intensive work on this in September and we take as long as it takes. And there will be an inevitable revision after that intensive process.

I can conclude only by reconfirming to you all that I remain committed to facilitating convergence in every way possible in the little time remaining to us.

Yours sincerely

Ambassador Crawford Falconer
Chairman
Committee on Agriculture, Special Session

DRAFT POSSIBLE MODALITIES ON AGRICULTURE (Excerpts)

3 Domestic Support

3.1 .....

4 Market Access

4.1 .....

5 Special and differential treatment

Special Products

5.1.1.1 .....

Special Safeguard Mechanism

98. This is clearly a fundamental element of the modalities also, but it is simply not yet developed well enough to go to precise text without that being either meaningless through the number of square brackets that would have to be inserted, or an artificial construct with no underlying consensus in the Membership. I see no point in trying either at this point. That said, there has been recently a much more constructive sense of practical engagement and we are well beyond the utterly entrenched positions of a year ago. I am therefore suggesting some possible orientation below – following on the constructive discussion we had pursuant to the Challenges paper - that might help intensify our work in September.

99. There will be two distinct triggers: price and quantity. The Hong Kong declaration was clear about this.

100. The Special Safeguard Mechanism is there to respond to the needs of farmers in developing countries, that is, rural development, food security and livelihood security needs. It is not just a measure applicable to imports per se. This strongly implies that the fundamental direction of this is for domestically produced products and substitutes of these products.

101. SSM is not about providing protection to preferential suppliers. For that reason, if preferential trade is to be counted in when calculating the triggers, then the remedy must apply also to preferential trade. If preferential trade is not to be subject to remedy, it should not be counted in when calculating the triggers. In practical terms it would seem unlikely that preferential trading arrangements would permit such remedy. Therefore, the working assumption could be that no preferential trade would be counted in the trigger.

102. It also seems to be generally accepted that the price- and quantity-based remedies would not be applicable at the same time to the same product.

103. Whatever the detailed triggers end up being, there is clear agreement that this is not to be set in such a way as would permit this mechanism to be literally triggered hundreds or scores of times by developing country Members. That is not what any Members intend. This mechanism is meant to be used as its name implies: in "special" situations.

104. The triggers and the remedy should not give rise to situations where "normal" trade is occurring. In other words it should not be applied in a way that is disruptive to such trade where fluctuations upwards and downwards are the norm: it is to address more unusual or excessive movements.

105. The triggers and the remedy are meant to be usable by the developing country Members concerned: for that reason alone the mechanism must not be unduly complicated or burdensome for such members to use.

106. Drawing on these elements it might be worth considering some areas where we could end up, knowing that there are varying positions and that to get agreement there will simply need to be reasonable compromise.

107. On the quantity trigger, if we are to deal with agreement that we not disrupt "normal" trade or make the mechanism over-sensitive to relatively minor movements, you need a reasonable benchmark against which to judge that. Previous 3 or 5 years? If the trigger is sitting too close to that historical level, virtually any increase will trigger it, but obviously it needs to be able to apply if levels fluctuate too rapidly or excessively. Somewhere around 110%?

108. On price, there are parallel considerations. Monthly movement could set the trigger off very easily. Too long a period of years will potentially mask significant movement. Maybe somewhere around 12-18 months would be worth looking at. Should the remedy be the full difference between the average benchmark price and the actual import price (whatever these are negotiated to be?)

109. It would also seem anomalous if the practical effect of applying the SSM was, though its application, to actually reduce the base level of trade for subsequent years so that future triggering actually becomes more regressive. This would tend to suggest that the remedy would be applicable to the end of the calendar, financial, marketing or whatever 12 month period is applicable for the product in question.

110. It does not seem likely that we will easily reach agreement that this measure can be applied in such a way that existing Uruguay Round bound rates can also be exceeded (except, perhaps, in the case of least-developed Member countries), as this would have the effect of going backwards. The most that might be feasible here would be some very restricted and tailored circumstances targeted perhaps to a more severe level of fluctuation than the norm and focussed on those developing country.

ANNEX F

COUNTRY REPORTS

Annex F.1

Philippines

A total of eleven (11) primary agricultural commodities were covered in the Philippine study, namely rice, corn, potatoes, garlic, onions, carrots, sugar, coconut oil, coffee, chicken, and pork. Data on imports of the commodities themselves were used in the study and matched against SSM triggers, except in the case of coconut where imports of palm oil were treated as proxies for coconut oil imports. The analysis was limited to available data from 2000 to 2004.

F.1.1 Incidence of Import Surges and Price Depressions

Table F.1.1 shows that imports of covered commodities exceeded the three-year moving average of import volumes by at least ten percent in 19 percent, or about one out of every five, of the months covered by the study. If a five-year historical moving average of import volumes was used, the incidence of import surges using a ten percent threshold rose to 23 percent.

The incidence of veritable import surges did not change drastically even if higher thresholds in the magnitude of 20 percent and 30 percent beyond the historical import volume averages were used. For example, import volumes exceeding 30 percent of the three-year average occurred in 16 percent of the months covered, down by only three (3) percentage points from the case where imports in excess of ten percent of the average were counted as surges.

Table F.1.2 indicates a more frequent incidence of price depressions compared to volume surges. CIF import prices converted to local currency were at least ten percent lower than three-year historical price averages in one out of every three months. If a five-year import price average was used as a reference, the incidence of price depressions of this magnitude increased to 39 percent.

Unlike in the case of volume surges, the incidence of price depressions declined significantly when higher thresholds were used. For example, the incidence of import prices falling below the three-year price average by at least 30 percent was only 18 percent of months covered or one-half the rate when a ten percent threshold was used. Similarly, the incidence declined from 39 percent to 24 percent of months covered when five-year price averages were used.

Potatoes, carrots, coconut and coffee were particularly vulnerable to import volume surges while chicken, carrots, coffee, potatoes, corn, rice and coconut were subjected to high incidences of price depressions. Sugar appeared to be characteristically immune to both volume surges and price depressions.

F.1.2 Access to Volume and Price–Based SSM Remedies

F.1.2.1 Access to Volume-Based SSM Remedies

Table F.1.3 shows that access to a volume-based SSM remedy averaged 23 percent of months covered if triggers were set to the moving three-year historical average of import volumes and SSM duties could be imposed only if import volumes exceeded the triggers by more than ten percent. If a five-year average was used instead, the percentage of months with access to SSM volume-based duties improved to 28 percent. Predictably, access rates declined when triggers were adjusted upwards

to equal five percent of average historical domestic consumption in cases where historical import volumes fell below five percent of the consumption average.

If recourse to the SSM volume-based duty was allowed only when import volumes exceeded the trigger by more than 30 percent, access to the remedy surprisingly declined by only two (2) percentage points when three-year averages were used, and four (4) percentage points when triggers were based on five-year averages, whether the averages were adjusted or unadjusted. This implies that a high proportion of volume surges were quite severe and thus would have been able to trigger SSM remedies even if thresholds were raised. Almost all commodities except sugar, rice and corn had considerable access to volume-based SSM duties. In turn, TRQ restraints on the use of safeguard duties effectively disqualified chicken and pork from using SSM remedies.

Further simulations as illustrated in Table F.1.4 indicate that overall access to volume-based SSM duties improved from 23 percent to 30 percent if a July-June period instead of the calendar year was used as the implementation period. However, the results for individual commodities were mixed, with coffee, onions and garlic gaining heavily while access rates for rice, potatoes and carrots declined. Reducing the maximum period for imposing SSM duties from 12 to six or three months had negative, although not exceptionally large, effects on access to the volume SSM. Interestingly, restricting the imposition of volume-based SSM duties up to the end of each year gave almost as much access to the remedy as a six-month limit.

The removal of TRQ constraints on the use of SSM remedies had the most significant effect by raising the access rate from 23 percent to 37 percent, with significant gains registered particularly for chicken, coffee, pork and potatoes. If a market test was applied and the use of volume-based SSM duties was disallowed in cases where the average monthly prices of imports during the preceding six months were within five percent of corresponding averages in the same period in the previous year, access to the SSM remedy dropped drastically to 13 percent of months covered. Increasing the threshold to a ten percent variance further reduced access rates to ten percent.

F.1.2.2 Access to Price-Based SSM Remedies

Access to price-based SSM remedies, as illustrated in Table F.1.5, was conspicuously better than that to volume-based SSM duties. Setting the trigger price to a three-year moving histo-rical average, price-based SSM remedies could have been invoked 44 percent of the time if the threshold was set to zero percent; i.e., SSM duties could be imposed immediately when import prices fell below the trigger. Sugar, chicken and pork (due to TRQ constraints) and to some extent, corn, had relatively low access rates while garlic, onions and carrots enjoyed very high access to the SSM remedy.

Access rates conspicuously declined as thresholds were increased. If only cases where import prices fell below the trigger price by more than 30 percent were considered, SSM price-based duties could be imposed only in 29 percent of the months covered, compared to 44 percent when a zero percent threshold was set. The availability of the SSM remedy did not change significantly when five instead of three-year moving price averages were used as triggers in the simulations. However, as higher thresholds were imposed, access rates when using five-year averages tended to be lower than those for three-year averages.

Table F.1.5 further shows that access to price-based SSM duties improved significantly from 44 percent to 53 percent of months covered if a July-June implementation period was used instead of a calendar year. Only corn and potatoes reacted negatively to this adjustment. Shortening the period during which SSM duties could be imposed did not significantly reduce access to the remedy except when a three-month limit was set, as seen in Table F.1.6. Notably, access rates were marginally better when the use of price-based SSM duties was restricted to the end of the year.

Overall access rates did not change when the modality allowing for adjustments in cases of currency devaluation was not applied. Gains for garlic and coconut were offset by reductions in the access rate for onions. A slight improvement involving garlic, onions and carrots was registered when price comparisons were made using US dollar instead of Philippine peso values. As in the case with volume-based SSM remedies, recourse to SSM duties increased dramatically, particularly for chicken, pork, rice and potatoes, if the rule disallowing the application of SSM remedies on imports falling within TRQ commitments was waived.

If a corollary market test was applied, so that the use of price-based SSM duties was disallowed in cases where the average monthly volume of imports during the preceding six months was within five percent of corresponding averages in the previous year, access to the price-based SSM remedy dropped drastically to 26 percent of months covered. Increasing the threshold to a ten percent variance further reduced access rates, but only marginally, to 25 percent.

F.1.2.3 Combined Rates of Access to Volume and Price-Based SSM Remedies

Table F.1.7 indicates that access to either a volume or price-based SSM remedy was available in 42 percent of the months covered by the study when using three-year price and import volume averages as triggers and setting a common ten percent threshold. If triggers were based on five-year averages instead, access rates improved by six (6) percentage points to 48 percent. The availability of the SSM remedy did not change even when triggers were adjusted upwards in instances when historical import volumes were deemed to be minimal. Quite surprisingly, overall access rates also did not deteriorate substantially even if the threshold for invoking volume-based remedies was raised to 30 percent (while keeping the price threshold steady at ten percent).

Carrots, garlic, and onions enjoyed very high access rates, while rice, potatoes, coconut and coffee were able to access the remedy about 50 percent of the time. Chicken and pork (because of TRQ constraints) and sugar had no access whatsoever to any type of SSM duty.

As seen in Table F.1.8, overall access rates improved significantly from 42 percent to 53 percent if a July-June implementation period was applied instead of a calendar year. Rice, onions, coconut, coffee and sugar in particular benefited from such an adjustment, although the effect on corn was negative. Access rates did not change significantly when the period for imposing SSM remedial duties was reduced to six months or limited to the end of the year, or when the modality for adjusting import prices in cases of currency devaluation was not applied. Slight gains in access rates were generated if import prices were compared to triggers using US dollar instead of Philippine peso values.

Overall access rates dropped significantly to 23 percent if market tests were applied to both price and volume-based SSM duties. In this case, the use of volume-based SSM duties was disallowed if the average monthly prices of imports during the preceding six months were within ten percent of corresponding averages in the same period in the previous year. At the same time, price-based SSM duties could not be used in cases where the average monthly volume of imports during the preceding six months were within ten percent of corresponding averages in the previous year.

Consistent with previous results, dramatic improvements were registered when TRQ constraints on the use of SSM remedies were removed, with chicken, pork, potatoes, rice, corn and coffee benefiting significantly from such an adjustment.

F.1.3 Effectiveness of SSM Remedies in Bridging Import versus Domestic Price Gaps

Table F.1.9 shows that import prices, inclusive of MFN duties, fell by more than ten percent below domestic prices of the commodities in 46 percent, or almost half, of the months covered by the study. "Problematic" months were particularly prevalent for garlic, onions, chicken and pork. Using parameter settings under the base scenario, which essentially accom-modates the G-33 proposal, either volume or price-based SSM remedies would have been available in 53 percent of these "problematic" months. In turn, these remedies would have been effective in raising the cost of imports, inclusive of MFN and applicable SSM duties, to not less than ten percent of domestic prices in 19 percent of the "problematic" months.

If only the volume-based SSM remedies were allowed in the base scenario, access to the remedy went down to 29 percent of the problematic months, while the effectiveness of the applicable SSM duties slid to ten percent. Rice in particular experienced a drastic drop in both access and effectiveness rates. In turn, if only the price-based SSM remedies were applied, access to SSM duties approximated the base result of 51 percent while the effectiveness rate declined only slightly to 16 percent. Only coconut suffered heavily from this adjustment. This indicates that the price-based remedies had a more significant effect on both access to, and the effectiveness of, the SSM.

Increasing the volume threshold from five percent to 15 percent of the volume trigger, and allowing SSM remedies only when import prices fell below the price trigger by more than 15 percent (as against zero percent in the base scenario), surprisingly did not produce any major variation from base scenario results. However, when thresholds were adjusted further to 30 percent for both volume and price-based remedies, the availability of SSM remedies went down significantly to 41 percent while the effectiveness rate deteriorated to 16 percent. Still, only rice and coconut were severely affected by this change. These results point to the ability of the products to tolerate moderately higher thresholds.

Table F.1.10 reflects a very slight improvement in the effectiveness of the SSM remedy if the volume-based remedies under the base scenario were doubled. If these remedies were cut in half instead, the effectiveness rate also declined only marginally from 19 percent to 18 percent. If the volume-based remedies under the base scenario were limited to percentages of current bound tariffs, while suspending the application of remedies in the form of percentage points, the ability of the SSM remedy to bridge price gaps declined to 17 percent. Coconut in particular experienced a major decline in effectiveness rates as a result of this adjustment. In turn, effectiveness rates were effectively preserved when percentage point remedies, as against remedies proportional to current bound rates, were applied. This outcome arose from the fact that prevailing Philippine tariffs rates were relatively low and remedies proportional to such rates correspondingly yielded lower levels of remedial tariffs than remedies in the form of absolute percentage points.

Table F.1.11 simulates the effect of proposed caps on SSM duties that can be imposed. If SSM remedies were limited to 50 percent of bound tariffs, access to the remedy increased slightly but the effectiveness of the SSM in bridging the problematic price gaps declined significantly to only eight percent of "problematic" months.[39] Setting the maximum remedial duty to 50 percentage points on the other hand had a less unfavourable effect, validating earlier findings that remedies in the form of absolute percentage points tend to be more beneficial than those set in terms of percentages of bound tariff rates.

If allowable SSM duties were limited to the difference between the current bound tariff rate and the tariff level at the start of the Doha Round, access to the remedy declined to 42 percent while the SSM itself was effectively rendered inutile with an effectiveness rate of only one percent.[40]

If the market test was applied so that volume and price-based duties could be imposed only if the average prices and volume of imports in the preceding six months exceeded the corresponding average in the same period in the previous year by more than ten percent, both the availability and effectiveness of the SSM remedy declined to 30 percent and 12 percent, respectively. Only corn and potatoes were not significantly affected by the application of the market test.

Using a July-June implementation period instead of a calendar year did not change the overall incidence[41] of "problematic" months but raised overall access to the SSM remedy while also slightly enhancing the effectiveness of the modality from 19 percent to 21 percent. Potatoes, carrots, coconut and chicken benefited from this adjustment, while rice and corn lost out in the process.

Table F.1.12 shows that only slight changes were registered when the maximum period for imposing SSM duties was reduced to six months or limited to the end of the year. If the constraint posed by TRQ commitments on the use of SSM remedies was removed, the availability of the SSM improved dramatically to 92 percent of the "problematic months" while its effectiveness rose to 44 percent of such months.

Suspending the modality allowing foreign exchange rates to be adjusted in the event of severe currency depreciation did not result in changes in overall access and effectiveness rates, although the availability of the SSM remedy for garlic improved while that for onions declined. In turn, using US dollars instead of Philippine pesos in pricing imported and domestic products resulted in a slight improvement in the availability of the SSM to 56 percent and its effectiveness to 20 percent of months covered by the study.

F.1.4 Conclusions and Recommendations

The results of the simulation show that the major agricultural commodities of the Philippines experienced significant import volume surges and price depressions between 2000 and 2004. Cumulative imports exceeded three-year historical averages by more than 30 percent in 16 percent of the months covered, while import prices fell below similar thresholds by at least 30 percent about 18 percent of the time.

Access to either a volume or price-based SSM remedy averaged 42 percent if triggers were set to three-year historical averages and a common ten percent threshold for invoking remedies was applied. The availability of SSM remedies improved if a July-June implementation period (instead of a calendar year) was used, and even more dramatically when constraints imposed by TRQ commitments on the use of SSM remedies were removed. Other parameters, such as the level of triggers and thresholds, foreign exchange rates, currency used to value imports, and the maximum period for imposing tariffs, did not register major effects on overall access rates. The imposition of market tests however reduced access rates by more than 50 percent.

About 46 percent of the months covered by the study exhibited import prices, inclusive of MFN duties, falling below domestic prices by more than ten percent. Under the base scenario, SSM remedies equivalent to the G-33 proposal were available in 53 percent of the problematic months, and were effective in bringing import prices, inclusive of MFN tariffs and SSM duties, to within ten percent of domestic prices in 19 percent of the "problematic" months.

These simulation results imply that the Philippines should study the feasibility of unilaterally dismantling its TRQ system for selected products by bringing down the tariffs of such products to in-quota levels in order to more easily avail of SSM remedies. The Philippines has utilised a July-June implementation period since the Uruguay Round and is not restricted from following the same modality in the future.

Although the simulations show that most Philippine products could absorb thresholds higher than those proposed by the G-33, extremely high thresholds exhibited serious adverse effects on access and effectiveness rates and should therefore be avoided. Given its relatively low bound rates, the Philippines should focus on gaining access to SSM remedies in absolute percentage points instead of percentages of bound tariffs. Caps on allowable tariffs should be avoided together with proposals to limit remedial duties to the difference between current and starting Doha Round bound rates and the application of market tests on the use of both volume and price-based SSM remedies. The Philippines need not worry much from shorter imposition periods and could very well be unaffected by a reversion to the Uruguay Round SSG end-of-year limit to the application of special safeguard duties.

Table F.1.1 Percent of Months With Import Volume Surges Using Different Thresholds Philippines, 2000 to 2004

Commodity	Incidence of Import Volume Surges					
	At Least 10% Over		At Least 20% Over		At Least 30% Over	
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave
Rice	7%	12%	5%	0%	5%	0%
Corn	15%	17%	13%	17%	12%	15%
Potato	55%	67%	55%	67%	53%	62%
Garlic	22%	22%	17%	17%	13%	12%
Onions	2%	10%	2%	7%	2%	7%
Carrots	33%	43%	32%	38%	32%	37%
Sugar	0%	0%	0%	0%	0%	0%
Coconut	27%	25%	25%	23%	23%	23%
Coffee	28%	30%	27%	30%	27%	28%
Chicken	17%	18%	12%	18%	7%	17%
Pork	8%	10%	0%	8%	0%	7%
Average	19%	23%	17%	20%	16%	19%

Table F.1.2 Percent of Months With Import Price Depressions Using Different Thresholds Philippines, 2000 to 2004

Commodity	Incidence of Import Price Depressions					
	At Least 10% Below		At Least 20% Below		At Least 30% Below	
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave
Rice	43%	55%	28%	33%	17%	22%
Corn	45%	45%	35%	40%	33%	37%
Potato	55%	85%	45%	77%	27%	60%
Garlic	25%	7%	3%	0%	0%	0%
Onions	15%	12%	7%	5%	5%	2%
Carrots	52%	55%	48%	55%	43%	55%
Sugar	0%	0%	0%	0%	0%	0%
Coconut	30%	30%	25%	13%	13%	3%
Coffee	47%	52%	45%	45%	40%	40%
Chicken	62%	75%	35%	55%	18%	45%
Pork	18%	15%	5%	5%	0%	0%
Average	36%	39%	25%	30%	18%	24%

Table F.1.3 Percent of Months With Access to Volume SSM at Various Trigger Levels Philippines, 2000 to 2004

Commodity	Access Rates to Volume-Based SSM							
	10% Threshold				30% Threshold			
	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*
Rice	7%	7%	12%	12%	5%	5%	0%	0%
Corn	15%	13%	17%	13%	12%	12%	15%	12%
Potato	42%	17%	50%	18%	40%	13%	47%	15%
Garlic	47%	47%	47%	47%	43%	43%	45%	45%
Onions	20%	20%	40%	40%	20%	20%	38%	38%
Carrots	57%	0%	65%	0%	55%	0%	58%	0%
Sugar	0%	0%	0%	0%	0%	0%	0%	0%
Coconut	35%	35%	50%	50%	32%	32%	30%	30%
Coffee	28%	27%	30%	28%	27%	23%	28%	25%
Chicken	0%	0%	0%	0%	0%	0%	0%	0%
Pork	0%	0%	0%	0%	0%	0%	0%	0%
Average	23%	15%	28%	19%	21%	13%	24%	15%

*Volume trigger set to 5% of average consumption if average import is less than 5% of average consumption

Table F.1.4 Percent of Months With Access to Volume SSM at Various Parameter Settings Philippines, 2000 to 2004

Commodity	Access Rates to Volume-Based SSM							
	3 Yr Ave	Jul-Jun	6 Months	3 Months	End of Yr	No TRQs	MktTst 5%	MktTst 10%
Rice	7%	17%	7%	7%	7%	22%	0%	0%
Corn	15%	7%	15%	15%	15%	23%	15%	15%
Potato	42%	32%	42%	42%	42%	87%	28%	25%
Garlic	47%	62%	35%	25%	33%	47%	25%	2%
Onions	20%	42%	10%	5%	22%	20%	10%	10%
Carrots	57%	45%	47%	37%	33%	57%	27%	25%
Sugar	0%	0%	0%	0%	0%	0%	0%	0%
Coconut	35%	37%	35%	30%	27%	35%	15%	13%
Coffee	28%	75%	28%	28%	28%	55%	20%	18%
Chicken	0%	10%	0%	0%	0%	35%	0%	0%
Pork	0%	0%	0%	0%	0%	25%	0%	0%
Average	23%	30%	20%	17%	19%	37%	13%	10%

Table F.1.5 Percent of Months With Access to Price SSM Using Different Thresholds Philippines, 2000 to 2004

Commodity	Access Rates to Price-Based SSM							
	0% Threshold		10% Threshold		30% Threshold		Jul-Jun	6 Months
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	Implem	Impose
Rice	55%	55%	55%	55%	32%	32%	77%	55%
Corn	22%	22%	22%	22%	22%	22%	7%	22%
Potato	55%	55%	45%	55%	23%	38%	47%	55%
Garlic	83%	83%	77%	65%	25%	20%	83%	83%
Onions	80%	65%	67%	65%	60%	20%	88%	78%
Carrots	90%	90%	90%	90%	83%	90%	90%	87%
Sugar	0%	0%	0%	0%	0%	0%	37%	0%
Coconut	60%	60%	40%	60%	37%	30%	60%	53%
Coffee	40%	65%	40%	45%	38%	38%	90%	37%
Chicken	0%	0%	0%	0%	0%	0%	10%	0%
Pork	0%	0%	0%	0%	0%	0%	0%	0%
Average	44%	45%	40%	42%	29%	26%	53%	43%

Table F.1.6 Percent of Months With Access to Price SSM at Various Parameter Settings Philippines, 2000 to 2004

Commodity	Access Rates to Price-Based SSM							
	3 Yr Ave	3 Months	End of Yr	No Dep'n	Dollars	No TRQs	MktTst 5%	MktTst 10%
Rice	55%	55%	55%	55%	55%	95%	30%	28%
Corn	22%	22%	22%	22%	22%	77%	18%	17%
Potato	55%	50%	55%	55%	55%	100%	45%	43%
Garlic	83%	70%	83%	92%	95%	83%	47%	45%
Onions	80%	67%	75%	67%	82%	80%	38%	38%
Carrots	90%	75%	93%	90%	92%	90%	57%	57%
Sugar	0%	0%	0%	0%	0%	0%	0%	0%
Coconut	60%	48%	60%	63%	60%	60%	22%	22%
Coffee	40%	38%	40%	40%	40%	65%	27%	27%
Chicken	0%	0%	0%	0%	0%	95%	0%	0%
Pork	0%	0%	0%	0%	0%	98%	0%	0%
Average	44%	39%	44%	44%	45%	77%	26%	25%

Table F.1.7 Percent of Months With Access to Any SSM Using Different Thresholds Philippines, 2000 to 2004

Commodity	Combined Access Rates to Volume and Price-Based SSM+							
	10% Volume Threshold				30% Volume Threshold			
	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*
Rice	55%	55%	58%	58%	55%	55%	55%	55%
Corn	22%	22%	22%	22%	22%	22%	22%	22%
Potato	47%	47%	55%	55%	45%	45%	55%	55%
Garlic	85%	85%	85%	85%	82%	82%	83%	83%
Onions	68%	68%	73%	73%	68%	68%	72%	72%
Carrots	90%	90%	92%	90%	90%	90%	90%	90%
Sugar	0%	0%	0%	0%	0%	0%	0%	0%
Coconut	52%	52%	87%	87%	50%	50%	68%	68%
Coffee	48%	48%	55%	55%	47%	47%	53%	53%
Chicken	0%	0%	0%	0%	0%	0%	0%	0%
Pork	0%	0%	0%	0%	0%	0%	0%	0%
Average	42%	42%	48%	48%	42%	42%	45%	45%

+Assuming a 10% threshold for invoking price-based SSM

*Volume trigger set to 5% of average consumption if average import is less than 5% of average consumption

Table F.1.8 Percent of Months With Access to Any SSM at Various Parameter Settings Philippines, 2000 to 2004

Commodity	Combined Access Rates to Volume and Price-Based SSM							
	3 Yr Ave	Jul-Jun	6 Months	End of Yr	No Dep'n	Dollars	MktTst 10%	No TRQs
Rice	55%	77%	52%	55%	55%	55%	23%	83%
Corn	22%	7%	22%	22%	22%	22%	18%	77%
Potato	47%	45%	47%	47%	47%	55%	43%	100%
Garlic	85%	80%	83%	87%	73%	85%	37%	85%
Onions	68%	90%	50%	63%	68%	68%	27%	68%
Carrots	90%	87%	87%	93%	90%	92%	57%	90%
Sugar	0%	20%	0%	0%	0%	0%	0%	0%
Coconut	52%	75%	55%	52%	55%	72%	18%	52%
Coffee	48%	93%	48%	48%	47%	48%	27%	88%
Chicken	0%	10%	0%	0%	0%	0%	0%	100%
Pork	0%	0%	0%	0%	0%	0%	0%	73%
Average	42%	53%	40%	42%	42%	45%	23%	74%

Table F.1.9 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings Philippines, 2000 to 2004

Commodity	Percent Problematic Months	BASE SCENARIO		VOLUME SSM ONLY		PRICE SSM ONLY		HIGHER THRESHOLD		VERY HIGH THRESHOLD	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Rice	38%	83%	74%	4%	4%	83%	74%	74%	70%	43%	39%
Corn	10%	50%	50%	33%	33%	50%	50%	50%	50%	50%	50%
Potato	43%	58%	50%	54%	35%	58%	42%	58%	50%	54%	50%
Garlic	100%	85%	0%	47%	0%	83%	0%	85%	0%	67%	0%
Onions	83%	84%	4%	42%	2%	84%	4%	68%	4%	60%	4%
Carrots	33%	100%	60%	65%	35%	100%	55%	100%	55%	95%	55%
Sugar	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Coconut	23%	79%	71%	64%	64%	29%	21%	79%	71%	64%	64%
Coffee	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Chicken	77%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pork	87%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average	46%	53%	19%	29%	10%	51%	16%	50%	18%	41%	16%

Table F.1.10 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings Philippines, 2000 to 2004

Commodity	Percent Problematic Months	BASE SCENARIO		HIGH REMEDIES		LOW REMEDIES		% OF BOUND		PERCENTAGE PTS	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Rice	38%	83%	74%	83%	74%	83%	74%	83%	74%	83%	74%
Corn	10%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Potato	43%	58%	50%	58%	54%	58%	42%	58%	50%	58%	50%
Garlic	100%	85%	0%	85%	0%	85%	0%	85%	0%	85%	0%
Onions	83%	84%	4%	84%	6%	84%	4%	84%	4%	84%	4%
Carrots	33%	100%	60%	100%	60%	100%	55%	100%	55%	100%	60%
Sugar	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Coconut	23%	79%	71%	79%	71%	79%	64%	79%	43%	79%	71%
Coffee	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Chicken	77%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pork	87%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average	46%	53%	19%	53%	20%	53%	18%	53%	17%	53%	19%

Table F.1.11 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings Philippines, 2000 to 2004

Commodity	Percent Problematic Months	BASE SCENARIO		50% OF BOUND		50 PCTG PTS		DOHA START		MARKET TEST		JULY-JUNE		
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		Problematic months	% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective		Available	Effective
Rice	38%	83%	74%	83%	61%	83%	74%	61%	9%	39%	39%	38%	70%	61%
Corn	10%	50%	50%	50%	33%	50%	50%	0%	0%	50%	50%	12%	29%	29%
Potato	43%	58%	50%	58%	15%	58%	38%	54%	0%	54%	42%	43%	69%	54%
Garlic	100%	85%	0%	98%	0%	80%	0%	67%	0%	47%	0%	100%	83%	0%
Onions	83%	84%	4%	84%	2%	84%	2%	70%	0%	38%	2%	83%	90%	4%
Carrots	33%	100%	60%	100%	15%	100%	35%	85%	0%	70%	45%	33%	100%	80%
Sugar	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	60%	0%
Coconut	23%	79%	71%	79%	7%	79%	71%	50%	0%	29%	21%	23%	93%	93%
Coffee	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Chicken	77%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	78%	9%	9%
Pork	87%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	87%	0%	0%
Average	46%	53%	19%	56%	8%	52%	16%	42%	1%	30%	12%	46%	56%	21%

Table F.1.12 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings Philippines, 2000 to 2004

Commodity	Percent Problematic Months	BASE SCENARIO		6 MONTHS		END OF YEAR		NO TRQS		NO DEP'N		DOLLARS	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Rice	38%	83%	74%	83%	74%	83%	74%	100%	91%	83%	74%	83%	78%
Corn	10%	50%	50%	50%	50%	50%	50%	100%	100%	50%	50%	50%	50%
Potato	43%	58%	50%	58%	46%	58%	50%	100%	88%	58%	50%	58%	50%
Garlic	100%	85%	0%	85%	0%	85%	0%	85%	0%	93%	0%	95%	0%
Onions	83%	84%	4%	80%	4%	82%	4%	84%	4%	72%	4%	86%	4%
Carrots	33%	100%	60%	100%	55%	100%	55%	100%	60%	100%	60%	100%	65%
Sugar	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Coconut	23%	79%	71%	79%	71%	79%	71%	79%	71%	79%	71%	79%	71%
Coffee	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Chicken	77%	0%	0%	0%	0%	0%	0%	100%	76%	0%	0%	0%	0%
Pork	87%	0%	0%	0%	0%	0%	0%	100%	44%	0%	0%	0%	0%
Average	46%	53%	19%	53%	18%	53%	19%	92%	44%	53%	19%	56%	20%

Annex F.2

Ecuador

A total of ten (10) primary agricultural commodities were covered in the Ecuador study, namely beans, wheat, corn, milk, pork, onions, potatoes, vegetable oil, chicken and rice. Data from 2000 to 2005 were used for all products except for beans which the country did not import prior to 2002. The analysis on the effectiveness of the SSM measure for milk, pork and chicken covered only the years 2000 to 2004 since domestic price data for 2005 for these commodities were not available.

