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What is the appropriate counterfactual when estimating effects of multilateral trade policy reform?

Kym Anderson, Hans Grinsted Jensen, Signe Nelgen and Anna Strutt[1]

Abstract

Multilateral trade reforms, such as may eventually emerge from the WTO's Doha Development Agenda (DDA), tend to be phased in over a decade or so after agreement is reached. Given the DDA's slow progress, that implementation may not be completed before the end of the next decade. *Ex ante* analysis of the DDA's possible effects thus requires first modelling the world economy to 2030 and, in that process, projecting what trade-related policies might be by then without a DDA. Typically, modelers assume the counterfactual policy regime to be a 'business-as-usual' projection assuming the *status quo*. Yet we know developing country governments tend to switch from taxing to assisting farmers in the course of economic development. This paper shows the difference made by including political economy-determined agricultural protection growth endogenously in the baseline projection. We reveal that difference by projecting the world economy to 2030 using the Global Trade Analysis Project (GTAP) model with those two alternative policy regimes and then simulating a move to global free trade (the maximum benefit from a multilateral trade reform) in each of those two cases. The welfare effects of removing the counterfactual price distortions in 2030 are shown to be much larger in the case where agricultural protection grows endogenously than in the case assuming no policy changes over the projection period. This suggests the traditional way of estimating effects of a multilateral agricultural trade agreement may considerably understate the potential welfare gains.

Keywords: Agricultural protection growth; Multilateral trade reform; Global economy-wide model projections; gains from trade liberalisation

JEL codes: D58, F13, F15, F17, Q17

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Introduction

There has been renewed interest in recent years in projecting commodity markets and the global economy two to four decades ahead. Demand for such long-term projections has been driven by spikes in food and energy prices, rapid growth in large emerging economies, and concerns about greenhouse gas emissions and policy responses to them. Such projections are also sought by trade policy analysts as a baseline for estimating the effects of proposed or alternative trade policy reforms that tend to be phased in over anything up to two decades. The biggest of those prospects potentially is a multilateral trade reform agreement that might eventually result from the Doha Development Agenda of the World Trade Organization (WTO). There are also numerous regional and other plurilateral economic integration proposals under discussion, including a Trans-Pacific Partnership negotiation among a dozen Pacific rim countries (http://www.dfat.gov.au/fta/tpp/) and a Transatlantic Trade and Investment Partnership being negotiated between the European Union and the United States (http://ec.europa.eu/trade/policy/in-focus/ttip/).

In developing baseline projections for such analytical purposes it is commonly assumed that trade-related policies do not change over the projection period. That may be reasonable for manufacturing protectionism, now that most major countries have liberalized most of their markets for industrial products. Agricultural policies, however, remain highly distortive – and they have been evolving in fairly systematic ways, with emerging countries gradually reducing their anti-agricultural policies and some even transitioning to support for farmers, following the earlier example set by today's high-income economies. How different might farm policies be in, say, 2030 in the absense of a Doha multilateral agreement and other plurilateral trade agreements?

We address this question by making projections of agricultural price distortions to 2030, based on political economy theory and knowledge of current WTO-bound tariffs.

These provide an alternative to the common ‘business-as-usual’ projections approach which assumes policy *status quo.* . We thus identify the effects of the choice of counterfactual against which future trade-liberalizing scenarios are compared.

We begin with a brief summary of the post-World War II history of distortions to agricultural incentives. The second section draws on political economy theory and institutional history to propose a set of econometric equations for the most important agricultural products, aimed at projecting future agricultural distortions for any country in the absense of further trade reform.[2] The third section presents the econometric results, and the fourth section identifies the differences in welfare effects of trade-distorting policies consequent on these alternative price distortions, using Version 8.1 of the Global Trade Analysis Project (GTAP) database. The key finding is that the contribution of farm policies to the estimated welfare cost of trade-distorting policies by 2030 is considerably higher – especially for developing countries – than if one assumes no change in farm policies over the next two decades. The final section draws out some policy implications.

History of distortions to agricultural incentives

Historically, trade measures (taxes and non-tariff barriers), plus the use of multiple exchange rates, have distorted product prices at national borders more commonly than direct domestic producer or consumer subsidies or taxes. Nominal Rates of Assistance (NRAs) measure the

[2] Bouët and Laborde (2010) also seek to assess the implications for the world economy of protection growth that might result if the WTO’s Doha round fails to agree to liberalize trade multilaterally. However, their assumed alternative protection rates are more ad hoc than in the present study.

gap between distorted domestic prices and their free market counterparts. These have been computed for each farm product as the percentage by which government policies have raised gross returns to farmers above what they would be without the government's intervention -- or lowered them, if the NRA is negative.[3]

National NRAs have tended to be higher, the higher a country's income per capita and the weaker a country's agricultural comparative advantage. This is revealed in the World Bank's agricultural distortions panel database (Anderson and Valenzuela 2008, Anderson and Nelgen 2013). These data also reveal that developing country exporters of farm products faced a tax of around 50 percent on average in the 1960s and 1970s, but that rate of taxation has gradually fallen since the 1980s. Meanwhile, the NRA for import-competing farmers in developing countries has been positive and gradually rising throughout this period. This anti-trade bias in farm price distortions in developing countries is also found in high-income countries, where import-competing farmers have enjoyed higher and faster-rising support than exporters over the post-war period. Thus in both sets of countries there has been a gradual rise in agricultural NRAs in the course of their economic growth, especially for industries whose international competitiveness has been declining (Anderson 2009).

What determines the evolution of NRAs over time?

[3] Included in the NRA are any product-specific input subsidies. Also calculated is a Consumer Tax Equivalent (CTE), which is equal to the NRA if and only if no domestic producer or consumer measures also are in place. Since trade measures are the dominant instrument of distortion, the NRA and CTE are very highly correlated so attention will be confined to NRAs in what follows.

