# THE WORLD BANK'S RESEARCH ON TRADE POLICY, 1998-2005: AN EVALUATION

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## PART I: GENERAL CONSIDERATIONS AND COMMENTS

### I. Introduction

The World Bank has a long research tradition on trade issues. The most prominent early projects were directed by Bela Balassa in the 1970s and dealt with protectionism and economic performance. These projects were built around the distinction between *nominal* and *effective* rate of protection, and analyzed the connection between export orientation and economic performance. Balassa found that there was a positive relation between exports' growth and GDP growth, and argued that protectionism negatively affected developing economies. During the 1980s research done at the Bank also dealt with cross-country regression analyses of growth. An early example of this type of work was an influential 1983 study by Gershon Feder published in the *Journal of Development Economics*. This paper – which in many ways is a precursor of modern cross-section analyses of growth – concluded that policies that encouraged exports had a positive effect on economic growth.

In the 1970s, and under the leadership of Hollis Chenery, the Bank undertook extensive work on economic performance – including growth – and the structure of different economies. The Bank's views on the subject were aptly summarized in the 1975 book "*Patterns of Development*" by Chenery and Moises Sirquin. The policy emphasis in this work was on the composition of exports – the main message was that countries ought to encourage manufactured exports – and on "*outward orientation*." Interestingly, no emphasis was placed on *trade liberalization* per se; there was a sense that export growth could be achieved through other policy means, including export subsidies, and that it did not require the (rapid or massive) lowering of tariffs.

*Trade liberalization* did not become a central aspect of the Bank's policy advice until the mid 1980s, an era that is associated with the name of Anne Krueger. During this time a number of research projects on trade reform and economic performance were implemented. Work on the optimal speed and sequencing of reform was undertaken, and multi-country studies on the effects of alternative trade regimes on a multitude of variables were implemented. The most ambitious of these projects was directed by Michael Michaely, Armeane Choksi and Demetrious Papageorgiou, and investigated in great detail economic performance in 19 countries. Although this study was controversial – a number of reviewers pointed out that the use of "subjective" measures of openness was a major limitation – it did make a number of important points. In particular, it emphasized the role of supporting policies and argued that the degree of regulation of labor markets was a fundamental determinant of the outcome of trade liberalization reforms. This important point has become central in more recent discussions on trade policy strategy, and has motivated recent research by academics and by researchers in the multilateral institutions.[1]

[1] See, for example, the research undertaken by James Heckman and his associates.

The Bank's views on trade liberalization and policy were summarized in the 1987 *World Development Report*. A number of economists from the Research Department contributed – either directly or indirectly – to this effort. After classifying countries in different groups according to their degree of "trade orientation," the Report analyzed economic performance. The conclusion was in line with other Bank research from that era, and pointed out to positive relationship between export orientation and growth. Reviewers, however, argued that the criteria used to classify countries were subjective and suspect. For instance, while Korea – a country well known for its selective controls of imports – was classified as strongly outwardly oriented, Chile – a country with a uniform 10% import tariff and no quantitative restrictions – was classified as being more protectionist.

During the early 1990s Bank research on trade started to focus on dynamic issues, and increasingly dealt with nuanced and less clear-cut issues. The 1993 *East Asian Miracle* study is an important product from these years. This volume asked whether import liberalization was a fundamental component of successful "outward oriented" policies. The authors pointed out that the East Asian miracle countries had maintained tight controls on imports – and in particular on imports of consumer and manufactured goods – at the same time as they had used a variety of pragmatic policies to encourage exports.

Throughout the rest of the 1990s Bank research on trade moved in two important directions. First, a large number of papers based on the so-called "new theories of endogenous growth" were produced. The Bank assembled one of the most comprehensive cross-country data sets on macroeconomics, and used it extensively to test numerous hypotheses on the long-run determinants of growth. Many of these papers – and in particular work done by Ross Levine and William Easterly – made it into the most prominent scholarly journals in the world. These papers emphasized the fundamental role of TFP growth in successful growth episodes, and argued that efforts to increase capital accumulation often were not translated into higher growth. Second, a number of projects on the political economy of protectionism were undertaken. These works emphasized the role of pressure groups and distributive consequences in the tailoring of trade policy.

In the late 1990s and early 2000 the Bank's research on trade focused on the impact of globalization on poverty and social conditions – indeed, many of the most recent efforts that deal with these issues are reviewed in this Report. An important and influential project on the subject was directed by David Dollar and Aart Kraay. Using a large data set and advanced econometric techniques, the authors concluded that developing countries that had become more integrated with the rest of the world had improved their economic performance – and had begun to catch up with advanced nations – while those countries that had turned their backs on globalization had continued to lag behind. Another research highlight of this period was the release of a cross-country data set on income distribution that had been assembled by Klaus Deininger and Lyn Squire. Once these data were available a number of researchers – both in the multilateral institutions as well as in academia – began to explore formally the connection between openness, trade policy, and globalization.[2] Other important research projects that dealt with the social consequences of globalization emphasized the need for designing appropriate evaluation methodologies. Work undertaken by Orazio Attanasio and his associates on Mexico and Colombia has been particularly influential.

[2] There have been some controversies surrounding the way in which these data were used. However, the fact that the data were made available is, of itself, commendable.

The brief and selective review presented in this section indicates that historically the Bank has had a very active, vibrant and influential research program on international trade and trade policy.[3] This past research provides the point of departure for the review and evaluation of more recent work presented in this Report. An important question is whether more recent research stands on its own when compared with the historical body of work undertaken by the Bank during the three decades spanning from 1970 to 2000.

## II. Recent Research

The research reviewed in this Report covers four broad aspects of trade and trade policy: (a) The effects of trade liberalization policies on economic performance, social conditions, and poverty. This includes analyses of the role of supporting policies and the evaluation of trade agreements such as the NAFTA. (b) Trade policy and international multilateral trade negotiations. (c) The political economy of trade reform, including the role of alternative policy tools. (d) Trade policy and factor markets, including the relationship between trade and innovation, and trade policy – including liberalization reforms – and labor market outcomes.

Although this is not the place for providing a detailed analysis of these four areas of research – in Part II of this Report a blow-by-blow evaluation of nine individual research projects and a large number of papers is provided – I will make four general points. First, the topics researched during the last few years are a natural extension of the research on trade and trade policy undertaken by the World Bank since the 1970s. The overarching question is whether trade policy can help countries accelerate growth and improve social conditions. Second, there are two major differences in emphasis, however, relative to earlier research. There is a clear concern about the *social effects* of alternative trade policies – their effects on poverty and income distribution – and there is an interest in understanding better the political economy dimensions of trade policy. The *overall* quality of the research is high, and compares quite well with *applied* academic research on the topic. In some ways this is not surprising, as the vast majority of the projects reviewed here involved academics from some of the best universities in the world as co-authors or authors. Third, although the Bank's research on trade continues to be influential, it is not as influential as it was in the 1980s and 1990s. Even though the recent debates on globalization and its effects on the poorer countries have referred to World Bank *policies*, there have been limited references to Bank *research*.[4] And fourth, in evaluating Bank research it is important to keep in mind the Bank's mission and nature. We are not talking about a research university; we are talking about a development institution. In that regard, the criteria used to evaluate the Bank's research should be different from those used to evaluate output generated by an economics department at a (major) university. Publication in first rate professional and scholarly journals is, of course, very important. However, it should not be the sole criterion for evaluating the relevance and usefulness of Bank research.

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[3] To be sure, the review presented above is selective and emphasizes those topics that, in my opinion, have been particularly salient in the Bank's research on international trade and economic development. A complete evaluation of this research effort is beyond the scope of this paper. For further elaboration of some of the points made here, see my paper in the May 1997 issue of the *American Economic Review*.

[4] See, for example, Thomas Friedman's "The World is Flat," and Joe Stiglitz's "Globalization and Its Discontents," just to name two of the most influential works on the subject.

## III. Research and Data

The World Bank is in a unique position for gathering data and constructing large and detailed multi-country data sets. To a large extent the Bank has done this during the last few years. Some important data sets developed at the Bank include a multi-country data set on capital stocks for many countries, data on educational attainment, data on tariff equivalence of NTBs, cross-country data on income distribution and poverty, and others. Some of the projects reviewed here use new data sets. The most important one is *Kenya: Export Prospects and Problems*, by Francis Ng and Alexander Yeats. In it the authors construct a data set on Kenya's exports, and show that these data are very different from those in official statistics. They also discuss the abysmal quality of trade data in most of Sub-Saharan Africa and argue that improving data quality and data availability is essential for evaluating different policies in the region.

In the years to come it is recommended that the Bank continues its effort to construct more extensive and better data sets. These should be made readily available to researchers from around the world. This will require a friendlier way of disseminating these data sets. Currently it is not easy to navigate the Bank's web site to find data sources and download data sets. It is recommended that the World Bank web page has a centralized "data page," were all data sets available and produced by the different departments are available in an organized fashion. A major effort should be made to make accessibility easy, and to have a powerful and easy to use search engine. At the current time, I am afraid, this is not the case.

## IV. Research Topics and Policy Implications

Every one of the projects reviewed here dealt with a topic that was relevant from a policy point of view. The questions addressed in these projects have either been at the center of global policy debates, or are germane to policy making in specific regions or countries. In that regard, there is no doubt that the focus of international trade research in the Bank has been appropriate, and has responded to the Bank's mission.