F.2.1 Incidence of Import Surges and Price Depressions

Table F.2.1 shows that imports of covered commodities exceeded the three-year moving average of import volumes by at least ten percent in 15 percent of the months covered by the study. Among the commodities, pork, onions and beans were relatively susceptible to surges. If a five-year historical moving average of import volumes was used, the incidence of import surges using a ten percent threshold rose marginally to 16 percent.

The incidence of import surges declined slightly when higher thresholds were applied. For example, import volumes exceeding 30 percent of the three-year average occurred in ten percent of the months covered, down by a third from the case where imports in excess of ten percent of the average were counted as surges. If a five-year average was used, the incidence of import surges was slightly higher at 12 percent.

Table F.2.2 indicates a less frequent incidence of price depressions compared to volume surges. CIF import prices converted to local currency were at least ten percent lower than three-year historical price averages in only 12 percent of the months covered by the study. Most of the commodities, such as wheat, corn, milk, potatoes, vegetable oil and chicken did not experience price depressions in any significant degree. If a five-year import price average was used as a reference, the incidence of price depressions of this magnitude decreased to ten percent, unlike in the case of volume surges when the use of a longer time frame for computing averages tended to increase the percentages.

The incidence of price depressions declined slightly when higher thresholds were used. If the threshold was increased to 20 percent, the incidence went down from 12 percent to ten percent of months covered. A further adjustment of the threshold to 30 percent resulted in a lower seven percent incidence of price depressions. Onions and rice showed particular sensitivities to changes in thresholds. On the other hand, beans did not exhibit any significant susceptibility to price depressions.

F.2.2 Access to Volume and Price-Based SSM Remedies

F.2.2.1 Access to Volume-Based SSM Remedies

Table F.2.3 shows that access to a volume-based SSM remedy averaged 30 percent of months covered if triggers were set to the moving three-year historical average of import volumes and SSM duties were allowed only if import volumes exceeded the triggers by more than ten percent. Pork, corn, vegetable oil and beans showed relatively high access rates exceeding 50 percent.

If the triggers were adjusted to five percent of average domestic consumption in cases where three-year average import volumes were deemed low, the percentage of months with access to SSM volume-based duties declined significantly to 18 percent. Major reductions in access rates were experienced by pork and potatoes, and to some extent, onions. In turn, using five instead of three-year averages tended to increase overall access rates, with major gains registered for onions and potatoes.

If recourse to the SSM volume-based duty was allowed only when import volumes exceeded the trigger by more than 30 percent, access to the remedy surprisingly declined only slightly from 30 percent to 27 percent when three-year averages were used. Only vegetable oil registered a significant decline in access rates, indicating that the volume surges affecting the other commodities were quite severe.

If five-year averages were used, the overall access rate went down from 36 percent to 28 percent. Also, several commodities appeared to be more sensitive to higher thresholds when a longer time span for averages was used. Aside from vegetable oil, onions and potatoes showed significantly lower access rates in this scenario.

Notably, wheat and chicken had no access whatsoever to volume-based SSM remedies, principally because cumulative imports did not exceed TRQ commitments at any time.

Further simulations as illustrated in Table F.2.4 indicate that overall access to the volume-based SSM remedy remained the same if a July-June period instead of the calendar year was used as the implementation period. Beans, corn, milk and pork lost from this adjustment while onions, potatoes, vegetable oil and rice reacted positively. Reducing the maximum period for imposing SSM duties from 12 to six or three months resulted in significant declines in access rates to 21 percent and 16 percent, respectively. Restricting the imposition of volume-based SSM duties up to the end of each year gave almost as much access to the remedy as a three-month limit.

Ecuador has had TRQ commitments since the Uruguay Round for corn, milk, chicken and wheat. The removal of TRQ constraints on the use of SSM remedies benefited only wheat whose access rate increased from zero to 18 percent. Chicken imports never exceeded their volume triggers and therefore maintained a zero percent access rate. Overall, the availability of volume-based SSM remedies improved slightly from 30 percent to 32 percent.

If a market test was applied such that the volume-based SSM duties could be applied only if average monthly import prices during the preceding six months exceeded corresponding averages in the same period in the previous year by more than five percent, access to the SSM remedy dropped drastically to only eight percent of months covered. Increasing the threshold to a higher ten percent variance further reduced access rates to seven percent. All commodities except milk were affected by this test.

F.2.2.2 Access to Price-Based SSM Remedies

Access to price-based SSM remedies, as illustrated in Table F.2.5, was slightly higher than that to volume-based SSM duties. Setting the trigger price to a three-year moving historical average, price-based SSM remedies could have been invoked 35 percent of the time if the threshold was set to zero percent; i.e., SSM duties could be imposed as soon as import prices fell below the trigger. Onions, rice and beans enjoyed access rates beyond 50 percent while wheat, milk and chicken were effectively shut off from any price-based SSM duty not only because of TRQ constraints but also as a result of relatively high import prices.

Access rates consistently declined as thresholds were increased. If only cases where import prices fell below the trigger price by more than 30 percent were considered, SSM price-based duties could be imposed only in 21 percent of the months covered, compared to 35 percent when a zero percent threshold was set. Corn, potatoes, pork and vegetable oil were particularly sensitive to increasing thresholds, with access rates immediately declining when thresholds were adjusted from zero percent to ten percent. Access rates also tended to decline slightly when five instead of three-year moving price averages were used in the simulations.

Table F.2.5 further shows that access to price-based SSM duties improved from 35 percent to 41 percent of months covered if a July-June implementation period was used instead of a calendar year. Major gains were registered by beans, pork and rice. Shortening the period during which SSM duties could be imposed reduced access to the remedy although not very significantly.

Notably, access rates were substantially better at 33 percent than when the use of price-based SSM duties was limited to six months, as reflected in Table F.2.6. The same table shows that overall access rates significantly declined from 35 percent to 24 percent when the modality allowing for adjustments in cases of currency devaluation was not applied. This points to relatively severe fluctuations in exchange rates prior to the dollarization of the sucre[42] in March 2000 and is validated by the fact that access rates improved to 40 percent when price comparisons were made using US dollars instead of the more erratic local currency values. Recourse to SSM duties also improved slightly to 39 percent, mainly due to gains by wheat and chicken, if the rule disallowing the application of SSM remedies on imports falling within TRQ commitments was waived.

If a corollary market test was imposed so that price-based SSM duties could not be applied if average monthly import volumes during the preceding six months were within 105 percent of corresponding averages in the same period in the previous year, access to the SSM remedy dropped drastically to only 17 percent of months covered. Increasing the threshold to a higher ten percent variance had no additional effect on access rates.

F.2.2.3 Combined Rates of Access to Volume and Price-Based SSM Remedies

Table F.2.7 indicates that access to either a volume or price-based SSM remedy was avai-lable in 48 percent of the months covered by the study when using three-year price and import volume averages as triggers and setting a common ten percent threshold. Almost all commodities except wheat, milk, and chicken enjoyed relatively high access rates.

Overall access rates did not change if triggers were based on five instead of three-year averages, although there were significant gains for corn and potatoes which in turn were offset by losses for milk, vegetable oil and rice. In turn, basing triggers on historical consumption patterns in cases where historical import volumes were considered negligible tended to significantly reduce the availability of the SSM remedy. Pork and potatoes in particular experienced major reductions in access rates in this case, although beans benefited from such an adjustment.

Overall access to either a volume or price-based SSM remedy declined only slightly when a higher 30 percent volume threshold was used (while keeping the price-based threshold steady at ten percent). Only corn and vegetable oil registered significant declines in access rates when this adjustment was made.

As seen in Table F.2.8, overall access rates were unchanged if a July-June implementa-tion period was applied instead of a calendar year, with gains for other commodities offset by losses for corn and milk. Access rates declined from 48 percent to 39 percent if the period for imposing SSM remedial duties was reduced to six months, and further down to 37 percent if the imposition period was limited to the end of the year.

The availability of the SSM remedy declined by five (5) percentage points if the modality for adjusting import prices in cases of currency devaluation was not applied. In turn, access rates improved by a similar degree if import prices were compared to triggers using US dollar instead of local currency values. Major gainers from this adjustment were corn, pork and vegetable oil.

Access rates deteriorated sharply to 20 percent if the market test requiring average import volumes and prices in the preceding six months to deviate from preceding year price and volume averages by more than ten percent was applied. In contrast, there was an improvement in access to the SSM

when TRQ constraints on the use of SSM remedies were removed, with wheat and chicken benefiting significantly from such an adjustment.

F.2.3 Effectiveness of SSM Remedies in Bridging Import versus Domestic Price Gaps

Table F.2.9 shows that import prices, inclusive of MFN duties, fell by more than ten percent below domestic prices of the commodities in 22 percent of the months covered by the study. These "problematic" months were particularly prevalent for beans and onions, and to a lesser degree, wheat, corn, and chicken. Using parameter settings under the base scenario, either volume or price-based SSM remedies would have been available in about one-third or 65 percent of these "problematic" months. In turn, these remedies would have been effective in raising the cost of imports, inclusive of MFN and SSM duties, to not less than ten percent of domestic prices in 45 percent of the "problematic" months. SSM remedies were particularly effective for corn, pork, onions and rice but were essentially inutile for wheat and chicken. Milk, potato and vegetable oils did not register any month wherein problematic price gaps occurred thereby obviating the need for SSM.

If only the volume-based SSM remedies were allowed in the base scenario, access to the remedy went down to only 38 percent of the problematic months, while the effectiveness of the applicable SSM duties slid to 19 percent. In turn, if only the price-based SSM remedies were applied, access to SSM duties averaged 54 percent while the effectiveness rate was 34 percent. This indicates that the price-based remedies generally had a more significant effect on both access to, and the effectiveness of, the SSM.

Increasing the volume threshold from five percent to 15 percent of the volume trigger and allowing SSM remedies only when import prices fell below the price trigger by more than 15 percent (as against zero percent in the base scenario) surprisingly did not produce any major variation from base scenario results. Essentially the same result arose when thresholds were adjusted even further to 30 percent for both volume and price-based remedies, with the availability of SSM remedies going down only slightly from 65 percent to 62 percent, and its effectiveness rate declining by only one (1) percentage point from that of the base scenario. These results point to the ability of most of the products to tolerate higher thresholds.

Table F.2.10 reflects no change in the effectiveness of the SSM remedy if the volume-based remedies under the base scenario were doubled. If these remedies were cut in half instead, the effectiveness rate declined only marginally from 45 percent to 43 percent, with slight reductions for corn and onions. A similar result occurred if the volume-based remedies under the base scenario were limited to percentages of current bound tariffs, while suspending the application of remedies in the form of percentage points. In turn, effectiveness rates were not affected when percentage point remedies, as against remedies proportional to current bound rates, were applied.

Table F.2.11 shows the effect of proposed caps on SSM duties that can be imposed. If SSM remedies were limited to 50 percent of bound tariffs, access to the remedy was not affected but the effectiveness of the SSM in bridging the problematic price gaps declined significantly from 45 percent to only eight percent of "problematic" months.[43] Almost all commodities except rice were adversely affected. Setting the maximum remedial duty to 50 percentage points on the other hand had a less unfavourable effect, although overall effectiveness rates still declined significantly from 45 percent to 25 percent of problematic months. Onions and beans experienced relatively large declines in effectiveness rates in this scenario.

If allowable SSM duties were limited to the difference between the current bound tariff rate and the tariff level at the start of the Doha Round, access to the remedy declined to 56 percent while the SSM itself was effectively rendered inutile with an effectiveness rate of only two percent of "problematic" months.

Similarly, the application of market tests significantly reduced access to SSM remedies from 65 percent to 32 percent of "problematic" months and resulted in a drastic decline in effectiveness rates from 45 percent to 16 percent. Under the said market test, price and volume-based SSM duties could be imposed only if average import volumes or prices in the preceding six months exceeded the corresponding average in the same period in the previous year by more than ten percent.

Using a July-June implementation period instead of a calendar year did not change the overall incidence of "problematic" months but nevertheless slightly impaired overall access to the SSM remedy while significantly reducing the effectiveness of the modality from 45 percent to 37 percent of "problematic" months. Beans and corn underwent major reductions in both availability and effectiveness rates as a result of this adjustment.

Table F.2.12 shows that reducing the maximum period for imposing SSM duties from 12 to six months resulted in a slight decline in access rates but a more significant deterioration in the effectiveness of the SSM in handling price gaps. Limiting the imposition period to the end of the year yielded a better effectiveness rate of 41 percent when compared to the six-month limit. If the constraint posed by TRQ commitments on the use of SSM remedies was removed, the availability of the SSM improved to 76 percent of the "problematic months" while its effec-tiveness rose to 52 percent of such months. Wheat and chicken in particular benefited from this adjustment.

Suspending the application of the foreign exchange adjustment modality in cases of severe currency depreciation resulted in only a slight deterioration in access and effectiveness rates. Given that the decline in overall access rates was much higher when this parameter setting was applied to all, and not just the "problematic" months, this indicates that foreign currency exchange fluctuations were less severe during the months with problematic price gaps. Similarly, there were minimal changes when prices of imports and domestic products were compared using US dollar instead of local currency (sucre) values.

F.2.4 Conclusions and Recommendations

The results of the simulation show that the major agricultural commodities of Ecuador were only slightly subjected to significant import volume surges and price depressions between 2000 and 2005. Cumulative imports exceeded three-year historical averages by more than 30 percent in ten percent of the months covered, while import prices fell below similar thresholds by at least 30 percent about seven percent of the time.

Access to either a volume or price-based SSM remedy averaged 48 percent of months covered by the study if triggers were set to three-year historical averages and a common ten percent thresh-old for invoking remedies was applied. The availability of SSM remedies did not vary significantly if five instead of three-year averages were used, but tended to decline if volume triggers were adjusted based on consumption patterns during years when imports were considered negligible. Access rates also improved if dollar instead of local currency (sucre) values were used in price comparisons, although this was not relevant to transactions after 2000 when the sucre was already pegged to the US dollar. Suspending the constraints imposed by TRQ commitments on the use of SSM remedies likewise had a positive effect.

Access rates in turn deteriorated if the maximum period for imposing SSM duties was shortened from 12 months, the modality for adjusting foreign currency exchange rates in the event of severe devaluation was not applied, and an additional market test was required for availing of price or volume-based SSM remedies.

Only about 22 percent of the months covered by the study exhibited import prices, inclusive of MFN duties, falling below domestic prices by more than ten percent. Under the base scenario, SSM remedies equivalent to the G-33 proposal would have been available in 65 percent of these "problematic" months, and would have been effective in bringing import prices, inclusive of MFN

tariffs and applicable SSM duties, to within ten percent of domestic prices in 45 percent of the "problematic" months.

Based on the results of the simulations, Ecuador could enhance the effectiveness of the SSM remedy for its products by removing TRQ constraints on the application of SSM duties. This could be done by unilaterally bringing down its bound tariffs to in-quota levels, thereby making the TRQ classification redundant. Ecuador could also benefit from a modality that would allow the use of US dollar instead of local currency values in comparing prices.

Ecuador should guard against proposals for the imposition of markets tests on the use of SSM remedies. Caps on allowable SSM duties, particularly in the form of percentages of bound tariffs, should be avoided together with the proposal to limit remedial duties so that overall tariffs do not exceed Doha Round starting rates. Shorter imposition periods should also be resisted, although the country appears to be able to absorb higher thresholds without unduly compromising its access to SSM remedies.

Table F.2.1 Percent of Months With Import Volume Surges Using Different Thresholds Ecuador, 2000 to 2005*

Commodity	Incidence of Import Volume Surges					
	At Least 10% Over		At Least 20% Over		At Least 30% Over	
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave
Beans	23%	23%	23%	23%	19%	19%
Wheat	8%	3%	6%	3%	3%	3%
Corn	18%	15%	17%	14%	10%	11%
Milk	10%	0%	10%	0%	10%	0%
Pork	32%	39%	28%	35%	22%	32%
Onions	28%	46%	25%	42%	25%	36%
Potato	15%	21%	15%	17%	13%	13%
Vegetable Oil	13%	15%	7%	11%	4%	6%
Chicken	0%	0%	0%	0%	0%	0%
Rice	4%	0%	4%	0%	1%	0%
Average	15%	16%	13%	14%	10%	12%

*Data on beans from 2002 to 2005 only

Table F.2.2 Percent of Months With Import Price Depressions Using Different Thresholds Ecuador, 2000 to 2005

Commodity	Incidence of Import Price Depressions					
	At Least 10% Below		At Least 20% Below		At Least 30% Below	
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave
Beans	33%	33%	33%	33%	27%	27%
Wheat	0%	0%	0%	0%	0%	0%
Corn	0%	15%	0%	15%	0%	15%
Milk	0%	0%	0%	0%	0%	0%
Pork	14%	3%	8%	0%	4%	0%
Onions	60%	49%	54%	38%	44%	36%
Potato	0%	0%	0%	0%	0%	0%
Vegetable Oil	0%	0%	0%	0%	0%	0%
Chicken	1%	0%	0%	0%	0%	0%
Rice	17%	8%	13%	4%	6%	3%
Average	12%	10%	10%	8%	7%	7%

Table F.2.3 Percent of Months With Access to Volume SSM at Various Trigger Levels Ecuador, 2000 to 2005

Commodity	Access Rates to Volume-Based SSM							
	10% Threshold				30% Threshold			
	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*
Beans	42%	67%	42%	67%	40%	65%	40%	65%
Wheat	0%	0%	0%	0%	0%	0%	0%	0%
Corn	60%	60%	56%	56%	53%	53%	53%	53%
Milk	10%	0%	0%	0%	10%	0%	0%	0%
Pork	74%	0%	75%	0%	72%	0%	72%	0%
Onions	31%	19%	68%	54%	28%	18%	54%	39%
Potato	38%	0%	65%	0%	36%	0%	35%	0%
Vegetable Oil	50%	50%	54%	54%	35%	35%	35%	35%
Chicken	0%	0%	0%	0%	0%	0%	0%	0%
Rice	4%	0%	0%	0%	1%	0%	0%	0%
Average	30%	18%	36%	22%	27%	15%	28%	18%

*Volume trigger set to 5% of average consumption if average import is less than 5% of average consumption

Table F.2.4 Percent of Months With Access to Volume SSM at Various Parameter Settings Ecuador, 2000 to 2005

Commodity	Access Rates to Volume-Based SSM							
	3 Yr Ave	Jul-Jun	6 Months	3 Months	End of Yr	No TRQs	MktTst 5%	MktTst 10%
Beans	42%	35%	29%	23%	23%	42%	25%	25%
Wheat	0%	0%	0%	0%	0%	18%	0%	0%
Corn	60%	22%	36%	24%	32%	60%	3%	3%
Milk	10%	0%	10%	10%	10%	10%	10%	10%
Pork	74%	42%	50%	38%	44%	74%	26%	17%
Onions	31%	69%	31%	31%	28%	31%	18%	17%
Potato	38%	53%	24%	15%	15%	38%	8%	4%
Vegetable Oil	50%	68%	28%	15%	13%	50%	0%	0%
Chicken	0%	0%	0%	0%	0%	0%	0%	0%
Rice	4%	17%	4%	4%	4%	4%	0%	0%
Average	30%	30%	21%	16%	17%	32%	8%	7%

Table F.2.5 Percent of Months With Access to Price SSM Using Different Thresholds Ecuador, 2000 to 2005

Commodity	Access Rates to Price-Based SSM							
	0% Threshold		10% Threshold		30% Threshold		Jul-Jun	6 Months
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	Implem	Impose
Beans	56%	56%	56%	56%	50%	50%	73%	44%
Wheat	0%	0%	0%	0%	0%	0%	0%	0%
Corn	28%	44%	17%	44%	0%	44%	31%	19%
Milk	0%	0%	0%	0%	0%	0%	0%	0%
Pork	47%	31%	31%	31%	31%	0%	67%	44%
Onions	83%	82%	83%	82%	82%	56%	83%	81%
Potato	36%	0%	17%	0%	0%	0%	51%	38%
Vegetable Oil	38%	29%	31%	19%	22%	0%	31%	29%
Chicken	0%	0%	0%	0%	0%	0%	0%	0%
Rice	65%	63%	65%	53%	35%	35%	85%	67%
Average	35%	30%	29%	28%	21%	17%	41%	32%

Table F.2.6 Percent of Months With Access to Price SSM at Various Parameter Settings Ecuador, 2000 to 2005

Commodity	Access Rates to Price-Based SSM							
	3 Yr Ave	3 Months	End of Yr	No Dep'n*	Dollars*	No TRQs	MktTst 5%	MktTst 10%
Beans	56%	38%	58%	56%	56%	56%	4%	4%
Wheat	0%	0%	0%	0%	0%	33%	0%	0%
Corn	28%	15%	17%	0%	28%	28%	0%	0%
Milk	0%	0%	0%	0%	0%	0%	0%	0%
Pork	47%	35%	44%	31%	47%	47%	28%	28%
Onions	83%	79%	83%	67%	83%	83%	56%	56%
Potato	36%	31%	26%	19%	74%	36%	21%	21%
Vegetable Oil	38%	25%	24%	7%	54%	38%	18%	17%
Chicken	0%	0%	0%	0%	0%	13%	0%	0%
Rice	65%	46%	82%	72%	65%	65%	36%	36%
Average	35%	26%	33%	24%	40%	39%	17%	17%

*The local currency of Ecuador, the sucre, was pegged to the US dollar starting in March 2000 with a fixed rate of 25,000 sucre per 1US$

Table F.2.7 Percent of Months With Access to Any SSM Using Different Thresholds Ecuador, 2000 to 2005^

Commodity	Combined Access Rates to Volume and Price-Based SSM+							
	10% Volume Threshold				30% Volume Threshold			
	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*
Beans	58%	83%	58%	83%	58%	83%	58%	83%
Wheat	0%	0%	0%	0%	0%	0%	0%	0%
Corn	76%	76%	96%	96%	69%	69%	94%	94%
Milk	10%	0%	0%	0%	10%	0%	0%	0%
Pork	74%	31%	75%	31%	72%	31%	72%	31%
Onions	83%	83%	82%	82%	83%	83%	82%	82%
Potato	54%	17%	65%	0%	53%	17%	35%	0%
Vegetable Oil	63%	63%	56%	56%	50%	50%	38%	38%
Chicken	0%	0%	0%	0%	0%	0%	0%	0%
Rice	65%	65%	53%	53%	65%	65%	53%	53%
Average	48%	40%	48%	39%	46%	38%	43%	36%

^Data for beans from 2002 to 2005 only
+Assuming a 10% threshold for invoking price-based SSM
*Volume trigger set to 5% of average consumption if average import is less than 5% of average consumption

Table F.2.8 Percent of Months With Access to Any SSM at Various Parameter Settings Ecuador, 2000 to 2005

Commodity	Combined Access Rates to Volume and Price-Based SSM							
	3 Yr Ave	Jul-Jun	6 Months	End of Yr	No Dep'n	Dollars	MktTst 10%	No TRQs
Beans	58%	75%	58%	58%	58%	58%	29%	58%
Wheat	0%	0%	0%	0%	0%	0%	0%	35%
Corn	76%	44%	44%	38%	60%	88%	3%	76%
Milk	10%	0%	10%	10%	10%	10%	10%	10%
Pork	74%	79%	58%	53%	74%	90%	33%	74%
Onions	83%	83%	83%	83%	79%	83%	56%	83%
Potato	54%	65%	40%	28%	38%	58%	22%	54%
Vegetable Oil	63%	74%	40%	25%	50%	79%	15%	63%
Chicken	0%	0%	0%	0%	0%	0%	0%	13%
Rice	65%	69%	58%	82%	71%	64%	33%	65%
Average	48%	48%	39%	37%	43%	53%	20%	53%

Table F.2.9 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings Ecuador, 2000 to 2005*

Commodity	Percent Problematic Months	BASE SCENARIO		VOLUME SSM ONLY		PRICE SSM ONLY		HIGHER THRESHOLD		VERY HIGH THRESHOLD	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Beans	94%	64%	18%	51%	0%	60%	18%	62%	18%	58%	18%
Wheat	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Corn	28%	75%	70%	70%	70%	5%	0%	70%	65%	65%	65%
Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pork	5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Onions	61%	100%	84%	32%	23%	100%	80%	100%	84%	100%	84%
Potato	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetable Oil	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Chicken	23%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rice	3%	100%	100%	0%	0%	100%	100%	100%	100%	100%	100%
Average	22%	65%	45%	38%	19%	54%	34%	64%	44%	62%	44%

*Data on beans only from 2002 to 2005; data on milk, pork and chicken only from 2000 to 2004

Table F.2.10 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings Ecuador, 2000 to 2005

Commodity	Percent Problematic Months	BASE SCENARIO		HIGH REMEDIES		LOW REMEDIES		% OF BOUND		PERCENTAGE PTS	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Beans	94%	64%	18%	64%	18%	64%	18%	64%	18%	64%	18%
Wheat	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Corn	28%	75%	70%	75%	70%	75%	65%	75%	65%	75%	70%
Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pork	5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Onions	61%	100%	84%	100%	84%	100%	80%	100%	80%	100%	84%
Potato	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetable Oil	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Chicken	23%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rice	3%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Average	22%	65%	45%	65%	45%	65%	43%	65%	43%	65%	45%

Table F.2.11 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings
Ecuador, 2000 to 2005

Commodity	Percent Problematic Months	BASE SCENARIO		50% OF BOUND		50 PCTG PTS		DOHA START		MARKET TEST		JULY-JUNE		
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		Problematic months	% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective		Available	Effective
Beans	94%	64%	18%	64%	0%	58%	0%	64%	0%	31%	0%	94%	80%	9%
Wheat	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	0%
Corn	28%	75%	70%	65%	45%	70%	65%	60%	10%	0%	0%	28%	40%	35%
Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pork	5%	100%	100%	100%	0%	100%	100%	100%	0%	67%	67%	7%	100%	100%
Onions	61%	100%	84%	100%	2%	100%	41%	82%	2%	68%	48%	61%	86%	84%
Potato	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetable Oil	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Chicken	23%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	23%	0%	0%
Rice	3%	100%	100%	100%	100%	100%	100%	0%	0%	0%	0%	3%	100%	100%
Average	22%	65%	45%	64%	8%	63%	25%	56%	2%	32%	16%	22%	60%	37%

Table F.2.12 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings
Ecuador, 2000 to 2005

Commodity	Percent Problematic Months	BASE SCENARIO		6 MONTHS		END OF YEAR		NO TRQS		NO DEP'N		DOLLARS	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Beans	94%	64%	18%	64%	7%	64%	18%	64%	18%	64%	18%	64%	18%
Wheat	19%	0%	0%	0%	0%	0%	0%	86%	50%	0%	0%	0%	0%
Corn	28%	75%	70%	50%	50%	50%	50%	75%	70%	70%	70%	75%	75%
Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pork	5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Onions	61%	100%	84%	100%	73%	100%	80%	100%	84%	93%	73%	100%	84%
Potato	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vegetable Oil	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Chicken	23%	0%	0%	0%	0%	0%	0%	21%	21%	0%	0%	0%	0%
Rice	3%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Average	22%	65%	45%	62%	35%	62%	41%	76%	52%	63%	42%	65%	46%

Annex F.3

Fiji

A total of fourteen (14) agricultural commodities were covered in the study on Fiji. Import and price data from 2000 to 2005 were used for all products except for corn, liquid milk, chicken and wheat which had no data on domestic prices and therefore had to be excluded from the analysis on the effectiveness of the SSM (Section F.3.3 below). In most cases, only annual instead of monthly import volumes for 1995 to 2000 were available; in these cases, the annual figures were broken down into monthly shares based on the average share of each month to total imports between 2000 and 2005.