Political economy theory to explain the pattern of agricultural distortions across countries and over time made some progress in the 1980s, but in recent years it has accelerated. Theorists focus on improving our conceptualization of the issue and suggesting hypotheses, while others have been compiling appropriate data and yet others have been using political econometrics to test those hypotheses (see, e.g., Anderson 2010; Rausser, Swinnen and Zusman 2011; Anderson, Rausser and Swinnen 2013). But even the earlier analyses can take us some way towards understanding the evolution of agricultural price-distorting policies. Anderson (1995), for example, suggests the following factors distinguish the domestic polities of developing and high-income countries.

First, in a poor agrarian economy (PAE), urban wage-earners and hence their employers care a great deal about the price of food, and are relatively well organized. Farmers by contrast, are numerous but poorly organized, and many are too small to engage in the (formal) market. For a rich industrial economy (RIE), by contrast, farm products (especially net of post-farmgate costs) represent a small fraction of urban household expenditure and hence of real wages. In addition, urban households are far more numerous and so suffer from a free-rider problem of collective action in RIEs, just as farmers do in PAEs.

Second, a typical PAE has the majority of its workforce employed in agricultural pursuits and relatively few in manufacturing, whereas the opposite applies in RIEs. Altering the domestic price of farm relative to industrial products thus has a far bigger impact on the price of mobile labor in a PAE than in an RIE. Industrial capitalists therefore are more likely to be able to lobby successfully for (and governments face less opposition to) taxes on agricultural exports and on imports of manufactured goods in PAEs, whereas agricultural interests are more likely to be able to lobby successfully for (and governments face less opposition to) agricultural subsidies and food import tariffs in RIEs.

Third, high costs of collecting taxes other than at the border in PAEs make them much more likely than RIEs to employ trade taxes and thus be prone to an anti-trade bias in their sectoral policies, while high costs of dispersing funds make PAEs less fiscally capable of subsidizing any sector. Since PAEs have a comparative advantage in agricultural goods, this anti-trade bias adds to the anti-agricultural bias in PAE policies.

Together these forces lead one to expect that countries will switch from a negative to a positive agricultural NRA as their per capita income grows, and more so if their agricultural comparative advantage declines in the development process. This is entirely consistent with the evidence compiled by Anderson and Valenzuela (2008).

Domestic polity also can come under external pressures, three of which have been of major importance. The first is the Uruguay Round Agreement on Agriculture, concluded in 2004, which led to conversion of non-tariff barriers to tariffs on farm products, set bindings on those tariffs, and reduced and bound agricultural domestic and export subsidies. The caps were somewhat above applied rates in high-income countries, but they were very much above applied tariffs in the case of middle- and especially low-income countries. Hence those bindings currently provide little discipline on the agricultural policies of most developing countries.

A second and complementary force operated in Europe. The eastern enlargement of the European Union required the budget for subsidies under the Common Agricultural Policy (CAP) to be spread (gradually) over additional countries. One consequence was a move away from price-support instruments to more-decoupled measures including single farm payments. The reforms came in various stages, under McSharry in 1992 (which were responding mainly to developments in the GATT's Uruguay Round) and under Fischler in the early 2000s (Swinnen 2008), which explains much of the gradual fall in high-income agricultural NRAs from the late 1980s. This trend is unlikely to reverse in the forseeable future, for intra-EU political and budgetary reasons.

The third external force comes from international financial institutions whose loans and other assistance to developing countries became somewhat conditional on better economic governance, including more openness of their economies. This has helped to bring down developing countries' NRAs for non-farm tradable sectors and to phase out their taxes on farm exports. However, with so little WTO discipline (i.e., high bindings) on developing countries' farm import tariffs and subsidies coming from the Uruguay Round Agreement on Agriculture, those tariffs have continued to drift upwards in some key developing countries over the past two decades (Figure 1). It has also meant the WTO membership has found it difficult to demand tight constraints on out-of-quota farm tariffs of countries seeking to accede to the WTO. This is the case even for China, where strong pressure resulted in low tariffs only on in-quota volumes of imports.

These factors suggest that high-income countries (including Eastern Europe's transition economies that are now part of the European Union) are unlikely in the foreseeable future to raise their assistance to farmers via price-distorting measures, developing countries are unlikely to return to farm export taxation (apart from temporarily at times of price spikes, see Martin and Anderson 2012 and Jensen and Anderson 2016), and all countries are unlikely to return to high levels of protection for the manufacturing sector. But if the WTO's Doha Development Agenda fails to conclude with an agreement to greatly reduce developing countries' bindings on agricultural import tariffs, political economy theory and past experience both suggest that their agricultural protection growth may well continue. More specifically, such protection increases could be expected to be related to growth in per capita income and in agricultural comparative disadvantage, and to be higher for import-competing than exported farm products. According to the econometric evidence reported in Anderson

(2010, Table 2.12), an equation worth considering for projecting each country's tradable food products is the following:

(1) $NRA_i = f\ (YPC, LPC, TSI_i)$

where YPC is the log of real per capita national income, LPC is the log of arable land per capita (an indicator of agricultural comparative advantage), and TSI_i is a trade specialization index for product i (exports minus imports as a fraction of exports plus imports of i) which, by definition, ranges between minus and plus one.[4]

Projecting developing countries' NRAs to 2030

Most modelers of trade-related policies for the global economy make use of the GTAP model and database (Hertel 1997; Narayanan *et al.* 2012). Modelers wishing to estimate the likely effects of a future structural or policy shock need first to project a baseline of the global economy to a target future date such as 2030 in the absence of that shock. Modelers often assume for their baseline that trade-related and other market-distorting policies remain unchanged over the projection period. We provide an alternative counterfactual, using estimates of Equation (1) for ten key traded farm products as of 2004, and projections of NRAs for each of those products to 2030 for each developing country in the World Bank distortion database compiled by Anderson and Valenzuela (2008). The sample for the regression equation is all 75 countries in the World Bank distortion database in 2004.

