

Import Surges and the Special Safeguard Mechanism in a Changing Global Market Context

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Introduction

Greater openness to trade can expose agricultural sectors in developing countries to market instability, which can, in turn, depress incentives for investment in domestic market development by private sector actors with limited recourse to risk management instruments. Recognizing this, the Hong Kong Ministerial Declaration (WTO 2005) called for the establishment of a new Special Safeguard Mechanism (SSM) to be used by developing countries. Negotiations on the modalities for the SSM have been particularly difficult, with some countries arguing for the mechanism to be effective and easy to use, while others are concerned that, without significant constraints, the SSM could be used in ways that unnecessarily disrupt trade.

These negotiations took place during a period of historically low agricultural market prices where further price depressions associated with significant increases in import volumes ("import surges") were deemed to be particularly harmful. However, since the release of the draft modalities texts in 2008 (WTO 2008 and 2008a), the global market context has changed significantly. Following an extended period of relatively low and stable global market prices until the early 2000s, prices started to increase. They rose sharply in 2007–08, then fell back somewhat during the next two years before peaking again in 2011. Since 2011, prices have followed a downward trend but remain well above the levels of the 1980s and 1990s (FAO 2014). Less well known, but perhaps more interesting in the context of this chapter, is that, while global food prices have risen significantly since the 1990s, import volumes to an aggregate of 103 food-importing developing countries² have also risen rapidly (FAO 2014a and Konandreas in this volume).

The changing global market context therefore creates a very different scenario with respect to expectations regarding the incidence of surges: both prices and aggregate import volumes have been increasing significantly. This raises questions about how the relevance of – and potential recourse to – an SSM may have changed during this period. In addressing such questions, this chapter summarizes the new FAO analysis (FAO 2014a), which revisits and updates the FAO's previous analyses (FAO 2005) on import surges and the design of the SSM, highlighting elements that could influence future negotiations.

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- 1 The views expressed in this chapter are those of the authors and do not necessarily reflect the views of the Food and Agriculture Organization of the United Nations (FAO).
 - 2 The developing countries included in this aggregate were selected for analysis by the FAO (2005) on the basis of their inclusion in the 2004 listings of NFIDCs and/or LIFDCs and/or LDCs. The analysis was conducted for 15 commodities across each of the countries.

1. Identifying import surges

The term “import surge” has been used to highlight two types of potential shocks to domestic agriculture sectors that may arise from increased openness to trade: (a) significant increases in volumes of imports from one year to the next; and (b) depressions to domestic market prices that may result from increased connectivity to global market prices. As previous FAO work has demonstrated (FAO 2006, 2006a), import surges can be the result of factors internal to the domestic economy, such as domestic production shortfalls due to climatic events – that do not necessarily imply negative impacts – or they can be the result of external, global market factors that can be potentially disruptive to domestic agriculture. The analysis presented in this chapter reflects the incidence of surges but should not be taken as implying that all surges will necessarily have negative impacts, nor that a safeguard remedy should necessarily be applied – or indeed is likely to be – in all identified cases. There is no agreed definition of an import surge or of a methodology for assessing and measuring import surges. The definitions tend to be based *inter alia* on differing thresholds, with an import surge said to have occurred when the actual imports surpass that threshold (FAO 2005). The selection of the threshold can have a significant effect on the determination of the existence of an import surge.

1.1 Volume surges

A comparison of the moving average of the previous three years' imports plus 30% (MA3+30) and the moving average of the previous three years' imports plus one standard deviation (MA3+1sd) demonstrates the importance of defining an appropriate threshold level.³

Table 1: Identified surges MA3+30

	Total	Ten Year Periods			Five Year Periods	
	1984-2013	1984-1993	1994-2003	2004-2013	2004-2008	2009-2013
Maize	504	196	189	119	73	46
Rice	470	186	192	92	54	38
Wheat	271	108	87	76	43	33
Bovine meat	663	208	238	217	142	75
Ovine meat	553	152	201	200	139	61
Pigmeat	741	217	306	218	145	73
Poultry meat	732	228	291	213	126	87
Butter	548	178	182	188	112	76
Cheese	536	140	210	186	118	68
SMP	594	130	223	241	125	116
WMP	487	105	199	183	104	79
Palm oil	409	190	176	43	35	8
Rapeseed oil	303	148	128	27	9	18
Soybean oil	352	177	152	23	13	10
Sunflower oil	275	76	147	52	30	22
Total	7438	2438	2921	2078	1268	810

Note: calculation for 103 countries. Number of identified surges = cases where actual volume exceeds threshold

3 The MA3+30 has been widely used in previous analyses, and there is an apparent preference for this type of threshold in the negotiations to date. The MA3+1sd is considered to be more accurate with regard to the level of variability in imports.