At the paper – as opposed to project – level, things are similar: Most of the papers reviewed are motivated by important policy issues and have policy implications. However, having said that, many of the papers don't spell out the policy implications clearly, nor do they develop the lessons that emerge from the research analysis. This is particularly the case for those papers that are written in a more academic style. In my view, this is a shortcoming of these papers. Every paper sponsored and financed by the World Bank should have an explicit section on "policy lessons and implications." I am aware, of course, that some scholarly journals may not be positively disposed toward including a lengthy section on policy issues. This, however, would only apply to *published articles*, and not to *Working Papers*. The majority of the Working Papers reviewed here, however, did not have a policy implications section. In the case of articles published in academic and scholarly journals, I would insist that at least a clearly stated paragraph on policy implications and lessons be included in the concluding remarks section.

## V. Research Quality, Authors and Cost Effectiveness

The vast majority of the papers reviewed are well written. Ideas are developed in a clear way, and empirical results are displayed in a professional manner.

There are two interrelated issues, however, that deserve attention: in some papers – especially in papers written by Bank personnel, without outside co-authors – there is unnecessary display of "technical virtuosity." I got the impression that at times the authors are trying to say, "we are also able to do fancy technical stuff." This is at times distracting, and often does not add anything to the quality or persuasiveness of the arguments. An example of this trait is the *Flagship Report on Lessons from NAFTA.* Instead of providing an analytical narrative on what we have learned from the NAFTA – with technical points relegated to annexes or footnotes – the authors delved for page after page on technical issues. A report that avoids falling in this trap is the very useful piece on exports' performance in Kenya.

The second and related point is that there aren't enough pieces that wrap things up, put issues in perspective and provide a unifying view. Or, at least there weren't enough pieces along those lines in the batch of projects and papers that I reviewed. In my view the Bank should make a greater effort to produce "summary" or "review" pieces that would provide a broad view on specific issues. In that regard, the Bank may want to require that most large projects produce a review type article. The model for these pieces could be the analytical review articles that are usually published in the *Journal of Economic Literature.*

Many of the papers reviewed in this Report have been co-authored, or authored, by non-Bank economists that have been hired by the Bank as consultants. In most cases non-bank authors are academics, mostly from Anglo Saxon countries. In the majority of cases they have Bank co-authors; some papers, however, are authored by outside authors only. A good example of this is: "Infrastructure, Geographical Disadvantage, Transport Costs and Trade" by Nuno Limao and Anthony J. Venables.

In my view, the best works among those reviewed tended to be either collaboration between an academic and a Bank economist, or were authored only by academics without direct involvement of a Bank economist. This suggests that the collaborative model of research is effective, in the sense of generating high quality and influential pieces. However, it potentially raises some issues related to cost effectiveness. The question is this: Would these academics be doing this work, even if the Bank had not hired them as consultants? Another way of putting it is whether the Bank is affecting the margin of decision for these scholars, or whether the funds involved are infra-marginal. The answer is likely to be case specific: in some cases by engaging her as a consultant, the Bank is inducing the academic in question to pay attention to issues she would not have researched otherwise. In other cases, the consulting fee would be financing work that would have been done anyway. An interesting question, and one for which I don't have a clear answer, is to what extent the Bank should make a greater effort to identify these two types of consultants. This would allow increasing the cost-effectiveness of the research projects.

Two additional and interrelated questions emerge for the analysis of authors and projects. First, to what extent does it make sense to have outsiders work solo? Wouldn't it make more sense to always – or almost always – have them team up with a Bank economist? To the extent that the outside academics have specific skills or knowledge, an efficient way of transmitting it to the Bank is sponsoring joint work done by the academic in question and a Bank professional. The second question is the dominance of academics from the Anglo Saxon world. Why is this so? Should the Bank make a much greater effort to diversify its consultants? Shouldn't more consultants come from the emerging countries? (By this I mean academics based in emerging countries' academic institutions.) Wouldn't greater diversity improve the know-how of the Bank itself? All of these are important questions related to research design and management, and I believe that the Bank's senior officials should address them, and develop an explicit policy regarding them.

### VI. Dissemination, Accessibility and Data Availability

The papers reviewed in this Repot are largely accessible, in the sense that they are well written and state their goals, methodology and results in a clear way. Some of them have been published in well-known scholarly and professional journals that circulate widely. Many of the papers that were reviewed in Working Paper form are likely to be published in the near future, and thus will become available and accessible in the form of a journal article or book chapter.

The vast majority of the papers are also available on the World Bank's web page. Unfortunately, however, more often than not it is not easy to find them. The World Bank's web page is not user friendly. It is difficult to navigate and its search tool leaves much to be desired. For instance, the category "research" is not one of those available in the pull-down menu from the search engine. Also, research projects are not centralized within one web page or a few web pages. There is fragmentation by topic and Bank vice-presidency where the project was originated.

Moreover, and more serious, it is difficult to find – and download – the data sets used in specific projects. For example, and as an experiment, I tried to find (and download) the data used in the very important paper on infrastructure and transport costs by Limao and Venables. It was a difficult task, and one at which I failed. When I got to the data page, the scrolling down through several screens did not help. And when I used the search tool and typed "infrastructure transport costs" (without the quotation marks) I got:[5]

PDF] Measuring Up to the Measurement Problem
**...** but not publishing them in a timely fashion, may increase the adjustment **costs** of dealing with a crisis (Box 14). * Compliance with international standards for **...**
siteresources.worldbank.org/DATASTATISTICS/Resour - 2005-06-27 - Text Version

[PDF] Cover, Contents & Summary 28 Sep.doc
**...** given its potential to drive remittance **costs** down. However, the key issue to **...** vehicle to fund important public **infrastructure** such as farm-to-market **...**
siteresources.worldbank.org/DATASTATISTICS/Resour - 2005-06-28 - Text Version

Result Page: **1**

Needless to say, neither of these is the data set of interest. The data were not available on the same page as the article, nor were they available on the web site of the *World Bank Economic Review*, where the article was published. Indeed the *World Bank Economic Review* does not have a data sets page, or at least I could not find it.

In my view, it is of essence that the Bank understands that it is a global *public institution*, and that as such it should provide services to the broad community of scholars and

[5] I must add that adding the quotation marks in the search did not improve things.

researchers. A fundamentally important aspect of this role is to make data sets readily available to researchers, academics and students from around the world.

## VII. Concluding Remarks

In the introduction to this review I pointed out that the World Bank had a strong research tradition on international trade. I argued that the evaluation of recent research should take this fact into account, and that a key question was whether recent efforts compare well with the better known past products. It is my view that, overall, recent research has been of fairly high quality and has responded to relevant issues. Methodologies used have been appropriate and results have been presented in a clear way. However, I have identified some areas where improvements are called for. In Part II of this Report I review in great deal nine projects.

# PART II: DETAILED EVALUATION OF INDIVIDUAL RESEARCH PROJECTS AND SELECTED PAPERS

## 1. Trade and Trade Policy

### A. Objectives

This project analyzes issues related to international trade and trade policies. It is composed of four articles that study different aspects of relevant topics in international trade. There are two papers (Rutherford and Tarr 2002 and Hoekman, Ng, and Olarreaga) sharing a similar motivation. Both articles try to address the impact of trade liberalization on trade flows and welfare. The article by Kee, Nicita and Olarreaga is more closely related to the literature regarding trade restrictiveness across countries. Finally, the paper by Feenstra and Kee (2004) discusses a methodology for measuring product variety in trade, and presents some empirical evidence on the relationship between export variety and productivity. All of these topics are important for better understanding the role of international trade in the growth and development process. Moreover, in all four papers the authors motivate the discussion making references to growth and development.

### B. Design and Implementation

The article "Trade liberalization, Product Variety and Growth in a Small Open Economy: A Quantitative Assessment" by Thomas F. Rutherford and David G. Tarr is an interesting methodological contribution to the literature on dynamic computable general equilibrium models. It makes two fundamental contributions: First, departing from previous work, the authors incorporate an explicit role for intermediate input varieties. The introduction of these varieties provides a mechanism through which trade liberalization may have more dramatic effects on economic growth. Second, they introduce a dynamic adjustment path, which allows them to evaluate numerically the welfare effect and adjustment costs during the transition to the new steady state, where trade is liberalized.

The main result in this paper is that trade liberalization may have a much larger impact on welfare than what has been revealed by more traditional general equilibrium models. The authors show that a 10% tariff cut leads to a 10.6% estimated welfare gain. Interestingly, this paper not only studies the impact of trade liberalization, but also incorporates a role for complementary policies such as international financial openness. In such a case, it is shown that with ability to access international capital markets, the welfare gains of trade reform are approximately tripled. The authors discuss their findings within the context of the existing literature, and provide an interesting comparison between their contribution and other work on the subject.

However, the authors do not explain fully in which countries these welfare gains are more likely to be captured. Naturally, the structure of the model is simple enough to answer the main research questions, but their assumptions may be more valid in some economies than in other ones. For some developing countries, with other domestic distortions such as labor market rigidities, the adjustment to the new steady state may be more prolonged and the welfare gains may be lower. This is also the case for economies with poor access to goods and capital markets.

In "Agricultural Tariffs or Subsidies: Which Are More Important for Developing Economies?" Bernard Hoekman, Francis Ng and Marcelo Olarreaga study in a very detailed way the way in which protectionism in advanced countries affects the developing nations. More specifically, the aim of this study is to compare the effects of import tariffs on agricultural goods in the rich countries with the effects of subsidies on agriculture in the same countries. This paper is relevant to evaluate the potential gains from the reduction of different types of protectionist policies. The authors simulate the effects of similar reductions in border protection and agriculture subsidies in the advanced countries on developing countries' welfare. This analysis is helpful to help determine where the emphasis should be focused in future multilateral trade negotiations.