[4] It should be kept in mind that the TSI is less than perfect as an indicator of comparative advantage because it reflects also the effects of trade-distorting policies at home and abroad.

The regression equations are reported in Table 1. The results are not highly significant, but apart from maize at least one of the 3 explanatory variables is statistically significant in each equation. The insignificant result for maize is not surprising in view of the very small range of its NRAs in the panel data and their average of almost zero. For the other nine products, the R^2 values are between 0.21 and 0.55. All product equations have a positive coefficient for YPC and a negative coefficient for LPC, as predicted by theory. Virtually all have a negative coefficient for TSI, again consistent with the above theory, the only exception being soybean (soybean has an even smaller range of NRAs around its zero average than does maize). While the overall explanatory power for the cross-country pattern of NRAs in 2004 is not good, this is to be expected, since there are many other factors (not least, the particular state of supply and demand, and hence world prices, in this particular year). In any event, all we are trying to capture here is the general trend of changes in protection as driven by changes in real income, comparative advantage and trade specialisation. We do not believe that that more-sophisticated econometrics (which would need to be a paper on its own) would alter these key relationships to any great extent.

To use these equations to project NRAs, it is necessary to have projected values for the three exogenous variables. These are taken from a recent exercise that employs the GTAP economy-wide model to project the world economy to 2030 (Anderson and Strutt 2012). That projection assumes the trade-related policies of each country do not change over the projection period but that national real GDP, population, unskilled and skilled labor, capital, agricultural land and other natural resources (oil, gas, coal and other minerals) grow at exogenously set rates.

In addition to taking the real GDP, land and population values for 2030 from the Anderson and Strutt (2012) study, we also use its estimated trade structure for 2030 to estimate a value for TSI for each product and developing country. That provides all the exogenous variables needed to estimate a potential endogenous value for the NRA for each product and country. That estimated value is then subjected to the following series of tests. First, if a farm product was and is projected still to be a net export product in 2030 (TSI>0), then its 2030 NRA is assumed to be the lesser of its base-period NRA or zero. That is, we assume all export taxes will be phased out by 2030, and that no new export subsidies will be introduced. And second, if it is projected to be an import-competing product in 2030 (TSI<0), then its 2030 NRA is assumed to be the lesser of the equation's projected NRA or its WTO-bound tariff rate. That is, we assume that all developing country governments respect their commitment to WTO not to exceed their tariff bindings but otherwise that they feel free to respond to domestic political forces in determining the degree of protection provided to import-competing farm industries.

Using this methodology and set of selection criteria, we obtain projected NRA values for each of the ten products and for each of the 39 developing countries in the World Bank sample. Their averages across regions and products, applied within a GTAP model projection to 2030,[5] are reported in Table 2.

What do those estimates reveal? For developing countries as a whole, the average NRA for these products is projected to rise from 9 percent to 16 percent by 2030. It happens that is twice the average for high-income countries (including Europe's transition economies). The biggest tariff increases are in East Asia and Latin America. By product, the biggest rises are in grains, beef, oilseeds and sugar, which is not surprising since they are also some of the most distorted products in high-income countries (see final column of Table 2).

[5] Implemented by calculating the trade-weighted average tariff rates implied by the equations and applying these percentage increases to the bilateral power of the tariff in the GTAP database.

For farm products other than these ten major ones, and for highly processed food and other merchandise, we assume developing country import protection rates in 2030 are the same as in the base period (so potentially understating the extent of overall farm protection growth), and that any developing country agricultural export taxes in GTAP's protection database are eliminated by 2030.

GTAP modelling

In what follows, we use the Version 8.1 GTAP database, which is benchmarked to 2007. The base period of 2007 is ideal for projecting forward to 2030 because it immediately precedes the recent period of temporary spikes in food and fuel prices and the global financial crisis and recession.

The GTAP model assumes perfect competition and constant returns to scale in production. The functional forms are nested constant elasticities of substitution (CES) production functions. Land is specific to agriculture in the GTAP database, and is mobile amongst alternative agricultural uses over this projection period, according to a Constant Elasticity of Transformation (CET) which, through a revenue function, transforms land from one use to another. In the modified version of the GTAP model we use, natural resources, including coal, oil, gas and other minerals, are specific to the sector in which they are mined. Aggregate national employment of each productive factor is fixed, although we use exogenous projections to model changes in factor availability over time. In the model closure adopted here, labour and produced capital are assumed to be mobile across all uses within a country, but immobile internationally. On the demand side there is a national representative household whose expenditure is governed by a Cobb-Douglas aggregate utility function which allocates net national expenditures across private, government, and saving activities.

The full GTAP v 8.1 database comprises 134 countries and regions, disaggregated into 57 sectors (Narayanan *et al*. 2012). However, we aggregate the database to model 34 sectors and 35 countries or regions (on-line Appendix Tables A.1 and A.2), further aggregating results to eight developing regions and one high-income region for reporting purposes.

The 2030 projection we use follows Anderson and Strutt (2014a), with exogenous growth rates in national real GDP, population, unskilled and skilled labor and capital, based on World Bank and CEPII (Fouré et al. 2012) projections, while agricultural land and other natural resources (oil, gas, coal and other minerals) are assumed to grow or contract in line with recent historical trends.[6] Given those exogenous growth rates, the model is able to derive implied rates of growth in total factor productivity and GDP per capita. For any one country the rate of total factor productivity growth is assumed to be the same in each of its manufacturing sectors, a little lower in services and somewhat higher in its primary sectors. Higher productivity growth rates for primary activities were characteristic of the latter half of the 20th century (Martin and Mitra 2001), and are necessary in this projection if real international prices of primary products (relative to the aggregate change for all products) are to rise only modestly to 2030.[7]

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[6] See Anderson and Strutt (2014a) for further details.

