



Asia-Pacific Research and Training Network on Trade

Working Paper Series, No. 6, April 2006

Modelling the Doha Round Outcome: A Critical view

Biswajit Dhar^{*}

^{*}Biswajit Dhar is Professor and Head, of the Centre for WTO Studies, Indian Institute of Foreign Trade. The views presented in this paper are those of the author and do not necessarily reflect the views of institute, other ARTNeT members, partners and the United Nations.

The Asia-Pacific Research and Training Network on Trade (ARTNeT) aims at building regional trade policy and facilitation research capacity in developing countries. The ARTNeT Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about trade issues. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. ARTNeT working papers are available online at: www.artnetontrade.org. All material in the working papers may be freely quoted or reprinted, but acknowledgment is requested, together with a copy of the publication containing the quotation or reprint. The use of the working papers for any commercial purpose, including resale, is prohibited.

Table of Content

Introduction.....	3
Analysis of the Results	4
(i) Full Liberalisation of Global Merchandise Trade	5
(ii) The Doha Round Scenarios.....	11
Methodological Limitations of the LINKAGE Model	13
By way of conclusions.....	16
References.....	18

Introduction

In a series of papers published during the past few years, World Bank economists have provided detailed projections by simulating the possible outcomes of the Doha Round negotiations¹. The projections have been obtained by using the LINKAGE Model, which is considered to be a global dynamic computable general equilibrium (CGE) model. The latest version of the LINKAGE Model, viz. LINK6, which these papers have relied on, uses the Global Trade Analysis Program (GTAP). LINK6 incorporates 87 countries/regions and 57 sectors and uses a dataset that has been updated up to 2001. This latter feature of the model, according to the authors, has helped generation of far more realistic results than those that were using the earlier versions, which had incorporated data only up to 1997.

This note attempts a critical assessment of the above-mentioned papers. At the outset, we would provide an analysis of the results that have been presented by looking at their implications for the developing countries in general and India, in particular. In the second part of the note, we would broadly allude to some of the methodological problems that are associated with the CGE models of the genre of the LINKAGE model. Our contention is that the limitations of these models, especially in terms of the assumptions on which they are based, deserve close scrutiny and that this dimension needs to be kept in view as the results obtained from studies are read.

¹ The most quoted of these papers are by Kym Anderson, Will Martin and Dominique van der Mensbrugghe. See references for details.

* Professor and Head, Centre for WTO Studies IIFT. The views expressed are personal.

Analysis of the Results

The LINKAGE model provides a baseline projection of the world economy first to 2005 and then to 2015 assuming no other policy changes. Deviations from that baseline in 2015, due to total liberalization from 2005, are then examined². The simulations for 2015 are based on alternative scenarios of trade liberalisation emerging from the current round of multilateral trade negotiations. The results have been presented based on two sets of assumptions. The first assumes full liberalisation of global merchandise trade. The projections relying on this assumption are worked out on the basis of a new source for protection data, which integrates trade preferences, specific tariffs and a partial evaluation of non-tariff barriers (NTBs). Inclusion of NTBs in the CGE models has been one of its less satisfactory aspects. This stems from the fact that attempts made thus far to quantify the impact of NTBs has been not been quite satisfactory. While the database on non-tariff measures that has been developed by UNCTAD, viz. the TRAINS database, is fraught with limitations ranging from incomplete coverage³ and problems relating to the measurement of their differential impacts on countries⁴, the Market Access Map (MAcMap) database that has been developed by ITC along with CEPII (Paris) includes only tariff quotas in its database. Considering that the NTBs (i.e. standards et al) are assuming increasing importance in a world where tariffs are steadily declining, this limitation of LINK6 needs to be highlighted.

The second set of results is based on some of the key proposals for agricultural trade reforms that are being actively discussed in the on-going negotiations. The simulations take into consideration proposals for tariff cuts along with those for treating some of the tariff lines as “sensitive” or “special products”. What needs to be particularly

² Anderson et al (2005).

³ For most countries, TRAINS database covers NTBs till end of the 1990s. In case of India, the NTB-data are provided up to 1997, which is even before the removal of quantitative restrictions (QRs) that India was maintaining for balance of payments purposes.

⁴ For instance, exporters from LDCs and developing countries endowed with relatively low level of technical skills would find it very difficult to conform to a technical barrier imposed by a developed country. But the same may not be true for other countries.

mentioned here is that none of two sets results take cognisance of the subsidy dimension, which, without doubt, holds the key for realising the objective of a distortion-free market for agricultural commodities.

(i) Full Liberalisation of Global Merchandise Trade

The first major set of results that is reported in the papers pertains to the effect of the on-going trade liberalisation efforts on the real income going up to the year 2015. These estimates have been made against the benchmark which assumes a complete freeing of merchandise trade over the period 2005-2010. It has been reported that real income gains by 2015 for the global economy as a whole would be US \$ 287.3 billion per year (in 2001 dollars). Of this increase, the developed countries' would have a share of US \$ 201.6 billion while for the developing countries the gains would be US \$ 85.7 billion. In other words, the share of the developing countries in the total gains would be a third of the total global gains. More importantly, real income gains reported for the developing countries would be 0.8 per cent of the baseline income in 2015, which is marginally higher than the corresponding figure for the developed countries (0.6 per cent). Among the developing countries, while the relatively prosperous Latin American region is expected to register real income which would be 1.0 per cent of the baseline income in 2015, for the South Asian region the corresponding figure is only 0.4 per cent.