The paper develops a partial equilibrium model of international trade and derives consistent changes in trade flows, world prices, and welfare generated by changes in tariffs, domestic supports and export subsidies. The empirical methodology consists of three sequential steps. First, the authors estimate import demand and export supply elasticities. In the second step they calibrate the model. In the final and third step they simulate the impact of liberalization.

The main finding of this paper is that tariffs matter much more than subsidies; that is, if the advanced countries reduce tariffs, the developing nations benefit more than if the advanced countries reduce subsidies. From here the authors conclude that attention in multilateral trade negotiations should focus on reducing border protection in both OECD and developing countries. Not surprisingly, the results also suggest that the impact of agricultural liberalization will not be homogeneous across the developing world. There will be some countries (net importers) adversely affected by the increase in world prices of agricultural products. The authors refer to the existing literature on the subject and discuss their paper within a broad context.

One of the critical issues in this paper is the estimation of elasticities. There are some limitations in the strategies followed by the authors. First, the assumption of homogeneity within products may be critical for the estimation of these elasticities. It may be argued that the degree of product differentiation in agricultural commodities is very low, there is evidence that trade classifications hide some important degree of within-products homogeneity. Schott (2004) finds evidence of huge differences in unit values within very detailed products exported to the United States.[6] Davis and Weinstein (2002) give some examples that heterogeneity is also valid for

[6] Peter K. Schott. 2004. "Across-Product versus Within-Product Specialization in International Trade," *Quarterly Journal of Economics* 119(2):647-678.

agricultural products.[7] Second, there may be some endogeneity problems. Within a political economy framework, it would be difficult to argue that export subsidies and import tariffs are exogenous to trade flows. Finally, as the authors point out, data constraints make it necessary to assume that elasticities are the same across countries. This assumption, for price elasticity, is indeed rejected once they distinguish between developed and developing countries.

The paper "Estimating Trade Restrictiveness Indices" by Hiau Looi Kee, Alessandro Nicita, and Marcelo Olarreaga belongs to a large body of literature estimating measures of trade distortions. Following the contribution of James Anderson and Peter Neary, the authors estimate three trade restrictiveness indices. The first index captures the extent to which trade policies at home affect domestic welfare. The second measures the impact of trade distortions on each country's import bundle. And the last index summarizes trade distortions imposed by the rest of the world on each country's export bundle. To shed light on differences across sectors in same country, all of these three indices are estimated for the broad aggregates of manufacturing and agriculture products.

The main results in this paper may be summarized as follows:

- Poor countries tend to be more restrictive and they also face the highest trade barriers on their export bundle.
- Non-tariff barriers are the main contributors (more than 70 percent on average) to world protection, underlying their importance for any study on trade protection.

This paper is very useful, as it helps clarify the extent to which different policies affect and distort trade. I expect that in the future these indices will be used by other researchers in their studies on the effects of trade policy and openness on a variety of economic outcomes.

Robert Feenstra and Hiau Looi Kee, in "On the Measurement of Product Variety in Trade," present a methodology to estimate product variety in trade and discuss some results on the relationship between export variety and productivity, both across and within countries. This is an interesting research area in which Robert Feenstra has been a leading contributor. The main motivation comes from the theoretical work on monopolistic competition and its emphasis in the extensive margin of international trade. The authors refer to this work, and to some recent empirical work on how export variety is related to productivity.

Using this methodology the authors provide some interesting stylized facts. First, in the cross-section of countries, there is very high correlation between export variety and productivity. Second, this correlation seems also to be present within a country over time. It is shown how, for example, a gradual decline in export variety in Canada since the early 1990s has been accompanied by a reduction in its productivity related to the rest of the world. In the same vein, by comparing Japan and Korea, they show how both gaps in terms of export variety and productivity have been narrowing between these two countries.

As is briefly discussed in the paper, this positive correlation between export variety and productivity is far from being a causal relationship. Increasing export variety may contribute to increases in productivity, but it is also possible that gains in productivity may increase export variety. This paper does not deal with this causality issue, and it is left as a very interesting area of future research. Indeed, the same authors have developed an extended version of this paper in

[7] Donald Davis and David Weinstein. 2002. "What Role for Empirics in International Trade?" In Ronald Findlay, Lars Jonung, Mats Lundahl, eds., Bertil Ohlin: A Centennial Celebration, 1899-1999, Cambridge: MIT Press.

which they show that export variety in fact exerts a causal effect on productivity. A useful application of this approach refers to export margins. Hummels and Klenow (2004) have used this methodology to distinguish between the extensive margin (variety) and intensive margin. Moreover, they decompose the intensive margin in a price index and in a quantity index. The main motivation in this recent work is to discuss how the different export margins are related to countries' size and income. Naturally, an extension of this type of analysis is to study the relationship between these margins and productivity.

### C. Accessibility

Most of the pieces in this project are well written. They are accessible to professional economists. At times, however, I wished that there was a stronger discussion on the policy implications that emerged from this research.

## 1. Trade and Trade Policy

**Annex 3: Research Quality Indicator Form**

| | |
|---|---|
| **S** | **S**uperior |
| **AA** | **A**bove **A**verage |
| **A** | **A**verage |
| **BA** | **B**elow **A**verage |
| **U** | **U**nacceptable |

| | S | AA | A | BA | U |
|---|---|---|---|---|---|
| ***Please rate the following aspects of the project outcomes (or in the case of ongoing projects, design and intermediate outputs)*** | | | | | |
| **Topics** | | | | | |
| Importance of the issues addressed | | X | | | |
| Clarity of the project focus and stated objectives | | | X | | |
| | | | | | |
| **Analysis** | | | | | |
| Theoretical/conceptual framework | | | X | | |
| Empirical application | | X | | | |
| Statistical and econometric methods | | | X | | |
| Use of existing knowledge and resources | | X | | | |
| | | | | | |
| **Data** | | | | | |
| Awareness of other data sources | | X | | | |
| Data compilation, cleaning and cataloging | | X | | | |
| Survey design and sampling | | X | | | |
| | | | | | |
| **Output Quality** | | | | | |
| Writing quality (clarity, organization, etc.) | | X | | | |
| Clarity of conclusions and recommendations | | X | | | |
| Extent to which conclusions are based on analytic evidence | | X | | | |
| Appropriateness of the recommendations | | | X | | |
| Appropriateness of output form (working paper, book, database, etc.) for intended audiences | | | X | | |
| Availability of translated outputs where appropriate | | | | | |
| | | | | | |
| **Extent to which research:** | | | | | |
| Increases knowledge and understanding of the issues | | X | | | |
| Provides a sound basis for policy | | X | | | |
| | | | | | |
| **Actual or likely impact of research on:** | | | | | |
| Government policy | | | X | | |
| Future analysis | | | X | | |
| The development community in general | | | X | | |
| | | | | | |
| **Overall Quality of Research** | | X | | | |

## 2. **Modeling Trade and Poverty Linkages**

### A. Objectives

This ambitious project analyzes the poverty impacts of a potential Doha Development Agenda. Although its emphasis is on the *consequences* of wide trade liberalization, it also contributes to the discussion of the effect of liberalization on the agricultural sector. The main outcome of this project is contained in the volume "Putting Development Back into the Doha Agenda: Poverty Impacts of a WTO Agreement" edited by Thomas W. Hertel and L. Alan Winters. Overall, the quality of the work is on the high side, the methods and techniques used are consistent with professional standards, and the topics analyzed are of great interest to the emerging and transition countries. This research will prove to be very important in future debates on the effects of trade openness and globalization on social conditions.

### B. Design and Implementation

The volume "Putting Development Back into the Doha Agenda: Poverty Impacts of a WTO Agreement" edited by Thomas W. Hertel and L. Alan Winters is structured in 17 chapters, covering 12 country case studies that deal with the poverty impact of several trade liberalization episodes. The countries included are Bangladesh, Brazil (2 studies), Cameroon, China (2 studies), Indonesia, Mexico, Mozambique, Philippines, Russia, and Zambia. This is an ambitious project that offers a comprehensive analysis of the national poverty impacts of specific policy reforms regarding multilateral trade negotiations. Many – if not the majority – of the controversies concerning trade liberalization evolve around its impact on poverty and income distribution. It is precisely for that reason that the issues discussed in this volume are highly relevant.

Most of the articles in this volume employ computable general equilibrium models, which are a typical tool for *ex ante* analysis of the economic consequences of comprehensive trade agreements. In order to deal with some of the traditional criticisms of CGEs, the editors also included some econometric-based analyses that focus on key dimensions of the relationship between trade liberalization and poverty.

What is the impact on poverty of the Doha Development Agenda? Unsurprisingly, the studies contained in this volume reveal that near-term effects are mixed. Some developing countries could experience small increases in poverty levels, while others could expect a reduction in poverty. An important finding – and one that is consistent with traditional trade theory – is that countries may reduce poverty not only by gaining access to developed countries' markets, but also thorough a reduction in their own trade barriers.

The results reported in this volume also deal with additional implications for policy makers in developing countries. For instance, according to some of the studies compiled here, labor mobility across sectors, the extent to which changes in world prices get transmitted to the rural sector and the incidence of national tax instruments are important in helping explain the effect of trade on poverty. These findings imply that the agenda for developing countries should not only be centered on trade policy issues, but also on domestic reforms. A key conclusion from the volume – and again, one that is not completely surprising – is that sustained reductions in poverty depend on stimulating economic growth. To do that, goods trade liberalization is not enough, and countries have to advance in reduction on barriers to trade in services and investment. These results are well integrated into the existing literature, and are related to the very important topic of the sequencing of economic reform.