[7] That calibration is consistent with the World Bank's projections over the coming decades (see Rosen and van der Mensbrugghe and Roson 2012). An alternative in which agricultural prices fall is considered unlikely over the next two decades, given the slower growth in agricultural R&D investment since 1990 and its consequent delayed slowing of farm productivity growth (Alston, Babcock and Pardey 2010). It is even less likely for farm products if fossil fuel prices and biofuel mandates in the US, EU and elsewhere are maintained over the next decade. Another alternative is that real international primary product prices will rise over coming decades, in which case assistance to farmers might be less everywhere than suggested below. For reasons of space, neither of these alternatives are considered below, but they are explored in Anderson and Strutt (2014a).

In the core scenario we assume no change in trade restrictions between the base period and 2030, following the core projection of Anderson and Strutt (2014a). In the alternative projection, we impose the NRA increases for developing countries' agriculture described in the previous section and summarized in Table 2. We also eliminate any export taxes on these sectors, while leaving any export subsidies in place. We then run two simulations that liberalise trade from the 2030 database: the first is from the unchanged GTAP protection database and the second is from the database that assumes there will be increased developing country protection by 2030 but that price distortions in high-income countries do not change. These two simulations involve fully removing tariffs on all commodities and any export or output subsidies in the agriculture and food sectors.

Projecting the cost of trade-distorting policies as of 2030

What would those projected NRAs imply about the costs of agricultural and other price- and trade-distorting policies in the world economy in 2030, compared with the costs assuming no changes in trade policies? Welfare results from these two simulations are summarized in Table 3, which shows the distribution of the welfare gains as equivalent variations, in 2007 US dollars, that would come from full global liberalization of all merchandise trade as of 2030 under the 'Policy status quo' and 'Increased DC protection' scenarios, and the difference between them. The 'Increment' columns suggest, unsurprisingly, that the global welfare cost of trade policies would be somewhat higher with the agricultural protection growth in developing countries. In particular, the welfare cost to developing countries would be $12.8 billion higher per year by 2030. It would be $16.6 billion higher because of more-inefficiently allocated resources, but the protection growth would improve the terms of trade for developing countries slightly and thereby reduce that loss by one-quarter – at the expense of high-income countries. Since income growth and declines in agricultural comparative advantage are projected to be faster in East Asia than any other developing economy region, it is not surprising that the projected losses that would be associated with endogenous farm protection growth are greatest for that region.

Table 4 decomposes column 6 of Table 3 (repeated in the final row of Table 4) to show the additional impact of allocative efficiency contributions by sector to welfare of liberalizing when there is increased developing country protection. As expected, we find that the additional welfare contributions are particularly significant in sectors where protection is projected to increase. For example, there is an additional $6.1 billion of allocative efficiency gains contributed by liberalizing the coarse grain sector, where average developing country protection is projected to increase from 7 percent to 37 percent (see Table 2). This is especially driven by the Rest of East Asia region, where the endogenous increase in coarse grain protection is from 4 percent to 157 percent. Turning to other sectors, oilseeds are the next largest contributor to increased allocative efficiency: again this is a sector for which we modelled particularly large protection increases, including for India and the Rest of East Asia region. These two sectors alone account for almost half of the projected losses that would be associated with endogenous farm protection growth.

Policy implications

Our analysis suggests the common assumption in developing baseline projections for the world economy, namely that trade-related policies do not change over a projection period as long as a quarter-century, may lead to underestimation of the gains from the phased implementation of prospective trade agreements. Had Japan and Korea been required to bind their agricultural tariffs at the rates in place when they signed onto the GATT in 1955 and

1967, respectively, estimates of the economic benefits of their membership of that club would have been much lower had it been assumed their farm tariffs would remain unchanged over the following quarter-century rather than rise – as indeed they did, and spectacularly so (Figure 2).

At the time of China's accession to WTO in December 2001, its NRA was less than 5 percent (see Figure 2), or 7.3 percent for just import-competing agriculture according to Anderson and Valenzuela (2008). Its average bound import tariff commitment was about twice that (16 percent in 2005), but what matters most is out-of-quota bindings on the items whose imports are restricted by tariff rate quotas. The latter tariff bindings as of 2005 for China were 65 percent for grains, 50 percent for sugar and 40 percent for cotton (WTO, ITC and UNCTAD 2007, p. 60). Hence China, too, has scope to raise its agricultural protection substantially, making it not unreasonable to project a 58 percent increase in their average NRA for key farm products in the present study (see Table 2).

Our key finding is that the contribution of farm policies to the estimated welfare cost of trade-distorting policies by 2030 is somewhat higher – especially for developing countries – than if one assumes no change in farm policies over the next two decades.

While the estimated welfare difference between the two scenarios is only a fraction of 1 percent of developing countries' GDP, we should remember that comparative static economywide modelling of this type always understates the true welfare costs (Francois and Martin 2010). Moreover, suppose the developing countries' policy response in place of raising farm import tariffs was to invest more in agricultural research. According to available evidence (Alston et al. 2000), this investment has a very high expected payoff for developing countries, a finding that is consistent with the welfare results from economywide modelling of boosts to farm productivity (Anderson and Strutt 2014b). Increasing the productivity of farms also would boost food self-sufficiency in a way that increases accessibility to food for developing country consumers, in contrast to welfare-reducing agricultural protection which shrinks their available supplies of food.

References

Alston, J.M., B.A. Babcock and P.G. Pardey (eds.) (2010), *The Shifting Patterns of Agricultural Production and Productivity Worldwide*, Midwest Agribusiness Trade Research and Information Center, Iowa State University, Ames IA.