Mutton, carrots, tomatoes, corn, wheat, wheat flour, soya oil, onions, liquid and powdered milk did not have domestic utilisation figures. This deficiency excluded these products from some simulations in Sections F.3.2.1 and F.3.2.3 which involved adjustments in volume triggers based on consumption patterns.

Utilisation data for beef, potatoes, chicken and rice were sourced separately from FAO although figures for 2004-2005 were not available and were just assumed to be equal to those in 2003. Where the FAO data did not appear to be realistic or relevant, they were not used in the analysis. Import prices for corn and wheat prior to 2000 were not available; price triggers for these commodities for year 2000 were set to zero.

Fiji had only minimal production in, or imported most of their requirements for, soya oil, powdered milk, onions, carrots, wheat, wheat flour and potatoes.

F.3.1 Incidence of Import Surges and Price Depressions

Table F.3.1 shows that imports of the 14 commodities exceeded the three-year moving ave-rage of import volumes by at least ten percent in 15 percent of the months covered by the study. Among the commodities, tomatoes, corn, liquid milk, chicken and wheat flour showed relatively high surge incidence rates of 25 percent or higher. If a five-year historical moving average of import volumes was used, the incidence of import surges using a ten percent threshold increased slightly to 17 percent.

The incidence of veritable import surges declined to 11 percent if a surge was defined as cumu-lative import volumes exceeding the three-year average by more than 30 percent. Commodities such as mutton, liquid milk and rice did not react significantly to increases in thresholds, indicating that the surges they underwent were quite severe; i.e., in excess of 30 percent over the threshold.

Table F.3.2 shows in turn that CIF import prices converted to local currency were at least ten percent lower than three-year historical price averages in 21 percent of the months covered by the study. Rice and onions showed relatively high susceptibility to price depressions. If a five-year import price average was used as a reference, the incidence of price depressions of this magnitude decreased to 19 percent, indicating that a longer period for basing price triggers tended to reduce the trigger level and make it harder to breach.

The incidence of price depressions declined significantly when higher thresholds were used. If the threshold was increased to 20 percent, the overall incidence went down from 21 percent to 15 percent of months covered when using three-year price averages as thresholds. A further adjustment of the threshold to 30 percent brought the incidence of price depressions down to nine percent, with only soya oil, rice and onions remaining with significantly high incidence rates.

F.3.2 Access to Volume and Price–Based SSM Remedies

F.3.2.1 Access to Volume-Based SSM Remedies

Table F.3.3 shows that volume-based SSM remedies would have been available in 35 percent of the months covered by the study if triggers were set to the moving three-year historical ave-rage of import volumes and SSM duties were allowed only if import volumes exceeded the triggers by more than ten percent. Tomatoes, onions, and chicken exhibited relatively high access rates exceeding 50 percent. In turn, the SSM was not available for wheat at any time.

If the volume triggers were adjusted to five percent of average domestic consumption in cases where average historical import volumes were deemed low, the percentage of months with access to SSM volume-based duties went down slightly to 31 percent.[44] Only chicken was significantly affected by this adjustment.

Using five instead of three-year averages tended to increase overall access rates, although mutton, carrots and powdered milk reacted negatively to this parameter change.

If the SSM volume-based duty was allowed only when import volumes exceeded the trigger by more than 30 percent, access to the remedy declined perceptibly from 35 percent to 21 percent when three-year averages were used. All commodities except mutton, wheat, tomatoes, liquid milk, rice and wheat flour were negatively affected by the increase in thresholds.

If five-year averages were used, the overall access rate went down from 38 percent to 23 percent when using a 30 percent threshold. If the five-year averages were adjusted in cases when historical import volumes fell below five percent of average domestic consumption of the commodity, access rates went down further to 20 percent.

Table T.3.4 reveals that overall access to volume-based SSM duties improved slightly to 39 percent if a July-June period instead of the calendar year was used as the implementation period. Only powdered milk, onions and potatoes reacted negatively to this change, while access rates for beef and rice remained steady. If the maximum period for imposing SSM duties was reduced from 12 to six or three months, access rates correspondingly went down to 24 percent and 19 percent, respectively. In turn, allowing the imposition of volume-based SSM duties only up to the end of each year gave access to the SSM 25 percent of the time, or even better than when a six-month maxi-mum period was imposed.

No commodity covered by the study has had any TRQ commitments since the UR. Simulations involving TRQs did not therefore affect the results.

If a market test was applied such that the use of volume-based SSM duties was disallowed in cases where average import prices during the preceding six months were within five percent of corresponding averages in the same period during the previous year, access to the SSM remedy dropped drastically to only 12 percent of months covered. Increasing the threshold to a higher ten percent variance further reduced access rates to ten percent. All commodities were adversely affected by this additional conditionality.

F.3.2.2 Access to Price-Based SSM Remedies

Access to price-based SSM remedies, as shown in Table F.3.5, was significantly higher than that to volume-based SSM duties. If the trigger price was set to a three-year moving historical average, price-based SSM remedies could have been invoked 64 percent of the time when the threshold was set to zero percent; i.e., SSM duties could be imposed as soon as import prices fell below the trigger. Only beef, soya oil and chicken had access rates falling below 50 percent.

Access rates declined appreciably as thresholds were increased. The availability of the SSM was more than halved to 31 percent if the threshold for invoking the remedy was adjusted from zero percent to 30 percent below the trigger price. Only rice and soya oil were able to essentially maintain their original access rates. In turn, beef, mutton, wheat, powdered and liquid milk and chicken showed large and immediate declines in access rates when thresholds were adjusted from zero percent to ten percent.

Table F.3.5 also shows that access to price-based SSM duties improved from 64 percent to 71 percent of months covered if a July-June implementation period was used instead of a calendar year. Major gains were registered by wheat, wheat flour and soya oil although tomatoes, powdered milk, onions and rice reacted negatively to this adjustment. If the maximum period for imposing SSM duties was reduced from 12 to six months, access to a price-based SSM remedy went down from 64 percent to 56 percent.

This access rate went down further to 46 percent if the imposition period was additionally reduced to three months, as shown in Table F.3.6. As in the case with volume-based duties, limiting the use of price-based SSM remedies to the end of the year surprisingly provided a better access rate of 62 percent.

Overall access rates hardly moved when the modality allowing for adjustments in cases of currency devaluation was not applied. Only mutton, wheat, potatoes and soya oil were affected by this adjustment, although in negligible terms. The availability of the remedy declined somewhat when US instead of Fiji dollar values were used in price comparisons, with almost all commodities negatively affected. Suspending the application of TRQ constraints on the use of SSM remedies had no effect since all commodities covered by the study have not had TRQ commitments since the UR.

If the use of price-based SSM duties was allowed only in cases where average import volumes during the preceding six months were within five percent of corresponding averages in the same period during the previous year, access to the SSM remedy dropped by more than half to 30 percent of months covered. Increasing the so-called market test threshold to a higher ten percent variance further reduced access rates to 27 percent.

F.3.2.3 Combined Rates of Access to Volume and Price-Based SSM Remedies

Table F.3.7 indicates that either a volume or price-based SSM remedy was accessible in almost two out of every three months covered by the study when using three-year price and import volume averages as triggers and setting a common ten percent threshold. All commodities except beef, mutton, and wheat had access rates exceeding 50 percent.

Overall access rates did not change if triggers were based on five-year averages, although the results for individual commodities were mixed. Minor changes also occurred if volume triggers were based on historical consumption patterns in instances when historical import volumes were considered negligible. Only chicken exhibited a significant decline in access rates when this adjustment was made.

Overall access to either a volume or price-based SSM remedy did not deteriorate much if a higher 30 percent volume threshold was used (while keeping the price-based threshold steady at ten percent). Only beef, onions and soya oil experienced major reductions in access rates under this scenario.

As shown in Table F.3.8, the overall accessibility of the SSM improved slightly from 65 percent to 71 percent if a July-June implementation period was applied instead of a calendar year. Mutton, wheat, soya oil and chicken benefited significantly from this adjustment although some commodities like rice reacted negatively. Access rates went down to 54 percent if the period for imposing SSM remedial duties was reduced to six months, but came out marginally better at 55 percent if the

imposition period was limited to the end of the year. Corn, chicken, rice and wheat flour did not seem to react perceptibly to changes in imposition periods.

The availability of the SSM remedy did not change when the modality for adjusting import prices in case of currency devaluation was not applied. In turn, access rates went down slightly to 63 percent if import prices were compared to triggers using US dollar instead of local currency values. Major losers from this adjustment were corn, powder milk and wheat flour.

Access rates declined from the baseline level of 65 percent to only 24 percent if market tests were applied simultaneously to volume and price-based SSM remedies. In these instances, the use of volume or price-based SSM duties was allowed only if average monthly import prices or volumes during the preceding six months were within ten percent of corresponding averages in the same period during the previous year. All commodities suffered significant declines in SSM access rates when this additional conditionality was imposed.

The suspension of TRQ constraints on the use of SSM remedies did not have any effect since none of the commodities had TRQ commitments since the UR.

F.3.3 Effectiveness of SSM Remedies in Bridging Import versus Domestic Price Gaps

Table F.3.9 shows that import prices, inclusive of MFN duties, fell by more than ten percent below domestic prices of the commodities in a relatively high 69 percent of the months covered by the study.[45] All of the commodities covered by this analysis had incidences of such "problematic" months exceeding 50 percent except powdered milk which did not encounter any.

Using parameter settings under the base scenario, either volume or price-based SSM remedies would have been available in a relatively high 81 percent of these "problematic" months. In turn, these remedies would have been effective in raising the cost of imports, inclusive of MFN and applicable SSM duties, to not less than ten percent of domestic prices in 42 percent of the "problematic" months. The effectiveness rate for all covered commodities except mutton, carrots, rice and wheat flour were above this average figure.

If only the volume-based SSM remedies were allowed in the base scenario, access to the remedy went down to only 42 percent of the problematic months, while the effectiveness of the applicable SSM duties deteriorated to 26 percent. Access rates for onions, potatoes and soya oil were however not significantly affected by this adjustment. In turn, if only the price-based SSM remedies were applied, access to SSM duties averaged 71 percent while the effectiveness rate was 31 percent. As in most other countries, this indicates that the price-based remedies generally had a more significant effect on both access to, and the effectiveness of, the SSM.

Increasing the volume threshold from five percent to 15 percent of the volume trigger and allowing SSM remedies only when import prices fell below the price trigger by more than 15 percent (as against zero percent in the base scenario) brought access rates slightly down from 69 percent to 62 percent, while the effectiveness of the SSM likewise dropped to 35 percent. Major declines were experienced by beef, mutton, potatoes and soya oil. If thresholds were adjusted further to 30 percent for both volume and price-based remedies, the availability of SSM remedies was reduced more abruptly to 46 percent, while the effectiveness of the modality deteriorated to 25 percent of "problematic" months. Access rates for all commodities except rice declined significantly at these higher threshold levels.

Table F.3.10 did not indicate any major change in the effectiveness of the SSM remedy if the volume-based remedies under the base scenario were doubled. Only carrots and mutton gained significantly from this adjustment. If these remedies were instead cut in half, the effectiveness rate declined only marginally from 42 percent to 38 percent, with slight reductions for beef, tomatoes, onions, potatoes and soya oil. Almost the same outcome was generated when the volume-based remedies under the base scenario were limited to percentages of current bound tariffs, while suspending the application of remedies in the form of percentage points. In turn, no change in effectiveness rates resulted when percentage point remedies, as against remedies proportional to current bound rates, were applied.

Table F.3.11 simulates the effect of proposed caps on allowable SSM duties. If SSM remedies were limited to 50 percent of bound tariffs[46], access to the remedy was not affected but the effectiveness of the SSM in bridging the problematic price gaps was almost halved from 42 percent to 22 percent of "problematic" months. All commodities were adversely affected, although in varying degrees. Capping the remedial duty to 50 percentage points on the other hand had a less unfavourable effect, although overall effectiveness rates still declined significantly to 36 percent. Rice and tomatoes underwent large cuts in effectiveness rates under this scenario.

If allowable SSM duties were limited to the difference between the current bound tariff rate and the tariff level at the start of the Doha Round, access to the remedy declined to 64 percent while the SSM itself was effectively rendered inoperable with an effectiveness rate of only three percent of "problematic" months.

Access to the SSM remedy was cut to 31 percent, or about a third of baseline levels, if market tests were applied simultaneously to volume and price-based SSM remedies. Effectiveness rates similarly went down drastically to 12 percent of "problematic" months. Beef, tomatoes, onions, potatoes and soya oil encountered large reductions in effectiveness rates when this adjustment was made. As explained earlier, the market test provides that volume or price-based SSM duties can be imposed only if average monthly import prices or volumes during the preceding six months were within ten percent of correspon-ding averages in the same period during the previous year.

Using a July-June implementation period instead of a calendar year increased the incidence of "problematic" months slightly from 69 percent to 71 percent. Access to the SSM remedy, and the effectiveness of the modality, also improved by one percentage point in the process. Mutton, carrots and soya oil in particular gained, while onions, potatoes and beef lost in terms of effectiveness rates.

Table F.3.12 indicates that reducing the maximum period for imposing SSM duties from 12 to six months resulted in a decline in access rates from 81 percent to 70 percent and a corollary deterio-ration in the effectiveness of the SSM in handling price gaps from 42 percent to 31 percent. Limiting the imposition period to the end of the year yielded a marginally better effectiveness rate of 32 percent when compared to the six-month limit. The suspension of the constraint posed by TRQ commitments on the use of SSM remedies did not have any effect since none of the commodities had TRQ commitments since the UR,

Suspending the application of the foreign exchange adjustment modality in cases of severe currency depreciation had minimal effects on the base scenario results. Similarly, although access to the SSM dipped slightly, there were no significant changes when prices of imports and domestic products were compared using US instead of Fiji dollar values.

F.3.4 Conclusions and Recommendations

The results of the simulation show that the major agricultural commodities of Fiji were only slightly subjected to significant import volume surges and price depressions between 2000 and 2005. Cumulative imports exceeded three-year historical averages by more than 30 percent in 11 percent of the months covered, while import prices fell below similar thresholds by at least 30 percent about nine percent of the time.

Despite these relatively low incidences of volume surges and price depressions, the avai-lability of either a volume or price-based SSM remedy averaged a relatively high 65 percent of the months covered by the study if triggers were set to three-year historical averages and a lower ten percent thresh-old for invoking remedies was applied. Overall access to the SSM remedies did not change if five instead of three-year averages were used, although the results for individual commodities were mixed. Similarly, access rates declined only slightly if volume triggers were based on consumption patterns during years when imports were considered negligible.

Access rates improved if a July-June instead of a calendar year was used as the implementation period. In turn, they deteriorated if the maximum period for imposing SSM duties was shortened from 12 to six months or only up to the end of the year, or if an additional market test was required for availing of volume-based SSM remedies. Simulation results did not vary significantly if the modality for foreign currency adjustments was suspended or import prices were denominated in US instead of local Fiji dollars.

More than two our of every three of the months covered by the study exhibited import prices, inclusive of MFN duties, falling below domestic prices by more than ten percent. Under the base scenario, SSM remedies equivalent to the G-33 proposal would have been available in 81 percent of these "problematic" months and would have been effective in bringing import prices, inclusive of MFN tariffs and applicable SSM duties, to within ten percent of domestic prices in 42 percent of the "problematic" months.

The effectiveness of the SSM remedy improved beyond the base result of 42 percent only in the scenarios where double the baseline remedies were allowed to be imposed and when a July-June instead of a calendar year was applied as the implementation period. In turn, the ability of the SSM to effectively address "problematic" price gaps significantly declined when higher thresholds were imposed for availing of the remedies and allowable remedies were either reduced, linked to current bound rates, or capped to either 50 percent of bound rates or only up to 50 percentage points. Setting Doha Round starting tariffs as caps on allowable SSM duties had the most deleterious effect on both access and effectiveness rates.

Effectiveness rates also suffered when a market test was applied to both price and volume-based remedies and when the imposition period was reduced from 12 to six months or only up to the end of the year.

The overall results did not vary significantly from the baseline outcome when the foreign exchange adjustment modality was suspended and when US instead of Fiji dollars were used to com-pare import values and domestic prices.

These simulations results imply that Fiji should lobby against reducing the 12-month imposition period proposed by the G-33 and adopting high thresholds for the invocation of SSM remedies. Attempts to impose caps on allowable tariffs, apply market tests, and limit SSM duties such that overall tariffs do not exceed Doha Round starting tariffs should also be resisted vigorously.

Table F.3.1 Percent of Months With Import Volume Surges at Different Thresholds Fiji, 2000 to 2005

Commodity	Incidence of Import Volume Surges					
	At Least 10% Over		At Least 20% Over		At Least 30% Over	
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave
Beef	8%	15%	4%	10%	3%	10%
Mutton	4%	3%	3%	3%	3%	1%
Wheat	0%	0%	0%	0%	0%	0%
Carrots	4%	4%	1%	1%	0%	0%
Tomato	31%	33%	25%	21%	21%	15%
Corn	25%	28%	21%	24%	14%	21%
Powdered Milk	11%	7%	10%	7%	8%	6%
Liquid Milk	26%	35%	25%	33%	25%	33%
Onions	6%	10%	1%	4%	0%	1%
Potato	6%	4%	3%	1%	1%	0%
Soya Oil	15%	15%	8%	10%	7%	7%
Chicken	43%	44%	42%	39%	38%	35%
Rice	8%	13%	8%	13%	8%	10%
Wheat Flour	28%	31%	26%	26%	25%	25%
Average	15%	17%	13%	14%	11%	12%

Table F.3.2 Percent of Months With Price Depressions at Different Thresholds Fiji, 2000 to 2005

Commodity	Incidence of Import Price Depressions					
	At Least 10% Below		At Least 20% Below		At Least 30% Below	
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave
Beef	3%	7%	1%	4%	1%	3%
Mutton	8%	6%	4%	3%	3%	0%
Wheat	4%	4%	1%	1%	1%	1%
Carrots	22%	21%	14%	3%	3%	3%
Tomato	22%	21%	13%	13%	4%	6%
Corn	24%	24%	13%	15%	10%	10%
Powdered Milk	14%	6%	6%	3%	1%	1%
Liquid Milk	7%	6%	3%	3%	0%	0%
Onions	46%	47%	29%	21%	18%	18%
Potato	29%	29%	25%	14%	11%	7%
Soya Oil	15%	17%	15%	14%	14%	0%
Chicken	10%	10%	10%	8%	7%	6%
Rice	69%	68%	61%	61%	46%	39%
Wheat Flour	17%	8%	15%	1%	3%	1%
Average	21%	19%	15%	12%	9%	7%

Table F.3.3 Percent of Months With Access to Volume SSM at Various Trigger Levels Fiji, 2000 to 2005

Commodity	Access Rates to Volume-Based SSM							
	10% Threshold				30% Threshold			
	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*
Beef	35%	35%	39%	39%	18%	18%	19%	19%
Mutton	19%	19%	17%	17%	18%	18%	17%	17%
Wheat	0%	0%	0%	0%	0%	0%	0%	0%
Carrots	35%	35%	19%	19%	0%	0%	0%	0%
Tomato	57%	57%	76%	76%	54%	54%	42%	42%
Corn	40%	40%	43%	43%	29%	29%	36%	36%
Powdered Milk	36%	36%	21%	21%	18%	18%	19%	19%
Liquid Milk	35%	35%	43%	43%	33%	33%	42%	42%
Onions	51%	51%	53%	53%	0%	0%	17%	17%
Potato	35%	35%	35%	35%	17%	17%	0%	0%
Soya Oil	39%	39%	42%	42%	18%	18%	19%	19%
Chicken	51%	7%	53%	21%	40%	3%	47%	6%
Rice	17%	17%	33%	33%	17%	17%	33%	33%
Wheat Flour	33%	33%	65%	65%	31%	31%	31%	31%
Average	35%	31%	38%	36%	21%	18%	23%	20%

*Only beef, potato, chicken and rice had domestic utilization figures, and only up to 2003; 2004-2005 data assumed to be same as in 2003

Table F.3.4 Percent of Months With Access to Volume SSM at Various Parameter Settings Fiji, 2000 to 2005

Commodity	Access Rates to Volume-Based SSM							
	3 Yr Ave	Jul-Jun	6 Months	3 Months	End of Yr	No TRQs	MktTst 5%	MktTst 10%
Beef	35%	35%	18%	10%	8%	35%	1%	0%
Mutton	19%	32%	11%	7%	21%	19%	7%	6%
Wheat	0%	17%	0%	0%	0%	0%	0%	0%
Carrots	35%	38%	18%	10%	36%	35%	1%	0%
Tomato	57%	69%	43%	35%	31%	57%	13%	13%
Corn	40%	56%	32%	28%	42%	40%	18%	18%
Powdered Milk	36%	18%	19%	15%	28%	36%	4%	4%
Liquid Milk	35%	51%	35%	31%	26%	35%	25%	18%
Onions	51%	50%	26%	14%	38%	51%	13%	11%
Potato	35%	33%	18%	10%	22%	35%	11%	10%
Soya Oil	39%	40%	22%	18%	15%	39%	13%	10%
Chicken	51%	60%	51%	47%	50%	51%	31%	28%
Rice	17%	17%	8%	8%	8%	17%	17%	17%
Wheat Flour	33%	38%	33%	29%	28%	33%	13%	13%
Average	35%	39%	24%	19%	25%	35%	12%	10%

Table F.3.5 Percent of Months With Access to Price SSM Using Different Thresholds Fiji, 2000 to 2005

Commodity	Access Rates to Price-Based SSM							
	0% Threshold		10% Threshold		30% Threshold		Jul-Jun	6 Months
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	Implem	Impose
Beef	44%	36%	18%	35%	17%	18%	44%	43%
Mutton	61%	26%	26%	25%	25%	17%	61%	44%
Wheat	54%	50%	36%	36%	17%	17%	72%	54%
Carrots	78%	75%	76%	74%	33%	33%	81%	57%
Tomato	83%	82%	78%	63%	33%	38%	78%	61%
Corn	68%	68%	67%	67%	35%	35%	81%	60%
Powdered Milk	74%	64%	64%	42%	17%	17%	63%	74%
Liquid Milk	67%	51%	39%	36%	17%	17%	68%	50%
Onions	82%	81%	81%	79%	47%	47%	72%	71%
Potato	74%	57%	68%	56%	25%	21%	79%	67%
Soya Oil	32%	65%	32%	49%	32%	21%	81%	36%
Chicken	42%	25%	25%	25%	24%	24%	56%	33%
Rice	94%	94%	92%	93%	88%	90%	86%	92%
Wheat Flour	50%	47%	47%	31%	31%	17%	67%	40%
Average	64%	59%	53%	51%	31%	29%	71%	56%

Table F.3.6 Percent of Months With Access to Price SSM at Various Parameter Settings Fiji, 2000 to 2005

Commodity	Access Rates to Price-Based SSM							
	3 Yr Ave	3 Months	End of Yr	No Dep'n	Dollars	No TRQs	MktTst 5%	MktTst 10%
Beef	44%	22%	44%	44%	35%	44%	21%	19%
Mutton	61%	28%	57%	69%	54%	61%	31%	21%
Wheat	54%	46%	68%	53%	35%	54%	18%	17%
Carrots	78%	53%	69%	78%	75%	78%	31%	29%
Tomato	83%	43%	81%	83%	81%	83%	32%	25%
Corn	68%	51%	69%	68%	68%	68%	32%	29%
Powdered Milk	74%	60%	74%	74%	51%	74%	26%	26%
Liquid Milk	67%	51%	50%	67%	54%	67%	42%	39%
Onions	82%	65%	72%	82%	79%	82%	42%	39%
Potato	74%	57%	65%	69%	68%	74%	39%	28%
Soya Oil	32%	26%	33%	39%	32%	32%	21%	19%
Chicken	42%	21%	50%	42%	25%	42%	33%	32%
Rice	94%	89%	94%	94%	100%	94%	36%	36%
Wheat Flour	50%	36%	44%	50%	33%	50%	19%	18%
Average	64%	46%	62%	65%	56%	64%	30%	27%

Table F.3.7 Percent of Months With Access to Any SSM Using Different Thresholds Fiji, 2000 to 2005

Commodity	Combined Access Rates to Volume and Price-Based SSM+							
	10% Volume Threshold				30% Volume Threshold			
	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*
Beef	46%	46%	53%	53%	32%	32%	36%	36%
Mutton	29%	29%	26%	26%	29%	29%	28%	28%
Wheat	36%	36%	36%	36%	36%	36%	36%	36%
Carrots	78%	78%	75%	75%	76%	76%	74%	74%
Tomato	92%	92%	93%	93%	89%	89%	81%	81%
Corn	74%	74%	74%	74%	72%	72%	72%	72%
Powdered Milk	69%	69%	49%	49%	67%	67%	49%	49%
Liquid Milk	61%	61%	68%	68%	61%	61%	67%	67%
Onions	97%	97%	97%	97%	81%	81%	88%	88%
Potato	78%	78%	67%	67%	71%	71%	56%	56%
Soya Oil	51%	51%	58%	58%	33%	33%	57%	57%
Chicken	53%	32%	56%	46%	43%	28%	53%	31%
Rice	92%	92%	93%	93%	92%	92%	93%	93%
Wheat Flour	60%	60%	65%	65%	60%	60%	44%	44%
Average	65%	64%	65%	64%	60%	59%	59%	58%

+Assuming a 10% threshold for invoking price-based SSM
*Volume trigger set to 5% of average consumption if average import is less than 5% of average consumption; only beef, potato, chicken and rice had domestic utilisation figures, and only up to 2003; 2004-2005 data assumed to be same as in 2003

Table F.3.8 Percent of Months With Access to Any SSM at Various Parameter Settings Fiji, 2000 to 2005

Commodity	Combined Access Rates to Volume and Price-Based SSM							
	3 Yr Ave	Jul-Jun	6 Months	End of Yr	No Dep'n	Dollars	MktTst 10%	No TRQs
Beef	46%	43%	28%	19%	46%	46%	7%	46%
Mutton	29%	36%	21%	31%	29%	38%	19%	29%
Wheat	36%	65%	19%	19%	35%	35%	3%	36%
Carrots	78%	86%	58%	72%	78%	76%	28%	78%
Tomato	92%	88%	78%	89%	92%	86%	21%	92%
Corn	74%	79%	72%	69%	74%	63%	33%	74%
Powdered Milk	69%	63%	50%	51%	69%	58%	21%	69%
Liquid Milk	61%	67%	47%	36%	61%	68%	32%	61%
Onions	97%	92%	85%	90%	97%	97%	39%	97%
Potato	78%	75%	58%	60%	78%	75%	24%	78%
Soya Oil	51%	74%	43%	39%	51%	51%	21%	51%
Chicken	53%	79%	53%	53%	53%	53%	29%	53%
Rice	92%	82%	88%	90%	92%	94%	39%	92%
Wheat Flour	60%	72%	54%	54%	60%	46%	17%	60%
Average	65%	71%	54%	55%	65%	63%	24%	65%

Table F.3.9 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings Fiji, 2000 to 2005*

