

Outline of the research project on Distortions to Agricultural Incentives

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Summary

The vast majority of the world's poorest households depend on farming for their livelihood. In the past their earnings were often depressed by pro-urban and anti-agricultural biases of their own country's policies. While progress has been made over the past two decades by numerous developing countries in reducing those policy biases, many trade-reducing price distortions remain intersectorally as well as within the agricultural sector of low-income countries.

This project seeks to understand the extent of and reasons behind that transformation. It will begin by compiling new estimates of protection over the past half century, and then use them in addressing such questions as the following: Where is there still a policy bias against agricultural production? To what extent has there been 'overshooting' in the sense that some developing country food producers are now being protected from import competition, following the examples of earlier-industrializing Europe, then Japan, and then Korea and Taiwan? What are the political economy forces behind the more-successful reformers and how do they compare with those in less-successful countries where distortions to agricultural incentives remain? How important have been international forces (IFI conditionality, GATT rounds, regional integration agreements, WTO accession, globalization of supermarkets and other firms along the value chain) relative to domestic political forces in bringing about reform during the past two decades, as compared with the earlier decades analyzed by Krueger, Schiff and Valdes (and others) in the 1980s? What explains the pattern of distortions within each country's agricultural sector? What can be done to accelerate reductions in the agricultural protectionist policies of high-income countries that are harmful to poor farmers in developing countries? What policy lessons can be drawn for developing countries from those differing experiences to ensure better growth-enhancing and poverty reducing outcomes from own-country reforms in the future, including less 'overshooting' to a protectionist regime?

The first stage of this project will address these questions through a series of national country studies in Africa, Asia, Eastern Europe/CIS, and Latin America, leading to a set of four regional volumes. They will be supplemented with similar analytical narratives of policy trends in high-income countries, and with a CGE-based empirical analysis, so as to get a better global picture of not only the reasons behind the evolution of distortions to agricultural incentives but also of their consequences for markets, national economic welfare, and the earnings of farmers. Each country/regional study will conclude by examining the most politically feasible reform options for that economy, drawing on its past history and lessons from the more-successful of the other countries examined in the project. Those first-stage studies will then provide the basis for the second stage of this project, involving more in-depth political econometric analyses across countries and over time as well as CGE-based analyses of the poverty consequences of current and alternative policy regimes.

Distortions to Agricultural Incentives

The issue

The vast majority of the world's poorest households depend on farming for their livelihood, as would many of the rest had prospects in agriculture not been so bleak as to force them into non-farm activities in search of a higher income. Earnings from farming have been depressed in low-income countries partly because own-country policies typically have had a pro-urban, anti-agricultural bias, and partly because richer countries (including some developing countries) assist and protect their farmers with import barriers and subsidies. Numerous developing country governments have made considerable progress over the past two decades in reducing their own sectoral and trade policy distortions (World Bank 2003, Ch. 3; Hoekman and Winters 2004), and many of them now believe high-income countries should reduce their remaining protectionism that harms developing country exports of farm (and textile) products. Indeed they are calling for such commitments on farm policies in the WTO's current round of multilateral trade negotiations (the Doha Development Agenda) before they will consider offering any further reform commitments of their own.

New research from the World Bank reported in Anderson, Martin and van der Mensbrugghe (2006a,b) confirms earlier findings (e.g. by Anderson et al. 2001) that the agricultural protectionist policies of high-income countries harm many developing countries – including some net food-importing ones such as those focused on cotton exports (Anderson and Valenzuela 2006). That new research using the Linkage Model, along with similar research using the GTAP Model (Anderson and Valenzuela 2005), also suggests full global liberalization of merchandise trade would raise value added in agriculture in most developing country regions (except South Asia, where job growth for unskilled rural labor would expand more in labor-intensive manufacturing and service sectors).

However, to wait for high-income country reform to solve the problem of rural poverty in developing countries is unwise for at least two reasons. First, past history suggests such reform will be slow in coming. True, the GATT's Uruguay Round Agreement on Agriculture helped to stop the growth in agricultural protection, but it did not deliver significant cuts in support to farmers (OECD 2006). Although more of that support is to some extent 'decoupled' from production than was the case in the 1980s, substantial unilateral agricultural liberalization by high-income countries has not been forthcoming other than in Australia and New Zealand. In the US, for example, the most recent five-year farm bill was a step backwards from the previous regime which at least sought to re-instrument protection towards less trade-distorting measures. Even the much-hyped 2003 reforms of the EU's Common Agricultural Policy (CAP) promise to reduce farm supports only very slightly for the EU-15, according to the OECD (2004). Nor have other regional integration agreements been very successful in reducing farm protection, including the recent enlargement eastwards of the EU: that has led to the

raising rather than lowering of farm protection in the ten new central and east European member states, and to trade diversion at the expense of many developing country farmers.

The second reason not to wait is that, even if all agricultural subsidies and import tariffs were to be eliminated globally, the Bank's latest research suggests the farm policies of high-income countries would be responsible for less than half the welfare gains to developing countries: the majority of those static gains would come from eliminating developing countries' agricultural tariffs (although it varies a lot by country – see first column of Table 1).¹ Full merchandise trade reform globally also would lead to almost as much South-South as South-North trade growth (Anderson, Martin and van der Mensbrugge 2006b, Table 8).² Hence for developing countries to postpone own reform would be to forego a major opportunity to boost theirs and neighboring economies. It would be doubly wasteful if, by being willing to commit to reform in that way, they would be able to convince high-income countries to reciprocate by signing on to a more-ambitious Doha agreement. Moreover, the consensus from econometric work is that freeing up markets in this way also yields dynamic gains that would be growth enhancing and poverty alleviating for developing countries.³

What can be done to encourage developing countries to further reform their sectoral and trade policies? One way is to provide greater policy transparency. The WTO's Trade Policy Review Mechanism (TPRM) describes policy changes for each developing country every six or so years (or four years for the largest economies). Another way is to offer specific advice based on a diagnostic study. For least developed countries the Integrated Framework's Diagnostic Trade Integration Study (DTIS) process builds on TPRM and related reports to provide such action plans for policy and institutional reform and to list investment and technical assistance needs. The IF process may well be extended to a broader range of low-income countries if the proposed 'aid for trade reform' initiative (Hoekman 2005, Hoekman and Prowse 2005) is taken up as an outcome of the Doha round.