The other three "products" from this project – two papers on Brazil and one on Russia – tend to confirm the overall results reported in the book discussed above. This is hardly surprising, since these three pieces are almost identical versions of the respective chapters from the volume. Indeed, it is difficult to understand why these three papers are presented as separate products, and not the other chapters in the Hertel-Winters volume.

**C. Accessibility**

The style is clear, and the message comes across in a straightforward way. The chapter on "Synthesis and Overview" is very useful.

2. **Modeling Trade and Poverty Linkages**

**Annex 3: Research Quality Indicator Form**

| | |
|---|---|
| **S** | **S**uperior |
| **AA** | **A**bove **A**verage |
| **A** | **A**verage |
| **BA** | **B**elow **A**verage |
| **U** | **U**nacceptable |

| | S | AA | A | BA | U |
|---|---|---|---|---|---|
| ***Please rate the following aspects of the project outcomes (or in the case of ongoing projects, design and intermediate outputs)*** | | | | | |
| **Topics** | | | | | |
| Importance of the issues addressed | X | | | | |
| Clarity of the project focus and stated objectives | X | | | | |
| | | | | | |
| **Analysis** | | | | | |
| Theoretical/conceptual framework | | | X | | |
| Empirical application | X | | | | |
| Statistical and econometric methods | X | | | | |
| Use of existing knowledge and resources | | X | | | |
| | | | | | |
| **Data** | | | | | |
| Awareness of other data sources | | X | | | |
| Data compilation, cleaning and cataloging | X | | | | |
| Survey design and sampling | | | | | |
| | | | | | |
| **Output Quality** | | | | | |
| Writing quality (clarity, organization, etc.) | | X | | | |
| Clarity of conclusions and recommendations | | X | | | |
| Extent to which conclusions are based on analytic evidence | | X | | | |
| Appropriateness of the recommendations | | X | | | |
| Appropriateness of output form (working paper, book, database, etc.) for intended audiences | | X | | | |
| Availability of translated outputs where appropriate | | | | | |
| | | | | | |
| **Extent to which research:** | | | | | |
| Increases knowledge and understanding of the issues | X | | | | |
| Provides a sound basis for policy | | X | | | |
| | | | | | |
| **Actual or likely impact of research on:** | | | | | |
| Government policy | | | X | | |
| Future analysis | | X | | | |
| The development community in general | | | X | | |
| | | | | | |
| **Overall Quality of Research** | | X | | | |

## 3. Political Economy of Trade Policy

### A. Objectives

This project is comprised of two papers. Its aim is to investigate some political economy angles of trade policies in the United States and Mercosur. Both papers are professionally done. They fit well within the existing literature. In both papers other works on the subject are referenced and discussed. These are important issues for the emerging and transitional economies. One of the papers was published in the *Journal of International Economics*; the other is scheduled for publication in the *Journal of Development Economics*. In spite of their technical quality, these papers – and in particular "Market Access for Sale" – do not provide a detailed discussion of the policy implications of the basic results. In both papers the "Conclusions" section is a summary, rather than a discussion of implications. In that regard, this project has missed a very good opportunity for enlightening an important policy issue.

### B. Design and Implementation

The article "The Protectionist Bias of Duty Drawbacks: Evidence from Mercosur," by Olivier Cadot, Jaime de Melo, and Marcelo Olarreaga, investigates the role of duty drawbacks in explaining differences in tariffs across industries in a custom union. Based on work by Grossman and Helpman (2004), the authors develop a model where, in the presence of imported intermediate products and duty-drawbacks, exporters have an incentive to lobby as a way of obtaining subsidies. The authors analyze how these incentives to lobby – and the resulting endogenously determined tariff structure – are likely to change when two countries form a customs union. The implications of this model are tested using data for common external tariff in Mercosur. In undertaking this test the authors concentrate their analysis on Argentina and Brazil, the two large members of Mercosur. The findings are consistent with the idea that the elimination of duty drawbacks for intra-regional exports led to increased counter-lobbying by users of intermediate products. In quantitative terms, the estimations show that, in the absence of counter-lobbying, the common external tariff would have been on average 3.5 percentage points (25 percent) higher.

In their article "Market Access for Sale," Hiau Looi Kee, Marcelo Olarreaga, and Peri Silva analyze whether preferential market access granted by the United States to exporters in the rest of the Americas is affected by foreign lobbying. The analysis is also based on the theoretical framework developed by Grossman and Helpman (2004). More specifically, they extend the Grossman-Helpman model to incorporate the role of foreign lobby contributions. The implications of this model are then tested using data on tariff preferences and lobby contributions for 34 countries in the region. According to the empirical results reported by Kee, Olarreaga, and Silva, the foreign lobbying variable plays a significant role in explaining the observed differences in preferential market access to the United States. In quantitative terms, the estimated parameters imply that the U.S. government puts a heavy weight on foreign lobby contributions, even much larger (five times) than the weight on tariff revenue forgone.

### C. Accessibility

The two papers in this project are well written. They are directed to a professional audience, and satisfy the requirements for scholarly publications. As with most Bank research published in scholarly journals, it is not easy to extract the policy implications or "best practices" lessons obtained from this work.

**3. Political Economy of Trade Policy**

**Annex 3: Research Quality Indicator Form**

| | |
|---|---|
| **S** | **S**uperior |
| **AA** | **A**bove **A**verage |
| **A** | **A**verage |
| **BA** | **B**elow **A**verage |
| **U** | **U**nacceptable |

| | S | AA | A | BA | U |
|---|---|---|---|---|---|
| ***Please rate the following aspects of the project outcomes or in the case of ongoing projects, design and intermediate utputs)*** | | | | | |
| **Topics** | | | | | |
| Importance of the issues addressed | | | X | | |
| Clarity of the project focus and stated objectives | | | X | | |
| | | | | | |
| **Analysis** | | | | | |
| Theoretical/conceptual framework | | X | | | |
| Empirical application | | | X | | |
| Statistical and econometric methods | | | | X | |
| Use of existing knowledge and resources | | X | | | |
| | | | | | |
| **Data** | | | | | |
| Awareness of other data sources | | X | | | |
| Data compilation, cleaning and cataloging | | X | | | |
| Survey design and sampling | | | | | |
| | | | | | |
| **Output Quality** | | | | | |
| Writing quality (clarity, organization, etc.) | | X | | | |
| Clarity of conclusions and recommendations | | | | X | |
| Extent to which conclusions are based on analytic evidence | | | X | | |
| Appropriateness of the recommendations | | | X | | |
| Appropriateness of output form (working paper, book, latabase, etc.) for intended audiences | | | X | | |
| Availability of translated outputs where appropriate | | | | | |
| | | | | | |
| **Extent to which research:** | | | | | |
| Increases knowledge and understanding of the issues | | | X | | |
| Provides a sound basis for policy | | | | X | |
| | | | | | |
| **Actual or likely impact of research on:** | | | | | |
| Government policy | | | | X | |
| Future analysis | | | | X | |
| The development community in general | | | | X | |
| | | | | | |
| **Overall Quality of Research** | | | X | | |

## 4. Patterns of Integration in the Global Economy

## A. Objectives

This project is comprised of two collections of papers – "From Natural Resources to the Knowledge Economy; Trade & Job Quality" edited by De Ferranti et. al., and "Neither Curse nor Destiny: Natural Resources and Development" edited by Lederman and Maloney – two additional papers on labor market issues related to integration in the global economy, and a third paper already incorporated in the volume edited by Lederman and Maloney.

"From Natural Resources to the Knowledge Economy: Trade and Job Quality" edited by David de Ferranti, Guillermo E. Perry, Daniel Lederman and William F. Maloney, published by the World Bank, analyzes the causes and consequences of Latin American patterns of global integration. This report is motivated by some concerns among scholars and policy makers that continued specialization in natural resources is responsible for the poor performance of the Latin American economies. In that regard, this project is highly relevant from a policy discussion. The authors discuss the existence literature and rely on recent theoretical developments in trade theory, labor economics and natural resources economics.

## B. Design and Implementation

"From Natural Resources to the Knowledge Economy: Trade and Job Quality" is structured in five chapters. In the first one, the authors motivate the questions addressed in this research and a summary of the main findings. The second chapter analyzes the main determinants of comparative advantage of LAC economies during the last two decades of the 20th century. In this chapter the authors discuss how traditional and modern notions of national endowments affect the structure of international trade. It also studies how trade structure in turn affects the rate of economic growth. The general conclusion is that trade liberalization and the development of modern factors of production can help accelerate the pace of development in the region. In contrast with the traditional view against specialization in natural resources, this chapter concludes that what matters is how countries produce, not what they export.

Chapters 3 and 4 complement the evidence in the previous chapter by analyzing historical evidence (Chapter 3) and country and industry specific experiences (Chapter 4). The authors relay on existing empirical evidence as well as on results from works commissioned for this report to reach some interesting conclusions. Some of these conclusions may be summarized as follows:

- The traditional arguments for diversifying production away from natural resources-based activities do not receive strong empirical support. First, natural resources intensive sectors have as much potential (or more) for gains in productivity than the manufacturing sector. Second, contrary to Prebisch's concerns, there has not been a declining trend for commodities' prices in the last century.
- The experiences of the Scandinavian countries and the United States and Canada show that natural resources abundance may be a source of growth and productivity if there are some complementary factors (education, institutions) that spur technological innovation.