These broad results lend themselves to two varying interpretations. The first, one which has been provided in the papers, is that the results are significantly favourable for the developing countries since their expected real income gains are considerably larger than their existing share in global production. Thus, while the developing countries' as a whole account for a quarter of the global production at present, they would be able to enjoy a third of the global gains in real income that is expected annually until the year 2015. An alternate view would be that what the results are pointing to is the increasing gulf between the relatively prosperous and poorer regions countries. In overall terms, it can be said that the disproportionately large gains for the developed countries that the papers under discussion have predicted would reinforce the status of the lesser players in the global economy as "developing" even after the so-called "development round" has been implemented. What is more, the results point to increasing differentiation between

the developing countries as the more prosperous regions are slated to record relatively larger increases in real income.

The disaggregated results provided for a small set of countries broadly reinforce the above-mentioned conclusions. India is expected to register a real income gain of only US \$ 3.4 billion a year, which is 0.4 per cent of the base line income in 2015. In case of China, the corresponding figures are US \$ 5.6 billion and 0.2 per cent respectively. On the other hand, countries like Thailand are expected to gain US \$ 7.7 billion, while for Argentina, the real income gain could be nearly US \$ 5.0 billion (see Table 1 for details).

From the point of view of developing countries, it is the expected movements in the terms of trade that provide the most disquieting numbers for this set of results. In what were considered as pioneering studies, Raul Prebisch and Hans Singer had pointed out in what are considered as pioneering studies that developing countries, as exporters of primary commodities, face deteriorating terms of trade while trading with the exporters of manufactured goods viz., the industrialised countries⁵. Subsequently, many studies have argued that for most of the past six decades, the terms of trade deterioration has been a major malaise for the developing countries. In fact, past studies had indicated that the developing countries would not have suffered the ignominy of the debt crisis if they had not experienced deterioration in their terms of trade. In their attempt to maintain their past levels of dollars earnings in the face of the deteriorating terms of trade, developing countries have only encouraged the development unsustainable production structures that could have serious medium to long term implications for their non-tradeables, in particular, labour and environment.

The results provided by the LINKAGE Model shows that the developing countries as a whole would suffer significant losses as a result of the changes in the terms of trade. The total loss that these countries are expected to suffer is expected to be nearly US \$ 30 billion a year. This sharply contrasts with the projection for the high income

⁵Prebisch's study was published as "The Economic Development of Latin America and its Principle Problem" and Singer's as "The Distribution of Gains between Investing and Borrowing Countries". For a more recent rendering of the issues involved, see UNCTAD (2005).

countries which should expect more than US \$ 30 billion gains annually from the terms of trade changes alone.

Among the developing country groupings, the projected changes in the terms of trade bring benefit only to the Latin American region. The South Asian region should suffer the largest losses on this account, amounting to more than US \$ 11 billion a year, and most of these losses would be because of the US \$ 9.4 billion losses that India is projected to suffer annually⁶. The results show that India and China would be suffering the largest losses arising from the movements in the terms of trade. This implies that for the two emerging economies the projected gains in real income would come at a considerable price in terms of domestic resource use.

The gains from full liberalisation of global merchandise trade, as estimated by the LINKAGE Model occur largely due to the liberalisation of agriculture and food sectors. Almost two-thirds of the global gains are due to agricultural trade liberalisation and these gains are expected mainly because High Income Countries would liberalise their agriculture sector. While these results are more along the expected lines, the disaggregated results that capture the impact of full global trade liberalisation on agricultural and food output as well as trade, should raise plenty heckles in many low income developing countries, including India.

According to the results provided by the Model, global trade liberalisation would significantly squeeze the global agricultural output by the year 2015. Agricultural output should decrease by almost US \$ 138 billion a year relative to the baseline. The members of the EU would experience sharp downturn in their output, as would be the case of Japan. From amongst the group of developing countries, India and China are expected to face decline in agricultural output; in case of the former, the decline is expected to be much larger in absolute terms. However, the group of agricultural exporters (the Cairns group countries) are likely to have a vastly different experience. Two of the major countries in this group, viz. Brazil and Argentina are expected to find their agricultural output increase annually by US \$ 66 billion and US \$ 12 billion respectively. Some of the

⁶ The losses that India would suffer because of adverse terms of trade would be nearly three times its real income gains following from the full liberalisation of global merchandise trade.

South East Asian countries are also expected to register gains, albeit by a relatively small amount. But while Brazil and Argentina are projected to make a collective gain of more than US 76 billion a year, the gains for the developing countries as a whole are put at US \$ 67 billion. Quite obviously, thus, some countries among in the developing world are expected to suffer significant losses and this group of countries is headed India. The projected annual losses for India should be of order of US \$ 24 billion a year, which is a four per cent decline in relation to the baseline. Along with India, China is also expected to be a loser, but of a much smaller magnitude (US \$ 10 billion a year).

The projections made by LINK6 about the winners and losers in the agriculture sector following from the global trade liberalisation have yet another significant dimension in that the distribution of gains within the developing world is expected to be highly skewed. Thus while the middle income countries are expected to register annual increases of more than US \$ 88 billion a year, the low income countries are expected to suffer annual losses of more than US \$ 21 billion. These results have serious longer term implications since the projected losers in the developing world are those countries that are significantly dependent on the agricultural sector as a source of livelihoods for a majority of their populations. What the World Bank is therefore trying to tell us is that the agricultural sector in developing countries like India, which is already under tremendous squeeze, could suffer further as full global trade liberalisation takes effect.

In respect of trade in agricultural products, the projections provided by LINK6 have a few surprises. China is shown to be emerging as a major exporter of agricultural products, with a likely export growth of nearly 146 per cent over the baseline. In comparison, China's import growth is expected to be a modest 27 per cent. As for India,

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_8411