Both processes (TPRM and IF) could be more effective if they had access to empirical research findings on the extent, causes and effects of policy evolution in the country in question relative to other comparable countries with more or less successful reform histories. That type of analysis has been provided in a consistent way for almost 20 years by the Secretariat of the OECD (2005) for developed countries plus Korea, Mexico and some of Europe's transition economies, in what are now called Producer Support Estimates (PSEs). No such comparable series has been generated for long periods for other developing countries since the Krueger, Schiff and Valdes (1988) study which covered the 1960-1985 period for 17 developing countries (apart from a nine-year update for the Latin American countries in that sample by the same country authors, and a comparable study of 7 central and eastern European countries – see Valdes 1996,

¹ Those estimates take into account the fact that the EU and some other high-income countries provide greater market access to some developing countries via various non-reciprocal preferential trading arrangements, such as the Everything But Arms initiative aimed at giving least-developed countries tariff- and quota-free access to EU markets, the Cotonou agreement that gives ACP countries non-reciprocal preferential access to the EU, and the AGOA agreement that gives Africans duty free access to US markets.

² This story remains true when services markets also are liberalized, according to two recent studies (Dihel 2004, Anderson and Valenzuela 2005).

³ See, e.g., Winters, McCulloch and McKay (2004), Dollar and Kraay (2004) and Winters (2004). For a survey of these and many other virtues of trade liberalization, see Anderson (2004).

2000).⁴ An exception is a new set of estimates of nominal rates of protection for a few key farm products in China, India, Indonesia and Vietnam since 1985 (Mullen et al. 2006). The OECD Secretariat also plans to release PSEs for Brazil, China and South Africa as well as several more East European countries in 2006. The present project will complement those two institutions' efforts by building on them and providing similar estimates for other significant economies, especially low-income ones.⁵ The purpose of this new project is to undertake such research with a particular focus on how policies have been and are affecting agricultural incentives and thereby rural poverty. Primarily that involves developing country case studies but, to fully draw lessons from history, and to better assess the prospect for export opportunities in high-income countries, it is necessary to supplement those developing country studies with analyses of the experiences of higher-income countries.

Background and previous studies

Historically, countries have tended to gradually change from taxing to subsidizing agriculture increasingly relative to other sectors in the course of their economic development -- although less so, and at a later stage of development, the stronger a country's comparative advantage in agriculture (Anderson, Hayami and others 1986; Lindert 1991). Hence at any point in time farmers in poor countries tended to face depressed terms of trade relative to product prices in international markets (notwithstanding some assistance via subsidies for fertilizer, credit or irrigation – Gulati and Narayanan 2003),⁶ while the opposite was true for farmers in rich countries (Anderson 1995). Again the exceptions were rich countries with an extreme comparative advantage in agriculture (Australia, New Zealand) and poor countries with an extreme comparative disadvantage in agriculture (South Korea, as with Japan earlier, and some oil-rich states particularly in the Middle East). Poor-country farmers also were disadvantaged by an anti-rural bias in public investments in infrastructure and human capital (education, health, agricultural R&D), and sometimes also by having to effectively finance urban consumer food subsidy programs (Byerlee and Sain 1986; Pinstrup-Andersen 1988). Within the agricultural sector of each country, import-competing industries tended to enjoy more government support than those that were more competitive internationally (Krueger, Schiff and Valdes 1988; Herrmann et al. 1992; Thiele 2004). The Krueger et al. study also reveals that, at least up to the mid-1980s, direct disincentives for farmers such as agricultural export taxes were less important than

⁴ See also Krueger, Schiff and Valdes (1991), Krueger (1992), Schiff and Valdes (1992a,b) and Bautista and Valdes (1993). The chapters on Ghana and Sri Lanka have protection estimates back to 1955, as does the study by Anderson, Hayami and others (1986) for Japan, Korea and Taiwan (and much earlier in the case of rice).

⁵ A joint initiative between those two institutions plus the World Bank, FAO and USDA was launched in early 2004 to ensure cooperation and information sharing in this type of analysis.

⁶ The most extreme cases in the 20th century of anti-agricultural industrialization have led to not just impoverishment but to massive deaths: 15-20 million in the Soviet Union in the early 1930s (Conquest 1986), 17-30 million in China in 1959-61 (Lin 1990; Li and Yang 2005), and up to 1 million in North Korea 1995-2000 (Goodkind and West 2001). On the economic causes of these and other famines, such as the Irish potato famine of 1845-51 (1.1 million), the Bengal famine of 1943 (3 million) and the Ethiopian famine of 1984-85 (up to 1 million), see Sen (1981) and Ravallion (1997). A comprehensive listing that also includes war deaths is provided by White (2005).

indirect disincentives in the form of import protection for the manufacturing sector or overvalued exchange rates, both of which attracted resources away from agricultural industries producing tradable products.

The current negotiations have brought to prominence a new force for agricultural protectionism in poor developing countries. This is based on the notion that agricultural protection is helpful and needed for food security, livelihood security and rural development. It has contributed to a situation where agricultural protection may be rising in poor countries such as India, even while non-agricultural protection is falling sharply. This view has succeeded in embedding an entirely new concept of “Special Products” into the multilateral trading system, despite the fact that such policies may worsen poverty and the food security of the poor.

This pattern of distortions to incentives is very wasteful from a global viewpoint, and detrimental to the vast majority of the world’s poorest people who are small farmers in developing countries whose real incomes are lowered by those policies (Table 2). Currently less than 15 million relatively wealthy farmers in developed countries, with an average of 78 hectares per worker, are being helped at the expense of not only consumers and taxpayers in those rich countries but also the majority of the 1.3 billion relatively impoverished farmers and their large families in developing countries who on average have to earn a living from just 2.5 hectares per worker (Table 3). And the evolution from taxing to subsidizing farmers as countries develop suggests that, left unchecked, agricultural protectionism would continue to spread to newly industrializing countries in the decades ahead as governments sought to protect domestic producers from import competition as the farm sector came under pressure to shrink in relative terms and, eventually, in terms of absolute numbers of people engaged.

Such a prospect contributed to the resolve of several groups in the 1980s to try to counter those political forces. For example, agricultural-exporting countries formed the Cairns Group and succeeded in ensuring that GATT members included an agreement on agricultural trade and subsidy reform in the Uruguay Round outcome. Over the same period, international financial institutions made a more concerted effort to encourage developing countries to reduce unilaterally their distortions against agriculture. Accession to preferential trading agreements and to the WTO, and the demise of communism, have helped in some cases too.

In Europe’s transition economies, assistance to farmers fell in the early 1990s but so did assistance to non-farm sectors, so more analysis is needed before it is clear whether farmers have been receiving more or less government assistance than other producers since the reforms began in the early 1990s. For those transition economies that joined the European Union in 2004 (denoted by a * in Table 4), in all cases except Slovenia their 2001-03 levels of farm protection were 30 per cent or more below the EU-15 average. Those farm protection levels therefore will rise substantially over the accession phase-in period of the next decade unless the EU’s Common Agricultural Policy is reformed drastically during that time. Meanwhile, the protection of manufacturing and service sectors will fall as those countries become part of that customs union. And the same is likely to be true in at least Bulgaria and Romania – and in Turkey (see bottom of Table 4) – as they aspire to accede to the EU in subsequent membership expansions.