Commodity	Percent Problematic Months	BASE SCENARIO		VOLUME SSM ONLY		PRICE SSM ONLY		HIGHER THRESHOLD		VERY HIGH THRESHOLD	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Beef	79%	75%	40%	39%	37%	49%	12%	30%	25%	28%	21%
Mutton	94%	63%	18%	18%	13%	62%	16%	26%	18%	26%	18%
Wheat	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Carrots	86%	79%	27%	37%	18%	79%	27%	63%	27%	34%	15%
Tomato	74%	94%	68%	47%	38%	91%	51%	85%	64%	68%	51%
Corn	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Powdered Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Liquid Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Onions	71%	100%	86%	67%	57%	88%	65%	88%	78%	49%	45%
Potato	57%	90%	88%	56%	56%	83%	73%	76%	73%	34%	34%
Soya Oil	50%	67%	64%	53%	50%	31%	31%	39%	36%	33%	33%
Chicken	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rice	96%	94%	20%	33%	0%	94%	20%	91%	20%	87%	20%
Wheat Flour	85%	64%	3%	46%	0%	51%	3%	61%	3%	41%	3%
Average	69%	81%	42%	42%	26%	71%	31%	62%	35%	46%	25%

*Excludes corn, liquid milk, chicken and wheat which had no data on domestic prices

Table F.3.10 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings
Fiji, 2000 to 2005

Commodity	Percent Problematic Months	BASE SCENARIO		HIGH REMEDIES		LOW REMEDIES		% OF BOUND		PERCENTAGE PTS	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Beef	79%	75%	40%	75%	42%	75%	32%	75%	33%	75%	40%
Mutton	94%	63%	18%	63%	22%	63%	18%	63%	18%	63%	18%
Wheat	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Carrots	86%	79%	27%	79%	42%	79%	27%	79%	27%	79%	27%
Tomato	74%	94%	68%	94%	68%	94%	60%	94%	62%	94%	68%
Corn	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Powder Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Liquid Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Onions	71%	100%	86%	100%	88%	100%	76%	100%	78%	100%	86%
Potato	57%	90%	88%	90%	88%	90%	83%	90%	83%	90%	88%
Soya Oil	50%	67%	64%	67%	67%	67%	58%	67%	58%	67%	64%
Chicken	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rice	96%	94%	20%	94%	20%	94%	20%	94%	20%	94%	20%
Wheat Flour	85%	64%	3%	64%	3%	64%	3%	64%	3%	64%	3%
Average	69%	81%	42%	81%	45%	81%	38%	81%	39%	81%	42%

Table F.3.11 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings Fiji, 2000 to 2005

Commodity	Percent Problematic Months	BASE SCENARIO		50% OF BOUND		50 PCTG PTS		DOHA START		MARKET TEST		JULY-JUNE		
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		Problematic months	% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective		Available	Effective
Beef	79%	75%	40%	75%	18%	75%	40%	44%	4%	21%	4%	85%	56%	38%
Mutton	94%	63%	18%	69%	7%	69%	16%	49%	0%	22%	12%	94%	71%	24%
Wheat	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Carrots	86%	79%	27%	79%	11%	79%	27%	61%	3%	32%	8%	90%	89%	32%
Tomato	74%	94%	68%	83%	28%	94%	53%	91%	8%	26%	8%	75%	85%	70%
Corn	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Powder Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Liquid Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Onions	71%	100%	86%	100%	51%	100%	82%	78%	4%	45%	39%	76%	89%	78%
Potato	57%	90%	88%	98%	76%	98%	88%	68%	15%	37%	37%	60%	86%	79%
Soya Oil	50%	67%	64%	67%	39%	67%	64%	47%	0%	22%	22%	53%	89%	82%
Chicken	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rice	96%	94%	20%	94%	0%	91%	1%	83%	0%	41%	0%	96%	86%	20%
Wheat Flour	85%	64%	3%	64%	0%	64%	0%	51%	0%	28%	0%	85%	89%	3%
Average	69%	81%	42%	81%	22%	82%	36%	64%	3%	31%	12%	71%	82%	43%

Table F.3.12 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings
Fiji, 2000 to 2005

Commodity	Percent Problematic Months	BASE SCENARIO		6 MONTHS		END OF YEAR		NO TRQS		NO DEP'N		DOLLARS	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Beef	79%	75%	40%	60%	26%	49%	14%	75%	40%	75%	40%	54%	42%
Mutton	94%	63%	18%	46%	10%	56%	16%	63%	18%	69%	18%	53%	21%
Wheat	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Carrots	86%	79%	27%	68%	18%	74%	23%	79%	27%	79%	27%	76%	29%
Tomato	74%	94%	68%	77%	40%	94%	58%	94%	68%	94%	68%	92%	58%
Corn	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Powdered Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Liquid Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Onions	71%	100%	86%	96%	78%	90%	65%	100%	86%	100%	84%	100%	82%
Potato	57%	90%	88%	83%	78%	90%	88%	90%	88%	90%	88%	98%	90%
Soya Oil	50%	67%	64%	53%	53%	44%	44%	67%	64%	67%	64%	67%	64%
Chicken	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rice	96%	94%	20%	91%	10%	94%	12%	94%	20%	94%	20%	100%	20%
Wheat Flour	85%	64%	3%	62%	2%	59%	2%	64%	3%	64%	3%	46%	8%
Average	69%	81%	42%	70%	31%	73%	32%	81%	42%	81%	41%	75%	42%

Annex F.4

Senegal

A total of eight (8) agricultural commodities were covered in the study on Senegal for the period 2000 to 2005. These included milk, maize, onions, potatoes, chicken, rice, vegetable (peanut) oil, and tomato concentrate.

Import and price data from 2000 to 2005 were relatively complete. However, there were no domestic utilisation and production data for vegetable (peanut) oil, as a result of which adjustments in volume triggers based on consumption figures under Sections F.4.2.1 and F.4.2.3 could not be carried out for this commodity. For almost all commodities, domestic prices measured in Senegalese FCFA were supplied as monthly price ranges; data was also usually confined to 2001 to 2005. In order to complete the analysis, the midpoints of monthly price ranges were used in measuring the effectiveness of SSM (Section F.4.3 below). In turn, data for 2000 was assumed to be the same as in 2001. Where some monthly price data was not available, domestic prices in the immediately preceding month were used as proxies, or in the succeeding month if the preceding month's data were not available.

Senegal was classified as a Least Development Country or LDC and it was assumed that it would be exempted from any tariff reduction from its end-Doha tariff rates during the simulation period.

F.4.1 Incidence of Import Surges and Price Depressions

Table F.4.1 shows that imports of the eight (8) commodities exceeded the three-year moving ave-rage of import volumes by at least ten percent in 18 percent of the months covered by the study. Only maize, chicken and tomatoes concentrate reflected higher-than-average import surge incidence rates. The frequency of import surges increased only marginally to 19 percent if a five-year historical moving average of import volumes was used.

The incidence of veritable import surges went down to 12 percent if a surge was defined as cumulative import volumes exceeding the three-year average by more than 30 percent. Only chicken (26 percent), maize (19 percent), tomatoes (17 percent) and potatoes (13 percent) exceeded this average frequency. The overall incidence of import volume surges went up slightly to 14 percent of total months if a five instead of three-year moving average was used in determining thresholds.

Table F.4.2 on the other hand shows that CIF import prices converted to local currency were at least ten percent lower than three-year historical price averages in 25 percent of the months covered by the study. Maize and onions, and to a lesser extent milk, were particularly susceptible to price depressions. There was no change in the overall incidence rate if a five-year import price average was used as a reference, although there were slight increases in the incidence of price depressions for milk and maize and a decline for vegetable oil. There were no incidences of price depression for tomato concentrate.

The frequency of price depressions went down significantly if thresholds were adjusted upwards. If the threshold was increased to 20 percent of three-year historical price averages, the overall incidence went down from 25 percent to 20 percent of months covered. If the threshold was raised further to 30 percent, the frequency of price depressions declined further to 13 percent of months covered, with only maize and onions remaining with significantly high incidence rates.

F.4.2 Access to Volume and Price–Based SSM Remedies

F.4.2.1 Access to Volume-Based SSM Remedies

Table F.4.3 shows that volume-based SSM remedies could have been invoked in a relatively high 43 percent of the months covered by the study if triggers were set to the moving three-year historical average of import volumes and SSM duties were permissible only if import volumes exceeded the triggers by more than ten percent. Almost all commodities except vegetable oil had relatively high access rates. In particular, maize, chicken and rice had rates exceeding 50 percent.

The percentage of months with access to SSM volume-based duties went down significantly to 29 percent if the volume triggers were adjusted to five percent of average domestic consumption in cases where three-year average import volumes were deemed low. Access rates for potato and tomato concentrate dropped to zero as a result of this adjustment, while that for chicken went down from 71 percent to 38 percent.

Overall access rates improved only very slightly if five instead of three-year averages were used to determine trigger levels.

If the SSM volume-based duty was permitted only when import volumes exceeded the trigger by more than 30 percent, access to the remedy declined from 43 percent to 31 percent when three-year averages were used. Maize, onions, chicken and rice were particularly affected by the adjustment in thresholds.

If five-year averages were used, the overall access rate went down from 44 percent to 32 percent when using a 30 percent, as against ten percent , threshold. If the five-year averages were adjusted in cases when historical import volumes fell below five percent of average domestic consumption of the commodity, access rates went down further to 20 percent.

Table F.4.4 indicates that overall access to volume-based SSM duties would have improved significantly from 43 percent to 65 percent if a July-June period instead of the calendar year was used as the implementation period. Only maize was adversely affected by this adjustment, while almost all the other commodities exhibited marked improvements. In turn, if the maximum period for imposing SSM duties was reduced from 12 to six or three months, access rates correspondingly went down to 29 percent and 21 percent, respec-tively, with all commodities except vegetable oil experiencing major declines. Allowing the imposition of volume-based SSM duties only up to the end of each year had a similar effect, with overall access rates declining to 26 percent of months covered.

No commodity covered by the study had any TRQ commitments since the UR. Simulations involving TRQs did not therefore affect the baseline results.

If a market test was applied such that the use of volume-based SSM duties was disallowed (even in the event of a volume trigger breach) in cases where average import prices during the preceding six months were within five percent of corresponding averages in the same period during the previous year, access to the SSM remedy dropped drastically to only 11 percent of months covered. Access rates went down further to nine percent if the market test threshold was raised to ten percent. All commodities were adversely affected by this additional conditionality, with access rates for rice, vegetable oil and tomato concentrate dropping to zero.

F.4.2.2 Access to Price-Based SSM Remedies

Access to price-based SSM remedies for Senegalese commodities, as shown in Table F.4.5, was significantly better than that to volume-based SSM duties. If the trigger price was set to a three-

year moving historical average, price-based SSM remedies could have been invoked 51 percent of the time when the threshold was set to zero percent; i.e., SSM duties could be imposed as soon as import prices fell below the trigger. Only potatoes, chicken and vegetable oil had access rates falling below the overall average rate.

The availability of the SSM remedy was more than halved to 21 percent if access to the price-based SSM was allowed only if import prices were more than 30 percent lower than triggers. Access rates for chicken, rice, vegetable oil, and tomato concentrate dropped to zero as a result of this adjustment. Onions and potatoes however showed some resiliency to higher thresholds.

Overall and individual commodity access rates were hardly affected if five instead of three-year averages were used.

Table F.4.5 also shows that access to price-based SSM duties improved from 51 percent to 70 percent of months covered if a July-June implementation period was used instead of a calendar year. This adjustment was particularly favourable for potatoes, chicken, vegetable oil, and tomato concentrate while only maize suffered a decline in access rates. In turn, access to a price-based SSM remedy went down slightly from 51 percent to 45 percent if the maximum period for imposing SSM duties was reduced from 12 to six months.

The access rate declined further to 41 percent if the imposition period was set to three months, as shown in Table F.4.6, with milk, maize, chicken, rice and tomato concentrate exhibiting significant reductions in access rates. In comparison, limiting the use of price-based SSM remedies to the end of the year had a less negative effect, with overall access rates going down only slightly to 46 percent.

Overall access rates changed marginally when the modality allowing for adjustments in cases of currency devaluation was not applied. Only milk and rice were affected by this adjustment to a significant degree. In turn, the availability of the remedy declined perceptibly to 39 percent if US dollar instead of Senegal FCFA values were used in price comparisons, with only maize, onions and potatoes not being seriously affected. Suspending the application of TRQ constraints on the use of SSM remedies had no effect since all commodities covered by the study did not have TRQ commitments since the UR.

If the use of price-based SSM duties was allowed only in cases where average import volumes during the preceding six months were within five percent of corresponding averages 5I percent the same period during the previous year, access to the SSM remedy dropped from 51 percent to 30 percent of months covered. Increasing the so-called market test threshold to a higher ten percent variance further reduced access rates to 28 percent. All commodities were adversely affected.

F.4.2.3 Combined Rates of Access to Volume and Price-Based SSM Remedies

Table F.4.7 shows that either a volume or price-based SSM remedy was accessible in 57 percent of the months covered by the study when using three-year price and import volume averages as triggers and setting a common ten percent threshold. All commodities except potatoes, vegetable (peanut) oil, and tomato concentrate had access rates exceeding 50 percent.

There were no perceptible changes in overall access rates if triggers were based on five-year averages; on a per commodity basis, only very slight changes appeared for rice and vegetable oil. Similarly, relatively minor changes occurred if volume triggers were based on historical consumption patterns in instances when historical import volumes were considered negligible. Only chicken and tomato concentrate exhibited declines in access rates when this adjustment was made.

Overall access to either a volume or price-based SSM remedy deteriorated only slightly from 57 percent to 55 percent if a higher 30 percent volume threshold was used (while keeping the price-based threshold steady at ten percent). Only rice experienced a significant reduction in access rates under this scenario.

Table F.4.8 shows that the overall accessibility of the SSM improved perceptibly from 57 percent to 76 percent if a July-June implementation period was applied instead of a calendar year. Only maize was negatively affected by this adjustment, while access rates for potatoes, rice and vegetable oil improved by large percentages. Access rates went down to 49 percent if the period for imposing SSM remedial duties was reduced to six months, and further down to 47 percent if the imposition period was limited to the end of the year. Only maize, chicken, tomato concentrate and rice suffered major declines in access rates as a result of these changes in SSM imposition periods.

The availability of the SSM remedy declined only slightly from 57 percent to 56 percent when the modality for adjusting import prices in case of currency devaluation was not applied. Only rice and tomato concentrate were adversely affected by this adjustment. In turn, access rates went down more perceptibly to 53 percent if import prices were compared to triggers using US dollar instead of local FCFA currency values. Losers from this adjustment were maize, rice, vegetable oil and tomato concentrate, while access rates for the other commodities remained unchanged.

Access rates were more than halved from the baseline level of 57 percent to only 24 percent if market tests were applied simultaneously to volume and price-based SSM remedies. In these instances, the use of volume or price-based SSM duties was allowed only if average monthly import prices or volumes during the preceding six months were within ten percent of corresponding averages in the same period during the previous year. All commodities suffered significant declines in SSM access rates when this additional conditionality was imposed.

The suspension of TRQ constraints on the use of SSM remedies did not have any effect since none of the commodities had TRQ commitments since the UR.

F.4.3 Effectiveness of SSM Remedies in Bridging Import versus Domestic Price Gaps

Table F.4.9 reveals that import prices, inclusive of MFN duties, fell below domestic prices of the covered commodities by more than ten percent in a relatively high 64 percent of the months covered by the study.[47] All of the commodities covered by this analysis had incidences of such "problematic" months exceeding 75 percent, except chicken (58 percent), potatoes (4 percent) and tomato concentrate (zero percent).

Using parameter settings under the base scenario, either volume or price-based SSM remedies would have been available in approximately three out of every four of these "problematic" months. In turn, these remedies would have been effective in raising the cost of imports, inclusive of MFN and applicable SSM duties, to not less than ten percent of domestic prices in 47 percent of the "problematic" months. The effectiveness rates were conspicuously high for potatoes, chicken and onions, but were only one percent or less for vegetable oil and tomato concentrate.

Access to the SSM remedy went down from 73 percent to only 54 percent of the problematic months if only the volume-based SSM remedies were allowed in the base scenario. In turn, the effectiveness of the applicable SSM duties deteriorated to 31 percent. Only onions and chicken did not suffer major reductions in access rates, while effectiveness rates for all commodities except milk and chicken declined significantly as a result of the limits set on SSM remedies. If only the price-based

SSM remedies were applied, access to SSM duties averaged 61 percent while the effectiveness rate declined to 27 percent. The deterioration in access rates was particularly acute for chicken and vegetable oil, while effectiveness rates for milk, chicken and rice dropped appreciably.

If the volume threshold was raised from five percent to 15 percent of the volume trigger and SSM remedies were allowed only when import prices fell below the price trigger by more than 15 percent (as against zero percent in the base scenario), access rates went down from 73 percent to 62 percent, while the effectiveness of the SSM remained relatively steady at 47 percent. Milk, rice and vegetable oil were particularly affected by the higher thresholds. If thresholds were increased further to 30 percent for both volume and price-based remedies, the availability of SSM remedies was reduced more abruptly to 47 percent, while the overall effectiveness of the modality deteriorated to 36 percent of "problematic" months. Of the commodities covered, only onion and potatoes, and to some extent maize, did not appear to be particularly vulnerable to higher thresholds.

As reflected in Table F.4.10, a doubling of volume-based SSM remedies did not affect access rates but improved the overall effectiveness of the SSM remedy from 47 percent to 58 percent of "problematic" months. Milk, maize and especially vegetable oil experienced significant improvements in effectiveness rates in this scenario. Cutting the allowable SSM remedies to half of the base rate in turn reduced the effectiveness of the modality to 41 percent with only milk and, to a much lesser extent, chicken, onions and maize being adversely affected. A similar outcome was generated when the volume-based remedies under the base scenario were limited to percentages of current bound tariffs, while suspending the application of remedies in the form of percentage points. Milk and rice (because of its low bound tariffs of five percent) were significantly affected. In turn, access and effectiveness rates reverted to the results under the base scenario when percentage point remedies, as against remedies proportional to current bound rates, were applied.

Table F.4.11 simulates the effect of proposed caps on allowable SSM duties. If SSM remedies were limited to 50 percent of bound tariffs, access to the remedy was retained at 73 percent while the effectiveness of the SSM in bridging the problematic price gaps was drastically reduced from 47 percent to 12 percent of "problematic" months. This was due to the relatively low bound tariffs on most of the Senegalese products covered by the study. Milk, maize and onions, which had bound rates ranging from five percent to 25 percent, saw their effectiveness rates dropping to zero, while chicken which had a comparatively high tariff of 61 percent experienced only a slight decline from 93 percent to 90 percent. On the other hand, capping the remedial duty to 50 percentage points resulted in less unfavourable effects, although the overall effectiveness rate still declined significantly to 32 percent. Only chicken and rice were able to maintain their effective-ness rates at baseline scenario levels while the SSM remedy remained effectively useless for vegetable oil and tomatoes.

Access to any SSM remedial duty was effectively cut off if allowable SSM duties were limited to the difference between the current bound tariff rate and the tariff level at the presumed start of the Doha Round. Because Senegal was classified as an LDC and exempted from undertaking any tariff reduction, there were no differentials between its starting Doha tariffs and tariffs in subsequent years; hence, there was no remedial duty available under this scenario. This also meant that the modality has zero effectiveness.

If the market test was applied such that volume-based duties could be imposed only if average imports in the preceding six months exceeded the corresponding average in the previous year by more than ten percent, the availability and effectiveness of the SSM remedy declined to 36 percent and 16 percent, respectively. All commodities were adversely affected by this adjustment.

Access to the SSM remedy and the effectiveness of the modality improved from 73 percent to 82 percent of "problematic" months if a July-June instead of a calendar year implementation period was used. However, access and effectiveness rates for maize, potatoes and chicken were negatively affected.

Table F.4.12 indicates that reducing the maximum period for imposing SSM duties from 12 to six months led to a decline in access rates from 73 percent to 64 percent and a parallel deterioration in the effectiveness of the SSM in handling price gaps from 47 percent to 37 percent of "problematic" months. Limiting the imposition period to the end of the year resulted in a further decline in the effectiveness rate to 31 percent. The suspension of the constraint posed by TRQ commitments on the use of SSM remedies did not have any effect since none of the commodities had TRQ commitments since the UR,

Suspending the application of the foreign exchange adjustment modality in cases of severe currency depreciation had only minor effects on access and effectiveness rates. Simulation results were slightly but not significantly lower when prices of imports and domestic products were compared using US dollar instead of Senegal FCFA values.

F.4.4 Conclusions and Recommendations

The results of the simulation indicate that the major agricultural commodities of Senegal were only moderately subjected to significant import volume surges and price depressions between 2000 and 2005. Cumulative imports exceeded three-year historical averages by more than 30 percent in 12 percent of the months covered, while import prices fell below similar thresholds by at least 30 percent about 13 percent of the time. However, if a ten percent instead of 30 percent threshold was used, the frequency of import volume surges rose to 18 percent, while that of price depressions increased to 25 percent.

The avai-lability of either a volume or price-based SSM remedy averaged a relatively high 57 percent of the months covered by the study if triggers were set to three-year historical averages and a ten percent thresh-old for invoking remedies was applied. Overall access to the SSM remedies did not change if five instead of three-year averages were used, although the results for individual commodities were mixed. Similarly, access rates declined only slightly if volume triggers were adjusted upwards on the basis of consumption patterns during years when imports were considered negligible.

Access rates improved if a July-June instead of a calendar year was utilised as the implementation period. In turn, they deteriorated if the maximum period for imposing SSM duties was shortened from 12 to six months or only up to the end of the year, or if an additional market test was required for availing of volume-based SSM remedies. Simulation results did not vary significantly if the modality for foreign currency adjustments was suspended or import prices were denominated in US dollars instead of local Senegal FCFA.

On the average, about two out of every three of the months covered by the study exhibited import prices, inclusive of MFN duties, falling below domestic prices by more than ten percent. Under the base scenario, SSM remedies equivalent to the G-33 proposal would have been available in 73 percent of these "problematic" months and would have been effective in bringing import prices, inclusive of MFN tariffs and applicable SSM duties, to within ten percent of domestic prices in 47 percent, or about half, of the said months.

The effectiveness of the SSM remedy improved beyond the base result of 47 percent only in the scenarios where double the baseline remedies were allowed to be imposed and, to a lesser extent,

when a July-June instead of a calendar year was applied as the implementation period. In turn, the ability of the SSM to effectively address "problematic" price gaps significantly declined when higher thresholds were imposed for availing of the remedies and allowable remedies were either reduced, linked to current bound rates, or capped to either 50 percent of bound rates or only up to 50 percent percentage points. Setting Doha Round starting tariffs as caps on allowable SSM duties effectively rendered the modality inutile since Senegal, being an LDC, was exempted from undertaking tariff cuts and therefore had no tariff differential to apply at any time as a safeguard duty.

Effectiveness rates also suffered when a market test was applied to both price and volume-based remedies and when the imposition period was reduced from 12 to six months or only up to the end of the year.

The suspension of the foreign exchange adjustment modality, or the use of US dollars instead of Senegal FCFA to compare import values and domestic prices, did not have significant influence over access and effectiveness rates.

Based on these simulation results, Senegal should lobby for the retention of the G-33 proposal to maintain SSM duties for a maximum of 12 months. It should work against attempts to impose additional market tests on the use of SSM remedies and proposals to prohibit total tariffs, inclusive of SSM duties, from going beyond Doha Round starting levels. Volume and price trigger thresholds beyond those proposed by the G-33 should be resisted, while priority should be given to modalities that provide for remedies in the form of absolute percentage points instead of percentages of bound tariffs.

Table F.4.1 Percent of Months With Import Volume Surges Using Different Thresholds Senegal, 2000 to 2005

Commodity	Incidence of Import Volume Surges					
	At Least 10% Over		At Least 20% Over		At Least 30% Over	
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave
Milk	14%	17%	13%	14%	8%	11%
Maize	32%	33%	26%	31%	19%	24%
Onions	8%	10%	6%	6%	4%	6%
Potato	14%	14%	14%	14%	13%	13%
Chicken	36%	40%	32%	36%	26%	31%
Rice	13%	14%	6%	7%	4%	6%
Vege Oil	7%	7%	7%	7%	7%	7%
Tomato	19%	19%	18%	18%	17%	18%
Average	18%	19%	15%	16%	12%	14%

Table F.4.2 Percent of Months With Import Price Depressions Using Different Thresholds Senegal, 2000 to 2005

Commodity	Incidence of Import Price Depressions					
	At Least 10% Below		At Least 20% Below		At Least 30% Below	
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave
Milk	40%	42%	22%	22%	1%	1%
Maize	65%	69%	63%	65%	40%	40%
Onions	64%	64%	57%	57%	56%	54%
Potato	17%	17%	14%	14%	8%	8%
Chicken	3%	3%	1%	1%	0%	0%
Rice	1%	1%	0%	0%	0%	0%
Vege Oil	10%	1%	0%	0%	0%	0%
Tomato	0%	0%	0%	0%	0%	0%
Average	25%	25%	20%	20%	13%	13%

Table F.4.3 Percent of Months With Access to Volume SSM at Various Trigger Levels Senegal, 2000 to 2005

Commodity	Access Rates to Volume-Based SSM							
	10% Threshold				30% Threshold			
	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*
Milk	39%	39%	39%	39%	38%	38%	38%	38%
Maize	64%	64%	65%	65%	39%	39%	43%	43%
Onions	35%	35%	35%	35%	18%	18%	18%	18%
Potato	36%	0%	36%	0%	35%	0%	35%	0%
Chicken	71%	38%	71%	38%	56%	35%	56%	35%
Rice	53%	53%	54%	54%	18%	18%	19%	19%
Vege Oil	7%	7%	7%	7%	7%	7%	7%	7%
Tomato	43%	0%	43%	0%	42%	0%	43%	0%
Average	43%	29%	44%	30%	31%	19%	32%	20%

*No domestic utilisation figures available for vegetable (peanut) oil

Table F.4.4 Percent of Months With Access to Volume SSM at Various Parameter Settings Senegal, 2000 to 2005

Commodity	Access Rates to Volume-Based SSM							
	3 Yr Ave	Jul-Jun	6 Months	3 Months	End of Yr	No TRQs	MktTst 5%	MktTst 10%
Milk	39%	72%	26%	18%	26%	39%	6%	4%
Maize	64%	53%	42%	38%	32%	64%	21%	10%
Onions	35%	76%	22%	14%	35%	35%	19%	19%
Potato	36%	50%	19%	15%	14%	36%	29%	29%
Chicken	71%	75%	53%	40%	46%	71%	11%	7%
Rice	53%	75%	31%	18%	25%	53%	0%	0%
Vege Oil	7%	57%	7%	7%	7%	7%	0%	0%
Tomato	43%	58%	29%	21%	19%	43%	0%	0%
Average	43%	65%	29%	21%	26%	43%	11%	9%

Table F.4.5 Percent of Months With Access to Price SSM Using Different Thresholds Senegal, 2000 to 2005

Commodity	Access Rates to Price-Based SSM							
	0% Threshold		10% Threshold		30% Threshold		Jul-Jun	6 Months
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	Implem	Impose
Milk	71%	76%	58%	58%	17%	17%	75%	63%
Maize	82%	82%	82%	82%	61%	61%	79%	81%
Onions	67%	67%	67%	67%	56%	56%	82%	67%
Potato	39%	39%	39%	39%	33%	33%	78%	38%
Chicken	38%	38%	18%	18%	0%	0%	82%	29%
Rice	72%	72%	33%	33%	0%	0%	78%	57%
Vege Oil	25%	25%	17%	15%	0%	0%	51%	21%
Tomato	17%	17%	17%	17%	0%	0%	36%	8%
Average	51%	52%	41%	41%	21%	21%	70%	45%

Table F.4.6 Percent of Months With Access to Price SSM at Various Parameter Settings Senegal, 2000 to 2005

Commodity	Access Rates to Price-Based SSM							
	3 Yr Ave	3 Months	End of Yr	No Dep'n	Dollars	No TRQs	MktTst 5%	MktTst 10%
Milk	71%	54%	57%	58%	43%	71%	33%	32%
Maize	82%	75%	78%	82%	79%	82%	54%	51%
Onions	67%	67%	67%	67%	67%	67%	44%	40%
Potato	39%	36%	42%	39%	39%	39%	24%	24%
Chicken	38%	21%	39%	38%	22%	38%	28%	28%
Rice	72%	44%	53%	64%	21%	72%	35%	26%
Vege Oil	25%	21%	25%	25%	15%	25%	10%	8%
Tomato	17%	8%	10%	17%	25%	17%	13%	13%
Average	51%	41%	46%	49%	39%	51%	30%	28%

Table F.4.7 Percent of Months With Access to Any SSM Using Different Thresholds Senegal, 2000 to 2005