Much of the disappointing performance of Latin American countries, in contrast to other natural resource abundant countries such as the Scandinavian nations, is due to the existence of explicit barriers to the adoption and creation of new technologies, and to lack of an environment that facilitates innovation.

Finally, Chapter 5 examines issues related to the region's labor markets. It studies the relationship between trade liberalization and wages and unemployment. In particular, it inquires whether, as it has been claimed for some globalization critics, trade reforms have been strongly associated with higher labor informality.

The volume "Neither Curse nor Destiny: Natural Resources and Development," edited by Daniel Lederman and William F. Maloney, is collection of papers related to the impact of natural resource abundance on economic growth. In recent years there has been revival in the debate about the relationship between economic growth and the abundance of natural resources. In a number of highly influential papers, Sachs and Warner argue that resource abundance is detrimental to growth. In this volume, structured in three main parts, there is detailed revision of the empirical evidence on this issue. In particular, the volume's objective is to determine whether the empirical evidence supports the Sachs-Warner view.

The first part of the volume is aimed at evaluating the robustness of the Sachs and Warner findings. In their very useful contribution, Lederman and Maloney (chapter 2) explore whether a different and theoretically more consistent model of comparative advantage in natural resources is able to replicate the negative relationship between natural resources and growth. Their findings are in open contrast to Sachs and Warner: their preferred measure of resource abundance is positively correlated with economic growth. Moreover, the empirical evidence seems to suggest that it is export concentration in a very small number of products, and not natural resources per se, that results in a lower rate of growth. In chapter 3, Manzano and Rigobon develop an alternative explanation for the apparent negative relationship between natural resources and growth. Their results suggest a problem of observational equivalence in Sachs and Warner's findings: most resource abundant countries suffered from a debt "overhang" after a period of high commodity prices during the 1970s. Bravo-Ortega and De Gregorio in Chapter 4 develop a model and present empirical evidence on the idea that the impact of natural resources on growth depends critically on the availability of human capital.

Part two of this volume focuses on lessons from history. Several interesting findings are reported in these chapters. These are briefly summarized as follows:

(i) Modern evidence reveals that Prebisch's concern about a permanent decline in real commodities prices is not supported by the data (chapter 5).

(ii) Deficient learning capacity and inward-looking industrialization led the Latin American countries to a very low rate of technological innovation (adoption). This fact goes a long way toward explaining Latin America's underperformance relative to the more developed resource abundant countries (chapter 6).[8]

(iii) The analysis of historical cases of countries where resource abundance was positively associated with economic growth (for example, the case of the United States) shows that what really matters is not the inherent character of resources, but the nature of the learning process and the diversification in other activities related to natural resources (chapters 7 and 8).

(iv) The final chapters of this volume deal with issues related to dynamics in comparative advantage. Paraphrasing the title, a number of authors ask whether natural resources are destiny. First, in chapter 9 Venables reviews the theoretical literature concerning determinants of trade

[8] This is the main message from the article by Maloney (2002): "Missed Opportunities: Innovation and Resource Based Growth in Latin America," published in *Economia* and reprinted in the volume reviewed here. This paper is a comparative analysis of the causes of the divergent performance of Latin American countries with respect to other natural resource abundant countries, such as Australia, Canada, Norway, Sweden, and New Zealand.

patterns, focusing mainly on the implications from "new economic geography" models. He concludes that this literature, among other interesting implications, predicts that natural endowments might not be the most important determinant of trade patterns. The empirical paper by Lederman and Xu in chapter 10 provides an empirical complement to the previous chapter, by studying which endowments explain comparative advantage in a panel data set of countries. Using Leamer's aggregates, they estimate net exports as a function of several "traditional" endowments (capital per worker, land per worker) and other "modern endowments" (knowledge, exchange rate variability). Their main conclusion is that traditional factor endowments do help to explain trade patterns, but their role is not as important as previously thought. For some products, "modern endowments" seem to be more relevant to explain comparative advantage. In the same vein, chapter 11 by Martin addresses how countries may reduce their dependence on natural resources. The author focuses on four factors: (i) physical and human capital accumulation, (ii) trade liberalization, (iii) differential rates of technological change, and (iv) reduction in transport costs.

The analyses presented in this volume are very useful and clearly policy relevant. Some questions, however, remain unanswered. Also, one could take issue with the approach taken in some of the chapters. A few concerns include:

- It is difficult to disentangle the effects of natural resource abundance and export concentration. Both are positively correlated.
- Comparative analyses of the experience of Latin American and Scandinavian countries are suggestive, but they are far from conclusive. Why the Scandinavian countries were able to develop technologically advanced activities based on natural resources is still open to debate (see comments by Warner on Maloney's paper in *Economica*).
- There is a weak link between the theoretical discussion in Venables' chapter and the empirical counterpart by Lederman and Xu. Moreover, these authors use a restricted version of the Heckscher-Ohlin model, assuming that all countries are located in the same cone of diversification; "modern endowments" used in the estimation are more likely to be endogenous to the productive structure and highly correlated among them and with "traditional" endowments. Identification is really an issue here.

In their paper "Labor Demand and Trade Reform in Latin America," Pablo Fajynzybler and William Maloney analyze empirically the consequences of trade liberalization on labor demand elasticity in three Latin American countries: Chile, Colombia, and Mexico. The paper is motivated by increasing fears that liberalization could increase the degree of uncertainty faced by workers, as well as job precariousness. It is argued that increased competitiveness of product markets and greater access to foreign inputs increase labor demand elasticity, especially for low-skilled workers.

From a methodological point of view, the paper offers no new perspective. The authors follow closely the approach by Slaughter (2001) and Krishna et al. (2001). Thus, the paper's main contribution is to study similar issues for a different sample of countries. To identify the impact of trade liberalization on labor elasticities, the authors include interactive terms between the explanatory variables and, alternatively, period-specific variables and trade-related variables. Among the trade-related variables, they include tariff rates, non-tariff barriers, real exchange rates, and import penetration. Empirically, the main concerns on endogeneity are addressed by using a GMM estimator. The findings of this paper reject the hypothesis that trade liberalization increases labor demand elasticities in Chile and Colombia. Mexico, on the other hand, provides limited support for this hypothesis. The paper, however, does not explain why these results were obtained. What makes these countries different? Why would the hypothesis be rejected in some of them and not in others?

Additional comments relate to identifying the effects of trade liberalization per se on economic activity. By including interactions between dependent variables and period specific effects, it is difficult to identify the pure role of trade liberalization. As is the case in most episodes of economic reform, trade liberalization was accompanied by other policies that may be relevant in explaining labor demand elasticities. And using outcome variables (import-penetration ratio) has some limitations, since these variables don't always capture adequately policy-induced changes. For similar changes in trade protection, some industries may respond very differently in terms of production and import penetration.

Norbert M. Fiess, Marco Fugazza, and William F. Maloney in "LDC Labor Market Structure and Real Exchange Rate Behavior" examine the relationship between wage rigidities and real exchange rates for three Latin American countries: Brazil, Colombia, and Mexico. Based on a two-sector model, they derive patterns of co-movement among relative salaried/self-employed incomes, salaried/self-employed sector sizes, and the real exchange rate. The main objective of this analysis is to discriminate between different hypotheses of exchange rate movements. As noted by the authors, their main findings are provocative. First, they show that unregulated self-employed and salaried sectors often appear as one integrated labor market, rather than segmented or dual labor markets as customarily envisaged. Second, they can explain the appreciations of the peso in Mexico from 1988-1991 and the Brazilian real from 1993-1996 without recourse to inertial stories. These are interesting results that are likely to generate further research in the future.

**C. Accessibility**

"From Natural Resources to the Knowledge Economy: Trade and Job Quality" is highly accessible. In a way, this report is a good example of how to produce material that (potentially) will reach a broad audience. The report is clearly written, and in order to make many of the important points the authors use well designed graphs and figures. More technical material is relegated to boxes. As in the case of the body of the texts, the boxes are clearly written.

Given the quality of the exposition and the policy relevance of this topic, it is surprising that the report was released by one of the Regional Vice-Presidencies in its semi-informal "Viewpoints" series, rather than by the Bank's publications office or through one of the joint publication programs that the Bank has with university presses.