What about in developing countries? For many agricultural-exporting developing countries the anti-agricultural bias of their own policies allegedly has been reduced in all three dimensions identified by Krueger, Schiff and Valdes (1988): direct taxes on farm exports, indirect taxation of the farm sector via manufacturing protectionism (Lerner's Symmetry Theorem), and overvalued exchange rates which discourage production of all tradables relative to nontradable goods and services.⁷ Some analysts even suggest the bias against agriculture has disappeared, according to their national general equilibrium analyses (e.g. Jensen, Robinson and Tarp 2002).⁸ However, there is plenty of piecemeal evidence to suggest it persists in many poor countries, including via informal taxes by local and provincial governments as in China (Lin et al. 2003) and various countries in Sub-Saharan Africa (Townsend 1999; World Bank 2002). Meanwhile, numerous more-advanced developing countries are moving from an anti-agricultural bias to not a neutral policy regime but – as in earlier industrializing countries – to one which is increasingly pro-agricultural, at least for some import-competing farm industries. This is in response to the rapidly widening gap between farm and non-farm household incomes that often accompanies rapid industrialization, even though farm incomes might be rising in absolute terms (Hayami 2005). That can be just as welfare-reducing as an anti-agricultural bias, and may not even be poverty alleviating (see the analysis by Warr (2005) of Indonesia's recent rice import ban). In a few economies such as Korea and Taiwan, plus some oil-rich countries in the Middle East, farmers were already very generously assisted in the 1980s and that support appears to have continued. For Korea direct assistance to farmers has fallen slightly since the mid-1990s as a result of Uruguay Round commitments (see final row of Table 4), as it has in Taiwan in response to demands from WTO members during Taiwan's accession negotiations; but, if manufacturing protection has fallen more in those economies over the past decade, then their bias toward agriculture may still have increased.

What do available data from Purdue University's Global Trade Analysis Project (GTAP, the most detailed and widely used protection database in the world) say about current distortions? As of 2001, the extent of tariff intervention in developing countries was even greater in agriculture than not only other primary sectors but also manufacturing (although less so than in high-income countries), according to that source (Table 5(a)). However, while much care has gone into representing in that database the agricultural policies of high-income countries, thanks to the laborious efforts of the OECD Secretariat, there has not been a similar provider of such public goods for developing countries (apart from the OECD's recent calculations for some East European countries and for Brazil and China – see OECD 2006). The GTAP database instead has had to rely just on applied tariff rates to represent distortions to agricultural prices in developing countries, the most recent set, for 2001, being provided to GTAP by a CEPII (Paris)/ITC (Geneva) project. The product of this joint effort, known as MACMaps, is a HS6 tariff level detailed database on bilateral protection that integrates trade preferences, specific and compound tariffs and a partial evaluation of non-tariff barriers in the form of

⁷ For a recent analysis of the effect of changes in exchange rate misalignment on farmer incentives in China and India, see Cheng and Orden (2005).

⁸ On the relationship between this GE analysis and the methodology used by Krueger, Schiff and Valdes, see Bautista, Robinson, Wobst and Tarp (2001).

tariff rate quotas (TRQs).⁹ Even though this is a vast improvement over earlier protection estimates provided by GTAP, shortcomings remain. One is that there may be ‘water’ or unused protection in such tariffs (Martin and Wang 2004). It is also possible that nontariff import barriers such as quarantine restrictions or food quality standards exist to such an extent that the applied tariff understates the actual protection level substantially. Indeed recent measures of the Trade Restrictiveness Index suggest that there is more protection of agricultural markets from import competition from nontariff measures than from tariffs (Table 5(b)). Another problem with standards is that they may be so high in developed countries relative to those in developing countries as to make it prohibitively expensive for developing country exporters to jump over (Baldwin 2001.) Also, production or export taxes or non-tax export restrictions, or exchange rate distortions – ignored in the GTAP database – may be still in place.¹⁰ A third is that value added taxes on agricultural products (and excise taxes on alcoholic beverages and tobacco) may be applied at the border on imported products but not (or not as fully) on domestically produced like products.¹¹ A fourth is that duty drawbacks may be significant, as was found for China (Inachovichina 2004). Also evident in China are informal (indeed illegal) taxes in cash or kind levied on farmers by local governments that may discourage production (Lin et al. 2002). Moreover, few developing country subsidies, including for farm inputs and to food consumers, are captured in the GTAP database. The present project’s estimates of distortions to agricultural prices will provide an indication of how close the GTAP tariff and subsidy data come to capturing that fuller set of measures in developing countries.

Questions to be addressed in this research project

Three sets of questions are to be addressed in this project: those relating to the changing *extent* to which policies are distorting agricultural incentives, those relating to the *causes* of those policy choices by different countries, and those relating to the *effects* of each country’s distortions and of politically feasible reforms on agricultural markets and incomes in their own and other countries. The first stage of the project, during 2006, will focus on the measuring the changing extent of distortions for each country being studied, and preparing an analytical narrative to explain evolution of those distortions. More-formal analysis of the causes and effects of those distortions not only over time but

⁹ More information on the MAcMaps database is available in Bouët et al. (2004) and at <http://www.cepii.fr/anglaisgraph/bdd/macmap.htm>. For details of its incorporation into the GTAP Version 6 dataset, see www.gtap.org.

¹⁰ Notwithstanding the reform efforts of many developing countries in the past two decades, there is considerable evidence of on-going direct discouragement to agricultural exports in low-income countries. Even Argentina has reverted to using export taxes again in recent years. See, for example, OECD (2003), Piermartini (2004), Thiele (2004) and Kazeki (2005). On exchange rate misalignments, see Hinkle and Montiel (1999) and Elbadawi and Soto (2005).

¹¹ Even though this violates the WTO’s national treatment rule, it apparently is not an uncommon practice in poorer countries where it is claimed to be too expensive to collect VAT on farm products. And with more than 100 countries now imposing value added taxes of 10 percent or more (Ebrill et al. 2001), this practice may well be adding substantially to delivered rates of agricultural protection in developing countries.

also across countries will be the focus of the second stage. By then it should be possible to address questions such as:

- In which developing countries is there still a national policy bias against agricultural production, in the sense that net farm income (agricultural value added) is depressed directly or indirectly?
- Where has there been ‘overshooting’ in the sense that some developing country farmers are now being protected from import competition or subsidized more than non-agricultural producers, following the examples of earlier-industrializing Europe, then Japan, and then Korea and Taiwan?
- What are the political economy forces behind the more-successful reformers and how do they compare with those in less-successful countries?
- How important have been international forces (IFIs, the Uruguay Round, preferential integration agreements, WTO accession, globalization of farm input suppliers, processors and supermarkets) relative to domestic political forces in bringing about reform during the past two decades, as compared with the earlier decades analyzed by Krueger, Schiff and Valdes (1988)?
- What policy lessons from those differing experiences can be drawn for national governments, IFIs, and the WTO’s Doha round to ensure better growth-enhancing and poverty reducing outcomes from own-country, regional and multilateral reforms?
- How are the effects of developed country policies on farmers in developing countries changing as developed countries re-instrument their agricultural protection away from market price support measures to other more-direct forms of support for their farm households, and alter their non-reciprocal preferential access agreements with ACP countries and LDCs?