Commodity	Combined Access Rates to Volume and Price-Based SSM+							
	10% Volume Threshold				30% Volume Threshold			
	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*
Milk	64%	64%	64%	64%	64%	64%	64%	64%
Maize	82%	82%	82%	82%	82%	82%	82%	82%
Onions	67%	67%	67%	67%	67%	67%	67%	67%
Potato	39%	39%	39%	39%	39%	39%	39%	39%
Chicken	75%	56%	75%	56%	74%	53%	74%	53%
Rice	61%	61%	63%	63%	43%	43%	44%	44%
Vege Oil	24%	24%	22%	22%	24%	24%	22%	22%
Tomato	46%	17%	46%	17%	44%	17%	46%	17%
Average	57%	51%	57%	51%	55%	48%	55%	48%

+Assuming a 10% threshold for invoking price-based SSM
*Volume trigger set to 5% of average consumption if average import is less than 5% of average consumption, except for vegetable oil

Table F.4.8 Percent of Months With Access to Any SSM at Various Parameter Settings Senegal, 2000 to 2005

Commodity	Combined Access Rates to Volume and Price-Based SSM							
	3 Yr Ave	Jul-Jun	6 Months	End of Yr	No Dep'n	Dollars	MktTst 10%	No TRQs
Milk	64%	72%	58%	63%	64%	64%	32%	64%
Maize	82%	72%	72%	68%	82%	78%	51%	82%
Onions	67%	78%	67%	67%	67%	67%	40%	67%
Potato	39%	78%	39%	42%	39%	39%	31%	39%
Chicken	75%	83%	57%	50%	75%	75%	11%	75%
Rice	61%	83%	47%	42%	53%	53%	3%	61%
Vege Oil	24%	76%	18%	24%	24%	7%	8%	24%
Tomato	46%	67%	32%	22%	43%	43%	13%	46%
Average	57%	76%	49%	47%	56%	53%	24%	57%

Table F.4.9 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings Senegal, 2000 to 2005*

Commodity	Percent Problematic Months	BASE SCENARIO		VOLUME SSM ONLY		PRICE SSM ONLY		HIGHER THRESHOLD		VERY HIGH THRESHOLD	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Milk	100%	76%	32%	51%	32%	71%	3%	60%	32%	54%	25%
Maize	83%	83%	57%	60%	20%	83%	52%	83%	57%	73%	52%
Onions	85%	69%	64%	69%	20%	67%	62%	67%	62%	66%	61%
Potato	4%	100%	100%	33%	0%	100%	100%	100%	100%	100%	100%
Chicken	58%	98%	93%	90%	90%	43%	14%	95%	93%	79%	79%
Rice	86%	71%	56%	47%	47%	69%	31%	55%	55%	16%	16%
Vege Oil	94%	51%	1%	25%	1%	26%	0%	24%	1%	7%	1%
Tomato	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average	64%	73%	47%	54%	31%	61%	27%	62%	47%	47%	36%

*Price data supplied as price ranges were converted into specific prices by computing midpoint of range; 2000 price data not supplied and assumed as same as in 2001

Table F.4.10 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings Senegal, 2000 to 2005

Commodity	Percent Problematic Months	BASE SCENARIO		HIGH REMEDIES		LOW REMEDIES		% OF BOUND		PERCENTAGE PTS	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Milk	100%	76%	32%	76%	49%	76%	7%	76%	3%	76%	32%
Maize	83%	83%	57%	83%	77%	83%	52%	83%	52%	83%	57%
Onions	85%	69%	64%	69%	66%	69%	62%	69%	62%	69%	64%
Potato	4%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Chicken	58%	98%	93%	98%	93%	98%	90%	98%	93%	98%	93%
Rice	86%	71%	56%	71%	56%	71%	56%	71%	35%	71%	56%
Vege Oil	94%	51%	1%	51%	25%	51%	1%	51%	1%	51%	1%
Tomato	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average	64%	73%	47%	73%	58%	73%	41%	73%	37%	73%	47%

Table F.4.11 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings Senegal, 2000 to 2005

Commodity	Percent Problematic Months	BASE SCENARIO		50% OF BOUND		50 PCTG PTS		DOHA START		MARKET TEST		JULY-JUNE		
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		Problematic months	% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective		Available	Effective
Milk	100%	76%	32%	76%	0%	76%	26%	0%	0%	32%	1%	100%	83%	43%
Maize	83%	83%	57%	83%	0%	83%	18%	0%	0%	60%	45%	83%	80%	33%
Onions	85%	69%	64%	69%	0%	69%	20%	0%	0%	51%	43%	85%	80%	49%
Potato	4%	100%	100%	100%	33%	100%	33%	0%	0%	33%	33%	4%	33%	33%
Chicken	58%	98%	93%	98%	90%	98%	93%	0%	0%	40%	7%	58%	88%	88%
Rice	86%	71%	56%	71%	8%	71%	58%	0%	0%	29%	3%	86%	81%	79%
Vege Oil	94%	51%	1%	51%	1%	51%	1%	0%	0%	9%	0%	94%	82%	15%
Tomato	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average	64%	73%	47%	73%	12%	73%	32%	0%	0%	36%	16%	64%	82%	48%

Table F.4.12 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings Senegal, 2000 to 2005

Commodity	Percent Problematic Months	BASE SCENARIO		6 MONTHS		END OF YEAR		NO TRQS		NO DEP'N		DOLLARS	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Milk	100%	76%	32%	67%	18%	61%	8%	76%	32%	64%	32%	65%	32%
Maize	83%	83%	57%	83%	47%	83%	37%	83%	57%	83%	58%	80%	55%
Onions	85%	69%	64%	69%	61%	69%	62%	69%	64%	69%	64%	69%	31%
Potato	4%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Chicken	58%	98%	93%	71%	62%	67%	52%	98%	93%	98%	93%	98%	93%
Rice	86%	71%	56%	61%	45%	56%	35%	71%	56%	63%	47%	61%	60%
Vege Oil	94%	51%	1%	38%	1%	53%	1%	51%	1%	51%	1%	41%	1%
Tomato	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average	64%	73%	47%	64%	37%	65%	31%	73%	47%	70%	46%	67%	42%

Annex F.5

Indonesia

Only four (4) agricultural commodities were covered in the Indonesia study, namely rice, corn (maize), soybeans and sugar. The analysis was limited to available data on import volumes and CIF values, and domestic prices, from 2000 to 2005.

Domestic utilisation figures were available only up to 2003 for all the four commodities; an annual five percent increase in domestic usage was assumed for 2004 and 2005 to complete the data series.

F.5.1 Incidence of Import Surges and Price Depressions

In general, the incidence of import volumes surges was relatively low for the four Indonesian commodities studied. Table F.5.1 shows that imports of covered commodities exceeded the three-year moving ave-rage of import volumes by at least ten percent in only nine percent of the months covered by the study. Soybean had the highest frequency of import surges at 13 percent.

The frequency of import surges gradually declined as thresholds were raised. For example, import volumes exceeding 30 percent of the three-year average occurred in only five percent of the months covered, while the frequency rate was seven percent if a 20 percent threshold was used. The incidence of import volume surges tended to increase when five instead of three-year averages were used.

In contrast to the relatively low incidence of import surges, Table F.5.2 shows that Indonesia was comparatively prone to import price depressions. CIF import prices converted to the Indonesian rupiah fell below the three-year historical price averages by more than ten percent in 35 percent of the months covered by the study. Using five-year import price averages as a reference had no effect on the results. In turn, raising the threshold to 20 percent brought the incidence of price depressions to 24 percent, and further down to 13 percent is a 30 percent threshold was used.

F.5.2 Access to Volume and Price–Based SSM Remedies

F.5.2.1 Access to Volume-Based SSM Remedies

Although the incidence of import volume surges was generally low for the Indonesian commodities, Table F.5.3 shows that a volume-based SSM remedy could still have been accessed in one out of every three months if triggers were set to the moving three-year historical average of import volumes and SSM duties could be imposed only if import volumes exceeded the triggers by more than ten percent. Corn had the highest access rate at 68 percent while the SSM was available for rice only in 17 percent of the months covered by the study. The percentage of months with access to SSM volume-based duties tended to increase if five instead of three-year import volume averages were used.

The overall access rate declined to 33 percent when triggers were adjusted upwards to equal five percent of average historical domestic consumption in cases where historical import volumes fell below five percent of the consumption average. Only rice was significantly affected by this adjustment, with its access rate dropping to zero.

If recourse to the SSM volume-based duty was allowed only when import volumes exceeded the trigger by more than 30 percent, access to the remedy was effectively halved to 19 percent when three-year averages were used. Only soybeans were not seriously affected by this adjustment.

However, the overall decline was less severe when five-year averages were applied. Adjustments to the trigger when import volumes were relatively low did not have an effect on SSM access rates when the threshold was set to 30 percent.

Table F.5.4 in turn indicates that overall access to volume-based SSM duties improved from 37 percent to 42 percent if a July-June period instead of the calendar year was used as the implementation period. Access rates improved for soybeans and sugar but declined slightly for corn. Adjusting the maximum period for imposing SSM duties from 12 to six or three months had significantly negative effects on access to the volume-based SSM. Interestingly however, using the Uruguay Round SSG modality of limiting the imposition of safeguard duties up to the end of each year yielded an overall access rate of 24 percent, which was better than the result when six and three-month limits were imposed. All commodities were uniformly affected by the changes in imposition periods.

The removal of TRQ constraints on the use of SSM remedies had no effect since Indonesia has had no TRQ commitments since the Uruguay Round, apparently because it opted to adopt ceiling bindings for its tariffs. Access to the SSM remedy dropped drastically to only four percent of months covered if a market test was applied such that the use of volume-based SSM duties was disallowed in cases where the average monthly prices of imports during the preceding six months were within five percent of corresponding averages in the same period in the previous year. Raising the threshold further to a ten percent variance effectively rendered the SSM inutile with access rates virtually dropping to zero. All commodities were severely affected by this adjustment.

F.5.2.2 Access to Price-Based SSM Remedies

Consistent with the comparative findings above, Table F.5.5 shows that access to price-based SSM remedies was perceptibly much higher than that to volume-based SSM duties. If the trigger price was set to a three-year moving historical average, price-based SSM remedies could have been invoked 82 percent of the time if the threshold was set to zero percent; i.e., SSM duties could be imposed immediately when import prices fell below the trigger. Rice had the lowest access rate of 76 percent of months covered by the study.

Access rates were particularly vulnerable to increases in thresholds. If only cases where import prices fell below the trigger price by more than ten percent were taken into account, SSM price-based duties became imposable in only 57 percent of the months covered, compared to 82 percent when a zero percent threshold was set. Rice and corn in particular reacted negatively under this scenario. Access rates dropped further to 33 percent when a 30 percent threshold was used, indicating a relatively even distribution in the severity of price depressions. The availability of the SSM remedy declined slightly when five instead of three-year moving price averages were used as triggers at the zero percent threshold level. This adjustment however did not affect the results when higher thresholds were applied.

Table F.5.5 additionally reveals that access to price-based SSM duties declined from 82 percent to 73 percent of months covered if a July-June instead of a calendar year implementation period was used. All commodities except rice were adversely affected by this parameter change. In turn, shortening the period during which SSM duties could be imposed from 12 to six months reduced access to the remedy slightly to 71 percent. Setting a three-month imposition limit, in turn, resulted in a further decline in access rates to 65 percent, as seen in Table G.5.6. Notably, access rates were marginally better at 75 percent when the application of price-based SSM remedies was restricted to the end of each year.

Table F.5.6 further shows that overall access rates declined slightly when the modality allowing for adjustments in exchange rates in cases of severe currency devaluation was not applied. Access to

price-based SSM remedies went down more perceptibly to 68 percent if import prices were quoted in dollars instead of rupiah, with all commodities except corn being affected. As mentioned earlier, Indonesia has not had any TRQ commitments since the Uruguay Round; hence, suspending TRQ limits on SSM usage had no effect on access rates.

Access to the price-based SSM remedy dropped drastically from 82 percent to 21 percent of months covered if a simultaneous market test was applied such that the use of price-based SSM duties was disallowed in cases where the average monthly volume of imports during the preceding six months was within five percent of corresponding averages in the previous year. Increasing the threshold to a ten percent variance further reduced access rates, but only slightly to 30 percent.

F.5.2.3 Combined Rates of Access to Volume and Price-Based SSM Remedies

Table F.5.7 shows that access to either a volume or price-based SSM remedy was available in 68 percent of the months covered by the study when using three-year price and import volume averages as triggers and setting a common ten percent threshold. Rice and corn enjoyed access rates higher than the overall average. Using five instead of three-year averages raised access rates to 82 percent with soybean and sugar experiencing major improvements. Adjusting the triggers upwards in instances when historical import volumes were deemed to be minimal slightly reduced access to the SSM remedy when three-year averages were used, but did not have any effect when five-year averages were applied.

If a higher 30 percent threshold for invoking volume-based remedies was used (while keeping the price threshold steady at ten percent), the availability of the SSM remedy declined only slightly from 68 percent to 62 percent whether or not the three-year averages were adjusted to account for years with minimal imports. Corn and soybeans did not appear to be affected by the increase in threshold levels.

Table G.5.8 in turn reveals that overall access rates improved from 68 percent to 76 percent if a July-June implementation period was followed instead of a calendar year. Soybeans and sugar benefited from such an adjustment. Access rates declined to 59 percent when the period for imposing SSM remedial duties was reduced to six months. Limiting the imposition period to the end of the year surprisingly resulted in an overall access rate of 69 percent, or one percentage point higher than under the base scenario which used a 12-month imposition period. Sugar in particular benefited from this adjustment.

Very slight, if any, changes in access rates arose when the modality for adjusting import prices in cases of severe currency devaluation was not applied, or when import prices were compared to triggers using US dollar instead of Indonesian rupiah values.

Overall access rates dropped significantly to 22 percent if market tests were applied to both price and volume-based SSM duties. In this case, the use of volume-based SSM duties was disallowed if the average monthly prices of imports during the preceding 6 months were within ten percent of corresponding averages in the same period in the previous year. At the same time, price-based SSM duties could not be used in cases where the average monthly volume of imports during the preceding six months were within ten percent of corresponding averages in the previous year.

Removing TRQ constraints on the use of SSM remedies had no effect on access rates since Indonesia has not had any TRQ commitments since the Uruguay Round.

F.5.3 Effectiveness of SSM Remedies in Bridging Import versus Domestic Price Gaps

Table F.5.9 shows that import prices, inclusive of MFN duties, fell by more than ten percent below corresponding domestic prices in 43 percent of the months covered by the study. Soybeans and sugar exhibited a relatively high vulnerability to such "problematic" price problems, while rice appeared to be immune from such situations. Either a volume or price-based SSM remedy was available in a very high 93 percent of these "problematic" months under the base scenario, which essentially accommodates the G-33 proposal. In turn, these remedies would have been effective in raising the cost of soybean imports, inclusive of MFN and applicable SSM duties, to not less than ten percent of domestic prices in 76 percent of the "problematic" months.

Access to the remedy declined from 93 percent to 60 percent of problematic months if only the volume-based SSM remedies were allowed in the base scenario. Correspondingly, the effectiveness of the applicable SSM duties slid to 59 percent, with sugar in particular being adversely affected. On the other hand, access rates averaged 84 percent if only the price-based SSM remedies were applied. However, price-based remedies were less effective than volume-based measures and were successful in addressing price gaps in only 37 percent of problematic months.

Increasing the volume threshold from five percent to 15 percent of the volume trigger and allowing SSM remedies only when import prices fell below the price trigger by more than 15 percent (as against zero percent in the base scenario) almost halved access rates to 54 percent and cut the effectiveness of the measure to 50 percent of months covered by the study. The corresponding rates went down further to 34 percent each when thresholds were adjusted to 30 percent for both volume and price-based remedies.

On the other hand, Table F.5.10 shows no changes in the effectiveness of the SSM remedy if the volume-based remedies under the base scenario were doubled. The effectiveness rate however declined from 76 percent to 63 percent if these remedies were cut in half. If the volume-based remedies under the base scenario were limited to percentages of current bound tariffs, while suspending the application of remedies in the form of percentage points, the ability of the SSM remedy to bridge price gaps declined further to 55 percent of months covered. However, base scenario results were maintained when only percentage point remedies were applied, while suspending the use of remedies proportional to current bound rates.

These results imply that parameters affecting access to the SSM were more crucial for addressing problematic price gaps for Indonesian products than the magnitude of the remedies themselves, although SSM duties quoted as percentages of bound tariffs were inferior to safeguard measures in the form of fixed percentage points. This is further validated in Table F.5.11 which shows that the effectiveness of SSM duties declined to 33 percent when these were limited to 50 percent of bound tariffs, while applying a fixed cap of 50 percentage points to allowable safeguard duties reduced the effectiveness rate only slightly from 76 percent to 72 percent Notably, the bound rates for sugar and corn were relatively low at 40 percent together with that for sugar at 27 percent. Rice, which was not affected by any problematic price gap, had a comparatively high bound tariff of 160 percent which effectively obviated the needs for additional safeguard measures.

If allowable SSM duties were limited to the difference between the current bound tariff rate and the tariff level at the start of the Doha Round, access to the remedy was reduced to 78 percent while the SSM itself was effectively rendered inutile with a residual effectiveness rate of six percent. In turn, if the market test was applied, so that volume and price-based duties could be imposed only if the average prices and volume of imports in the preceding six months exceeded the corresponding average in the same period in the previous year by more than ten percent, the availability of the SSM remedy drastically declined to 28 percent while its effectiveness deteriorated to only ten percent.

Using a July-June implementation period instead of a calendar year increased the percentage of problematic months slightly from 43 percent to 45 percent of total months, with higher incidences resulting for rice and corn. However, the access and effectiveness rates declined to 77 percent and 63 percent, respectively.

Table F.5.12 reflects a decline in access and effectiveness rates if the maximum period for imposing SSM duties was reduced from 12 to six months. Surprisingly, however, the simulation results ran close to baseline scenario levels if the Uruguay Round SSG end-of-year modality was applied.

Indonesia has not had any TRQ commitments since the Uruguay Round and was not affected by any suspension of the restrictions on the use of SSM remedies on imports falling within TRQ commitments. Access and effectiveness rates did not change significantly when the modality wherein foreign exchange rates could be adjusted in the event of severe currency depreciation was not applied. However, access and effectiveness rates dipped to 63 percent when US dollars instead of Indonesia rupiah were used in pricing imported and domestic products.

F.5.4 Conclusions and Recommendations

The results of the simulation show that the four Indonesian agricultural commodities did not experience frequent or severe import volume surges between 2000 and 2005. Cumulative imports exceeding three-year historical averages by more than 30 percent occurred in only five percent of the months covered. However, price depressions occurred in about a third of the months covered by the study, with 13 percent of such instances involving import prices falling below historical price averages by more than 30 percent.

Access to either a volume or price-based SSM remedy averaged 68 percent if triggers were set to three-year historical averages and a common ten percent threshold for invoking remedies was applied. The availability of SSM remedies improved if five-year averages were used and a July-June implementation period (instead of a calendar year) was applied. Slight improvements also followed a reversion to the Uruguay Round SSG end-of-year limit to the imposition of safeguard duties.

Further reductions in the maximum period for imposing tariffs and disallowing adjustments for foreign exchange fluctuations tended to reduce access rates, although the most negative effect arose from applying market tests and limiting the allowable SSM duty to the different between current and starting Doha Round tariffs.

Almost half of the months covered by the study exhibited import prices, inclusive of MFN duties, falling below domestic prices by more than ten percent. Soybeans and sugar were exceptionally prone to such "problematic" situations, while rice exhibited zero incidence of problematic months. Under the base scenario, SSM remedies equivalent to the G-33 proposal were available in 93 per cent of the problematic months, and were effective in bringing import prices, inclusive of MFN tariffs and SSM duties, to within ten percent of domestic prices in 7 percent of the "problematic" months.

No parameter adjustments enhanced the effectiveness of the SSM for Indonesia products beyond the baseline scenario results. Price-based SSM remedies tended to be less effective. Because of the relatively low tariffs on corn, sugar and soybeans, caps on SSM remedies based on a percentage of bound tariffs were less effective than caps in the form of absolute percentage points. Additionally, providing enhanced access to the SSM through more lenient threshold settings was more crucial than allowing higher levels of remedial duties. Limiting remedial duties to the difference between current and starting Doha bound rates, or applying market tests on the use of both volume and price-based SSM remedies, had severe negative effects particularly on the effectiveness of the SSM.

Given these results, it would be advisable for Indonesia to benchmark its SSM nego-tiations on commodities like soybeans and sugar which have relatively low tariffs and which exhibit vulnerability

to import prices falling consistently lower than domestic prices. Priority should be given to ensuring access to the SSM through lower thresholds vis-à-vis increasing remedial measures, although remedies in the form of fixed percentage points should be given preference over safeguard duties quoted as percentages of bound tariffs. Particular attention should be given to preventing the imposition of market tests, or limiting MFN plus remedial tariffs to Doha starting levels, which have been shown to have serious adverse effects on the effectiveness of the SSM.

Table F.5.2 Percent of Months With Import Volume Surges Using Different Thresholds Indonesia, 2000 to 2005

Commodity	Incidence of Import Volume Surges					
	At Least 10% Over		At Least 20% Over		At Least 30% Over	
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave
Rice	1%	0%	0%	0%	0%	0%
Corn	11%	17%	10%	14%	6%	10%
Soybean	13%	21%	10%	15%	7%	10%
Sugar	10%	8%	7%	6%	6%	4%
Average	9%	11%	7%	9%	5%	6%

Table F.5.2 Percent of Months With Import Price Depressions Using Different Thresholds Indonesia, 2000 to 2005

Commodity	Incidence of Import Price Depressions					
	At Least 10% Below		At Least 20% Below		At Least 30% Below	
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave
Rice	46%	46%	29%	29%	8%	8%
Corn	61%	61%	47%	47%	35%	35%
Soybean	4%	4%	0%	0%	0%	0%
Sugar	29%	29%	18%	18%	10%	10%
Average	35%	35%	24%	24%	13%	13%

Table F.5.3 Percent of Months With Access to Volume SSM at Various Trigger Levels Indonesia, 2000 to 2005

Commodity	Access Rates to Volume-Based SSM							
	10% Threshold				30% Threshold			
	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*
Rice	17%	0%	0%	0%	0%	0%	0%	0%
Corn	68%	68%	69%	69%	35%	35%	68%	68%
Soybean	39%	39%	89%	89%	36%	36%	53%	53%
Sugar	25%	24%	24%	24%	6%	6%	4%	4%
Average	37%	33%	45%	45%	19%	19%	31%	31%

*Volume trigger set to 5% of average consumption if average import is less than 5% of average consumption

Table F.5.4 Percent of Months With Access to Volume SSM at Various Parameter Settings Indonesia 2000 to 2005

Commodity	Access Rates to Volume-Based SSM							
	3 Yr Ave	Jul-Jun	6 Months	3 Months	End of Yr	No TRQs	MktTst 5%	MktTst 10%
Rice	17%	17%	8%	4%	18%	17%	0%	0%
Corn	68%	63%	35%	18%	26%	68%	10%	1%
Soybean	39%	54%	24%	15%	24%	39%	0%	0%
Sugar	25%	36%	17%	13%	26%	25%	7%	0%
Average	37%	42%	21%	13%	24%	37%	4%	0%

Table F.5.5 Percent of Months With Access to Price SSM Using Different Thresholds Indonesia 2000 to 2005

Commodity	Access Rates to Price-Based SSM							
	0% Threshold		10% Threshold		30% Threshold		Jul-Jun	6 Months
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	Implem	Impose
Rice	76%	76%	76%	76%	49%	39%	76%	68%
Corn	88%	94%	82%	78%	49%	74%	78%	75%
Soybean	83%	57%	36%	0%	0%	0%	64%	71%
Sugar	82%	75%	35%	75%	35%	18%	74%	71%
Average	82%	76%	57%	57%	33%	33%	73%	71%

Table F.5.6 Percent of Months With Access to Price SSM at Various Parameter Settings Indonesia 2000 to 2005

Commodity	Access Rates to Price-Based SSM							
	3 Yr Ave	3 Months	End of Yr	No Dep'n	Dollars	No TRQs	MktTst 5%	MktTst 10%
Rice	76%	69%	67%	79%	63%	76%	25%	24%
Corn	88%	72%	72%	78%	88%	88%	47%	44%
Soybean	83%	58%	78%	67%	67%	83%	39%	33%
Sugar	82%	61%	83%	81%	54%	82%	18%	18%
Average	82%	65%	75%	76%	68%	82%	32%	30%

Table F.5.7 Percent of Months With Access to Any SSM Using Different Thresholds Indonesia 2000 to 2005

Commodity	Combined Access Rates to Volume and Price-Based SSM+							
	10% Volume Threshold				30% Volume Threshold			
	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*
Rice	82%	76%	76%	76%	76%	76%	76%	76%
Corn	82%	82%	82%	82%	82%	82%	82%	82%
Soybean	50%	50%	89%	89%	50%	50%	53%	53%
Sugar	60%	58%	82%	82%	40%	39%	79%	79%
Average	68%	67%	82%	82%	62%	62%	73%	73%

+Assuming a 10% threshold for invoking price-based SSM
*Volume trigger set to 5% of average consumption if average import is less than 5% of average consumption

Table F.5.8 Percent of Months With Access to Any SSM at Various Parameter Settings Indonesia 2000 to 2005

Commodity	Combined Access Rates to Volume and Price-Based SSM							
	3 Yr Ave	Jul-Jun	6 Months	End of Yr	No Dep'n	Dollars	MktTst 10%	No TRQs
Rice	82%	75%	71%	83%	79%	79%	22%	82%
Corn	82%	78%	74%	67%	82%	82%	44%	82%
Soybean	50%	65%	38%	50%	49%	50%	18%	50%
Sugar	60%	85%	54%	76%	60%	60%	1%	60%
Average	68%	76%	59%	69%	67%	68%	22%	68%

Table F.5.9 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings Indonesia, 2000 to 2005

Commodity	Percent Problematic Months	BASE SCENARIO		VOLUME SSM ONLY		PRICE SSM ONLY		HIGHER THRESHOLD		VERY HIGH THRESHOLD	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Rice	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Corn	7%	100%	100%	100%	100%	100%	100%	100%	100%	20%	20%
Soybean	69%	96%	92%	80%	80%	86%	26%	46%	42%	30%	30%
Sugar	94%	90%	62%	43%	40%	81%	41%	57%	51%	38%	38%
Average	43%	93%	76%	60%	59%	84%	37%	54%	50%	34%	34%

Table F.5.10 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings Indonesia, 2000 to 2005

Commodity	Percent Problematic Months	BASE SCENARIO		HIGH REMEDIES		LOW REMEDIES		% OF BOUND		PERCENTAGE PTS	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Rice	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Corn	7%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Soybean	69%	96%	92%	96%	92%	96%	76%	96%	58%	96%	92%
Sugar	94%	90%	62%	90%	63%	90%	50%	90%	50%	90%	62%
Average	43%	93%	76%	93%	76%	93%	63%	93%	55%	93%	76%

Table F.5.11 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings Indonesia, 2000 to 2005

Commodity	Percent Problematic Months	BASE SCENARIO		50% OF BOUND		50 PCTG PTS		DOHA START		MARKET TEST		JULY-JUNE		
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		Problematic months	% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective		Available	Effective
Rice	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%	0%
Corn	7%	100%	100%	100%	100%	100%	100%	100%	60%	40%	40%	10%	71%	71%
Soybean	69%	96%	92%	96%	38%	96%	86%	78%	2%	40%	18%	69%	70%	66%
Sugar	94%	90%	62%	91%	24%	90%	60%	76%	4%	19%	1%	94%	90%	65%
Average	43%	93%	76%	93%	33%	93%	72%	78%	6%	28%	10%	45%	77%	63%

Table F.5.12 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings
Indonesia, 2000 to 2005

Commodity	Percent Problematic Months	BASE SCENARIO		6 MONTHS		END OF YEAR		NO TRQS		NO DEP'N		DOLLARS	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Rice	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Corn	7%	100%	100%	80%	80%	80%	80%	100%	100%	100%	100%	100%	100%
Soybean	69%	96%	92%	88%	52%	94%	70%	96%	92%	94%	86%	94%	94%
Sugar	94%	90%	62%	79%	53%	91%	66%	90%	62%	88%	59%	78%	65%
Average	43%	93%	76%	83%	54%	92%	68%	93%	76%	91%	72%	85%	78%

Annex F.6

China

A total of seventeen (17) primary agricultural commodities were covered in the China study; namely, wheat grain, corn, milk, rice, barley, soybeans, rapeseed, cotton, sugar, bananas, palm oil, soya oil, vegetable oil, beef, mutton, pork and chicken. In general, data from 2002 to 2005 were used for the simulations.

No data on production and utilisation was available for barley and palm oil. For the other commodities, domestic utilisation data was derived by deducting exports from available production data, and assuming zero year-end stock levels. For sugar, production data for 2005 was not provided, and was assumed to be five percent over 2004 levels. For soya oil and vegetable oil, only 2004 production figures were available, and outputs for 2002, 2003 and 2005 were assumed to be equal to 2004 levels.

Bound MFN tariffs for milk, beef, mutton and pork were quoted in ranges. The maximum end of the range was used in the simulations.