## 4. Patterns of Integration in the Global Economy

**Annex 3: Research Quality Indicator Form**

| | |
|---|---|
| **S** | **S**uperior |
| **AA** | **A**bove **A**verage |
| **A** | **A**verage |
| **BA** | **B**elow **A**verage |
| **U** | **U**nacceptable |

| | S | AA | A | BA | U |
|---|---|---|---|---|---|
| ***Please rate the following aspects of the project outcomes (or in the case of ongoing projects, design and intermediate outputs)*** | | | | | |
| **Topics** | | | | | |
| Importance of the issues addressed | X | | | | |
| Clarity of the project focus and stated objectives | X | | | | |
| | | | | | |
| **Analysis** | | | | | |
| Theoretical/conceptual framework | | | X | | |
| Empirical application | | | X | | |
| Statistical and econometric methods | | | X | | |
| Use of existing knowledge and resources | | X | | | |
| | | | | | |
| **Data** | | | | | |
| Awareness of other data sources | | X | | | |
| Data compilation, cleaning and cataloging | | X | | | |
| Survey design and sampling | | | | | |
| | | | | | |
| **Output Quality** | | | | | |
| Writing quality (clarity, organization, etc.) | | X | | | |
| Clarity of conclusions and recommendations | | | X | | |
| Extent to which conclusions are based on analytic evidence | | | X | | |
| Appropriateness of the recommendations | | | X | | |
| Appropriateness of output form (working paper, book, database, etc.) for intended audiences | | X | | | |
| Availability of translated outputs where appropriate | | | | | |
| | | | | | |
| **Extent to which research:** | | | | | |
| Increases knowledge and understanding of the issues | | X | | | |
| Provides a sound basis for policy | | X | | | |
| | | | | | |
| **Actual or likely impact of research on:** | | | | | |
| Government policy | | | X | | |
| Future analysis | | | X | | |
| The development community in general | | | X | | |
| | | | | | |
| **Overall Quality of Research** | | X | | | |

## 5. Geography and Trade

### A. Objectives

This Project is comprised of a single paper: "Infrastructure, Geographical Disadvantage, Transport Costs and Trade" by Nuno Limao and Anthony J. Venables. The objective of this project is to investigate the role played by transport costs in international trade flows, and to determine the ways in which investment in infrastructure can reduce the effects of distance. The project pays particular attention to the role of geography, infrastructure and trade in Africa. This is a very important topic for developing and transition economies. Its findings have important implications for policies on infrastructure.

### B. Design and Implementation

The authors use two data sets to investigate the effects of infrastructure on transportation costs. The first one has data on the cost of shipping a standard container from the port of Baltimore in the United States to selective destinations. The authors are able to break down these costs into two components: the first one for transportation by sea, and the second one for the ratio of CIB to FOB import values. The authors also use a data set for bilateral imports to investigate the effects of geography and infrastructure on trade. The methodological approach followed is straightforward and uses advanced econometric techniques. The use of alternative data sets allows the authors to check for the robustness of the results. The analysis is well integrated with academic and scholarly research on the subject, and makes reference to the literature. This is not surprising, since Tony Venables is one of the most prominent scholars working on issues related to trade and geography.

The results obtained by the authors are important and useful. They find that improvements in infrastructure reduce transportation costs, and thus the costs of geographical distance, very significantly. Indeed, the magnitudes of the effects are startling: improving infrastructure from the median to the top quartile is equivalent to becoming 2,400 kilometers closer to trading partners. This, of course, makes exports more competitive internationally, giving them a boost.

The results obtained from the trade equations are equally large and impressive. According to the authors, the estimated elasticity of international trade relative to transport costs is approximately –2. A 10 percent increase in transport costs reduces, on average, trade volumes by approximately 20 percent.

Their findings with respect to intra-African trade are particularly interesting: For short distances (less than 1,100 kilometers), African countries tend to face lower transportation costs than non African countries. These costs become larger for longer distances. For the case of Africa they estimate the elasticity of (bilateral) trade flows with respect to transport costs to be approximately –3.

This research provides very important information on (some of) the benefits of infrastructure projects. These will prove valuable in cost-benefit analysis.

### C. Accessibility

The sole paper in this project is very well written and clearly presented. The authors communicate clearly the importance of the topic, and go through their methodology in a clear a succinct fashion. The results are presented with clarity, and the summary tables are illustrative and full of information. As I was reading the paper, I began to ask myself whether the *World Bank Economic Review* had been the best outlet for this piece. The paper is so well written and so well executed that I thought it deserved a wide audience. I have since done some research on citations and impact. I am happy to inform that the paper has been cited widely – 23 times according to the *Social Sciences Citation Index* and 129 times according to *Google Scholar*.

**5. Geography and Trade**

**Annex 3: Research Quality Indicator Form**

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|---|---|
| **S** | **S**uperior |
| **AA** | **A**bove **A**verage |
| **A** | **A**verage |
| **BA** | **B**elow **A**verage |
| **U** | **U**nacceptable |

| | S | AA | A | BA | U |
|---|---|---|---|---|---|
| ***Please rate the following aspects of the project outcomes (or in the case of ongoing projects, design and intermediate outputs)*** | | | | | |
| **Topics** | | | | | |
| Importance of the issues addressed | X | | | | |
| Clarity of the project focus and stated objectives | X | | | | |
| | | | | | |
| **Analysis** | | | | | |
| Theoretical/conceptual framework | | X | | | |
| Empirical application | X | | | | |
| Statistical and econometric methods | X | | | | |
| Use of existing knowledge and resources | X | | | | |
| | | | | | |
| **Data** | | | | | |
| Awareness of other data sources | X | | | | |
| Data compilation, cleaning and cataloging | X | | | | |
| Survey design and sampling | | | | | |
| | | | | | |
| **Output Quality** | | | | | |
| Writing quality (clarity, organization, etc.) | X | | | | |
| Clarity of conclusions and recommendations | X | | | | |
| Extent to which conclusions are based on analytic evidence | X | | | | |
| Appropriateness of the recommendations | | | X | | |
| Appropriateness of output form (working paper, book, database, etc.) for intended audiences | | X | | | |
| Availability of translated outputs where appropriate | | | | | |
| | | | | | |
| **Extent to which research:** | | | | | |
| Increases knowledge and understanding of the issues | X | | | | |
| Provides a sound basis for policy | | X | | | |
| | | | | | |
| **Actual or likely impact of research on:** | | | | | |
| Government policy | | X | | | |
| Future analysis | X | | | | |
| The development community in general | | X | | | |
| | | | | | |
| **Overall Quality of Research** | X | | | | |

## 6. Pre-Shipment Inspection and Customs Corruption

### A. Objectives

This project has one output, the working paper "Tariff Evasion and Customs Corruption: Does PSI Help?" by José Anson, Olivier Cadot and Marcelo Olarreaga. The purpose of this paper is to investigate whether pre-shipment inspections (PSI) – a process that usually takes place in the exporting country – reduce fraud in the importing country. (Fraud usually takes the form of under-invoicing of imports.) This is an important topic in a number of countries where fraud has been high and pervasive. Indeed, whether to rely on PSI is a recurrent question among many trade and finance ministers. The paper relies on state-of-the-art modeling and the authors are clearly aware of the existing literature. The paper is developed in a professional way. There are no clear-cut policy recommendations.

### B. Design and Implementation

Implementation is in two parts. A model is developed to analyzing the strategic interaction between customs officials and importers. The results suggest that the introduction of PSI can either reduce or increase the degree of fraud. The actual results depend on the degree of efficiency of the PSI and on the probability of inspection in the destination country. The second part corresponds to an empirical analysis using data from three countries: Argentina, the Philippines and Indonesia.

Evaluating whether a PSI system works is a complex and difficult task; there are issues of measurement as well as issues related to the appropriate statistical technique. In this paper the authors rely on non-parametric tests as well as regression estimation. The non-parametric tests consist of three steps. In the first step the distribution of the ratio of "true value" of imports (as determined by the PSI) to declared value (as reported at destination) is computed. In the second step the distribution of the CIF to FOB ratio in the importing country is computed. In the third step these two distributions are compared. If the PSI is effective, the two distributions should be similar. Non-parametric tests for the equality of the distributions are computed. The results obtained from the econometric analysis support those from the non-parametric tests: PSI has reduced fraud in the Philippines; it has not reduced fraud in Argentina or Indonesia.

### C. Accessibility

The paper is written in a professional style. The exposition, however, is somewhat disorganized.

## 6. Pre-Shipment Inspection and Customs Corruption

### Annex 3: Research Quality Indicator Form

| | |
|---|---|
| **S** | **S**uperior |
| **AA** | **A**bove **A**verage |
| **A** | **A**verage |
| **BA** | **B**elow **A**verage |
| **U** | **U**nacceptable |

| | S | AA | A | BA | U |
|---|---|---|---|---|---|
| ***Please rate the following aspects of the project outcomes (or in the case of ongoing projects, design and intermediate outputs)*** | | | | | |
| **Topics** | | | | | |
| Importance of the issues addressed | | | X | | |
| Clarity of the project focus and stated objectives | | | X | | |
| | | | | | |
| **Analysis** | | | | | |
| Theoretical/conceptual framework | | | X | | |
| Empirical application | | | | X | |
| Statistical and econometric methods | | | X | | |
| Use of existing knowledge and resources | | | | X | |
| | | | | | |
| **Data** | | | | | |
| Awareness of other data sources | | | X | | |
| Data compilation, cleaning and cataloging | | | X | | |
| Survey design and sampling | | | | | |
| | | | | | |
| **Output Quality** | | | | | |
| Writing quality (clarity, organization, etc.) | | | | X | |
| Clarity of conclusions and recommendations | | | | X | |
| Extent to which conclusions are based on analytic evidence | | | X | | |
| Appropriateness of the recommendations | | | | X | |
| Appropriateness of output form (working paper, book, database, etc.) for intended audiences | | | X | | |
| Availability of translated outputs where appropriate | | | | | |
| | | | | | |
| **Extent to which research:** | | | | | |
| Increases knowledge and understanding of the issues | | | | X | |
| Provides a sound basis for policy | | | | X | |
| | | | | | |
| **Actual or likely impact of research on:** | | | | | |
| Government policy | | | | X | |
| Future analysis | | | | X | |
| The development community in general | | | | X | |
| | | | | | |
| **Overall Quality of Research** | | | | X | |

## 7. Trade and Poverty

### A. Objectives

There is one product in this project: the working paper "Globalization and Complementary Policies: Poverty Impacts in Rural Zambia," by Jorge F. Balat and Guido G. Porto. The authors note that in the last few years poverty has increased in Zambia. During that period Zambia implemented a number of economic reforms, including trade liberalization and the elimination of the marketing board for maize and cotton. In their work they try to determine whether there has been a link between these reforms and the increase in poverty. This is a highly relevant topic for the emerging and transitional economies. Critics of economic reform and of globalization have often argued that one of the consequences of these policies is that they increase poverty and negatively affect income distribution. It is possible to argue that analyzing an individual case will not help elucidate the question of the relationship between globalization and poverty. It is important, however, to see this effort in the broader context of academic and professional research on the subject. The authors of this paper reference additional works on the subject.