Alston, J.M., M.C. Marra, P.G. Pardey and T.J. Wyatt (2000), *A Meta-Analysis of Rates of Return to Agricultural R&D: Ex Pede Herculem?* Washington DC: International Food Policy Research Institute.

Anderson, K. (1995), 'Lobbying Incentives and the Pattern of Protection in Rich and Poor Countries', *Economic Development and Cultural Change* 43(2): 401-23, January.

Anderson, K. (ed.) (2009), *Distortions to Agricultural Incentives: A Global Perspective, 1955-2007,* London: Palgrave Macmillan and Washington DC: World Bank.

Anderson, K. (ed.) (2010), *The Political Economy of Agricultural Price Distortions*, Cambridge and New York: Cambridge University Press.

Anderson, K. and S. Nelgen (2013), *Updated National and Global Agricultural Trade and Welfare Reduction Indexes, 1955 to 2012*, data spreadsheets at www.worldbank.org/agdistortions.

Anderson, K., G. Rausser and J.F.M. Swinnen (2013), 'Political Economy of Public Policies: Insights from Distortions to Agricultural and Food Markets', *Journal of Economic Literature* 51(2): 423-77, June.

Anderson, K., and A. Strutt (2012), 'The Changing Geography of World Trade: Projections to 2030'. *Journal of Asian Economics* 23(4): 303-23, August.

Anderson, K., and A. Strutt (2014a), 'Emerging Economies, Productivity Growth, and Trade with Resource-Rich Economies by 2030', *Australian Journal of Agricultural and Resource Economics* 58(4): 590-606, October.

Anderson, K., and A. Strutt (2014b), 'Food Security Policy Options for China: Lessons from Other Countries', *Food Policy* 49(1): 50-58, July.

Anderson, K. and E. Valenzuela (2008), *Global Estimates of Distortions to Agricultural Incentives, 1955 to 2007*, data spreadsheets at www.worldbank.org/agdistortions.

Bouët, A. and D. Laborde (2010), 'Assessing the Potential Cost of a Failed Doha Round', *World Trade Review* 9(2): 319–351.

Fouré J.A. Benassy-Quéré and L. Fontagné (2012), 'Macroeconomic Projections for the World Economy at the 2050 Horizon', Working Paper 2012-3, CEPII, Paris, February.

Francois, J.F. and W. Martin (2010), 'Ex Ante Assessments of the Welfare Impacts of Trade Reforms with Numerical Models', Ch. 13 in *New Developments in Computable General Equilibrium Analysis for Trade Policy*, edited by H. Beladi and E.K. Choi, London: Emerald Group Publishing.

Jensen, H.G. and K. Anderson (2016), 'Grain Price Spikes and Beggar-thy-neighbor Policy Responses: A Global CGE Analysis', *World Bank Economic Review* Vol. 30 (forthcoming).

Hertel, T.W. (ed.) (1997), *Global Trade Analysis: Modeling and Applications*, Cambridge and New York: Cambridge University Press.

Martin**,** W. and D. Mitra (2001), 'Productivity Growth and Convergence in Agriculture and Manufacturing', *Economic Development and Cultural Change* 49(2): 403-22.

Narayanan, B.G., A.H. Aguiar and R. McDougall (2012), ‘Global Trade, Assistance, and Production: The GTAP 8 Data Base’, West Lafayette IN: Center for Global Trade Analysis, Purdue University, downloadable at www.gtap.org.

Rausser, G.C., J. Swinnen and P. Zusman (2011), *Political Power and Economic Policy: Theory, Analysis and Empirical Applications*, Cambridge and New York: Cambridge University Press.

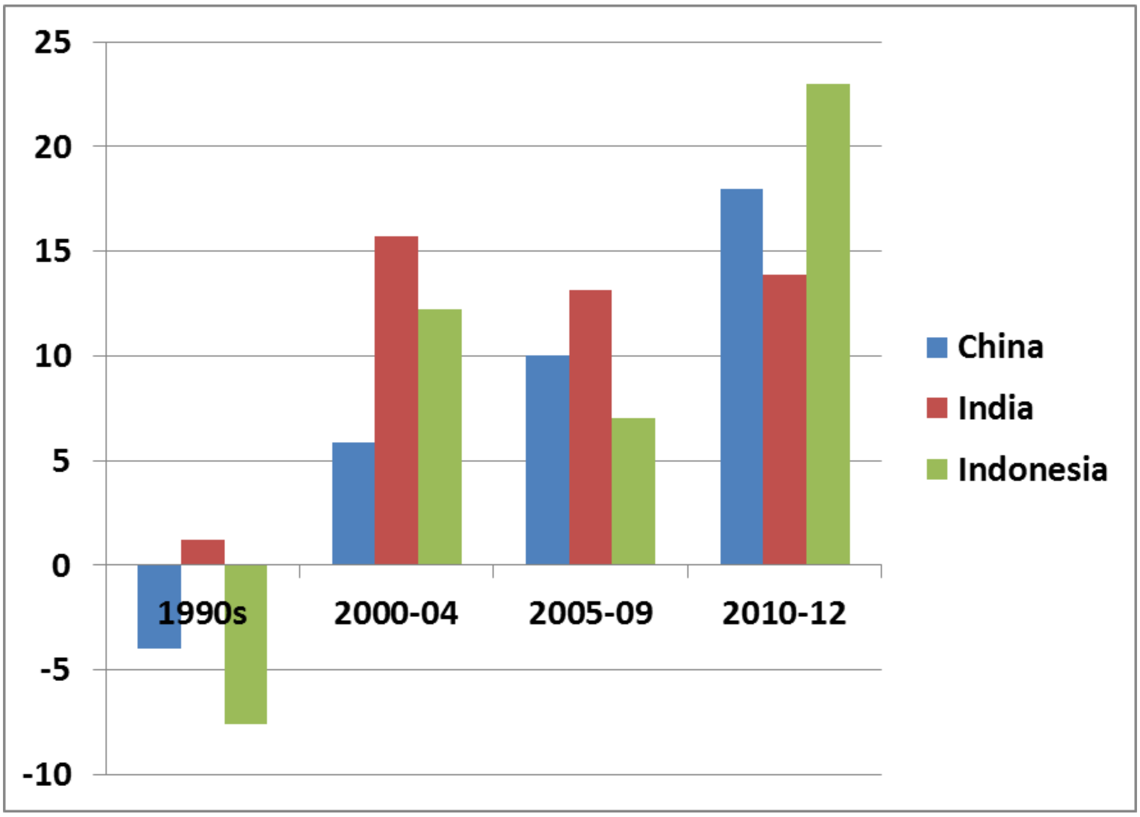
Rosen, R. and D. van der Mensbrugghe (2012), ‘Climate Change and Economic Growth: Impacts and Interactions’, *International Journal of Sustainable Economy* 4(3): 270–85.