No domestic prices were provided for rapeseed, milk and chicken. Hence, the effectiveness of the SSM for these commodities could not be measured. In turn, only domestic prices for 2005 were available for cotton and sugar. Domestic price gaps for wheat, corn, rice, barley and palm oil were plugged by using available price data averages and movements as references.

F.6.1 Incidence of Import Surges and Price Depressions

In general, Chinese products were only mildly subjected to import surges and price depressions. Table F.6.1 shows that imports of covered commodities exceeded the three-year moving average of import volumes by at least ten percent in 15 percent of the months covered by the study. Among the commodities, cotton and vegetable oil appeared to be particularly susceptible to import volume surges. On the other hand, corn, rapeseed, bananas, beef, mutton, pork and chicken registered surges less than five percent of the time. There appeared to be no changes in the results if five instead of three-year historical moving averages of import volumes were used as reference points. However, this may be due to the fact that the data sets available for domestic production and consumption were limited to a four-year period (2002 to 2005).

The incidence of import surges declined when higher thresholds were applied. For example, import volumes in excess of 20 percent of the three-year average occurred in 13 percent of the months covered, down from the baseline level of 15 percent. The incidence of import surges declined further to ten percent if a 30 percent threshold was applied. Cotton and vegetable oil maintained their import surges rates even at high threshold levels.

Table F.6.2 indicates that price depressions occurred less frequently than volume surges for the covered Chinese products. Overall, CIF import prices converted to local currency were at least ten percent lower than three-year historical price averages in only 12 percent of the months covered by the study. Only vegetable oil, soya oil, and corn experienced price depressions to a significant degree. Ten of the seventeen commodities had zero incidences of price depressions. Since price data sets were limited to 2002-2005, simulations using five instead of three-year import price averages did not affect the results.

The incidence of price depressions declined from 12 percent to nine percent of months covered if the threshold was raised to 20 percent below three-year import price averages. A further adjustment of the threshold to 30 percent resulted in a 7 percent inci-dence of price depressions. Only corn

and vegetable oil remained with high incidences of price depressions, indicating that the other commodities were subjected to mild if not negligible levels of import price competition.

F.6.2 Access to Volume and Price-Based SSM Remedies

F.6.2.1 Access to Volume-Based SSM Remedies

Table F.6.3 shows that a volume-based SSM remedy could have been invoked in a relatively low 13 percent of the months covered if triggers were set to the moving three-year historical average of import volumes and SSM duties were allowed only if import volumes exceeded the triggers by more than ten percent. Milk, soybeans, cotton, bananas, palm oil and chicken had access rates exceeding the 13 percent average, while all the other commodities were able to make use of volume-based SSM remedies in only six percent or less of the months covered by the study. Notably, wheat grain, corn, rice, rapeseed, sugar, soya oil, vegetable oil, beef and pork had zero access rates. Vegetable oil, which exhibited a high incidence of severe import surges in Table F.6.1, had no access to SSM remedies since imports of the commodity never exceeded TRQ commitments.

The percentage of months with access to SSM volume-based duties declined to eight percent if the volume triggers were adjusted to five percent of average domestic consumption in cases where average import volumes were deemed low. Milk, chicken and mutton saw their access rates plunging to zero as a result of this adjustment. Using five instead of three-year averages had no effect on access rates because the production and consumption data available were limited to a four-year period from 2002 to 2005.

If access to the SSM volume-based duty was permitted only when import volumes exceeded the trigger by more than 30 percent, the availability of the remedy went down from 13 percent to only four percent overall, indicating that the import surges was generally not severe. Only barley, cotton, soybeans and palm oil retained positive access to volume-based remedies, although all these commodities except cotton experienced at decline in access rates. The results were the same when the volume triggers were adjusted to five percent of average domestic consumption in cases where import volumes were low.

Table F.6.4 shows the results of further simulations using different settings for selected parameters. Overall access to volume-based SSM duties more than doubled to 27 percent if a July-June period instead of the calendar year was used as the implementation period. Barley, bananas, beef, mutton, pork and chicken gained significantly from this adjustment, while access rates for cotton and palm oil noticeably went down.

Reducing the maximum period for imposing SSM duties from 12 to six months resulted in a decline in access rates from 13 percent to 9 percent. A further reduction in the imposition period to a maximum of three months brought access rates lower to seven percent. Milk, soybeans, bananas, and chicken appeared to be particularly vulnerable to this adjustment, while cotton, barley, mutton and palm oil retained their baseline access rates even with changes in imposition periods. Meanwhile, maintaining the Uruguay Round SSG modality for an end-of-year limit to the imposition of SSM duties resulted in a ten percent average access rate, or slightly better than the result from even a six-month limit. Surprisingly, access rates for bananas and chicken were higher when SSM remedies were limited to the end of the year than when a maximum 12-month imposition period was used.

Upon its accession to the WTO, China made TRQ commitments for wheat grain, corn, rice, cotton, sugar, palm oil, soya oil and vegetable oil. These commitments had a significant influence on access to volume-based SSM remedies such that suspending the restrictions on their use on imports falling within TRQ volumes resulted in an increase in the availability of the SSM from 13 percent to

29 percent of total months. Commodities like wheat grain, corn, rice, sugar, soya oil and vegetable oil which registered zero access rates under the baseline scenario showed significantly improved access to the SSM remedy when TRQ constraints were suspended.

Access to the SSM remedy dropped drastically to only one percent of months covered if a market test was applied such that the volume-based SSM duties could be imposed only if average monthly import prices during the preceding six months exceeded corresponding averages in the same period in the previous year by more than five percent. Only soybeans, cotton and palm oil were able to maintain positive, although very low, access rates. Increasing the threshold further to a higher ten percent variance did not alter the results.

F.6.2.2 Access to Price-Based SSM Remedies

Overall access to price-based SSM remedies, as illustrated in Table F.6.5, was equal to that to volume-based SSM duties. If the trigger price was set to a three-year moving historical average, price-based SSM remedies could have been invoked 13 percent of the time if the threshold was set to zero percent; i.e., SSM duties could be imposed as soon as import prices fell below the trigger. Only milk, soybeans, rapeseed, bananas, pork and chicken had positive access rates; all the other commodities had absolutely no opportunity to avail of price-based remedies.

Access rates ran parallel to thresholds levels. If only cases where import prices fell below the trigger price by more than ten percent were considered, SSM price-based duties could have been imposed in only eight percent of the months covered. Increasing the threshold further to 30 percent resulted in a decline in access rates to only three percent. Milk, soybeans and palm oil saw their access rates dropping to zero, while rapeseed, bananas, pork and chicken remained virtually unscathed by higher thresholds. There were no changes in the results when five instead of three-year averages were used in view of the limited data range available.

Table F.6.5 further additionally reveals that access to price-based SSM duties would have improved from 13 percent to 17 percent of months covered if a July-June implementation period was used instead of a calendar year. Of the commodities with positive access rates under the baseline scenario, only soybeans, palm oil and chicken were adversely affected by this adjustment.

Shortening the period during which SSM duties could be imposed from 12 to six months resulted in a decline in access rates from 13 percent to ten percent. Table F.6.6 shows that reducing the maximum imposition period further to three months resulted in a seven percent overall access rate, with only palm oil not affected by this adjustment. On the other hand, retaining the Uruguay Round SSG modality of allowing safeguard remedies only up to the end of the year registered a relatively better 11 percent result, with bananas actually enjoying a higher access rate and soybeans and palm oil retaining baseline results.

Table F.6.6 additionally reveals that overall access rates were not affected in any way if the modality allowing for adjustments in cases of currency devaluation was not applied, or when price comparisons were made using US dollar instead of Chinese RMBs.

The most significant gain in access rates for price-based SSM measures arose when the rule disallowing the application of SSM remedies on imports falling within TRQ commitments was waived. Under this scenario, the overall access rate almost tripled from 13 percent to 35 percent. All of the commodities with TRQ commitments, except cotton, gained significantly from this adjustment.

If a market test was simultaneously imposed such that price-based SSM duties could not be applied if average monthly import volumes during the preceding six months were within 105 percent of

corresponding averages in the same period in the previous year, access to the SSM remedy dropped drastically to only six percent of months covered. All commodities with positive access rates in the baseline scenario, except soybeans, bananas and palm oil, were seriously affected by this parameter change. The results were the same even when the threshold was raised to a higher ten percent threshold.

F.6.2.3 Combined Rates of Access to Volume and Price-Based SSM Remedies

Overall, access to either a volume or price-based SSM remedy averaged 19 percent of the months covered by the study when using three-year price and import volume averages as triggers and setting a common ten threshold. Table F.6.7 shows that only mutton and barley had positive access rates lower than the norm. In turn, wheat grain, corn, rice, sugar, soya oil, vegetable oil and beef had absolutely no opportunity to avail of SSM remedies.

Overall access rates did not change if triggers were based on five instead of three-year averages due to the limited data range used in the simulations. In turn, adjusting annual volume triggers based on historical consumption patterns in cases where import volumes were considered negligible reduced the availability of the SSM remedy from 19 percent to 14 percent of the months covered by the study. Milk and chicken, and to a lesser extent mutton, were significantly affected by this parameter adjustment.

Overall access to either a volume or price-based SSM remedy went down from 19 percent to 12 percent if a higher 30 percent volume threshold was applied, while keeping the price-based threshold steady at ten percent. Among the commodities that registered positive access rates, only rapeseed, cotton and pork were not affected by this adjustment.

Table F.6.8 reveals that using a July-June implemen-ta-tion period instead of a calendar year would have improved overall access rates from 19 percent to 29 percent, with all commodities with positive access rates benefiting except rapeseed, cotton and palm oil. In turn, access rates declined to 13 percent if the period for imposing SSM remedial duties was reduced from 12 to six months, but were slightly better at 14 percent if the imposition period was limited to the end of the year. Among the commodities with positive access rates, only barley, cotton, palm oil and mutton were not affected by changes in imposition periods.

The simulations did not reveal any deviations from baseline results when the modality for adjusting import prices in cases of currency devaluation was not applied or when import prices were compared to triggers using US dollar instead of local currency values.

Overall and commodity-specific access rates however deteriorated sharply if the market test requiring average import volumes and prices in the preceding six months to deviate from preceding year price and volume averages by more than ten percent was applied. In contrast, there was a stark improvement in access to the SSM when TRQ constraints on the use of SSM remedies were removed. Overall, the availability of the SSM remedy rose from 19 percent to 44 percent of months covered, with all the eight commodities with TRQ commitments seeing their access rates rising from zero or very low to significantly high levels.

F.6.3 Effectiveness of SSM Remedies in Bridging Import versus Domestic Price Gaps

Table F.6.9 shows that import prices, inclusive of MFN duties, fell by more than ten percent below domestic prices of the commodities in almost half or 48 percent of the months covered by the study. Soybean, bananas, palm oil, soya oil, mutton and pork registered frequencies of such "problematic"

months in excess of the overall average. In turn, there were no months wherein import prices of wheat grain, corn, milk, rice, barley, rapeseed, cotton and chicken fell below domestic prices by more than ten percent.

Using parameter settings under the G-33 base scenario, either volume or price-based SSM remedies would have been available in about one-fourth or 24 percent of the "problematic" months. In turn, these remedies would have been effective in raising the cost of imports, inclusive of MFN and SSM duties, to not less than ten percent of domestic prices in a relatively low 16 percent of the "problematic" months. Of the 17 commodities studied, only soybeans, bananas, palm oil and mutton had positive effectiveness rates, indicating that most of the price gaps were too wide for the SSM to satisfactorily address.

If only volume-based SSM remedies were allowed in the base scenario, access to the remedy declined from 24 percent to 17 percent, with bananas experiencing a large decline. Nevertheless, the effectiveness rate remained steady at 16 percent of problematic months. On the other hand, if only the price-based SSM remedies were applied, access to SSM duties averaged slightly lower at 16 percent, while the effective-ness rate was conspicuously inferior at only three percent. This indicates that the volume-based remedies were generally more accessible and effective for Chinese products.

Increasing the volume threshold from five percent to 15 percent of the volume trigger and permitting SSM remedies only when import prices fell below the price trigger by more than 15 percent (as against zero percent in the base scenario) reduced access and effectiveness rates to 17 percent and 15 percent, respectively, compared to 24 percent and 16 percent under the base scenario. Only soybean was not affected by this adjustment. Access to the SSM slid further to eight percent of months covered, while effectiveness rates dropped to only seven percent if a higher threshold of 30 percent for both volume and price-based remedies was imposed. These results indicate a high level of vulnerability of the Chinese products to increased threshold levels.

Table F.6.10 reflects a negligible improvement in effectiveness rates from 16 percent to 17 percent if the volume-based remedies under the base scenario were doubled, with only banana benefiting from the adjustment. On the other hand, the effectiveness rate declined more perceptibly to 13 percent if the volume-based remedies were cut in half, with only mutton escaping any deterioration.

The effectiveness rate plunged to only three percent when the volume-based remedies under the base scenario were limited to percentages of current bound tariffs, while suspending the application of remedies in the form of percentage points. In turn, the resultant effectiveness rates equalled those under the base scenario if percentage point remedies, as against remedies proportional to current bound rates, were applied. These results derive from the fact that bound tariffs on the Chinese products were relatively low. All of the covered commodities except cotton, sugar, wheat grain, corn and rice had bound tariffs of 25 percent and below.

Similar to the results when SSM remedies were restricted to percentages of bound tariffs, Table F.6.11 shows that the effectiveness of the SSM would be reduced to a measly one percent of problematic months if SSM remedies were limited to 50 percent of bound tariffs. In turn, setting the maximum remedial duty to 50 percentage points led to results equal to those derived under the base scenario.

Given the relatively low tariffs for the Chinese products, a modality that limited SSM remedies to the difference between the current bound tariff rate and the tariff level at the start of the Doha Round understandably rendered the SSM inutile, with access rates for all commodities virtually dropping to zero.

The application of a simultaneous market test not only reduced access to the SSM from 24 percent to 11 percent of problematic months, but also pared the effectiveness rate from 16 percent to four percent. Pork and mutton lost access to the remedy altogether, while soybeans, bananas and palm oil experienced major drops in effectiveness rates. Under the said market test, price and volume-based SSM duties can be imposed only if average import volumes or prices in the preceding 6 months exceeded the corresponding average in the same period in the previous year by more than ten percent.

Using a July-June implementation period instead of a calendar year resulted in a slight increase in problematic months from 48 percent to 51 percent of months covered. However, the availability of the SSM remedy significantly rose to 41 percent, while the effectiveness rate more than doubled to 35 percent.

Table F.6.12 shows that reducing the maximum period for imposing SSM duties from 12 to six months resulted in a slight decline in access rates from 24 percent to 19 percent and a parallel drop in effectiveness rates from 16 percent to 12 percent. Soybeans and bananas were particularly affected by this adjustment. Limiting the imposition period to the end of the year had a more deleterious effect, with the availability of the SSM remedy dropping to 18 percent of months covered, and the measure being effective in addressing problematic price gaps in only ten percent of problematic months.

Suspending the application of the rule whereby safeguard duties cannot be imposed on imports falling within TRQ commitments dramatically increased access to the SSM from 24 percent to 45 percent of problematic months. Effectiveness rates in turn rose from 15 percent to 37 percent. Of the commodities with TRQ commitments, sugar, palm oil, soya oil and vegetable oil exhibited large increases in access and effectiveness rates as a result of this parameter adjustment.

These were no deviations from baseline scenario results if the application of the foreign exchange adjustment modality in cases of severe currency depreciation was suspended. Similarly, there were no changes when prices of imports and domestic products were compared using US dollar instead of Chinese RMB values.

F.6.4 Conclusions and Recommendations

The results of the simulation reflect a relatively low incidence of import volume surges and price depressions for Chinese products between 2002 and 2005. Cumulative imports exceeded three-year historical averages by more than 30 percent in only ten percent of the months covered, while import prices fell below similar thresholds by at least 30 percent in only seven percent of the time.

Access to either a volume or price-based SSM remedy also averaged a relatively low 19 percent of months covered by the study if triggers were set to three-year historical averages and a common ten percent threshold for invoking remedies was applied. Access rates went down to 12 percent when a 30 percent threshold was utilized.

The availability of SSM remedies was not affected if five instead of three-year averages were used, primarily because the data set used was limited to a four-year period from 2002 to 2005. The simulations showed a slight decline in access rates when volume triggers were adjusted based on consumption patterns during years when imports were considered negligible.

Access rates improved in only two instances – when a July-June instead of calendar year implementation period was applied, and when the rule prohibiting the imposition of safeguard duties on imports falling within TRQ commitments was suspended.

In turn, access rates deteriorated if the maximum period for imposing SSM duties was shortened from 12 months, and particularly if an additional market test was required for availing of price or volume-based SSM remedies. Suspending the modality for adjusting foreign currency exchange rates in the event of severe devaluation, and using US dollars instead of Chinese RMBs to valuate imports, had neutral effects on access rates.

About half of the months covered by the study exhibited import prices, inclusive of MFN duties, falling below domestic prices by more than ten percent. Under the G-33 base scenario, SSM remedies would have been available in 24 percent of these "problematic" months, and would have been effective in bringing import prices, inclusive of MFN tariffs and applicable SSM duties, to within ten percent of domestic prices in a relatively low 16 percent of the "problematic" months. Eight of the seventeen commodities did not register any months with problematic price gaps.

Based on the results of the simulations, the effectiveness of the SSM remedy could be enhanced significantly by removing TRQ constraints on the application of SSM duties, utilizing a June-July instead of calendar implementation period, and to a limited extent, increasing the level of remedial duties. On the other hand, the commodities appeared to be insensitive to caps in the form of percentage points, the suspension of foreign exchange adjustments in cases of severe currency fluctuations, and the use of US dollars instead of Chinese RMBs in comparing import and domestic prices.

Access rates tended to deteriorate with higher thresholds, low remedies, and shorter imposition periods. Because of the relatively low bound tariffs on Chinese products, caps on safeguard duties quoted as a percentage of tariffs also compromised the effectiveness of the SSM. Allowing only a reversion to Doha starting rates or applying a simultaneous market test had severe adverse effects on the effectiveness of the SSM.

Given these simulation results, China should assess the comparative costs and benefits of unilaterally dismantling its TRQ commitments for many of its products in exchange for enjoying better access to any special safeguard modality. This may however require that China reduce its tariffs further to in-quota levels for the products concerned. Shifting to a July-June implementation period may likewise enhance access to SSM remedies and improve their effectiveness in addressing price gaps.

Because of the low tariffs on most Chinese agricultural products, priority should be placed on securing SSM remedial modalities based on fixed percentage points which yield higher effective remedies than percentages of bound tariffs. Less stringent thresholds are also needed to significantly improve China's comparatively low access rates to SSM remedies. Attempts to impose market tests, or limit allowable MFN+SSM duties to starting Doha Round levels will have to be resisted if the effectiveness of the measure is to be retained at reasonable levels.

Table F.6.1 Percent of Months With Import Volume Surges Using Different Thresholds China, 2002 to 2005

Commodity	Incidence of Import Volume Surges					
	At Least 10% Over		At Least 20% Over		At Least 30% Over	
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave
Wheat Grain	29%	29%	25%	25%	19%	19%
Corn	2%	2%	2%	2%	2%	2%
Milk	6%	6%	4%	4%	0%	0%
Rice	19%	19%	19%	19%	15%	15%
Barley	6%	6%	4%	4%	2%	2%
Soybean	25%	25%	19%	19%	15%	15%
Rapeseed	0%	0%	0%	0%	0%	0%
Cotton	56%	56%	54%	54%	52%	52%
Sugar	10%	10%	8%	8%	8%	8%
Banana	4%	4%	2%	2%	0%	0%
Palm Oil	21%	21%	15%	15%	8%	8%
Soya Oil	21%	21%	19%	19%	17%	17%
Vege Oil	42%	42%	42%	42%	40%	40%
Beef	0%	0%	0%	0%	0%	0%
Mutton	4%	4%	2%	2%	0%	0%
Pork	0%	0%	0%	0%	0%	0%
Chicken	2%	2%	0%	0%	0%	0%
Average	15%	15%	13%	13%	10%	10%

Table F.6.2 Percent of Months With Import Price Depressions Using Different Thresholds China, 2002 to 2005

Commodity	Incidence of Import Price Depressions					
	At Least 10% Below		At Least 20% Below		At Least 30% Below	
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave
Wheat Grain	0%	0%	0%	0%	0%	0%
Corn	46%	46%	44%	44%	42%	42%
Milk	0%	0%	0%	0%	0%	0%
Rice	10%	10%	4%	4%	0%	0%
Barley	0%	0%	0%	0%	0%	0%
Soybean	0%	0%	0%	0%	0%	0%
Rapeseed	10%	10%	10%	10%	10%	10%
Cotton	0%	0%	0%	0%	0%	0%
Sugar	8%	8%	2%	2%	0%	0%
Banana	10%	10%	0%	0%	0%	0%
Palm Oil	0%	0%	0%	0%	0%	0%
Soya Oil	42%	42%	13%	13%	0%	0%
Vege Oil	75%	75%	75%	75%	75%	75%
Beef	0%	0%	0%	0%	0%	0%
Mutton	0%	0%	0%	0%	0%	0%
Pork	0%	0%	0%	0%	0%	0%
Chicken	0%	0%	0%	0%	0%	0%
Average	12%	12%	9%	9%	7%	7%

Table F.6.3 Percent of Months With Access to Volume SSM at Various Trigger Levels China, 2002 to 2005

Commodity	Access Rates to Volume-Based SSM							
	10% Threshold				30% Threshold			
	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*
Wheat Grain	0%	0%	0%	0%	0%	0%	0%	0%
Corn	0%	0%	0%	0%	0%	0%	0%	0%
Milk	50%	0%	50%	0%	0%	0%	0%	0%
Rice	0%	0%	0%	0%	0%	0%	0%	0%
Barley	6%	6%	6%	6%	2%	2%	2%	2%
Soybean	58%	58%	58%	58%	31%	31%	31%	31%
Rapeseed	0%	0%	0%	0%	0%	0%	0%	0%
Cotton	23%	23%	23%	23%	23%	23%	23%	23%
Sugar	0%	0%	0%	0%	0%	0%	0%	0%
Banana	27%	27%	27%	27%	0%	0%	0%	0%
Palm Oil	19%	19%	19%	19%	8%	8%	8%	8%
Soya Oil	0%	0%	0%	0%	0%	0%	0%	0%
Vege Oil	0%	0%	0%	0%	0%	0%	0%	0%
Beef	0%	0%	0%	0%	0%	0%	0%	0%
Mutton	4%	0%	4%	0%	0%	0%	0%	0%
Pork	0%	0%	0%	0%	0%	0%	0%	0%
Chicken	25%	0%	25%	0%	0%	0%	0%	0%
Average	13%	8%	13%	8%	4%	4%	4%	4%

*Volume trigger set to 5% of average consumption if average import is less than 5% of average consumption; no production and consumption data for barley and palm oil.

Table F.6.4 Percent of Months With Access to Volume SSM at Various Parameter Settings China, 2002 to 2005

Commodity	Access Rates to Volume-Based SSM							
	3 Yr Ave	Jul-Jun	6 Months	3 Months	End of Yr	No TRQs	MktTst 5%	MktTst 10%
Wheat Grain	0%	0%	0%	0%	0%	38%	0%	0%
Corn	0%	0%	0%	0%	0%	2%	0%	0%
Milk	50%	60%	27%	15%	27%	50%	0%	0%
Rice	0%	0%	0%	0%	0%	29%	0%	0%
Barley	6%	35%	6%	6%	6%	6%	0%	0%
Soybean	58%	65%	40%	33%	42%	58%	8%	8%
Rapeseed	0%	10%	0%	0%	0%	0%	0%	0%
Cotton	23%	4%	23%	23%	23%	65%	8%	8%
Sugar	0%	0%	0%	0%	0%	27%	0%	0%
Banana	27%	58%	15%	8%	29%	27%	0%	0%
Palm Oil	19%	15%	19%	19%	19%	58%	6%	6%
Soya Oil	0%	0%	0%	0%	0%	54%	0%	0%
Vege Oil	0%	0%	0%	0%	0%	52%	0%	0%
Beef	0%	27%	0%	0%	0%	0%	0%	0%
Mutton	4%	60%	4%	4%	4%	4%	0%	0%
Pork	0%	58%	0%	0%	0%	0%	0%	0%
Chicken	25%	60%	13%	6%	27%	25%	0%	0%
Average	13%	27%	9%	7%	10%	29%	1%	1%

Table F.6.5 Percent of Months With Access to Price SSM Using Different Thresholds China, 2002 to 2005

Commodity	Access Rates to Price-Based SSM							
	0% Threshold		10% Threshold		30% Threshold		Jul-Jun	6 Months
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	Implem	Impose
Wheat Grain	0%	0%	0%	0%	0%	0%	0%	0%
Corn	0%	0%	0%	0%	0%	0%	0%	0%
Milk	25%	25%	0%	0%	0%	0%	48%	13%
Rice	0%	0%	0%	0%	0%	0%	0%	0%
Barley	0%	0%	0%	0%	0%	0%	31%	0%
Soybean	25%	25%	0%	0%	0%	0%	0%	19%
Rapeseed	52%	52%	50%	50%	50%	50%	65%	31%
Cotton	0%	0%	0%	0%	0%	0%	0%	0%
Sugar	0%	0%	0%	0%	0%	0%	0%	0%
Banana	38%	38%	31%	31%	0%	0%	50%	40%
Palm Oil	8%	8%	0%	0%	0%	0%	0%	8%
Soya Oil	0%	0%	0%	0%	0%	0%	0%	0%
Vege Oil	0%	0%	0%	0%	0%	0%	0%	0%
Beef	0%	0%	0%	0%	0%	0%	0%	0%
Mutton	0%	0%	0%	0%	0%	0%	0%	0%
Pork	25%	25%	25%	25%	0%	0%	50%	13%
Chicken	56%	56%	25%	25%	0%	0%	44%	44%
Average	13%	13%	8%	8%	3%	3%	17%	10%

Table F.6.6 Percent of Months With Access to Price SSM at Various Parameter Settings China, 2002 to 2005

Commodity	Access Rates to Price-Based SSM							
	3 Yr Ave	3 Months	End of Yr	No Dep'n	Dollars	No TRQs	MktTst 5%	MktTst 10%
Wheat Grain	0%	0%	0%	0%	0%	29%	0%	0%
Corn	0%	0%	0%	0%	0%	71%	0%	0%
Milk	25%	6%	10%	25%	25%	25%	10%	8%
Rice	0%	0%	0%	0%	0%	42%	0%	0%
Barley	0%	0%	0%	0%	0%	0%	0%	0%
Soybean	25%	13%	25%	25%	25%	25%	25%	25%
Rapeseed	52%	25%	35%	52%	52%	52%	0%	0%
Cotton	0%	0%	0%	0%	0%	0%	0%	0%
Sugar	0%	0%	0%	0%	0%	50%	0%	0%
Banana	38%	27%	44%	38%	38%	38%	38%	35%
Palm Oil	8%	8%	8%	8%	8%	25%	8%	8%
Soya Oil	0%	0%	0%	0%	0%	75%	0%	0%
Vege Oil	0%	0%	0%	0%	0%	75%	0%	0%
Beef	0%	0%	0%	0%	0%	0%	0%	0%
Mutton	0%	0%	0%	0%	0%	0%	0%	0%
Pork	25%	6%	6%	25%	25%	25%	0%	0%
Chicken	56%	31%	50%	56%	56%	56%	27%	27%
Average	13%	7%	11%	13%	13%	35%	6%	6%

Table F.6.7 Percent of Months With Access to Any SSM Using Different Thresholds China, 2002 to 2005

Commodity	Combined Access Rates to Volume and Price-Based SSM+							
	10% Volume Threshold				30% Volume Threshold			
	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*
Wheat Grain	0%	0%	0%	0%	0%	0%	0%	0%
Corn	0%	0%	0%	0%	0%	0%	0%	0%
Milk	50%	0%	50%	0%	0%	0%	0%	0%
Rice	0%	0%	0%	0%	0%	0%	0%	0%
Barley	6%	6%	6%	6%	2%	2%	2%	2%
Soybean	58%	58%	58%	58%	31%	31%	31%	31%
Rapeseed	50%	50%	50%	50%	50%	50%	50%	50%
Cotton	23%	23%	23%	23%	23%	23%	23%	23%
Sugar	0%	0%	0%	0%	0%	0%	0%	0%
Banana	40%	40%	40%	40%	31%	31%	31%	31%
Palm Oil	19%	19%	19%	19%	8%	8%	8%	8%
Soya Oil	0%	0%	0%	0%	0%	0%	0%	0%
Vege Oil	0%	0%	0%	0%	0%	0%	0%	0%
Beef	0%	0%	0%	0%	0%	0%	0%	0%
Mutton	4%	0%	4%	0%	0%	0%	0%	0%
Pork	25%	25%	25%	25%	25%	25%	25%	25%
Chicken	42%	25%	42%	25%	25%	25%	25%	25%
Average	19%	14%	19%	14%	12%	12%	12%	12%

+Assuming a 10% threshold for invoking price-based SSM
*Volume trigger set to 5% of average consumption if average import is less than 5% of average consumption; no production and consumption data for barley and palm oil.