Research tasks

During 2006 the project involves two tasks. The first is to generate better and more-complete time series estimates of the direct and indirect distortions to agricultural incentives, especially in developing countries. The second and closely related task is to analyze the political economy forces behind the evolution of those policies so as to be able to suggest (a) their likely future path in the absence of shocks to the political process, and (b) politically feasible unilateral, regional and multilateral reform strategies in the event of new developments abroad (e.g., a successful Doha agreement among WTO members, and perhaps an associated ‘aid for trade reform’ initiative by IFIs).

The structure of the country chapters is given in Table 7, while Table 8 provides the list of countries to be studied and the contributors. The methodology to be used in each of the country chapters is outlined in Anderson and Martin (2006).

Project leadership

Kym Anderson will provide overall leadership for this project in close association with Will Martin, guided by a Senior Advisory Board comprising Bank staff (L. Alan

Winters, John Nash, Bernard Hoekman), other IFI staff (Anne Krueger of IMF, Stefan Tangermann of OECD), academics (Bruce Gardner, Yujiro Hayami) and regional co-leaders (Alberto Valdes for Latin America, Johan Swinnen for Eastern Europe). Co-leader have also been appointed for Africa (Will Masters) and Asia (Will Martin), thereby dividing the load.

Timelines and workshops during 2006

February: Contracts signed, methodology paper circulated for comment and revised

March 27-28: Methodological workshop, Washington DC

End-May: Submission of time series estimates of distortions (earlier in the case of ECA)

Northern summer: Submission of penultimate draft chapters a fortnight before the relevant workshop, for circulating prior to the workshop to the other contributors (each of whom will be an Opening Discussant on one or two other studies)

Post-workshop: Five weeks will be allowed for revision of distortion estimates and chapters following the workshop. The revised versions will be refereed and those of sufficient quality will appear in an edited volume to be published in 2007.

Regional workshops are each immediately prior to or following a professional conference, which contributors are of course welcome to attend at their own expense. The Bank will reimburse the cost of a discounted economy fare to the relevant venue for one author of each country study, as well as hotel and meal costs during the workshop. Participants are encouraged to make travel arrangements well in advance (ticket, visa, conference registration if desired). The Bank will make a block booking for hotel rooms for those who are only attending our workshop, while those who are staying on for the adjoining conference are encouraged to make a hotel book when registering for the conference. The dates and venues for the workshops are as follows:

ECA region:

May 31-June 1, Bonn, Germany, immediately following the IATRC Summer Symposium – see www.agp.uni-bonn.de/iatrc/iatrc_e.htm

Africa region:

June 17-18, Addis Ababa, Ethiopia, immediately following the Annual Global Economic Analysis Conference – see <https://www.gtap.agecon.purdue.edu/events/Conferences/2006/default.asp>

Latin American region (still to be confirmed):

July 23, Long Beach, California, USA, immediately prior to the Annual Meetings of the American Agricultural Economics Association – see www.aaea.org/

Asia region:

August 12, Gold Coast, Australia, immediately prior to the 26th triennial Congress of the International Association of Agricultural Economists – see www.iaae2006.org

Global overview:

November 13-17, Bellagio, Italy – see www.rockfound.org/bellagio

Table 1: Effects on national, regional and global economic welfare of full trade liberalization in different groups of countries and sectors, 2015

(percent)

	<i>World</i>	<i>All high-income countries</i>	<i>All developing^a countries</i>	<i>Brazil</i>	<i>China</i>	<i>India</i>	<i>Indonesia</i>	<i>Sub-Saharan Africa</i>
Developing^a countries liberalize:								
<i>Agriculture and food</i>	17	9	33	6	137	-26	14	35
<i>Textile & clothing</i>	8	7	10	0	13	-7	5	11
<i>Other merchandise</i>	20	26	7	-2	-152	83	9	14
<i>All sectors</i>	45	42	50	4	3	50	28	60
High-income countries liberalize:								
<i>Agriculture and food</i>	46	54	30	93	-102	15	26	43
<i>Textile & clothing</i>	6	1	17	0	152	35	64	-0
<i>Other merchandise</i>	3	3	3	3	80	0	-18	-3
<i>All sectors</i>	55	58	50	96	126	50	72	40
All countries liberalize:								
<i>Agriculture and food</i>	63	63	63	99	27	-11	40	78
<i>Textile & clothing</i>	14	8	27	0	150	28	69	11
<i>Other merchandise</i>	23	29	10	-1	-77	83	-9	11
<i>All sectors</i>	100	100	100	100	100	100	100	100

^a High-income countries include the newly industrialized East Asian customs territories of Hong Kong, Korea, Singapore and Taiwan as well as Europe's transition economies that joined the EU in April 2004.

Source: Anderson, Martin and van der Mensbrugge (2006a, Table 12.6).

Table 2: Effects of full liberalization of global agricultural and other merchandise trade on agricultural value added, by country/region, 2015

(relative to baseline, 2001 dollars and percent)