Swinnen, J.F.M. (2008), *The Perfect Storm: The Political Economy of the Fischler Reforms of the Common Agricultural Policy*, Brussels: Centre for European Policy Studies.

WTO, ITC and UNCTAD (2007), *World Tariff Profiles 2006*, Geneva: World Trade Organization.

Figure 1: Agricultural Nominal Rates of Assistance[a] in China, India and Indonesia, 1990 to 2012

(percent)

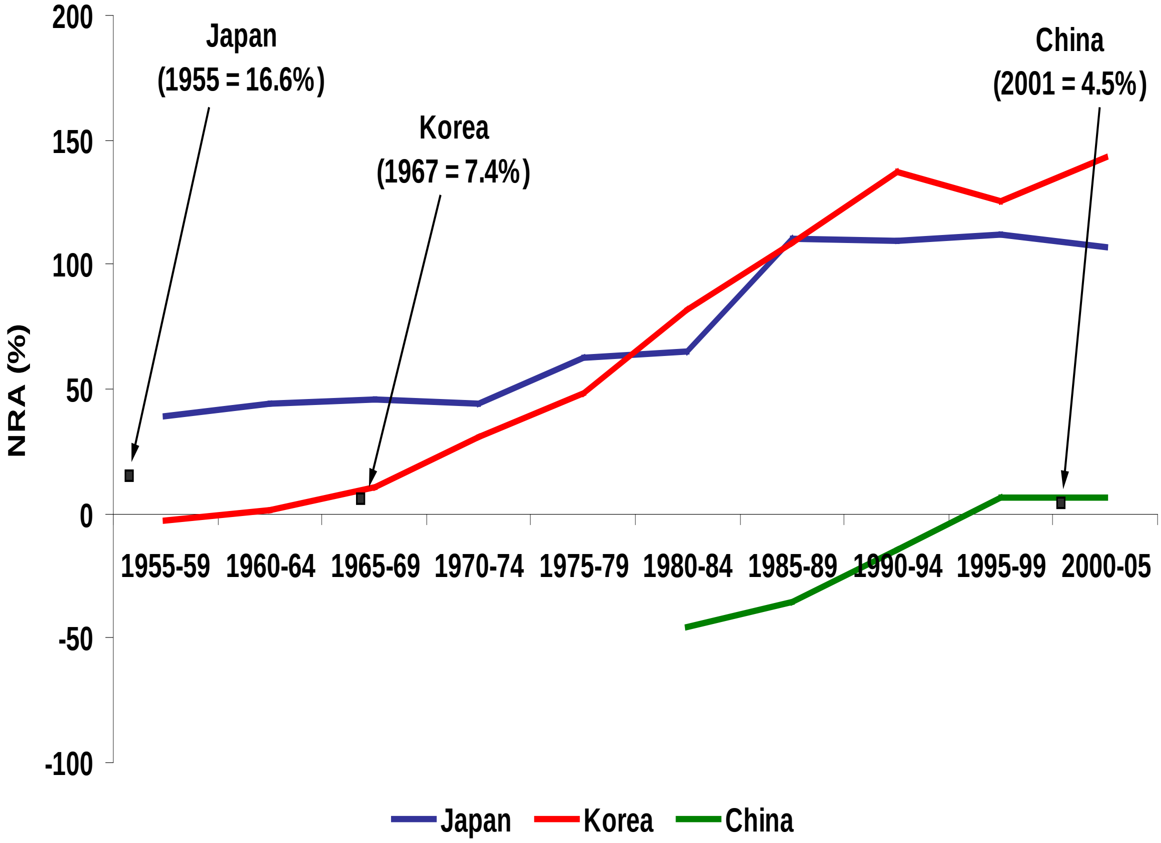


[a] The Nominal Rate of Assistance is the percentage by which gross returns to farmers have been raised by national farm policies (predominantly import restrictions and, in India's case, farm input subsidies). The final column for India is just 2010.

Source: Compiled from estimates in Anderson and Nelgen (2013)

Figure 2: NRAs for Japan, Korea and China and date of accession to GATT or WTO, 1955 to 2005

(percent)



Source: Anderson (2009, Figure 1.14), based on estimates in Anderson and Valenzuela (2008).