Table 2: Identified surges MA3+1sd

	Total	Ten Year Periods			Five Year Periods	
	1984-2013	1984-1993	1994-2003	2004-2013	2004-2008	2009-2013
Maize	568	181	202	185	106	79
Rice	779	249	287	243	123	120
Wheat	649	205	218	226	138	88
Bovine meat	900	266	297	337	187	150
Ovine meat	618	168	209	241	151	90
Pigmeat	963	237	355	371	201	170
Poultry meat	1066	270	371	425	200	225
Butter	635	191	206	238	136	102
Cheese	806	191	285	330	172	158
SMP	586	141	208	237	113	124
WMP	545	126	210	209	119	90
Palm oil	525	173	210	142	78	64
Rapeseed oil	220	121	77	22	7	15
Soybean oil	394	162	174	58	33	25
Sunflower oil	246	65	121	60	31	29
Total	9500	2746	3430	3324	1795	1529

Note: calculation for 103 countries. Number of identified surges = cases where actual volume exceeds threshold

On the basis of MA3+30, the highest incidence of surges occurs for meat (bovine, pig and poultry all with incidences of greater than 20% of possible cases), to a slightly lesser extent in dairy products (all greater than 15%), 10% or lower in most oilseeds, and with a mixed pattern in cereals. Across time periods, a higher incidence of import surges was observed in 1994–2003 than in 1984–93 (mainly meat and dairy), while there was a reduction in the remaining groups (mainly cereals and oilseeds).

By contrast, all but two of the commodity groups (butter and SMP) saw a falling incidence, often significant, from the period 1994–2003 to 2004–13. Looking at the last decade (2004–13), it is observed that the incidence of surges in all commodities (except rapeseed, which was already low) fell significantly in 2009–13 when compared to 2004–08, with total surges in 2009–13 at approximately two thirds of the 2004–08 level.

Comparing the two different thresholds, the number of surges identified with MA3+1sd is higher and, while the patterns across commodity groups and periods are similar to those observed with MA3+30, the extent to which the number of surges falls off in the most recent five-year period is much less significant. Some interesting differences include the higher incidence of surges in wheat (21% (MA3+sd) versus 9% (MA3+30) of possible cases), the lower incidence in rapeseed and sunflower oil, and poultry and SMP having a higher incidence in 2009–13 than in 2004–08.

In understanding the differing incidences across the two threshold “definitions”, it is necessary to investigate the relationship between the actual levels of imports and the thresholds by examining specific country/commodity cases. Two examples highlight the differences. Typical of many of the analysed country/commodity cases, imports of palm oil to Pakistan have risen relatively constantly

since the early 1990s, with very limited variation. As a result, the MA3+30 remains significantly above the actual level of imports and no surges have been “identified”. By contrast, the MA3+1sd reflects the low level of variability, maintaining a course similar to the import curve. However, in “smoothing” the trend, it picks up a number of surges.

Imports of rice to Indonesia have been more volatile with an increasing, albeit variable, upward trend until 2000 followed a declining trend with significant inter-year variability during the 2000s. As a result, the MA3+1sd, reflecting the variability, sits above the MA3+30. However, in this case the MA3+30 only picks up one additional surge because of the year-to-year variation.

Figure 1: Palm oil imports – Pakistan (000 tons)