	\$billion			percent		
	<i>Developing country agr & food policies</i>	<i>High-income country agr&food policies</i>	<i>All goods trade policies</i>	<i>Developing country agr & food policies</i>	<i>High-income country agr & food policies</i>	<i>All goods trade policies</i>
Australia and New Zealand	2.5	3.2	6.4	10.1	13.0	25.6
EU 25 plus EFTA	7.3	-42.0	-39.1	4.9	-28.3	-26.4
United States	5.1	-20.7	-18.2	4.2	-17.0	-15.0
Canada	2.0	1.4	3.4	13.3	9.6	23.3
Japan	0.2	-17.7	-17.7	0.4	-39.6	-39.5
Korea and Taiwan	0.5	-10.1	-9.5	1.7	-35.4	-33.3
Hong Kong and Singapore	0.1	0.1	0.1	3.6	5.0	7.5
Argentina	0.4	4.9	6.1	2.1	27.4	33.8
Bangladesh	-0.4	0.2	-0.5	-3.3	1.7	-4.4
Brazil	0.0	15.1	15.1	0.1	46.2	46.3
China	-16.3	13.3	0.3	-3.8	3.1	0.1
India	-17.3	2.9	-17.1	-8.2	1.4	-8.1
Indonesia	-0.1	1.0	0.8	-0.4	3.3	2.7
Thailand	1.1	3.1	3.8	7.2	20.4	25.0
Vietnam	0.9	0.3	0.8	14.5	5.7	13.6
Russia	-1.8	0.7	-1.4	-8.4	3.2	-6.5
Mexico	-3.8	7.9	0.9	-9.9	20.9	2.5
South Africa	0.1	0.4	0.5	1.3	7.8	9.6
Turkey	-2.9	0.9	-2.0	-10.3	3.0	-7.2
Rest of South Asia	-1.7	1.2	-0.6	-3.7	2.7	-1.3
Rest of East Asia	-1.4	1.2	-0.2	-5.5	4.6	-0.7
Rest of LAC	1.9	19.7	22.9	2.5	26.0	30.2
Rest of ECA	-2.1	1.4	-1.1	-3.3	2.3	-1.8
Middle East and North Africa	-4.8	6.2	0.3	-4.4	5.6	0.3
Selected SSA countries	0.4	1.1	1.5	2.7	6.5	9.1
Rest of Sub Saharan Africa	-0.7	3.0	2.3	-1.7	7.2	5.4
Rest of the World	0.7	2.5	3.1	3.4	13.2	16.4
High-income countries	17.6	-85.8	-74.6	4.6	-22.3	-19.4
Developing countries	-47.9	87.1	35.6	-3.9	7.0	2.9
Middle-income countries	-29.6	74.8	45.3	-3.4	8.7	5.3
Low-income countries	-18.2	12.3	-9.7	-4.8	3.2	-2.5
East Asia and Pacific	-15.8	18.9	5.5	-3.2	3.8	1.1
South Asia	-19.4	4.4	-18.1	-7.2	1.6	-6.8
Europe and Central Asia	-6.8	3.0	-4.5	-6.0	2.6	-4.0
Middle East and North Africa	-4.8	6.2	0.3	-4.4	5.6	0.3
Sub Saharan Africa	-0.2	4.5	4.3	-0.3	7.1	6.7
Latin America and the Caribbean	-1.4	47.7	45.0	-0.9	29.0	27.4
World total	-30.3	1.3	-39.0	-1.9	0.1	-2.4

Source: Anderson, Martin and van der Mensbrugge (2006b, Table 13).

Table 3: Agricultural indicators for developed market economies, Europe's economies in transition, and developing economies

	GNP per capita (\$)	Population (billions)	Agricultural workforce (millions)	Agriculture's share of GDP (%)	Agric. GDP at int'l prices (\$billion)	Agr. land per capita (ha)	Agr. land per farm worker (ha)	Agricultural exports fob (\$ billions) [& exports as % of agric GDP] 1999-2001	Agricultural imports fob (\$ billions) 1999-2001
	2001	2001	2001	2001	2002	2001	2001		
Developed market economies	28,100	0.9	14	2.1	360	1.27	78.3	274 [75%]	267
Europe's transition economies	1,940	0.4	31	8.2	75	1.54	20.4	15 [20%]	24
<i>Subtotal</i>	<i>19,770</i>	<i>1.3</i>	<i>45</i>	<i>2.6</i>	<i>435</i>	<i>1.36</i>	<i>38.5</i>	<i>289</i> <i>[67%]</i>	<i>290</i>
Developing economies	1,270	4.9	1,282	11.9	615	0.67	2.5	125 [20%]	124
WORLD	5,230	6.1	1,327	6.2	1050	0.82	3.8	414 [40%]	414

Source: FAO (2004).

Table 4: Agricultural Producer Subsidy Equivalents (PSEs) for European Transition Economies, Turkey, EU-15 and Korea, 1991 to 2004

	(per cent)									
	1991-95	1996	1997	1998	1999	2000	2001	2002	2003	2004
Bulgaria	-28	-55	-10	2	-2	1	3			
*Czech Rep.	24	11	6	26	23	17	23	25	27	
*Estonia	-14	7	6	20	6	7	13			
*Hungary	13	11	11	25	24	22	22	33	27	
*Latvia	-20	3	5	20	22	15	16			
*Lithuania	-87	1	4	16	16	6	11			
*Poland	16	19	18	28	24	15	15	14	9	
Romania	14	12	3	30	20	19	24			
Russia	-21	24	34	23	8	5	9	9	1	
*Slovakia	24	0	14	32	26	25	16	22	21	
*Slovenia	25	27	32	42	49	39	40			
Ukraine	-1	-4	16	13	-3	-2	4	-5	1	
Turkey	20	15	25	26	23	21	5	20	29	27
EU-15	38	35	34	38	40	34	34	34	36	34
Korea	73	64	63	57	66	67	63	65	61	63

* Joined European Union in May 2004

Source : www.OECD.org

Table 5(a): Import restrictions by sector and region: weighted average applied tariffs (%), 2001

Importing region:	Agric and food	Other primary	Other manuf	All tradeables
WORLD	16.8	2.6	4.2	4.9
High-income countries	16.1	1.1	2.0	2.8
Developing countries	17.5	6.7	9.5	9.9
Australia	2.8	3.4	5.7	5.3
Canada	9.1	0.4	1.0	1.4
EU15	12.8	0.6	1.9	2.4
Japan	30.2	0.4	1.8	5.2
New Zealand	2.0	0.9	2.4	2.2
Switzerland	29.9	0.1	3.1	4.3
Rest of EFTA	32.3	0.0	0.2	2.5
United States	2.5	0.9	1.9	1.8
Eastern Central Europe	14.2	2.9	7.0	7.3
Albania	11.9	11.7	10.4	11.0
Czech Rep.	8.3	2.8	4.0	4.0
Estonia	6.8	0.0	0.0	0.8
Hungary	20.4	1.0	2.4	2.9
Latvia	8.6	1.7	1.0	2.2
Lithuania	4.7	0.2	0.2	0.7
Poland	22.8	2.1	2.1	3.6
Romania	20.4	2.4	5.6	6.2
Russia	13.5	6.5	9.2	9.8
Slovenia	14.9	7.7	10.2	10.2
Turkey	16.7	0.4	1.7	2.4
Rest of Former Soviet Union	11.8	1.6	5.2	4.6
Asia	29.2	8.2	12.3	22.8
Bangladesh	12.6	22.5	19.3	18.4
China	37.6	5.3	13.1	13.4
India	50.2	20.0	27.6	26.9
Indonesia	5.0	3.4	5.0	4.8
Malaysia	17.1	5.5	4.6	5.6
Pakistan	25.9	14.2	17.1	17.6
Philippines	9.5	3.6	2.2	3.0
Sri Lanka	14.4	6.0	4.6	6.2
Thailand	29.4	4.4	9.6	10.1
Vietnam	36.6	10.3	15.4	16.5