Table F.6.8 Percent of Months With Access to Any SSM at Various Parameter Settings China, 2002 to 2005

Commodity	Combined Access Rates to Volume and Price-Based SSM							
	3 Yr Ave	Jul-Jun	6 Months	End of Yr	No Dep'n	Dollars	MktTst 10%	No TRQs
Wheat Grain	0%	0%	0%	0%	0%	0%	0%	38%
Corn	0%	0%	0%	0%	0%	0%	0%	71%
Milk	50%	60%	27%	27%	50%	50%	0%	50%
Rice	0%	0%	0%	0%	0%	0%	0%	33%
Barley	6%	35%	6%	6%	6%	6%	0%	6%
Soybean	58%	65%	40%	42%	58%	58%	8%	58%
Rapeseed	50%	40%	29%	33%	50%	50%	0%	50%
Cotton	23%	4%	23%	23%	23%	23%	8%	65%
Sugar	0%	0%	0%	0%	0%	0%	0%	52%
Banana	40%	69%	35%	42%	40%	40%	29%	40%
Palm Oil	19%	15%	19%	19%	19%	19%	6%	58%
Soya Oil	0%	0%	0%	0%	0%	0%	0%	75%
Vege Oil	0%	0%	0%	0%	0%	0%	0%	75%
Beef	0%	27%	0%	0%	0%	0%	0%	0%
Mutton	4%	60%	4%	4%	4%	4%	0%	4%
Pork	25%	58%	13%	6%	25%	25%	0%	25%
Chicken	42%	60%	25%	44%	42%	42%	6%	42%
Average	19%	29%	13%	14%	19%	19%	3%	44%

Table F.6.9 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings
China, 2002 to 2005*

Commodity	Percent Problematic Months	BASE SCENARIO		VOLUME SSM ONLY		PRICE SSM ONLY		HIGHER THRESHOLD		VERY HIGH THRESHOLD	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Wheat Grain	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Corn	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rice	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Barley	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Soybean	100%	56%	56%	56%	56%	25%	0%	56%	56%	38%	38%
Rapeseed	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cotton	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Sugar	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Banana	81%	49%	23%	26%	18%	46%	15%	33%	21%	0%	0%
Palm Oil	96%	22%	20%	20%	20%	9%	4%	15%	15%	9%	7%
Soya Oil	63%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vege Oil	31%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Beef	31%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Mutton	96%	4%	4%	4%	4%	0%	0%	2%	2%	0%	0%
Pork	100%	25%	0%	0%	0%	25%	0%	0%	0%	0%	0%
Chicken	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average	48%	24%	16%	17%	16%	16%	3%	17%	15%	8%	7%

*Rapeseed, milk and chicken not included in evaluation due to lack of domestic price data. Domestic prices for cotton and sugar only for 2005

Table F.6.10 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings China, 2002 to 2005

Commodity	Percent Problematic Months	BASE SCENARIO		HIGH REMEDIES		LOW REMEDIES		% OF BOUND		PERCENTAGE PTS	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Wheat Grain	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Corn	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rice	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Barley	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Soybean	100%	56%	56%	56%	56%	56%	50%	56%	2%	56%	56%
Rapeseed	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cotton	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Sugar	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Banana	81%	49%	23%	49%	31%	49%	18%	49%	15%	49%	23%
Palm Oil	96%	22%	20%	22%	20%	22%	11%	22%	7%	22%	20%
Soya Oil	63%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Vege Oil	31%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Beef	31%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Mutton	96%	4%	4%	4%	4%	4%	4%	4%	0%	4%	4%
Pork	100%	25%	0%	25%	0%	25%	0%	25%	0%	25%	0%
Chicken	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average	48%	24%	16%	24%	17%	24%	13%	24%	3%	24%	16%

Table F.6.11 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings
China, 2002 to 2005

Commodity	Percent Problematic Months	BASE SCENARIO		50% OF BOUND		50 PCTG PTS		DOHA START		MARKET TEST		JULY-JUNE		
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		Problematic	% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective	months	Available	Effective
Wheat Grain	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Corn	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rice	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Barley	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Soybean	100%	56%	56%	54%	2%	54%	54%	54%	2%	25%	8%	100%	63%	63%
Rapeseed	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cotton	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%
Sugar	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%
Banana	81%	49%	23%	51%	3%	49%	23%	49%	0%	44%	15%	83%	60%	50%
Palm Oil	96%	22%	20%	22%	2%	22%	20%	22%	0%	9%	7%	96%	15%	15%
Soya Oil	63%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	73%	0%	0%
Vege Oil	31%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	38%	0%	0%
Beef	31%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	31%	33%	33%
Mutton	96%	4%	4%	4%	0%	4%	4%	4%	0%	0%	0%	96%	57%	54%
Pork	100%	25%	0%	25%	0%	25%	0%	25%	0%	0%	0%	100%	69%	42%
Chicken	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average	48%	24%	16%	24%	1%	24%	16%	24%	0%	11%	4%	51%	41%	35%

Table F.6.12 Percent of Problematic Months Where SSM is Available and Effective, at Various Parameter Settings
China, 2002 to 2005

Commodity	Percent Problematic Months	BASE SCENARIO		6 MONTHS		END OF YEAR		NO TRQS		NO DEP'N		DOLLARS	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Wheat Grain	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Corn	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rice	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Barley	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Soybean	100%	56%	56%	40%	35%	42%	25%	56%	56%	56%	56%	56%	56%
Rapeseed	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cotton	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Sugar	25%	0%	0%	0%	0%	0%	0%	67%	33%	0%	0%	0%	0%
Banana	81%	49%	23%	49%	18%	44%	13%	49%	23%	49%	23%	49%	23%
Palm Oil	96%	22%	20%	22%	20%	22%	20%	61%	59%	22%	20%	22%	20%
Soya Oil	63%	0%	0%	0%	0%	0%	0%	83%	83%	0%	0%	0%	0%
Vege Oil	31%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%
Beef	31%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Mutton	96%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Pork	100%	25%	0%	13%	0%	6%	0%	25%	0%	25%	0%	25%	0%
Chicken	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average	48%	24%	16%	19%	12%	18%	10%	45%	37%	24%	16%	24%	16%

ANNEX G

TABULATED RESULTS OF SIMULATIONS BY COMMODITY AND COUNTRY

Table G1 Percent of Months With Import Volume Surges Using Different Thresholds All Countries, by Product

Commodity	Incidence of Import Volume Surges					
	At Least 10% Over		At Least 20% Over		At Least 30% Over	
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave
Banana	4%	4%	2%	2%	0%	0%
Barley	6%	6%	4%	4%	2%	2%
Beans	23%	23%	23%	23%	19%	19%
Beef	5%	9%	3%	6%	2%	6%
Carrots	17%	22%	15%	18%	14%	17%
Chicken	21%	23%	19%	20%	15%	18%
Coconut	27%	25%	25%	23%	23%	23%
Coffee	28%	30%	27%	30%	27%	28%
Corn	18%	20%	16%	18%	11%	14%
Cotton	56%	56%	54%	54%	52%	52%
Garlic	22%	22%	17%	17%	13%	12%
Milk	15%	15%	14%	14%	12%	12%
Mutton	4%	3%	3%	3%	2%	1%
Onions	11%	19%	9%	15%	8%	13%
Palm Oil	21%	21%	15%	15%	8%	8%
Pork	16%	19%	11%	17%	9%	15%
Potato	21%	25%	20%	23%	18%	20%
Powdered Milk	11%	7%	10%	7%	8%	6%
Rapeseed	0%	0%	0%	0%	0%	0%
Rice	8%	9%	6%	6%	5%	5%
Soya Oil	18%	18%	13%	13%	11%	11%
Soybean	18%	23%	13%	17%	10%	12%
Sugar	7%	6%	5%	4%	4%	4%
Tomato	25%	26%	22%	19%	19%	17%
Vege Oil	18%	19%	16%	17%	14%	15%
Wheat Flour	28%	31%	26%	26%	25%	25%
Wheat Grain	10%	8%	8%	7%	6%	6%
Average	16%	17%	13%	15%	11%	13%

Table G2 Percent of Months With Import Volume Surges Using Different Thresholds All Products, by Country

Country	Incidence of Import Volume Surges					
	At Least 10% Over		At Least 20% Over		At Least 30% Over	
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave
Philippines	19%	23%	17%	20%	16%	19%
Fiji	15%	17%	13%	14%	11%	12%
Ecuador	15%	16%	13%	14%	10%	12%
Senegal	18%	19%	15%	16%	12%	14%
Indonesia	9%	11%	7%	9%	5%	6%
China	15%	15%	13%	13%	10%	10%
Average	16%	17%	13%	15%	11%	13%

Table G3 Percent of Months With Import Price Depressions Using Different Thresholds All Countries, by Product

Commodity	Incidence of Import Price Depressions					
	At Least 10% Below		At Least 20% Below		At Least 30% Below	
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave
Banana	10%	10%	0%	0%	0%	0%
Barley	0%	0%	0%	0%	0%	0%
Beans	33%	33%	33%	33%	27%	27%
Beef	2%	4%	1%	3%	1%	2%
Carrots	36%	36%	30%	27%	21%	27%
Chicken	15%	17%	9%	12%	5%	10%
Coconut	30%	30%	25%	13%	13%	3%
Coffee	47%	52%	45%	45%	40%	40%
Corn	40%	43%	33%	37%	26%	29%
Cotton	0%	0%	0%	0%	0%	0%
Garlic	25%	7%	3%	0%	0%	0%
Milk	13%	13%	7%	7%	0%	0%
Mutton	5%	3%	3%	2%	2%	0%
Onions	47%	44%	38%	31%	32%	29%
Palm Oil	0%	0%	0%	0%	0%	0%
Pork	12%	6%	5%	2%	2%	0%
Potato	24%	30%	20%	24%	11%	17%
Powdered Milk	14%	6%	6%	3%	1%	1%
Rapeseed	10%	10%	10%	10%	10%	10%
Rice	32%	32%	23%	23%	13%	12%
Soya Oil	26%	27%	14%	13%	8%	0%
Soybean	3%	3%	0%	0%	0%	0%
Sugar	14%	14%	8%	8%	4%	4%
Tomato	11%	10%	6%	6%	2%	3%
Vege Oil	22%	19%	19%	19%	19%	19%
Wheat Flour	17%	8%	15%	1%	3%	1%
Wheat Grain	2%	2%	1%	1%	1%	1%
Average	21%	21%	16%	15%	11%	11%

Table G4 Percent of Months With Import Price Depressions Using Different Thresholds All Products, by Country

Country	Incidence of Import Price Depressions					
	At Least 10% Below		At Least 20% Below		At Least 30% Below	
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave
Philippines	36%	39%	25%	30%	18%	24%
Fiji	21%	19%	15%	12%	9%	7%
Ecuador	12%	10%	10%	8%	7%	7%
Senegal	25%	25%	20%	20%	13%	13%
Indonesia	35%	35%	24%	24%	13%	13%
China	12%	12%	9%	9%	7%	7%
Average	21%	21%	16%	15%	11%	11%

Table G5 Percent of Months With Access to Volume SSM at Various Trigger Levels and Thresholds. All Countries, by Product

Commodity	Access Rates to Volume-Based SSM							
	10% Threshold				30% Threshold			
	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*
Banana	27%	27%	27%	27%	0%	0%	0%	0%
Barley	6%	6%	6%	6%	2%	2%	2%	2%
Beans	42%	67%	42%	67%	40%	65%	40%	65%
Beef	21%	21%	23%	23%	11%	11%	12%	12%
Carrots	45%	19%	40%	11%	25%	0%	27%	0%
Chicken	31%	10%	31%	13%	21%	8%	23%	9%
Coconut	35%	35%	50%	50%	32%	32%	30%	30%
Coffee	28%	27%	30%	28%	27%	23%	28%	25%
Corn	44%	44%	45%	44%	30%	30%	39%	38%
Cotton	23%	23%	23%	23%	23%	23%	23%	23%
Garlic	47%	47%	47%	47%	43%	43%	45%	45%
Milk	32%	20%	31%	22%	22%	19%	22%	22%
Mutton	13%	12%	12%	10%	11%	11%	10%	10%
Onions	35%	32%	49%	46%	16%	14%	32%	28%
Palm Oil	19%	19%	19%	19%	8%	8%	8%	8%
Pork	29%	0%	30%	0%	29%	0%	29%	0%
Potato	37%	13%	46%	13%	32%	7%	28%	3%
Powdered Milk	36%	36%	21%	21%	18%	18%	19%	19%
Rapeseed	0%	0%	0%	0%	0%	0%	0%	0%
Rice	17%	14%	18%	18%	7%	7%	10%	10%
Soya Oil	23%	23%	25%	25%	11%	11%	12%	12%
Soybean	47%	47%	77%	77%	34%	34%	44%	44%
Sugar	10%	9%	9%	9%	2%	2%	2%	2%
Tomato	50%	28%	60%	38%	48%	27%	42%	21%
Vege Oil	21%	21%	23%	23%	16%	16%	16%	16%
Wheat Flour	33%	33%	65%	65%	31%	31%	31%	31%
Wheat Grain	0%	0%	0%	0%	0%	0%	0%	0%
Average	29%	21%	32%	25%	20%	14%	22%	16%

*Volume trigger set to 5% of average consumption if average import volume is less than 5% of average consumption (where data is available)

Table G6 Percent of Months With Access to Volume SSM at Various Trigger Levels and Thresholds. All Products, by Country

Country	Access Rates to Volume-Based SSM							
	10% Threshold				30% Threshold			
	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*
Philippines	23%	15%	28%	19%	21%	13%	24%	15%
Fiji	35%	31%	38%	36%	21%	18%	23%	20%
Ecuador	30%	18%	36%	22%	27%	15%	28%	18%
Senegal	43%	29%	44%	30%	31%	19%	32%	20%
Indonesia	37%	33%	45%	45%	19%	19%	31%	31%
China	13%	8%	13%	8%	4%	4%	4%	4%
Average	29%	21%	32%	25%	20%	14%	22%	16%

*Volume trigger set to 5% of average consumption if average import volume is less than 5% of average consumption (where data is available)

Table G7 Percent of Months With Access to Volume SSM at Various Parameter Settings All Countries, by Product

	Access Rates to Price-Based SSM							
Commodity	3 Yr Ave	Jul-Jun	6 Months	3 Months	End of Yr	No TRQs	MktTst 5%	MktTst 10%
Banana	27%	58%	15%	8%	29%	27%	0%	0%
Barley	6%	35%	6%	6%	6%	6%	0%	0%
Beans	42%	35%	29%	23%	23%	42%	25%	25%
Beef	21%	32%	11%	6%	5%	21%	1%	0%
Carrots	45%	41%	31%	22%	35%	45%	13%	11%
Chicken	31%	41%	25%	20%	25%	37%	9%	8%
Coconut	35%	37%	35%	30%	27%	35%	15%	13%
Coffee	28%	75%	28%	28%	28%	55%	20%	18%
Corn	44%	36%	29%	22%	26%	46%	12%	8%
Cotton	23%	4%	23%	23%	23%	65%	8%	8%
Garlic	47%	62%	35%	25%	33%	47%	25%	2%
Milk	32%	45%	24%	19%	22%	32%	11%	9%
Mutton	13%	43%	8%	6%	14%	13%	4%	3%
Onions	35%	60%	23%	16%	31%	35%	15%	14%
Palm Oil	19%	15%	19%	19%	19%	58%	6%	6%
Pork	29%	32%	20%	15%	18%	38%	11%	7%
Potato	37%	42%	25%	20%	22%	47%	19%	17%
Powdered Milk	36%	18%	19%	15%	28%	36%	4%	4%
Rapeseed	0%	10%	0%	0%	0%	0%	0%	0%
Rice	17%	25%	10%	7%	11%	23%	3%	3%
Soya Oil	23%	24%	13%	11%	9%	45%	8%	6%
Soybean	47%	58%	30%	23%	31%	47%	3%	3%
Sugar	10%	14%	7%	5%	11%	17%	3%	0%
Tomato	50%	64%	36%	28%	25%	50%	6%	6%
Vege Oil	21%	47%	13%	8%	7%	34%	0%	0%
Wheat Flour	33%	38%	33%	29%	28%	33%	13%	13%
Wheat Grain	0%	6%	0%	0%	0%	16%	0%	0%
Average	29%	38%	20%	15%	20%	35%	9%	7%

Table G8 Percent of Months With Access to Volume SSM at Various Parameter Settings All Products, by Country

	Access Rates to Price-Based SSM							
Country	3 Yr Ave	Jul-Jun	6 Months	3 Months	End of Yr	No TRQs	MktTst 5%	MktTst 10%
Philippines	23%	30%	20%	17%	19%	37%	13%	10%
Fiji	35%	39%	24%	19%	25%	35%	12%	10%
Ecuador	30%	30%	21%	16%	17%	32%	8%	7%
Senegal	43%	65%	29%	21%	26%	43%	11%	9%
Indonesia	37%	42%	21%	13%	24%	37%	4%	0%
China	13%	27%	9%	7%	10%	29%	1%	1%
Average	29%	38%	20%	15%	20%	35%	9%	7%

Table G9 Percent of Months With Access to Price SSM at Various Trigger Levels and Thresholds. All Countries, by Product

Commodity	Access Rates to Price-Based SSM							
	0% Threshold		10% Threshold		30% Threshold		Jul-Jun	6 Months
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	Implem	Impose
Banana	38%	38%	31%	31%	0%	0%	50%	40%
Barley	0%	0%	0%	0%	0%	0%	31%	0%
Beans	56%	56%	56%	56%	50%	50%	73%	44%
Beef	27%	22%	11%	21%	10%	11%	27%	26%
Carrots	83%	82%	83%	81%	56%	59%	85%	70%
Chicken	26%	22%	13%	13%	5%	5%	39%	20%
Coconut	60%	60%	40%	60%	37%	30%	60%	53%
Coffee	40%	65%	40%	45%	38%	38%	90%	37%
Corn	52%	56%	48%	53%	30%	42%	50%	46%
Cotton	0%	0%	0%	0%	0%	0%	0%	0%
Garlic	83%	83%	77%	65%	25%	20%	83%	83%
Milk	42%	39%	27%	26%	9%	9%	48%	33%
Mutton	37%	16%	16%	15%	15%	10%	37%	27%
Onions	78%	74%	75%	74%	61%	46%	81%	74%
Palm Oil	8%	8%	0%	0%	0%	0%	0%	8%
Pork	26%	19%	19%	19%	12%	0%	40%	21%
Potato	51%	37%	42%	37%	20%	22%	64%	49%
Powdered Milk	74%	64%	64%	42%	17%	17%	63%	74%
Rapeseed	52%	52%	50%	50%	50%	50%	65%	31%
Rice	64%	64%	57%	55%	36%	35%	71%	60%
Soya Oil	19%	39%	19%	29%	19%	13%	48%	22%
Soybean	60%	44%	22%	0%	0%	0%	38%	50%
Sugar	33%	30%	14%	30%	14%	7%	42%	28%
Tomato	50%	49%	47%	40%	17%	19%	57%	35%
Vege Oil	23%	20%	18%	13%	8%	0%	31%	19%
Wheat Flour	50%	47%	47%	31%	31%	17%	67%	40%
Wheat Grain	20%	19%	14%	14%	6%	6%	27%	20%
Average	45%	43%	36%	36%	22%	20%	52%	40%

Table G10 Percent of Months With Access to Price SSM at Various Trigger Levels and Thresholds. All Products, by Country

Country	Access Rates to Price-Based SSM							
	0% Threshold		10% Threshold		30% Threshold		Jul-Jun	6 Months
	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	3 Yr Ave	5 Yr Ave	Implem	Impose
Philippines	44%	45%	40%	42%	29%	26%	53%	43%
Fiji	64%	59%	53%	51%	31%	29%	71%	56%
Ecuador	35%	30%	29%	28%	21%	17%	41%	32%
Senegal	51%	52%	41%	41%	21%	21%	70%	45%
Indonesia	82%	76%	57%	57%	33%	33%	73%	71%
China	13%	13%	8%	8%	3%	3%	17%	10%
Average	45%	43%	36%	36%	22%	20%	52%	40%

Table G11 Percent of Months With Access to Price SSM at Various Parameter Settings All Countries, by Product

	Access Rates to Price-Based SSM							
Commodity	3 Yr Ave	3 Months	End of Yr	No Dep'n	Dollars	No TRQs	MktTst 5%	MktTst 10%
Banana	38%	27%	44%	38%	38%	38%	38%	35%
Barley	0%	0%	0%	0%	0%	0%	0%	0%
Beans	56%	38%	58%	56%	56%	56%	4%	4%
Beef	27%	13%	27%	27%	21%	27%	13%	12%
Carrots	83%	63%	80%	83%	83%	83%	42%	42%
Chicken	26%	14%	27%	26%	19%	46%	18%	17%
Coconut	60%	48%	60%	63%	60%	60%	22%	22%
Coffee	40%	38%	40%	40%	40%	65%	27%	27%
Corn	52%	42%	46%	45%	51%	68%	27%	25%
Cotton	0%	0%	0%	0%	0%	0%	0%	0%
Garlic	83%	70%	83%	92%	95%	83%	47%	45%
Milk	42%	30%	31%	39%	31%	42%	22%	21%
Mutton	37%	17%	34%	42%	33%	37%	18%	13%
Onions	78%	70%	74%	71%	78%	78%	45%	43%
Palm Oil	8%	8%	8%	8%	8%	25%	8%	8%
Pork	26%	16%	19%	19%	26%	58%	11%	11%
Potato	51%	43%	47%	45%	59%	61%	32%	28%
Powdered Milk	74%	60%	74%	74%	51%	74%	26%	26%
Rapeseed	52%	25%	35%	52%	52%	52%	0%	0%
Rice	64%	54%	62%	65%	54%	76%	29%	27%
Soya Oil	19%	16%	20%	23%	19%	49%	13%	12%
Soybean	60%	40%	57%	50%	50%	60%	33%	30%
Sugar	33%	24%	33%	32%	22%	46%	7%	7%
Tomato	50%	26%	45%	50%	53%	50%	22%	19%
Vege Oil	23%	17%	18%	12%	26%	42%	10%	9%
Wheat Flour	50%	36%	44%	50%	33%	50%	19%	18%
Wheat Grain	20%	17%	26%	20%	13%	40%	7%	6%
Average	45%	34%	42%	43%	41%	55%	22%	21%

Table G12 Percent of Months With Access to Price SSM at Various Parameter Settings All Products, by Country

	Access Rates to Price-Based SSM							
Country	3 Yr Ave	3 Months	End of Yr	No Dep'n	Dollars	No TRQs	MktTst 5%	MktTst 10%
Philippines	44%	39%	44%	44%	45%	77%	26%	25%
Fiji	64%	46%	62%	65%	56%	64%	30%	27%
Ecuador	35%	26%	33%	24%	40%	39%	17%	17%
Senegal	51%	41%	46%	49%	39%	51%	30%	28%
Indonesia	82%	65%	75%	76%	68%	82%	32%	30%
China	13%	7%	11%	13%	13%	35%	6%	6%
Average	45%	34%	42%	43%	41%	55%	22%	21%

Table G13 Percent of Months With Access to Volume or Price SSM Using Different Thresholds. All Countries, by Product

Commodity	Combined Access Rates to Volume and Price-Based SSM+							
	10% Volume Threshold				30% Volume Threshold			
	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*
Banana	40%	40%	40%	40%	31%	31%	31%	31%
Barley	6%	6%	6%	6%	2%	2%	2%	2%
Beans	58%	83%	58%	83%	58%	83%	58%	83%
Beef	28%	28%	32%	32%	19%	19%	22%	22%
Carrots	83%	83%	83%	82%	83%	83%	81%	81%
Chicken	35%	23%	35%	26%	30%	22%	32%	22%
Coconut	52%	52%	87%	87%	50%	50%	68%	68%
Coffee	48%	48%	55%	55%	47%	47%	53%	53%
Corn	60%	60%	64%	64%	59%	59%	63%	63%
Cotton	23%	23%	23%	23%	23%	23%	23%	23%
Garlic	85%	85%	85%	85%	82%	82%	83%	83%
Milk	46%	34%	45%	36%	37%	34%	36%	36%
Mutton	19%	18%	18%	16%	18%	18%	17%	17%
Onions	79%	79%	80%	80%	75%	75%	77%	77%
Palm Oil	19%	19%	19%	19%	8%	8%	8%	8%
Pork	36%	19%	37%	19%	36%	19%	36%	19%
Potato	55%	45%	57%	39%	52%	43%	46%	37%
Powdered Milk	69%	69%	49%	49%	67%	67%	49%	49%
Rapeseed	50%	50%	50%	50%	50%	50%	50%	50%
Rice	63%	62%	61%	61%	59%	59%	57%	57%
Soya Oil	31%	31%	35%	35%	20%	20%	34%	34%
Soybean	53%	53%	77%	77%	43%	43%	44%	44%
Sugar	24%	23%	33%	33%	16%	16%	32%	32%
Tomato	69%	54%	69%	55%	67%	53%	63%	49%
Vege Oil	32%	32%	29%	29%	28%	28%	22%	22%
Wheat Flour	60%	60%	65%	65%	60%	60%	44%	44%
Wheat Grain	14%	14%	14%	14%	14%	14%	14%	14%
Average	48%	45%	50%	46%	44%	42%	45%	42%

+Assuming a 10% threshold for invoking price-based SSM

*Volume trigger set to 5% of average consumption if average import is less than 5% of average consumption

Table G14 Percent of Months With Access to Volume or Price SSM Using Different Thresholds. All Products, by Country

Country	Combined Access Rates to Volume and Price-Based SSM+							
	10% Volume Threshold				30% Volume Threshold			
	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*	3 Yr Ave	3 Yr Adj*	5 Yr Ave	5 Yr Adj*
Philippines	42%	42%	48%	48%	42%	42%	45%	45%
Fiji	65%	64%	65%	64%	60%	59%	59%	58%
Ecuador	48%	40%	48%	39%	46%	38%	43%	36%
Senegal	57%	51%	57%	51%	55%	48%	55%	48%
Indonesia	68%	67%	82%	82%	62%	62%	73%	73%
China	19%	14%	19%	14%	12%	12%	12%	12%
Average	48%	45%	50%	46%	44%	42%	45%	42%

+Assuming a 10% threshold for invoking price-based SSM

*Volume trigger set to 5% of average consumption if average import is less than 5% of average consumption

Table G15 Percent of Months With Access to Volume or Price SSM Using Various Parameter Settings, All Countries, by Product

	Combined Access Rates to Volume and Price-Based SSM							
Commodity	3 Yr Ave	Jul-Jun	6 Months	End of Yr	No Dep'n	Dollars	MktTst 10%	No TRQs
Banana	40%	69%	35%	42%	40%	40%	29%	40%
Barley	6%	35%	6%	6%	6%	6%	0%	6%
Beans	58%	75%	58%	58%	58%	58%	29%	58%
Beef	28%	37%	17%	12%	28%	28%	4%	28%
Carrots	83%	86%	71%	82%	83%	83%	41%	83%
Chicken	35%	47%	28%	29%	35%	35%	10%	56%
Coconut	52%	75%	55%	52%	55%	72%	18%	52%
Coffee	48%	93%	48%	48%	47%	48%	27%	88%
Corn	60%	51%	51%	47%	57%	60%	27%	77%
Cotton	23%	4%	23%	23%	23%	23%	8%	65%
Garlic	85%	80%	83%	87%	73%	85%	37%	85%
Milk	46%	49%	36%	34%	46%	48%	20%	46%
Mutton	19%	46%	14%	20%	19%	24%	12%	19%
Onions	79%	86%	72%	76%	78%	79%	41%	79%
Palm Oil	19%	15%	19%	19%	19%	19%	6%	58%
Pork	36%	47%	27%	23%	36%	43%	13%	61%
Potato	55%	67%	46%	44%	50%	57%	29%	66%
Powdered Milk	69%	63%	50%	51%	69%	58%	21%	69%
Rapeseed	50%	40%	29%	33%	50%	50%	0%	50%
Rice	63%	68%	56%	62%	62%	61%	21%	71%
Soya Oil	31%	44%	26%	23%	31%	31%	13%	61%
Soybean	53%	65%	38%	47%	53%	53%	14%	53%
Sugar	24%	41%	22%	31%	24%	24%	1%	38%
Tomato	69%	77%	55%	56%	67%	65%	17%	69%
Vege Oil	32%	56%	22%	18%	28%	32%	9%	51%
Wheat Flour	60%	72%	54%	54%	60%	46%	17%	60%
Wheat Grain	14%	24%	7%	7%	13%	13%	1%	36%
Average	48%	57%	40%	42%	47%	48%	19%	59%

Table G16 Percent of Months With Access to Volume or Price SSM Using Various Parameter Settings, All Products, by Country