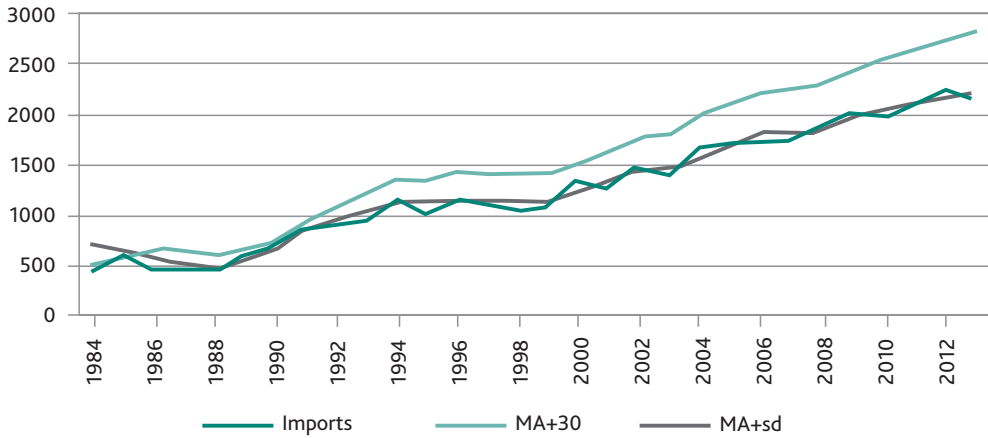
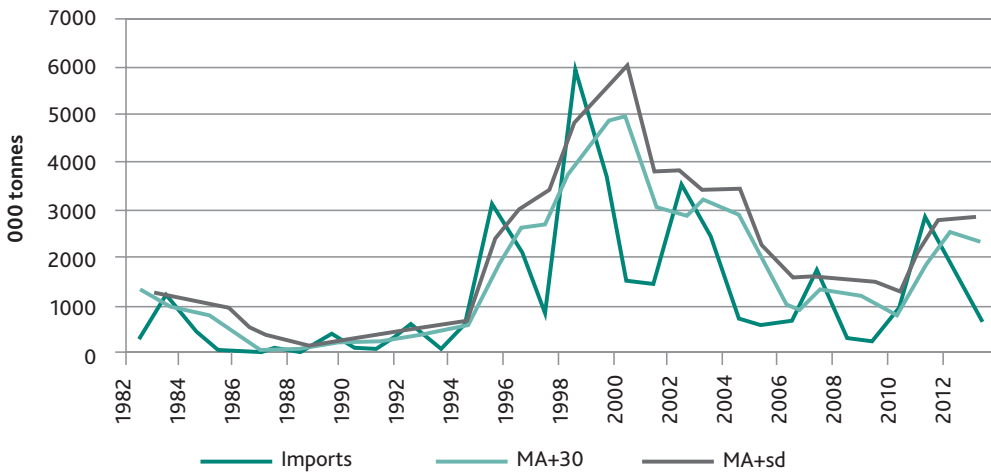


Figure 2: Rice imports – Indonesia (000 tons)



The analysis using two different thresholds helps demonstrate that the pattern of imports is a key variable in determining the incidence of surges under different threshold choices. Where imports rise relatively constantly, the MA3+1sd is more sensitive to identifying surges; whereas, for imports that follow a more variable trend, the MA3+30 identifies a greater number of surges.

The level at which the threshold is set also differentially affects the identification of surges across commodities and countries. WTO (2008) and WTO (2008a) refer to thresholds of 110%, 120% and 140%, in addition to the 130% applied in the analysis above.

Table 3 confirms the fall in incidence as the threshold is increased, but also reveals that the distribution of surges across countries becomes more concentrated with this increase, with 16.2% of surges observed in the top 10 countries (by incidence of surge) at the 140% threshold compared to 13.6% falling in the top 10 countries at the 110% threshold.

Table 3: Incidence of surges under different thresholds

Threshold	Top 10%	Total surges	%
110	1,371	10,086	13.6
120	1,107	7,416	14.9
130	935	5,884	15.9
140	791	4,873	16.2

Table 4: Incidence of surges in countries falling into different country groupings

Group Region			
G33	76	Africa	79
SVEs	56	Eastern Asia	89
LDCs	77	Southern Asia	89
RAMs	74	South-East Asia	74
NFIDCs	66	Caribbean	57
Total	74	Total	74

Table 4 depicts the average incidence of surges in countries falling into different country groupings⁴ and geographical areas. It is notable that Small, vulnerable economies (SVEs) observe significantly fewer surges on average, with the Caribbean as a geographical grouping also reflecting that lower average number. The relative sensitivity of the SVE group to the increasing threshold level (see FAO 2014a) also indicates that, although the incidence of surges identified is at a comparable level to the group as a whole at low-level thresholds, the proportion of surges drops off more rapidly when the threshold level increases. This suggests that the depth of the surges maybe lower on average in this country group and therefore less likely to be defined as surges at the higher threshold levels.

⁴ Given the sample of countries selected for analysis (NFIDCs, LIFDCs and LDCs listed in 2004), the countries included in the groupings may not be fully representative of all the countries in these negotiating groups.

1.2 Price depressions

Previous analyses explored the use of both historical reference prices and different forms of moving averages. Given the significant upward shift in price levels over the past decade, the use of historical reference prices (such as 1984–86 averages) is now largely irrelevant. The incidence of price depressions over the thirty-year period was therefore investigated first by comparing a three-year and a five-year moving average and then by applying different threshold levels to the MA3 (MA3x90% and MA3x85%). In the absence of comprehensive data sets on domestic Cost Insurance and Freight prices, it is not possible to undertake the analysis at the country level. Following the approach adopted by Sharma (2006,) key international market prices were used as a proxy. This information was updated to 2011 using FAOSTAT data.