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Table 5(a) cont: Import restrictions by sector and region: weighted average applied tariffs (%), 2001

Importing region:	Agric and food	Other primary	Other manuf	All tradeables
Latin America & Car.	10.1	5.1	7.8	7.7
Argentina	6.8	7.2	10.7	10.1
Bolivia	8.8	7.5	7.6	7.8
Brazil	5.0	4.0	11.3	9.6
Chile	6.8	6.9	6.3	6.5
Colombia	10.3	8.6	9.8	9.8
Ecuador	10.0	5.8	7.7	7.7
Mexico	11.5	4.0	4.5	5.0
Peru	15.9	10.1	11.6	12.1
Uruguay	4.1	2.9	7.8	6.6
Venezuela	11.8	12.3	12.2	12.1
Central America	8.6	4.1	7.7	7.5
Rest of South America	8.9	3.4	7.4	7.0
Rest of FTAA	13.9	8.1	11.0	10.8
Rest of the Caribbean	10.4	2.4	10.0	7.9
Africa	19.2	13.1	16.8	16.7
Botswana	4.5	0.3	2.2	2.2
Madagascar	3.7	1.9	4.0	3.6
Malawi	11.1	9.4	10.4	10.3
Mauritius	9.5	14.4	12.9	12.5
Morocco	29.3	15.0	21.9	21.6
Mozambique	13.3	7.5	10.2	10.5
Nigeria	39.6	26.1	22.3	25.4
South Africa	8.9	2.0	7.3	6.4
Tanzania	19.2	10.7	14.0	14.3
Tunisia	51.7	11.5	13.2	16.5
Uganda	8.2	5.0	5.4	5.8
Zambia	9.4	8.3	8.3	8.4
Zimbabwe	27.2	11.9	13.6	14.2
Rest of Sth African CU	4.8	0.5	2.9	2.8
Rest of SADC	37.7	11.4	15.6	19.5
Rest of Sub-Saharan Afr	15.1	12.6	12.3	12.8
Rest of North Africa	10.4	15.4	25.4	21.3

Source: GTAP Version 6.1 database, available at www.gtap.org

Table 5(b): Import restrictions by regions: overall trade restrictiveness index, 2001-04

Importing region:	Own-region trade restrictions			Restrictions exporters face abroad		
	Agriculture and food	Other manuf	All tradables	Agriculture and food	Other manuf	All tradables
WORLD	37	10	14	37	10	14
High-income countries	38	5	9	35	10	13
Middle-income countries	38	15	18	39	10	14
Low-income countries	36	20	23	37	12	18
Australia	36	8	10	54	9	21
Canada	19	5	6	45	9	12
EU15	38	8	12	37	9	12
Japan	36	7	11	0	8	8
New Zealand	33	12	14	37	12	21
Norway	70	1	8	31	8	9
Switzerland	50	4	8	30	7	9
United States	22	7	8	48	7	11
Eastern Central Europe	22	9	11	42	10	13
Albania	8	7	7	32	14	16
Belarus	32	12	14	31	12	13
Czech Rep.	7	4	4	46	8	8
Estonia	8	5	5	39	14	17
Hungary	23	7	8	45	9	12
Kazakhstan	33	12	14	59	12	16
Kyrgyzstan	9	3	4	38	12	17
Latvia	32	7	10	35	11	17
Lithuania	18	5	6	40	16	22
Poland	26	7	8	33	11	14
Romania	38	16	18	29	12	12
Russia	27	19	20	49	8	10
Slovenia	45	9	12	65	13	13
Turkey	38	9	11	37	10	12
Ukraine	47	18	22	48	11	14
Asia	33	17	18	5	9	12
Bangladesh	23	18	19	25	17	18
China	25	12	13	27	6	6
India	65	20	24	49	13	18
Indonesia	32	6	9	36	12	14
Malaysia	39	22	23	27	6	9
Pakistan	35	12	15	64	17	22
Philippines	50	18	21	61	6	10
Sri Lanka	18	6	8	23	17	18
Thailand	38	7	9	69	8	14
Vietnam	53	33	35	53	15	22

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Table 5(b) cont.: Import restrictions by regions: overall trade restrictiveness index, 2001-04

Importing region:	Own-region trade restrictions			Restrictions exporters face abroad		
	Agriculture and food	Other manuf	All tradables	Agriculture and food	Other manuf	All tradables
Latin America	32	15	17	44	10	16
Argentina	20	17	18	45	13	24
Bolivia	36	12	15	41	15	22
Brazil	38	22	24	45	8	16
Chile	25	8	10	31	7	15
Colombia	44	18	22	35	12	19
Costa Rica	12	4	5	39	8	16
Ecuador	36	12	15	28	10	18
Mexico	58	24	27	25	7	8
Nicaragua	38	6	10	44	15	28
Paraguay	37	15	17	37	10	25
Peru	40	12	16	46	8	18
Uruguay	36	18	20	41	13	27
Venezuela	47	17	22	37	6	6
Sub-Saharan Africa	34	16	19	34	9	17
Burkina Faso	39	10	13	35	12	27
Cameroon	24	17	18	18	7	10
Chad	23	15	16	17	7	12
Cote d'Ivoire	51	33	37	41	9	23
Egypt	79	33	40	64	10	16
Ethiopia	14	17	17	43	11	24
Kenya	31	7	10	35	10	19
Madagascar	18	13	13	38	14	21
Malawi	26	12	14	41	17	26
Mali	28	11	13	24	4	7
Mauritius	38	17	21	52	9	16
Morocco	73	40	44	28	9	12
Mozambique	29	9	13	37	8	22
Nigeria	76	42	47	15	5	6
Sudan	49	47	47	51	3	22
South Africa	12	7	7	47	7	12
Tanzania	83	31	38	42	15	24
Tunisia	84	28	34	39	13	14
Uganda	11	6	7	28	7	14
Zambia	29	9	11	46	10	22
Zimbabwe	47	12	18	35	9	19

Source: Kee, Nicita and Olarreaga (2006), and OTRI excel file, in data & statistics part of www.worldbank.org/trade/

Table 5(c): Import restrictions by regions: relative trade restrictiveness indexes, 2001-04