### B. Design and Implementation

The sole paper in this project is well designed and professionally executed. The authors look at the problem at hand from different perspectives, and rely on state-of-the-art statistical techniques. The results obtained are reasonable. The paper would have benefited from a strong section on policy recommendations.

As the authors point out, a liberalization program that liberalizes agricultural prizes – such as the one put in effect in Zambia in the 1990s – affects poverty in two fundamental ways. First, by increasing the price of agricultural goods, it has the potential to affect incomes of (poor) rural households. On the other hand, by increasing the price of foodstuffs, it has the potential effect of negatively impacting poor consumers (both rural and urban). The authors use the available data in Zambia in a creative way in their attempt to analyze both of these issues. Their analysis of the production side relies on "matching coefficients." Producing for the market – as opposed to producing for self-consumption – is considered as the "treatment." Propensity scores are estimated to establish the "appropriate" control group, and the incomes for both groups – producers to markets, and self-consumption – are compared. The authors make sure that the balancing property is satisfied. They find that for most crops those households that produce for the market have a higher income than those that don't. They argue that supporting policies, which are implemented along with liberalization, matter. In order to deal with this, they estimate productivity equations for cotton. They find that those households that receive extension services have a higher productivity (8.5% higher) than those that don't. Their consumption-side analysis confirms the view that the increase in maize prices has had a negative effect on the real income of the poor. This effect, however, was reduced by the introduction of a less expensive variety of maize.

### C. Accessibility

The paper is clearly written. The exposition is straightforward, and a professional economist familiar with modern and advanced econometric and statistical techniques should have no problem in understanding the paper. As with most pieces reviewed here, there is very little in terms of policy recommendations or lessons or "best practices." The interested reader has to extract these important conclusions on his or her own. As pointed out repeatedly in this review, this is one of the most serious shortcomings of Bank research on international trade.

## 7. Trade and Poverty

**Annex 3: Research Quality Indicator Form**

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|---|---|
| **S** | **S**uperior |
| **AA** | **A**bove **A**verage |
| **A** | **A**verage |
| **BA** | **B**elow **A**verage |
| **U** | **U**nacceptable |

| | S | AA | A | BA | U |
|---|---|---|---|---|---|
| ***Please rate the following aspects of the project outcomes (or in the case of ongoing projects, design and intermediate outputs)*** | | | | | |
| **Topics** | | | | | |
| Importance of the issues addressed | | | X | | |
| Clarity of the project focus and stated objectives | | X | | | |
| | | | | | |
| **Analysis** | | | | | |
| Theoretical/conceptual framework | | | X | | |
| Empirical application | | X | | | |
| Statistical and econometric methods | | X | | | |
| Use of existing knowledge and resources | | | X | | |
| | | | | | |
| **Data** | | | | | |
| Awareness of other data sources | | X | | | |
| Data compilation, cleaning and cataloging | | X | | | |
| Survey design and sampling | | | | | |
| | | | | | |
| **Output Quality** | | | | | |
| Writing quality (clarity, organization, etc.) | | | X | | |
| Clarity of conclusions and recommendations | | X | | | |
| Extent to which conclusions are based on analytic evidence | | | X | | |
| Appropriateness of the recommendations | | X | | | |
| Appropriateness of output form (working paper, book, database, etc.) for intended audiences | | | X | | |
| Availability of translated outputs where appropriate | | | | | |
| | | | | | |
| **Extent to which research:** | | | | | |
| Increases knowledge and understanding of the issues | | X | | | |
| Provides a sound basis for policy | | | X | | |
| | | | | | |
| **Actual or likely impact of research on:** | | | | | |
| Government policy | | | X | | |
| Future analysis | | | X | | |
| The development community in general | | | X | | |
| | | | | | |
| **Overall Quality of Research** | | | X | | |

## 8. Trade Policy Data Support/Dissemination

### A. Objectives

This is another project with only one product, the working paper "Kenya: Export Prospects and Problems," by Francis Ng and Alexander Yeats. The main purpose of this piece is to analyze the evolution of Kenya's exports during the last few years. The task is challenging, as the quality of trade data in Kenya – and more generally in Africa – is very poor. The authors painstakingly construct an alternative data set for trade, using data from trading partners. They find that the divergence between these "constructed" data and the official data is remarkably large. The topics analyzed in this paper – the evolution of exports and the need for quality data to evaluate policy – are very important for the emerging and transition countries. They are particularly central for African countries. Most countries in Sub-Saharan Africa have failed to make exports an engine of growth. Why is this so? Different authors have suggested different explanations. Most of them, however, are based on faulty premises and are not backed by serious data analyses. The Ng and Yeats contribution is very welcome. In a careful way they dissect the available evidence and provide a plausible and highly persuasive analysis of Kenya's poor export performance.

### B. Design and Implementation

This study has two strengths. First, it constructs a new data set for Kenya's exports. This work shows that the quality of Kenya's official statistics is dismal. There is an urgent need to upgrade data collection, analysis and dissemination. Doing this will allow for a more transparent evaluation of economic policies and will add to the process of accountability.

The second strength of this project is that the analysis is kept at a relatively simple level. The authors provide a compelling analytical narrative that explains, in a step-by-step fashion, the shortcomings and failures of Kenya's external policies. This narrative is complemented by the construction and analysis of a set of indicators that capture the main characteristics of Kenya's export sector. These indicators include an *index of trade complementarity*, an *index of export prospects*, and an index that decomposes the sources of Kenya's export growth. The authors discuss some of the literature on African exports and growth, and refer to the academic literature on the topic. However, a better integration of their own analysis with the existing scholarly literature, and in particular with the more technically oriented empirical literature, would have improved the analysis.

The paper is organized in 11 chapters. The first chapter is the introduction and motivates the analysis. Chapter 2 deals with data constraints and explains clearly the glaring gaps in data availability, and points out that data gathering in Kenya contradict UN standards. It forcefully makes the point that an improvement in data quality is a requirement for policy evaluation. Chapter 3 focuses on Africa's marginalization in world trade. It documents the decline in export ratios, and points out that in some countries non-oil exports have declined in absolute terms in the last 20 years. The authors point out that in Kenya – as in other African countries – there is an urgent need to diversify exports. Chapter 4 deals with the destination of Kenya's exports, and makes a simple and yet very powerful point: most of Kenya's exports go to a small number of countries, generating a high degree of vulnerability. A healthy growth strategy would diversify both the number of products exported as well as the countries to which they are exported. Chapter 5 discusses the role of preferences in the recent evolution of Kenya's exports. It focuses on the role played by the "*African Growth and Opportunities Act of the U.S.*" The authors conclude that the effect of the AGOA has been limited. Further, they argue that the implementation of the CAFTA will erode the AGOA's actual preferences further.

Chapter 6 deals with the composition of Kenya's exports, while Chapter 7 focuses on competitive factors. Four key points are made: (1) Kenya's exports are highly concentrated, with two products – coffee and tea – dominating. Unless exports are diversified, Kenya's marginalization in world trade will increase in the years to come. (2) Some new non-traditional products, including cut flowers, show promise. There is a need to encourage the development of similar non-traditional export industries. (3) The evolution of an *index of trade complementarity,* suggests that the potential for increased intra Africa trade has declined. (4) In the aggregate Kenya's international competitive position has worsened. Chapter 8 deals with intra-industry trade, and shows that Kenya lags behind other emerging countries in terms of international production sharing. This has resulted in a relative stagnation of Kenya's exports and has contributed to the lack of export diversification. The authors argue that there are many potential sectors where international production sharing would be feasible and would become dynamic. These industries include consumer electronics and office equipment. The topic of Chapter 9 is regional markets. The authors argue that, given the poor quality of the data, this is a very difficult task. After analyzing their newly constructed data, they conclude that the evolution of non-oil intra-African trade has been disappointing. During the last 30 years, Kenya's non-oil exports to the region grew at a significantly lower rate than world trade. Chapter 10 deals with prospects for export diversification. There are many internal factors – including a hostile atmosphere toward business – that hold Kenya's exports down. These include corruption, NTBs, excessive labor regulations, and the absence of the rule of law, among others. A pro-active export policy would require addressing these important shortcomings and limitations. The authors argue that Kenya lacks the institutional setting required for identifying potential new export products. The final Chapter focuses on policy recommendations.

This is a comprehensive study that covers some of the most important impediments faced by the export sector in Kenya. What is surprising, however, is the very limited role given to exchange rate policy in the analysis. Traditionally, African nations have tended to maintain an acutely overvalued real exchange rate. This has introduced a serious anti-exports bias, and has conspired to choke export growth. Many forces have been behind exchange rate overvaluation, including a lack of understanding of economic principles, corruption and other political economy considerations. This study would have been more compelling if it had addressed these issues directly.