Table 1: Relationship between NRA and income, arable land endowment and a product's trade status, developing countries, 2004

(endogenous variable: NRA)

Exogenous variables:	Beef	Cotton	Maize	Milk	Pigmeat	Poultry	Rice	Soybean	Sugar	Wheat
YPC	0.378***	0.150**	0.0222	0.198***	0.0895	0.197**	0.396***	0.330*	0.268***	0.0555*
	(0.0662)	(0.0655)	(0.0306)	(0.0594)	(0.0579)	(0.0928)	(0.0891)	(0.173)	(0.0542)	(0.0306)
LPC	-0.200**	-0.0477	-0.0735	-0.265***	-0.135*	-0.265*	-0.725***	-0.849**	-0.122	-0.122*
	(0.0977)	(0.120)	(0.0717)	(0.0817)	(0.0776)	(0.145)	(0.173)	(0.311)	(0.112)	(0.0691)
TSI_i	-0.169	-0.00249	-0.00486	-0.0383	-0.0795	-0.354*	-0.369**	0.115	-0.176	-0.114
	(0.120)	(0.107)	(0.0747)	(0.101)	(0.0973)	(0.187)	(0.159)	(0.328)	(0.126)	(0.0733)
Constant	-2.978***	-1.227**	-0.141	-1.483***	-0.693	-1.439*	-3.701***	-3.517**	-1.295***	-0.481*
	(0.592)	(0.552)	(0.261)	(0.530)	(0.522)	(0.833)	(0.766)	(1.561)	(0.482)	(0.271)
Observations	44	22	56	41	35	42	37	26	57	53
R-squared	0.554	0.241	0.031	0.410	0.214	0.268	0.527	0.309	0.336	0.265
Adj. R-squared	0.521	0.114	-0.0248	0.362	0.138	0.210	0.484	0.215	0.298	0.220

Standard errors are shown in parentheses
Significance levels are *** p<0.01, ** p<0.05, * p<0.10

Source: Authors' estimates, based on NRA estimates and other variable data compiled from the World Bank (World Development Indicators) and the United Nations (COMTRADE data) by Anderson and Valenzuela (2008).

Table 2: Average tariffs in projected 2030 database without and with increases in developing country agricultural protection, aggregated regions (%) (trade-weighted averages)

(a) With unchanged NRAs	China	ASEAN	Rest E.Asia	India	Rest S.Asia	Central Asia	C&L America	M.East &Africa	All DCs	All HICs
Rice	3.9	37.6	2.2	37.1	9.4	7.0	7.7	21.2	**14.1**	**33.6**
Wheat	2.1	2.4	3.3	99.7	6.7	3.0	3.0	10.5	**15.8**	**11.7**
Coarse grains	1.8	4.5	3.9	21.0	3.3	1.9	12.8	7.3	**7.4**	**6.0**
Oilseeds	2.5	6.5	22.4	42.7	4.2	3.4	0.6	4.7	**4.0**	**0.9**
Sugar	0.3	13.9	4.8	89.5	11.8	9.4	15.0	15.0	**11.1**	**24.2**
Cotton	5.0	0.1	0.0	9.8	3.2	0.2	2.9	2.5	**4.0**	**0.3**
Beef and sheep meat	24.0	6.5	18.2	15.1	6.2	10.0	3.5	7.3	**16.1**	**8.5**
Pork and poultry	8.3	10.3	8.9	10.2	7.7	15.7	6.4	9.2	**8.4**	**6.9**
Dairy products	8.6	4.6	19.5	30.6	17.4	11.4	13.1	11.1	**10.3**	**6.3**
Average –above sectors	**7.9**	**7.9**	**10.0**	**37.5**	**5.9**	**8.3**	**6.6**	**11.0**	**9.3**	**7.9**

(b) With increased NRAs	China	ASEAN	Rest E.Asia	India	Rest S.Asia	Central Asia	C&L America	M.East &Africa	All DCs	All HICs
Rice	4.2	99.4	6.8	47.0	23.4	8.4	15.7	32.9	**20.3**	**34.6**
Wheat	43.0	4.8	4.5	99.7	10.5	4.8	15.2	13.7	**22.4**	**12.0**
Coarse grains	19.2	8.0	156.6	21.3	11.6	7.5	20.1	11.1	**36.9**	**6.0**
Oilseeds	15.9	18.9	84.8	100.6	18.8	14.7	4.4	10.3	**17.2**	**0.9**
Sugar	26.7	46.5	8.9	118.2	30.5	14.4	29.9	15.6	**21.9**	**24.3**
Cotton	5.5	3.9	0.8	9.9	8.6	0.3	3.0	5.7	**6.1**	**0.3**
Beef and sheep meat	26.2	12.6	26.7	19.5	11.2	17.8	29.2	9.0	**21.7**	**8.6**
Pork and poultry	10.4	17.7	12.8	21.0	12.9	19.9	11.0	11.1	**10.9**	**7.0**
Dairy products	12.4	5.3	20.8	34.8	18.9	11.4	21.1	11.1	**12.1**	**6.2**
Average –above sectors	**12.5**	**14.8**	**39.2**	**43.8**	**11.8**	**10.9**	**15.4**	**13.8**	**15.5**	**8.0**

Source: Authors' compilation (see text for methodology)

Table 3: Changes in economic welfare and component contributions from full liberalization, relative to 2030 baseline

(equivalent variation, 2007 US$ million)

	Total Welfare (EV)			**Allocative efficiency contribution**			**Terms of trade contribution**		
	(1) Policy status quo	**(2) Increased DC protection**	**(3) Increment with increased DC protection (2)-(1)**	**(4) Policy status quo**	**(5) Increased DC protection**	**(6) Increment with increased DC protection (5)-(4)**	**(7) Policy status quo**	**(8) Increased DC protection**	**(9) Increment with increased DC protection (8)-(7)**
China	173,294	175,376	2,082	145,823	148,912	3,090	28,592	27,736	-856
ASEAN	45,925	47,512	1,587	32,534	35,970	3,436	10,706	8,666	-2,040
Rest East Asia	58,412	63,447	5,035	38,256	44,599	6,343	25,107	24,057	-1,050
India	92,167	93,271	1,104	129,353	130,217	865	-34,470	-34,208	263
Rest South Asia	-2,110	-1,799	311	6,114	6,427	313	-2,802	-2,996	-194
Central Asia	2,858	3,076	219	1,392	1,440	48	580	786	206
C&L America	19,227	20,687	1,460	31,996	33,681	1,685	-13,023	-13,288	-266
ME and Africa	31,480	32,467	987	41,394	42,201	807	-19,609	-19,400	209
All Developing	421,252	434,037	12,785	426,861	443,448	16,587	-4,919	-8,647	-3,728
All High-income	138,359	140,626	2,266	133,955	132,568	-1,387	3,046	6,633	3,586
World	**559,611**	**574,663**	**15,052**	**560,816**	**576,016**	**15,200**	**-1,873**	**-2,014**	**-141**