Importing region:	Own-region trade restrictions			Restrictions exporters face abroad		
	Agric & food rel. to manuf total OTRI	Tariff rel to total OTRI		Agric & food rel. to manuf total OTRI	Tariff rel to total OTRI	
		Agric and food	Other manuf		Agric and food	Other manuf
WORLD	373	55	52	373	55	52
High-income countries	1050	52	29	380	56	43
Middle-income countries	233	57	56	391	56	55
Low-income countries	159	64	66	300	53	60
Australia	458	4	44	579	55	42
Canada	371	15	59	514	43	29
EU15	464	15	42	438	49	52
Japan	495	20	23			58
New Zealand	272	7	32	317	48	49
Norway	6532	62	44	394	29	23
Switzerland	1209	65	60	437	58	43
United States	324	22	37	699	54	33
Eastern Central Europe	244	55	61	420	46	54
Albania	111	94	90	229	42	66
Belarus	258	40	63	264	59	56
Czech Rep.	162	95	71	595	48	56
Estonia	166	84	67	282	58	61
Hungary	311	25	39	523	50	55
Kazakhstan	271	30	37	511	53	20
Kyrgyzstan	260	100	80	324	48	62
Latvia	480	23	44	305	54	68
Lithuania	375	37	60	250	61	58
Poland	367	23	45	307	58	59
Romania	240	73	81	252	51	59
Russia	141	20	41	635	45	22
Slovenia	503	15	37	490	25	54
Turkey	422	100	43	367	36	64
Ukraine	257	86	30	456	50	38
Asia	194	56	52	56	53	57
Bangladesh	128	68	84	143	46	77
China	209	69	47	458	21	46
India	323	67	64	370	54	62
Indonesia	504	16	88	306	42	41
Malaysia	180	6	20	432	52	47
Pakistan	280	28	89	383	68	68
Philippines	281	17	14	1072	65	60
Sri Lanka	296	100	99	135	48	75
Thailand	548	48	92	862	63	58
Vietnam	158	57	40	349	54	72

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Table 5(c) cont.: Import restrictions by regions: relative trade restrictiveness indexes, 2001-04

Importing region:	Own-region trade restrictions			Restrictions exporters face abroad		
	Agric & food rel. to manuf total OTRI	Tariff rel to total OTRI		Agric & food rel. to manuf total OTRI	Tariff rel to total OTRI	
		Agric and food	Other manuf		Agric and food	Other manuf
Latin America	213	42	57	440	55	51
Argentina	117	49	65	348	49	33
Bolivia	308	27	65	266	57	32
Brazil	176	26	47	549	65	53
Chile	327	23	73	414	45	34
Colombia	242	37	58	300	60	67
Costa Rica	314	93	90	526	51	60
Ecuador	291	42	76	289	49	68
Mexico	238	52	45	371	51	49
Nicaragua	639	27	71	287	59	78
Paraguay	256	30	64	377	60	55
Peru	337	29	72	587	59	68
Uruguay	200	29	48	305	56	49
Venezuela	275	35	72	675	56	54
Sub-Saharan Africa	209	75	82	383	53	53
Burkina Faso	405	39	99	287	63	47
Cameroon	145	88	93	240	62	52
Chad	151	100	96	250	43	37
Cote d'Ivoire	154	25	31	479	59	62
Egypt	243	59	36	651	57	64
Ethiopia	84	100	94	375	51	49
Kenya	452	81	93	362	52	65
Madagascar	144	100	94	268	57	76
Malawi	220	54	97	243	52	69
Mali	267	51	89	531	43	44
Mauritius	218	36	85	572	70	70
Morocco	182	52	46	315	43	69
Mozambique	314	48	100	482	54	58
Nigeria	181	45	51	294	61	44
Sudan	104	41	40	1479	71	52
South Africa	186	51	87	628	54	55
Tanzania	269	28	26	281	51	15
Tunisia	298	53	70	301	47	71
Uganda	191	95	100	419	47	55
Zambia	315	59	100	442	57	44
Zimbabwe	379	52	93	384	57	59

Source: Kee, Nicita and Olarreaga (2006), and OTRI excel file, in data & statistics part of www.worldbank.org/trade/

Latin America & Caribbean	Agric emplt (mill.)	GTAP	IFPRI CGEs	WTO TPRM	OECD IFPRI	PRSP /TDIS	MI 02	JRT 02	AV 96, 00	LCCR 93	KSV 92	MPC 91	B&K 78	B&A 71	LSS 70	
Argentina	1.5	X	X	99*				X	X	X	X					X
Brazil	12.9	X	X	96,00, 04*	X			X	X	X	X	X	X	X		X
Chile	1.0	X	X	97,03*					X	X	X	X	X	X		
Colombia	3.7	X	X	96*					X	X	X	X	X			
Dominican Rep	0.6		X	96,02					X		X					
Ecuador	1.3	X	X	05					X							
Mexico	8.7	X	X	07,02*	X			X		X				X		X
Nicaragua	0.4			99		P										
REST OF LAC	13.8															
Total, LAC	43.9															

^a GTAP: separately represented in the GTAP model (Cameroon and Senegal also to be separated out in 2007); IFPRI CGEs: national CGE model available at IFPRI; WTO TPRM: Trade Policy Review reports available (* means a pre-1995 GATT TPR also is available); OECD IFPRI: estimates of PSEs by OECD Secretariat or protection rates by IFPRI available soon.

References: AV: Valdes (1996, 2000); B&A: Balassa and Associates (1971); B&K: Bhagwati (1978) and Krueger (1978); JRT: Jensen, Robinson and Tarp (2002); KSV: Krueger, Schiff and Valdes (1988); LCCR: Little, Cooper, Corden and Rajapatirana (1993); LSS: Little, Scitovsky and Scott (1970); MI: Ingco (2002); MPC: Michaely, Papageorgiou and Choksi (1991); PRSP and DTIS: Poverty Reduction Strategy Paper and Trade Diagnostic Integration Study.

Table 7: Structure of the country case study chapters

Length: 12,000 words (40 double-spaced pages) plus a maximum of 12 tables or figures

Sections:

1. Introduction and summary: stress the key themes and any major features that distinguish this case study from others
2. Brief history of growth and structural changes intersectorally and within the agricultural sector over the past 50 years, and of their impact in alleviating poverty
3. Brief history of policy evolution (extent, causes and effects of distortions) prior to the mid-1950s or whenever the time series of annual estimates of DRAs and CTEs start
4. Detailed description and tabulation of the changing extent of direct and indirect distortions to incentives faced by domestic producers and consumers of primary agricultural and lightly processed food products, based on annual estimates of those distortions (DRAs and CTEs) from 1955 to 2005
5. An analytical narrative of the reasons behind the evolution of policy choices since the mid-1950s (long-run trends, turning points, inter- and intra-year fluctuations around trends, contributions from the various policy instruments and their rankings in terms of efficiently meeting government objectives, and the roles of external/international (GATT/WTO, IFIs, PTAs) vs. purely internal/domestic political forces)
6. In the light of that political economy explanation, draw out the prospects for national policy reform: likely vs. desirable policy direction through to 2020; implications for the trend level of distortions to agricultural incentives, for the choice of policy instruments, and for poverty alleviation; and policy lessons and consequences for other developing and transition economies.