**C. Accessibility**

This paper is well written, and highly accessible in terms of exposition and level of technical discussion. In many ways, it has what should be the basic template for Bank studies. There is a short and highly readable executive summary. Jargon is kept to a minimum, and is used only when strictly necessary, and the authors restrain themselves from the temptation to showcase their technical virtuosity. The use of equations is kept to a minimal level. Chapters and sections are preceded by a very useful "Key Points" paragraph, and there are numerous boxes that provide a more in-depth treatment of some important issues. However, the presentation would have improved if the authors had provided a better connection between their work and the existing literature – both on Africa and on the rest of the world – on the subject.

## 8. <u>Trade Policy Data Support/Dissemination</u>

## Annex 3: Research Quality Indicator Form

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|---|---|
| **S** | **S**uperior |
| **AA** | **A**bove **A**verage |
| **A** | **A**verage |
| **BA** | **B**elow **A**verage |
| **U** | **U**nacceptable |

| | **S** | **AA** | **A** | **BA** | **U** |
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| ***Please rate the following aspects of the project outcomes or in the case of ongoing projects, design and intermediate outputs)*** | | | | | |
| **Topics** | | | | | |
| Importance of the issues addressed | **X** | | | | |
| Clarity of the project focus and stated objectives | **X** | | | | |
| | | | | | |
| **Analysis** | | | | | |
| Theoretical/conceptual framework | | | **X** | | |
| Empirical application | | **X** | | | |
| Statistical and econometric methods | | | **X** | | |
| Use of existing knowledge and resources | | **X** | | | |
| | | | | | |
| **Data** | | | | | |
| Awareness of other data sources | | **X** | | | |
| Data compilation, cleaning and cataloging | **X** | | | | |
| Survey design and sampling | | | | | |
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| **Output Quality** | | | | | |
| Writing quality (clarity, organization, etc.) | **X** | | | | |
| Clarity of conclusions and recommendations | **X** | | | | |
| Extent to which conclusions are based on analytic evidence | **X** | | | | |
| Appropriateness of the recommendations | | **X** | | | |
| Appropriateness of output form (working paper, book, database, etc.) for intended audiences | | | **X** | | |
| Availability of translated outputs where appropriate | | | | | |
| | | | | | |
| **Extent to which research:** | | | | | |
| Increases knowledge and understanding of the issues | **X** | | | | |
| Provides a sound basis for policy | **X** | | | | |
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| **Actual or likely impact of research on:** | | | | | |
| Government policy | **X** | | | | |
| Future analysis | | **X** | | | |
| The development community in general | | **X** | | | |
| | | | | | |
| **Overall Quality of Research** | **X** | | | | |

## 9. Flagship: Latin America and the Caribbean

### A. Objectives

This "flagship" project has one output, the report "Lessons from NAFTA for Latin America and the Caribbean Countries: A Summary of Research Findings," by Daniel Lederman, William F. Maloney and Luis Serven. The purpose of the project is to provide a summary of research on NAFTA ten years after the Agreement was implemented. In doing this, the authors try to distill lessons that will be useful for other countries in the Latin American region: lessons on how to deal with free trade agreements, and what to expect from them. The report is presented as a "summary of research findings," and in that respect one does not expect to find new results.

The topic addressed in this report is of significant importance for the emerging and transition economies. Indeed, its importance goes well beyond the Latin American nations; the report deals with issues that are relevant to countries from every region in the world. The authors have done a very good job at referencing the literature on the subject.

### B. Design and Implementation

I was puzzled, however, by the way this report is presented. The most effective way of communicating a "summary of research findings" is by providing an *analytical narrative* that would go from questions, to methods, to results, to policy implications. This type of "summary of research findings" has a long tradition in economics. Every year a fair number of review articles that follow this strategy are published – may of them in the *Journal of Economic Literature*. The most effective and influential among these review articles are nimble and concise, and go straight to the substance.

The authors of this "flagship" piece chose to follow a different approach. "Lessons from NAFTA" provides an excruciatingly detailed analysis of different papers and research projects. Long passages are devoted to discussing relatively unimportant methodological and technical issues, and at reproducing detailed results available in other papers. At times the analysis becomes repetitious and tedious, and the reader often looses track of the big questions. In some sense, the Bank missed a major opportunity for providing a clear, crisp and authoritative evaluation of the NAFTA, at the same time as offering lessons for the rest of the Latin American countries.

The report is organized in seven chapters. They cover most NAFTA-related issues, but are uneven in terms of depth, data analysis and policy lessons. Chapter 1 focuses on convergence between Mexico and the United States. More than providing a summary of existing research, this chapter presents new evidence on convergence. The analysis follows the most recent econometric techniques and is competently done. And yet, this reviewer could not fail to have a sense that the newer techniques and methods were being applied in a somewhat mechanical way. At times it seemed that conveying technical virtuosity was more important that transmitting simple and yet powerful policy implications. The most interesting part of this chapter was the one dealing with industry-level TFP convergence. Chapter 2 deals with macroeconomic dynamics after NAFTA. The purpose of this chapter is to investigate whether NAFTA has affected macro volatility in Mexico, and to analyze whether macro synchronization across NAFTA members has increased. The analysis is based on two alternative methodologies – the computation of correlation coefficients and regression analyses. There is also an analysis of whether Mexico and Central America are good candidates for forming a currency union with the

United States. By and large this analysis is affected by two factors: the short period of time that has passed since the adoption of NAFTA, and the significant amount of noise introduced by the peso crisis of 1994-1995 (the so-called "tequila crisis"). Chapter 3 focuses on NAFTA's remaining trade barriers. This is a very useful chapter – possibly the most useful one in the report – that makes three important points: (a) Rules of origin represent an important (hidden) cost of doing cross-boarder business. (b) Mexico's agricultural sector has not suffered a terminal crisis, as was often predicted in the early and mid-1990s. (c) The anti-dumping and countervailing duties provisions of the NAFTA have not worked as expected.

Chapter 4 of the report deals with factor markets. The first part of the chapter deals with capital markets, financial integration and FDI. The authors follow Cuevas et al (2002) and use a panel data set for 45 countries to analyze whether joining a trade agreement increases the flows of FDI. Their results suggest that this indeed is the case for the average country in their sample. The analysis of Mexico's case, however, suggests that FDI increased by less than what the model had predicted. The second part of the chapter (starting with section 4.7) deals with labor markets in Mexico, and presents extensive results on wage conversion and migration into the United States. The authors also document the increase in the skill premium in Mexican labor markets. There is also an interesting discussion on the evolution (and future prospects) of labor productivity in Mexico. The chapter finishes with a long and exhaustive bibliography on trade and labor markets. One of the limitations of this ambitious chapter is that it relies on a very simple theoretical framework: the Stolper-Salmuelson theorem of international trade. A more interesting and textured analysis would have considered alternative models for labor markets, including the existence of distortions such as labor taxes, high severance costs and/or minimum wages.

Chapter 5 focuses on NAFTA and the process of innovation in Mexico. This is a very interesting chapter, full of information and useful insights. It deserves to be a stand-alone paper. One wonders, however, if achieving a quantum leap in R&D, patents granted and scientific publications was, indeed, one of the expected outcomes of the NAFTA. And the policy implications of the analysis are less than clear. Chapters 6 and 7 are on the effects of NAFTA on other countries. Chapter 6 focuses on trade flows, and Chapter 7 on foreign direct investment. The main findings are that there is little evidence of either trade or investment diversion.

**C. Accessibility**

At a formal level, the presentation mode is rather disorganized. Some of the chapters make extensive use of boxes, where the more technical or detailed material is presented. Other chapters make very little or no use of boxes.

This is not a very easy report to read. There are long passages where the authors delve into technical issues that are not central to the discussion. There is a certain pretentiousness in the style that is distracting.

**9. Flagship: Latin America and Caribbean**

**Annex 3: Research Quality Indicator Form**

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|---|---|
| **S** | **S**uperior |
| **AA** | **A**bove **A**verage |
| **A** | **A**verage |
| **BA** | **B**elow **A**verage |
| **U** | **U**nacceptable |

| | S | AA | A | BA | U |
|---|---|---|---|---|---|
| ***Please rate the following aspects of the project outcomes (or in the case of ongoing projects, design and intermediate outputs)*** | | | | | |
| **Topics** | | | | | |
| Importance of the issues addressed | **X** | | | | |
| Clarity of the project focus and stated objectives | **X** | | | | |
| | | | | | |
| **Analysis** | | | | | |
| Theoretical/conceptual framework | | | **X** | | |
| Empirical application | | | **X** | | |
| Statistical and econometric methods | | | **X** | | |
| Use of existing knowledge and resources | | **X** | | | |
| | | | | | |
| **Data** | | | | | |
| Awareness of other data sources | | **X** | | | |
| Data compilation, cleaning and cataloging | | | **X** | | |
| Survey design and sampling | | | | | |
| | | | | | |
| **Output Quality** | | | | | |
| Writing quality (clarity, organization, etc.) | | | | **X** | |
| Clarity of conclusions and recommendations | | | | **X** | |
| Extent to which conclusions are based on analytic evidence | | | **X** | | |
| Appropriateness of the recommendations | | | **X** | | |
| Appropriateness of output form (working paper, book, database, etc.) for intended audiences | | | | | |
| Availability of translated outputs where appropriate | | | | | |
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| **Extent to which research:** | | | | | |
| Increases knowledge and understanding of the issues | | | | | |
| Provides a sound basis for policy | | | | | |
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| **Actual or likely impact of research on:** | | | | | |
| Government policy | | | | | |
| Future analysis | | | | | |
| The development community in general | | | | | |
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| **Overall Quality of Research** | | | | | |

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