	Combined Access Rates to Volume and Price-Based SSM							
Country	3 Yr Ave	Jul-Jun	6 Months	End of Yr	No Dep'n	Dollars	MktTst 10%	No TRQs
Philippines	42%	53%	40%	42%	42%	45%	23%	74%
Fiji	65%	71%	54%	55%	65%	63%	24%	65%
Ecuador	48%	48%	39%	37%	43%	53%	20%	53%
Senegal	57%	76%	49%	47%	56%	53%	24%	57%
Indonesia	68%	76%	59%	69%	67%	68%	22%	68%
China	19%	29%	13%	14%	19%	19%	3%	44%
Average	48%	57%	40%	42%	47%	48%	19%	59%

Table G17 Percent of Problematic Months Where SSM is Available and Effective Volume vs. Price-based SSM. All Countries, by Product

Commodity	Percent Problematic Months	BASE SCENARIO % of Months SSM		VOLUME SSM ONLY % of Months SSM		PRICE SSM ONLY % of Months SSM	
		Available	Effective	Available	Effective	Available	Effective
Banana	81%	49%	23%	26%	18%	46%	15%
Barley	0%	0%	0%	0%	0%	0%	0%
Beans	94%	64%	18%	51%	0%	60%	18%
Beef	60%	60%	32%	31%	29%	39%	10%
Carrots	62%	84%	35%	44%	22%	84%	34%
Chicken	53%	40%	38%	37%	37%	18%	6%
Coconut	23%	79%	71%	64%	64%	29%	21%
Coffee	0%	0%	0%	0%	0%	0%	0%
Corn	28%	80%	62%	63%	36%	65%	43%
Cotton	0%	0%	0%	0%	0%	0%	0%
Garlic	100%	85%	0%	47%	0%	83%	0%
Milk	55%	76%	32%	51%	32%	71%	3%
Mutton	95%	39%	12%	12%	10%	37%	10%
Onions	75%	87%	59%	54%	25%	83%	52%
Palm Oil	96%	22%	20%	20%	20%	9%	4%
Pork	61%	15%	3%	3%	3%	15%	3%
Potato	25%	79%	74%	54%	46%	74%	63%
Powder Milk	0%	0%	0%	0%	0%	0%	0%
Rapeseed	0%	0%	0%	0%	0%	0%	0%
Rice	39%	83%	44%	34%	19%	83%	33%
Soya Oil	55%	36%	35%	29%	27%	17%	17%
Soybean	82%	77%	74%	68%	68%	56%	13%
Sugar	53%	80%	55%	38%	36%	72%	37%
Tomato	37%	94%	68%	47%	38%	91%	51%
Vege Oil	43%	42%	1%	20%	1%	22%	0%
Wheat Flour	85%	64%	3%	46%	0%	51%	3%
Wheat Grain	12%	0%	0%	0%	0%	0%	0%
Average	49%	64%	37%	39%	24%	55%	23%

Table G18 Percent of Problematic Months Where SSM is Available and Effective Volume vs. Price-based SSM. All Products, by Country

Country	Percent Problematic Months	BASE SCENARIO % of Months SSM		VOLUME SSM ONLY % of Months SSM		PRICE SSM ONLY % of Months SSM	
		Available	Effective	Available	Effective	Available	Effective
Philippines	46%	53%	19%	29%	10%	51%	16%
Fiji	69%	81%	42%	42%	26%	71%	31%
Ecuador	22%	65%	45%	38%	19%	54%	34%
Senegal	64%	73%	47%	54%	31%	61%	27%
Indonesia	43%	93%	76%	60%	59%	84%	37%
China	48%	24%	16%	17%	16%	16%	3%
Average	49%	64%	37%	39%	24%	55%	23%

Table G19 Percent of Problematic Months Where SSM is Available and Effective Various Threshold and Remedy Settings All Countries, by Product

Commodity	Percent Problematic Months	BASE SCENARIO		HIGHER THRESHOLD		VERY HIGH THRESH		HIGH REMEDIES		LOW REMEDIES	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Banana	81%	49%	23%	33%	21%	0%	0%	49%	31%	49%	18%
Barley	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Beans	94%	64%	18%	62%	18%	58%	18%	64%	18%	64%	18%
Beef	60%	60%	32%	24%	19%	22%	17%	60%	33%	60%	25%
Carrots	62%	84%	35%	72%	34%	49%	24%	84%	46%	84%	34%
Chicken	53%	40%	38%	39%	38%	32%	32%	40%	38%	40%	37%
Coconut	23%	79%	71%	79%	71%	64%	64%	79%	71%	79%	64%
Coffee	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Corn	28%	80%	62%	79%	60%	67%	53%	80%	75%	80%	57%
Cotton	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Garlic	100%	85%	0%	85%	0%	67%	0%	85%	0%	85%	0%
Milk	55%	76%	32%	60%	32%	54%	25%	76%	49%	76%	7%
Mutton	95%	39%	12%	17%	11%	16%	11%	39%	15%	39%	12%
Onions	75%	87%	59%	80%	57%	67%	48%	87%	61%	87%	55%
Palm Oil	96%	22%	20%	15%	15%	9%	7%	22%	20%	22%	11%
Pork	61%	15%	3%	3%	3%	3%	3%	15%	3%	15%	3%
Potato	25%	79%	74%	70%	66%	44%	43%	79%	76%	79%	69%
Powdered Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rapeseed	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rice	39%	83%	44%	74%	42%	53%	22%	83%	44%	83%	44%
Soya Oil	55%	36%	35%	21%	20%	18%	18%	36%	36%	36%	32%
Soybean	82%	77%	74%	51%	49%	34%	34%	77%	74%	77%	63%
Sugar	53%	80%	55%	51%	46%	34%	34%	80%	57%	80%	45%
Tomato	37%	94%	68%	85%	64%	68%	51%	94%	68%	94%	60%
Vege Oil	43%	42%	1%	19%	1%	6%	1%	42%	20%	42%	1%
Wheat Flour	85%	64%	3%	61%	3%	41%	3%	64%	3%	64%	3%
Wheat Grain	12%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average	49%	64%	37%	52%	33%	39%	25%	64%	41%	64%	33%

Table G20 Percent of Problematic Months Where SSM is Available and Effective Various Threshold and Remedy Settings All Products, by Country

Country	Percent Problematic Months	BASE SCENARIO		HIGHER THRESHOLD		VERY HIGH THRESH		HIGH REMEDIES		LOW REMEDIES	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Philippines	46%	53%	19%	50%	18%	41%	16%	53%	20%	53%	18%
Fiji	69%	81%	42%	62%	35%	46%	25%	81%	45%	81%	38%
Ecuador	22%	65%	45%	64%	44%	62%	44%	65%	45%	65%	43%
Senegal	64%	73%	47%	62%	47%	47%	36%	73%	58%	73%	41%
Indonesia	43%	93%	76%	54%	50%	34%	34%	93%	76%	93%	63%
China	48%	24%	16%	17%	15%	8%	7%	24%	17%	24%	13%
Average	49%	64%	37%	52%	33%	39%	25%	64%	41%	64%	33%

Table G21 Percent of Problematic Months Where SSM is Available and Effective Various Remedy Caps and Limitations, All Countries, by Product

Commodity	Percent Problematic Months	BASE SCENARIO		% OF BOUND		PERCENTAGE PTS		50% OF BOUND		50 PCTG PTS	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Banana	81%	49%	23%	49%	15%	49%	23%	51%	3%	49%	23%
Barley	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Beans	94%	64%	18%	64%	18%	64%	18%	64%	0%	58%	0%
Beef	60%	60%	32%	60%	26%	60%	32%	60%	14%	60%	32%
Carrots	62%	84%	35%	84%	34%	84%	35%	84%	12%	84%	29%
Chicken	53%	40%	38%	40%	38%	40%	38%	40%	37%	40%	38%
Coconut	23%	79%	71%	79%	43%	79%	71%	79%	7%	79%	71%
Coffee	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Corn	28%	80%	62%	80%	57%	80%	62%	78%	18%	79%	35%
Cotton	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Garlic	100%	85%	0%	85%	0%	85%	0%	98%	0%	80%	0%
Milk	55%	76%	32%	76%	3%	76%	32%	76%	0%	76%	26%
Mutton	95%	39%	12%	39%	11%	39%	12%	43%	4%	43%	11%
Onions	75%	87%	59%	87%	56%	87%	59%	87%	14%	87%	35%
Palm Oil	96%	22%	20%	22%	7%	22%	20%	22%	2%	22%	20%
Pork	61%	15%	3%	15%	3%	15%	3%	15%	0%	15%	3%
Potato	25%	79%	74%	79%	71%	79%	74%	83%	51%	83%	67%
Powdered Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rapeseed	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rice	39%	83%	44%	83%	35%	83%	44%	83%	13%	82%	36%
Soya Oil	55%	36%	35%	36%	32%	36%	35%	36%	21%	36%	35%
Soybean	82%	77%	74%	77%	31%	77%	74%	76%	20%	76%	70%
Sugar	53%	80%	55%	80%	45%	80%	55%	82%	21%	80%	54%
Tomato	37%	94%	68%	94%	62%	94%	68%	83%	28%	94%	53%
Vege Oil	43%	42%	1%	42%	1%	42%	1%	42%	1%	42%	1%
Wheat Flour	85%	64%	3%	64%	3%	64%	3%	64%	0%	64%	0%
Wheat Grain	12%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average	49%	64%	37%	64%	30%	64%	37%	65%	14%	64%	30%

Table G22 Percent of Problematic Months Where SSM is Available and Effective Various Remedy Caps and Limitations, All Products, by Country

Country	Percent Problematic Months	BASE SCENARIO		% OF BOUND		PERCENTAGE PTS		50% OF BOUND		50 PCTG PTS	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Philippines	46%	53%	19%	53%	17%	53%	19%	56%	8%	52%	16%
Fiji	69%	81%	42%	81%	39%	81%	42%	81%	22%	82%	36%
Ecuador	22%	65%	45%	65%	43%	65%	45%	64%	8%	63%	25%
Senegal	64%	73%	47%	73%	37%	73%	47%	73%	12%	73%	32%
Indonesia	43%	93%	76%	93%	55%	93%	76%	93%	33%	93%	72%
China	48%	24%	16%	24%	3%	24%	16%	24%	1%	24%	16%
Average	49%	64%	37%	64%	30%	64%	37%	65%	14%	64%	30%

Table G23 Percent of Problematic Months Where SSM is Available and Effective Various Threshold and Remedy Settings, All Countries, by Product

Commodity	Percent Problematic Months	BASE SCENARIO		JULY-JUNE			6 MONTHS		END OF YEAR		NO TRQS	
		% of Months SSM		Problematic months	% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective		Available	Effective	Available	Effective	Available	Effective	Available	Effective
Banana	81%	49%	23%	83%	60%	50%	49%	18%	44%	13%	49%	23%
Barley	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Beans	94%	64%	18%	94%	80%	9%	64%	7%	64%	18%	64%	18%
Beef	60%	60%	32%	63%	51%	37%	47%	21%	39%	11%	60%	32%
Carrots	62%	84%	35%	64%	92%	44%	76%	27%	80%	30%	84%	35%
Chicken	53%	40%	38%	54%	40%	40%	29%	25%	27%	22%	88%	75%
Coconut	23%	79%	71%	23%	93%	93%	79%	71%	79%	71%	79%	71%
Coffee	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Corn	28%	80%	62%	29%	67%	36%	74%	49%	74%	43%	84%	65%
Cotton	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%
Garlic	100%	85%	0%	100%	83%	0%	85%	0%	85%	0%	85%	0%
Milk	55%	76%	32%	55%	83%	43%	67%	18%	61%	8%	76%	32%
Mutton	95%	39%	12%	95%	65%	36%	29%	8%	35%	11%	39%	12%
Onions	75%	87%	59%	76%	86%	53%	85%	54%	84%	52%	87%	59%
Palm Oil	96%	22%	20%	96%	15%	15%	22%	20%	22%	20%	61%	59%
Pork	61%	15%	3%	62%	36%	23%	9%	3%	6%	3%	65%	25%
Potato	25%	79%	74%	26%	78%	68%	74%	67%	79%	74%	94%	89%
Powdered Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rapeseed	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rice	39%	83%	44%	41%	78%	49%	78%	35%	78%	31%	86%	46%
Soya Oil	55%	36%	35%	61%	47%	42%	29%	29%	24%	24%	74%	73%
Soybean	82%	77%	74%	82%	66%	64%	64%	44%	68%	48%	77%	74%
Sugar	53%	80%	55%	55%	81%	56%	71%	47%	82%	59%	83%	57%
Tomato	37%	94%	68%	38%	85%	70%	77%	40%	94%	58%	94%	68%
Vege Oil	43%	42%	1%	45%	65%	12%	31%	1%	43%	1%	60%	19%
Wheat Flour	85%	64%	3%	85%	89%	3%	62%	2%	59%	2%	64%	3%
Wheat Grain	12%	0%	0%	15%	0%	0%	0%	0%	0%	0%	86%	50%
Average	49%	64%	37%	51%	68%	40%	58%	29%	59%	29%	75%	46%

Table G24 Percent of Problematic Months Where SSM is Available and Effective Various Threshold and Remedy Settings, All Products, by Country

Country	Percent Problematic Months	BASE SCENARIO		JULY-JUNE			6 MONTHS		END OF YEAR		NO TRQS	
		% of Months SSM		Problematic months	% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective		Available	Effective	Available	Effective	Available	Effective	Available	Effective
Philippines	46%	53%	19%	46%	56%	21%	53%	18%	53%	19%	92%	44%
Fiji	69%	81%	42%	71%	82%	43%	70%	31%	73%	32%	81%	42%
Ecuador	22%	65%	45%	22%	60%	37%	62%	35%	62%	41%	76%	52%
Senegal	64%	73%	47%	64%	82%	48%	64%	37%	65%	31%	73%	47%
Indonesia	43%	93%	76%	45%	77%	63%	83%	54%	92%	68%	93%	76%
China	48%	24%	16%	51%	41%	35%	19%	12%	18%	10%	45%	37%
Average	49%	64%	37%	51%	68%	40%	58%	29%	59%	29%	75%	46%

Table G25 Percent of Problematic Months Where SSM is Available and Effective Various Foreign Currency and Other Settings, All Countries, by Product

Commodity	Percent Problematic Months	BASE SCENARIO		DOHA START		MARKET TEST		NO DEP'N		DOLLARS	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Banana	81%	49%	23%	49%	0%	44%	15%	49%	23%	49%	23%
Barley	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Beans	94%	64%	18%	64%	0%	31%	0%	64%	18%	64%	18%
Beef	60%	60%	32%	35%	3%	17%	3%	60%	32%	43%	33%
Carrots	62%	84%	35%	67%	2%	41%	17%	84%	35%	82%	38%
Chicken	53%	40%	38%	0%	0%	17%	3%	40%	38%	40%	38%
Coconut	23%	79%	71%	50%	0%	29%	21%	79%	71%	79%	71%
Coffee	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Corn	28%	80%	62%	19%	5%	45%	35%	79%	63%	78%	62%
Cotton	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Garlic	100%	85%	0%	67%	0%	47%	0%	93%	0%	95%	0%
Milk	55%	76%	32%	0%	0%	32%	1%	64%	32%	65%	32%
Mutton	95%	39%	12%	31%	0%	13%	7%	43%	12%	33%	14%
Onions	75%	87%	59%	54%	1%	50%	33%	83%	56%	87%	49%
Palm Oil	96%	22%	20%	22%	0%	9%	7%	22%	20%	22%	20%
Pork	61%	15%	3%	15%	0%	2%	2%	15%	3%	15%	3%
Potato	25%	79%	74%	60%	9%	43%	39%	79%	74%	83%	76%
Powdered Milk	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rapeseed	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rice	39%	83%	44%	46%	1%	35%	7%	80%	40%	82%	46%
Soya Oil	55%	36%	35%	26%	0%	12%	12%	36%	35%	36%	35%
Soybean	82%	77%	74%	66%	2%	33%	13%	76%	71%	76%	76%
Sugar	53%	80%	55%	68%	4%	17%	1%	79%	53%	70%	58%
Tomato	37%	94%	68%	91%	8%	26%	8%	94%	68%	92%	58%
Vege Oil	43%	42%	1%	0%	0%	7%	0%	42%	1%	34%	1%
Wheat Flour	85%	64%	3%	51%	0%	28%	0%	64%	3%	46%	8%
Wheat Grain	12%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average	49%	64%	37%	40%	2%	28%	12%	63%	36%	61%	37%

Table G26 Percent of Problematic Months Where SSM is Available and Effective Various Foreign Currency and Other Settings, All Products, by Country

Country	Percent Problematic Months	BASE SCENARIO		DOHA START		MARKET TEST		NO DEP'N		DOLLARS	
		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM		% of Months SSM	
		Available	Effective	Available	Effective	Available	Effective	Available	Effective	Available	Effective
Philippines	46%	53%	19%	42%	1%	30%	12%	53%	19%	56%	20%
Fiji	69%	81%	42%	64%	3%	31%	12%	81%	41%	75%	42%
Ecuador	22%	65%	45%	56%	2%	32%	16%	63%	42%	65%	46%
Senegal	64%	73%	47%	0%	0%	36%	16%	70%	46%	67%	42%
Indonesia	43%	93%	76%	78%	6%	28%	10%	91%	72%	85%	78%
China	48%	24%	16%	24%	0%	11%	4%	24%	16%	24%	16%
Average	49%	64%	37%	40%	2%	28%	12%	63%	36%	61%	37%

ENDNOTES

1 JOB(06)/64, G-33 proposal on a Special Safeguard Mechanism for Developing Countries. 23 March 2006

2 Such as the duration of the base period used to establish the import levels that would 'trigger' additional duties; and the 'threshold' that establishes the degree of variation from this base period that would permit the imposition of the safeguard duty.

3 The SSG was established in article 5 of the Uruguay Round Agreement on Agriculture. The new SSM was proposed in part because of the difficulties which developing countries have had in using the SSG.

4 Paragraph 109 of the "Draft Modalities for Agriculture", TN/AG/W/4.

5 The baseline scenario for the price trigger is that outlined in the G-33 proposal of 23 March 2006, JOB(06)/64. The baseline scenario for the volume trigger is based on one of the bracketed options outlined in the chair's Draft Possible Modalities text of June 2006, JOB(06)/199. In this, although the thresholds between ranges were tightened, the volume-based remedies in absolute percentage point terms were effectively doubled. The text however retained the G-33 proposal's parameters for the price-based setting. For consistency, the revised schedule of SSM duties set out in the 2006 draft modalities text was used as the baseline for the simulations on SSM effectiveness.

6 See paragraph 110 of the "Draft Modalities for Agriculture", TN/AG/W/4.

7 Annex 5 of the Agreement on Agriculture (AoA) did provide for some exemptions from this rule under certain special conditions. However, only a few countries availed themselves of such exemption, such as the Philippines, South Korea, and Japan (for a limited period) for rice.

8 Based on the UR Agreement, the starting out-quota or MFN tariff rate for an agricultural product enjoying QRs and other non-tariff measures prior to UR was to be calculated as the percentage difference between the 1986-88 average internal and world prices of the product. For products that were subjected only to ordinary custom duties before the UR, the starting tariffs were supposed to be equivalent to their applied rates as of September 1986. However, these rules were not strictly followed. Some countries, for example, were allowed to adopt so-called "ceiling bindings" through which they arbitrarily set their starting tariffs and excluded these from any reduction throughout the UR implementation period. Others did not properly apply the formula for calculating tariff equivalents of QRs. Many of these instances of "dirty tariffication" were never challenged during the rush to finalise the UR negotiations and thus were legally adopted and accepted as part of the tariff schedules and commitments of the countries concerned.

9 For this reason, TRQs have been alternately called minimum access volumes or MAVs.

10 "The New SSM: A Price Floor Mechanism for Developing Countries", by Alberto Valdes and William Foster, International Centre for Trade and Sustainable Development (ICTSD) Issue Paper No. 1, July 2005.

11 See Footnote 2. Although the use of ceiling bindings allowed some countries to deviate from the established tariffication formula and gave them the additional flexibility not to undertake tariff reductions during the UR, it also disqualified them for availing of SSG privileges for the products concerned.

12 This is a common interpretation of Paragraph 4 of Section 5 (Special Safeguard Provisions) of the UR-AoA which states that volume-based remedies *"may only be levied at a level which shall not exceed one-third of the level of the **ordinary customs duty in effect** in the year in which the action is taken"*.

13 In subsequent proposals, no remedial duties could be imposed if cumulative imports did not go beyond 105 percent of the volume trigger, equivalent to a five percent threshold. Beyond that, SSM duties could be invoked in varying degrees depending on the severity of the surge. For this set of simulations however, thresholds were set to ten percent and 30 percent for purposes of determining the incidence of import volume surges.

14 Import volume surges and price depressions occurring prior to the start of the simulations in January 2000 were not considered even if these could have triggered volume or price-based SSM duties which would have been carried over to the beginning of 2000. Additionally, it was assumed in the simulations that if an SSM duty higher than an existing one became available, it would be immediately imposed as a new SSM remedy and the period of imposition would be reset all over again.

15 In the G-33 proposal, price-based SSM duties could be imposed once import prices fell below the price trigger; i.e., a zero percent threshold. A ten percent threshold would mean that the price-based SSM remedy could be invoked only if the monthly import price fell below the price trigger by more than ten percent.

16 In cases where both a volume and a price-based SSM duty could be imposed in a single month, the fre-quency was counted only as one month.

17 Although the ten percent threshold could be adjusted, it was deemed sufficient to make comparisons between import and domestic prices; i.e. imports landing ten percent cheaper than domestic equivalents would effectively be priced at or near domestic prices if unloading and handling costs, plus wholesale trading margins, were taken into consideration.

18 However, it should be noted that the import data sets available for some countries and commodities covered only a few years and did not make it possible to compute true averages for the preceding five or three-year periods. In such cases, only the years with available import volumes were averaged.

19 It should, however, again be noted that these results may not be conclusive since the data sets often were not sufficient to allow for the computation of complete three-year averages. If annual import or consumption data was available only for the preceding one or two years, only these data points were averaged for purpo-ses of determining the "three-year average". If no historical data was available for the preceding three years, triggers were set to zero. The same procedure was followed in the case of five-year averages, whether adjus-ted or not.

20 As in the case with volumes, the results for price-based SSM remedies must be interpreted with the caveat that the data sets were sometimes not sufficient to allow for the computation of complete three or five-year price averages. If price data was available only for the preceding one or two years, only these data points were averaged for purposes of determining the "three-year average". If no historical data was available for the preceding three years, triggers were set to zero. The same procedure was followed in the case of five-year price averages.

21 It should however be noted here that the baseline simulations in Section 5.2.3, which reflected an overall access rate of 48 percent of total months, used a common ten percent threshold for invoking volume and price-based remedies. In contrast, the simulations on the effectiveness of the SSM applied the more liberal parameter settings proposed by the G-33, which included a 5 percent volume threshold and a zero percent price threshold. This explains the higher 64 percent result.

22 Note that there was a slight increase in the access rate from 64 percent to 65 percent when remedial SSM duties were capped at 50 percent of bound tariffs. This increase resulted from the fact that the level of remedial duties fluctuated more frequently when such a cap on applicable duties was imposed, which in turn led to a more frequent resetting of the 12-month

imposition period for SSM duties and, correspondingly, a slightly larger percentage of months when the remedies could have been invoked.

23 In the simulations, it was assumed that each country would start the Doha Round with its end-Uruguay Round bound rates and reduce these tariffs in equal annual amounts within a ten-year period in accordance with the tariff reduction matrix proposed by the G-20 (Section 3.3.j of the paper). Senegal, being an LDC, was the only country in the study that was exempted from this tariff reduction modality.

24 For example, if a developing country started the Doha Round with a 50 percent tariff for a certain commodity, it would have been required to reduce it by 30 percent over ten years based on the G-20 proposal, or by 1.5 percentage points per year. During the first year of implementation therefore, there would be no SSM duty to impose since the bound tariff would remain at the starting level. In the second year, the maximum SSM duty that could be imposed would have been 1.5 percentage points so as not to exceed the Doha Round starting tariff levels. By the tenth year, the SSM duty would not be able to exceed 15 percentage points, which would have been the total tariff reduction during the ten-year implementation period.

25 The deterioration in access rates mainly arose from the fact that Senegal, being an LDC, was exempted from any tariff reduction and therefore had no differential between its Doha Round starting tariffs and any bound tariff in subsequent years. Under the modality where total tariffs could only revert to Doha Round starting levels, this ironically meant that Senegal could not impose any additional SSM duties such that it effectively lost all access to SSM remedies and correspondingly ended up with a zero effectiveness rate. For the other countries, the declines in access rates can be explained by the fact that the simulation model assumed that the tariff phasedown would take effect at the end of each other; hence, until 31 December of the first year, tariffs would equal Doha Round starting levels, and there would therefore be no SSM duties to impose during that period.

26 Paragraph 100 of the "Draft Modalities for Agriculture" issued by Ambassador Crawford Falconer, Chair of the Committee on Agriculture Special Session on 17 July 2007 as JOB(07)/128. This draft is attached as Annex E.

27 Ibid. Paragraph 105 of the "Draft Modalities for Agriculture".

28 Ibid. Paragraph 103 of "Draft Modalities for Agriculture".

29 Ibid. Paragraph 109 of the "Draft Modalities for Agriculture".

30 Ibid. Paragraph 110 of the "Draft Modalities" text states: "*It does not seem likely that we will easily reach agreement that this [SSM] measure can be applied in such a way that existing Uruguay Round bound rates can also be exceeded (except, perhaps, in the case of least-developed Member countries), as this would have the effect of going backwards*".

31 For the purposes of this Article, "year" refers to the calendar, financial or marketing year specified in the *Schedule* relating to that developing country Member.

32 A shipment shall not be considered for purposes of this subparagraph or paragraph 5 unless the volume of the product included in that shipment is within the range of normal commercial shipments of that product entering into the customs territory of that developing country Member.

33 The ~~reference~~ trigger price used to invoke the provisions of this subparagraph shall, in general, be based on the average monthly c.i.f. unit value of the product concerned, or otherwise shall be based on a ~~an appropriate~~ price that appropriately reflects ~~in terms of~~ the quality of the product and its stage of processing. ~~It~~ The trigger price shall, following its initial use, be publicly ~~specified~~ disclosed and available to the extent necessary to allow other Members to assess the additional duty that may be levied.

34 ~~Where domestic consumption is not taken into account, the base trigger level under subparagraph 4(a) shall apply.~~

35 The headings used in this reference paper are indicative only.

36 A shipment shall not be considered for purposes of this subparagraph or paragraph 5 unless the volume of the product included in that shipment is within the range of normal commercial shipments of that product entering into the customs territory of that developing country Member.

37 The trigger price used to invoke the provisions of this subparagraph shall, in general, be based on the average monthly CIF unit value of the product concerned, or otherwise shall be based on a price that appropriately reflects the quality of the product and its stage of processing. The trigger price shall, following its initial use, be publicly disclosed and available to the extent necessary to allow other Members to assess the additional duty that may be levied.

38 Please note that the covering note of the first instalment of this document applies equally to the second instalment.

39 The increase in the availability of the SSM remedy arose from the fact that the level of remedial duties fluctuated more frequently when a cap on applicable duties was imposed, resulting in a more frequent resetting of the 12-month imposition period for SSM duties. Notably however, the SSM was significantly less effective even though it was more accessible.

40 Most of the Philippine products covered by the study ended the UR with 40 percent tariff rates. Assuming a second-tier reduction rate of 30 percent in the Doha Round spread equally over ten years, the annual reduction would amount to 1.2 percent. In the tenth year, the maximum allowable SSM duty under the proposed modality would be only 12 percent.

41 When using a July-June implementation period, current year tariffs are applied on July-December imports while the succeeding year's tariffs are imposed on January-June imports. In comparison, a calendar year implementation period uniformly uses the tariff for the current year. The shift in tariff rates in the July-June modality may change the frequency of "problematic" months since it could affect the behaviour of import prices plus bound tariffs vis-à-vis domestic prices.

42 Ecuador pegged its local currency, the sucre, to the dollar in March 2000 with a fixed exchange rate of 25,000 sucre to 1US$. The modalities involving foreign currency exchange rates and the use of dollar values therefore affected only imports in 2000, during which currency movements in 1999, when the sucre was not yet pegged to the dollar, were taken into consideration.

43 Most of the commodities covered by the study had end-UR bound tariffs ranging from 20 percent to 50 percent. Limiting SSM duties to 50 percent of bound tariff levels effectively capped applicable remedial duties to between ten percent and 25 percent at the start, and even lower as mandatory annual reductions were applied on bound rates.

44 Only beef, potatoes, chicken and rice could be tested for this adjustment modality since the other commodities did not have any credible domestic utilisation data available. Data on the four commodities were sourced from FAO for 2000 to 2003; 2004 and 2005 annual utilisation figures were assumed to be the same those for 2003.

45 Corn, liquid milk, chicken and wheat were not included in this analysis due to the unavailability of domestic wholesale price data on these commodities.

46 End-UR, and assumed Doha Round starting, bound tariffs were 40 percent for all commodities except powder milk (46 percent) and rice (49 percent).

47 As indicated earlier, domestic price data which were originally supplied as price ranges were converted to absolute monthly price figures by computing the midpoint of the ranges.

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