References

Text tables

Text figures

Appendix: Detailed NRA, CTE, DRA and TRA tables and any other supportive tables and figures for retention only in the Working Paper version of the chapter

[Place tables and figures after the references, one per page, and provide Excel spreadsheets of the underlying data and calculations electronically in a separate file]

Table 8: Draft outlines of the five-volume series of books to emerge from this project

Distortions to Agricultural Incentives in Africa

Edited by Kym Anderson and Will Masters

I. Introduction

1. Introduction and overview, *by Kym Anderson and Will Masters*

II. North Africa

2. Egypt, *by James Cassing, Hoda Moussa, Saad Nassar and Gamal Siam*

III. Southern Africa

3. Madagascar, *by Feno Maret-Rakotondrazaka*
4. Mozambique, *by Channing Arndt, Xavier Cirera and Andrea Alfieri*
5. South Africa, *by Lawrence Edwards, Johann Kirsten and Nick Vink*
6. Zambia, *by Peter Robinson, Jones Govereh and Dan Ndlela*
7. Zimbabwe, *by Dan Ndlela and Peter Robinson*

IV. Eastern Africa

8. Ethiopia, *by Shahidur Rashid, Meron Assefa and Gezahegn Ayele*
9. Kenya, *by Alex Winter-Nelson and Gem Argwings-Kodhek*
10. Sudan, *by Hamid Faki and Abdelmoneim Taha Ahmed*
11. Tanzania, *by Oliver Morrissey and Vincent Leyaro*
12. Uganda, *by Alan Matthews and Jacob Opolot*

V. Western Africa

13. Cameroon, *by Ernest Bamou and Will Masters*
14. Cote d'Ivoire, *by Philip Abbott*
15. Ghana, *by Jonathan Brooks, Andre Croppenstedt and Emmanuel Aggrey-Fynn*
16. Nigeria, *by Peter Walkenhorst*
17. Senegal, *by Will Masters*
18. West and Central Africa: Cotton, *by John Baffes*

Appendix 1: Methodology for measuring distortions to agricultural incentives, *by Kym Anderson, Marianne Kurzweil, Will Martin, Damiano Sandri and Ernesto Valenzuela*

Appendix 2: Annual estimates of African distortions to agricultural incentives, *by Ernesto Valenzuela, Marianne Kurzweil, Johanna Croser and Kym Anderson*

Distortions to Agricultural Incentives in Asia

Edited by Kym Anderson and Will Martin

I. Introduction

1. Introduction and overview, *by Kym Anderson and Will Martin*

II. Northeast Asia

2. South Korea and Taiwan, *by Yujiro Hayami and Masa Honma*
3. China, *by Scott Rozelle, Will Martin, Jikun Huang and Yu Liu*

III. Southeast Asia

4. Indonesia, *by George Fane and Peter Warr*
5. Malaysia, *by Prema-Chandra Athukorala and Wai-Heng Loke*
6. Philippines, *by Cristina David, Ponciano Intal and Arsenio Balisacan*
7. Thailand, *by Peter Warr and Archanun Kohpaiboon*
8. Vietnam, *by Prema-Chandra Athukorala, Pham Lan Huong and Vo Tri Thanh*

IV. South Asia

9. Bangladesh, *by Quazi Shahabuddin, Nazneen Ahmed, Zaid Bakht & Paul Dorosh*
10. India, *by Ashok Gulati, Garry Pursell and Kanupriya Gupta*
11. Pakistan, *by Paul Dorosh and Abdul Salem*
12. Sri Lanka, *by Sisira Jayasuriya and Jayatilleke Bandara*

Appendix 1: Methodology for measuring distortions to agricultural incentives, *by Kym Anderson, Marianne Kurzweil, Will Martin, Damiano Sandri and Ernesto Valenzuela*

Appendix 2: Annual estimates of Asian distortions to agricultural incentives, *by Ernesto Valenzuela, Marianne Kurzweil, Johanna Croser and Kym Anderson*

Distortions to Agricultural Incentives in Latin America

Edited by Kym Anderson and Alberto Valdés

I. Introduction

1. Introduction and overview, *by Kym Anderson and Alberto Valdés*

II. Country studies

2. Argentina, *by Adolfo C. Sturzenegger and Mariana Salazni*
3. Brazil, *by Mauro Lopes, Ignez Vidigal Lopes, Marilene Silva de Oliveira, Fábio Campos Barcelos, Esteban Jara and Pedro Rangel Bogado*
4. Chile, *by Alberto Valdés and Esteban Jara*
5. Colombia, *by Lia Guteman*
6. Dominican Republic, *by Jesús de los Santos and Pedro Pablo Peña*
7. Ecuador, *by Ernesto Valenzuela, Sara Wong and Damiano Sandri*
8. Mexico, *by Isidro Soloaga and Gabriel Lara*
9. Nicaragua, *by Matias Berthelon, Diana Kruger and Diana Saavedra*

Appendix 1: Methodology for measuring distortions to agricultural incentives, *by Kym Anderson,*

Marianne Kurzweil, Will Martin, Damiano Sandri and Ernesto Valenzuela

Appendix 2: Annual estimates of Latin American distortions to agricultural incentives, *by*

Ernesto Valenzuela, Esteban Jara, Johanna Croser and Kym Anderson

Distortions to Agricultural Incentives in Europe's Transition Economies

Edited by Kym Anderson and Johann Swinnen

I. Introduction

1. Introduction and overview, *by Kym Anderson and Johan Swinnen*

II. Eastern Europe

2. New EU member countries, *by Johan Swinnen and Pavel Ciaian*
3. Turkey, *by Alison Burrell and Marianne Kurzweil*

III. Commonwealth of Independent States

4. Russia, *by Bill Liefert and Olga Liefert*
5. Ukraine, *by Stephan von Cramon, Oleg Nivyeovski, Emanuel Elsner von der Malsburg and Veronika Movchan*
6. Kazakhstan, *by Richard Pomfret*
7. Kyrgyz Republic, *by Garry Christiansen and Richard Pomfret*
8. Tajikistan, Turkmenistan and Uzbekistan, *by Richard Pomfret*

Appendix: Methodology for measuring distortions to agricultural incentives, *by Kym*

Anderson, Marianne Kurzweil, Will Martin, Damiano Sandri and Ernesto Valenzuela

Distortions to Agricultural Incentives: Global Perspective

Edited by Kym Anderson

I. Introduction

1. Introduction and overview, *by Kym Anderson*

II. Advanced Economies

2. Japan, Korea and Taiwan, *by Yujiro Hayami and Masayoshi Honma*
3. EU15 and EFTA, *by Tim Josling*
4. United States and Canada, *by Bruce Gardner*
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