Table 5: Identified price depressions by commodity and threshold level

Products	100%		90%		85%	
	MA-3	MA-5	MA-3	MA-5	MA-3	MA-5
Wheat	17	15	9	8	6	5
Wheat flour	15	14	5	8	3	4
Maiz	12	11	5	7	3	4
Rice,milled eq.	14	13	8	9	5	5
Sugar, raw	13	16	7	9	6	7
Sugar, refined	12	13	6	10	6	7
Bovine Meat	13	13	3	3	0	1
Ovine Meat	7	7	5	7	0	1
Pig Meat	10	12	7	8	3	5
Poultry Meat	12	13	5	8	2	3
Butter	14	12	6	7	3	7
Cheese	13	10	4	5	0	2
SMP	13	10	7	7	5	3
WMP	12	12	3	4	1	0
Palm Oil	11	11	7	9	5	7
Rapeseed Oil	10	10	7	7	5	6
Soybean Oil	9	10	6	8	4	6
Sunflower Oil	10	9	6	7	5	5
Total	217	210	106	131	62	78

The total number of depressions identified in the MA3 case falls by more than half from 217 at the 100% threshold to 106 at the 90% threshold and then by almost half again to 62 at the 85% threshold. The declines for the MA5 are more gradual. These patterns are observed for most products represented in the Table. With regard to the incidence of price depressions across time, there is a significant reduction in the number of identified depressions between 1983–2003 and 2004–11. In comparison to the 102 incidences recorded in the 21 years to 2003, only four cases (wheat, butter, SMP and WMP) are recorded in the 8 years between 2004 and 2011.

Table 6: Incidence of price depressions 2004–11 compared to 1983–2003 (MA3*90% threshold)

Products	Total	1983-2003	2004-2011
Wheat	9	8	1
Wheat flour	5	5	0
Maiz	5	5	0
Rice,milled eq.	8	8	0
Sugar, raw	7	7	0
Sugar, refined	6	6	0
Bovine Meat	3	3	0
Ovine Meat	5	5	0
Pig Meat	7	7	0
Poultry Meat	5	5	0
Butter	6	5	1
Cheese	4	4	0
SMP	7	6	1
WMP	3	2	1
Palm Oil	7	7	0
Rapeseed Oil	7	7	0
Soybean Oil	6	6	0
Sunflower Oil	6	6	0
Total	106	102	4

2. Implications for the SSM

The incidence of "import surges" has changed significantly since the early 2000s, reflecting the change from a context of low and relatively stable prices to the new market context of higher and possibly more volatile prices. The incidence of volume surges has fallen significantly in all commodity groups and on average across the 103 developing countries on which the analysis was based. Furthermore, the incidence of price depressions fell to zero in most commodity groups between 2004 and 2011. While the sharp fall in the incidence of price depressions is unsurprising during a period in which prices rose significantly, the fall in the incidence of volume surges does not reflect a reduction in import volumes. Indeed, far from being the result of lower levels of imports (or lower rates of increases in imports), the reduced incidence of volume surges was identified for a period in which imports of many commodities by many food-importing developing countries had increased significantly, but at a more constant rate. Under such conditions, the relative importance of a volume trigger *vis-à-vis* a price trigger in providing the justification for the application of a remedy increases, as well as the rationale for cross-checks between increases in import volumes and price depressions, become weaker.

The analysis also demonstrates the sensitivity of the incidence of surges both for the type of threshold and for the level of that threshold. A threshold based on a moving average plus a certain percentage is likely to be relatively insensitive to volume surges where imports grow relatively constantly, whereas one reflecting limited variability, such as the MA3+1sd, may be more effective. Where there is greater

volatility in import levels, the MA3+30 is, however, likely to be more effective. Such conclusions carry through to the design of the SSM in that the choice of the trigger level will significantly affect the effectiveness of the mechanism. Confirming previous analyses, the number of incidences of price depressions appears to be more sensitive to the level of the threshold than the incidence of volume surges is. This suggests that particularly careful consideration is required in setting of a price trigger within the mechanism.

While introducing differentiation into the mechanism may be problematic, consideration could be given to the use of different trigger levels for each country group. The analysis suggests that import patterns, and hence the effectiveness of different trigger levels, can differ quite significantly depending on the country group. Given their relatively high reliance on food imports as a proportion of total consumption, surges in some LDCs or SVEs are unlikely to create significant deviations from the moving average; however, the potential for negative ramifications still exists. For such countries, a more sensitive (lower) volume trigger may therefore be appropriate.

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