Source: Authors’ GTAP model results (see text for methodology)

Table 4: Allocative efficiency contributions of liberalizing by sector with increased DC protection, relative to liberalization from the core 2030 baseline

(equivalent variation, 2007 US$ million)

	China	ASEAN	Rest E. Asia	India	Rest S. Asia	Central Asia	C&L America	M.East & Africa	All DCs	All HICs	World
Rice	66	1,393	148	36	138	0	31	468	2,281	-49	2,232
Wheat	238	-15	-39	-202	68	5	239	63	357	-376	-19
Coarse grains	570	-1	5,348	22	0	1	27	145	6,112	-29	6,083
Oilseeds	263	502	2,405	563	-14	1	-92	90	3,717	-219	3,498
Sugar	821	975	170	174	383	1	220	21	2,764	-11	2,754
Cotton	-290	-13	0	-15	-275	-13	6	9	-590	-95	-685
Beef and sheep meat	46	87	259	88	9	9	668	122	1,288	-17	1,272
Pork and poultry	1,701	148	88	129	5	39	168	46	2,324	-171	2,153
Dairy products	545	28	6	49	34	0	403	-16	1,048	-163	885
Total – sectors with increased DC protection	**3,959**	**3,103**	**8,385**	**844**	**349**	**44**	**1,670**	**948**	**19,302**	**-1,129**	**18,172**
All other sectors	-869	333	-2,042	21	-35	4	16	-140	-2,715	-257	-2,972
All sectors	**3,090**	**3,436**	**6,343**	**865**	**313**	**48**	**1,685**	**808**	**16,587**	**-1,387**	**15,200**

Source: Authors' GTAP model results (see text for methodology)

On-Line Appendix Table A1: Regional aggregation of the world's economies

Developing countries	Regions modelled	Original GTAP regions
China	China	CHN
ASEAN	Singapore	SGP
	Indonesia	IDN
	Malaysia	MYS
	Philippines	PHL
	Thailand	THA
	Vietnam	VNM
	RestSEAsia (Cambodia, Laos, Brunei, Myanmar, Timor Leste)	KHM LAO XSE
Rest East Asia	Pacific Countries	XOC
	Hong Kong	HKG
	South Korea	KOR
	Taiwan	TWN
	RestNEAsia (North Korea, Macau, Mongolia)	XEA
India	India	IND
Rest SouthAsia	Pakistan	PAK
	Bangladesh	BGD
	RestSAsia (Afganistan, Bhutan Maldives, Nepal, Sri Lanka)	LKA XSA
Central Asia	Central Asia	ARM AZE GEO KAS KYR TAJ TKM UZ KAZ KGZ XSU ARM AZE GEO
C&LAmerica	Mexico	MEX
	Argentina	ARG
	Brazil	BRA
	Chile	CHL
	Peru	PER
	Other Latin America	XNA BOL COL ECU PRY URY VEN XSM CRI GTM NIC PAN XCA XCB
ME&Africa	Middle East and Nth Africa	IRN XWS EGY MAR TUN XNF
	South Africa	ZAF
	Sub-Saharan Africa	NGA SEN XWF XCF XAC ETH MDG MWI MUS MOZ TZA UGA ZMB ZWE XEC BWA XSC
Other regions modelled (no protection increase):		
	EU27 and EFTA	AUT BEL CYP CZE DNK EST FIN FRA DEU GRC HUN IRL ITA LVA LTU LUX MLT NLD POL PRT SVK SVN ESP SWE GBR CHE NOR XEF BGR ROU
	Russia	RUS
	Other Europe	ALB BLR HRV UKR XEE XER TUR
	USA	USA
	Canada	CAN
	Australia	AUS
	New Zealand	NZL
	Japan	JPN

Appendix Table A2: Sectoral aggregation of each region's economy

Commodities where protection is increased (aggregated for reporting):	**Commodities modelled**	**Original GTAP sectors**
Rice	Paddy rice	pdr
	Processed rice	pcr
Wheat	Wheat	wht
CoarseGrains	Other cereal grains	gro
Oilseeds	Oil seeds	osd
Sugar	Sugar cane and sugar beet	c_b
	Sugar	sgr
Cotton	Plant-based fibres	pfb
Beef&sheep	Cattle, sheep, goats, horses	ctl
	Wool, silk etc	wol
	Beef and sheep meat etc	cmt
OtherMeats	Pigs & chicken etc	oap
	Other meat products	omt
Dairy	Dairy products	mil
Other sectors modelled with no increase in protection:		
	Raw milk	rmk
	Vegetables, fruit, nuts	v_f
	Vegetable oils and fats	vol
	Other crops	ocr
	Other processed food, beverages and tobacco	ofd b_t
	Forestry and fishing	frs fsh
	Coal	coa
	Oil	oil
	Gas	gas
	Other minerals	omn
	Textiles, apparel & leather	tex wap lea
	Motor vehicles & parts	mvh
	Electronic equipment	ele
	Other light manufacturing	lum ppp fmp otn omf
	Petroleum, coal products	p_c
	Heavy manufacturing	crp nmm i_s nfm ome
	Utilities and construction	wtr cns
	Electricity & gas distribution	ely gdt
	Trade & transport	trd otp wtp atp
	Other Services	cmn ofi isr obs ros osg dwe

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