A. Introduction

Welcome to the 29th issue of the World Bank Trade Research Electronic Newsletter, a quarterly E-mail publication containing abstracts of recent trade working papers, publications and other works. Additional information on the Bank’s Trade Research Team activities can be found on the World Bank Trade Research website (http://www.worldbank.org/research/trade). It provides basic information on research activities in progress, trade working papers, other Bank trade publications, trade data and links to other trade related web sites. You may also visit the recently redesigned Trade Website at http://www.worldbank.org/trade for additional information on trade and development, including the World Bank Institute’s activities in the area of capacity-building and training, the Integrated Framework for Trade-related Technical Assistance, and a new series of “Trade Notes” on topics of current interest and international conferences. If you do not wish to receive this bulletin, please send an E-mail message with “Unsubscribe” in the title area to trade@worldbank.org.

All of the working papers listed below are available for downloading from the website in the Adobe Acrobat format at the address: http://www.worldbank.org/research/trade/archive.html

To obtain a hard copy of a working paper, please send your request (with postal mailing address) via E-mail to trade@worldbank.org.

B. Activities and Publications

1. Intellectual Property and Development: Lessons from Recent Economic Research
International policies towards protecting intellectual property rights have seen profound changes over the past two decades. Rules on how to protect patents, copyright, trademarks and other forms of intellectual property have become a standard component of international trade agreements. How will developing countries fare in this new international environment? This book brings together empirical research that assesses the effects of changing intellectual property regimes on various measures of economic and social performance—ranging from international trade, foreign investment and competition to innovation and access to new technologies. The studies presented point to an important development dimension to the protection of intellectual property. But a one-size fits all approach to intellectual property is unlikely to work. There is need to adjust intellectual property norms to domestic needs, taking into account developing countries’ capacity to innovate, technological needs, and institutional capabilities. In addition, governments need to consider a range of complementary policies to maximize the benefits and reduce the costs of reformed intellectual property regulations. For more information, the book is now available at: http://publications.worldbank.org/ecommerce/catalog/product?item_id=3607026.

2. Global Agricultural Trade and Developing Countries
This title presents research findings based on a series of commodity studies of significant economic importance to developing countries. First, the book sets the stage with background chapters and investigations of cross-cutting issues. Trade and domestic policy regimes affecting agricultural and food markets are described, and the resulting patterns of production and trade are assessed. The book follows with an analysis of product standards and costs of compliance and their effects on agricultural and food trade. An investigation of the impact of preferences given to selected countries and their effectiveness is next. The evidence on the attempts to decouple agricultural support from agricultural output is then reviewed. The last background chapter explores the robustness of the global gains of multilateral agricultural and food trade liberalization. For more information, please visit our website at: http://publications.worldbank.org/ecommerce/catalog/product?item_id=3829969.

3. New Trade Note: Agricultural Negotiations: Recent Developments in the Doha Round
In August 2004, the WTO General Council reached a decision on frameworks to continue with the multilateral trade negotiations under the Doha Development Agenda. These agreements lay the foundations for future reform of global agricultural trade. On non-agricultural market access, the framework sets the stage for the pursuit of tariff cuts and the reduction or elimination of non-tariff barriers. These agreements help put the Doha round back on track after the ‘detour’ of the WTO Ministerial in Cancun. Arguably the most significant piece of the ‘July Package’ concerns agricultural trade. The agreed framework lays out a map for the future elimination of all forms of export subsidies and for better disciplines on export credits, exporting state trading enterprises and food aid. It also introduces new commitments to discipline trade-distorting farm subsidies, promoting deeper cuts in countries with higher subsidies. Moreover, it commits WTO
members to pursue ‘progressivity’ in tariff reduction with a view to achieve substantial improvements in market access while allowing for flexibility in the treatment of sensitive products. For the full text, please see details in http://siteresources.worldbank.org/INTRANETTRADE/Resources/Pubs/TradeNote19.pdf.


   The proliferation of regional trade agreements is fundamentally altering the world trade landscape. The number of agreements in force surpasses 200 and has risen eight-fold in two decades. Today as much as 40 percent of global trade takes place among countries that have some form of reciprocal regional trade agreement. The report argues that agreements leading to open regionalism—that is, deeper integration of trade as a result of low external tariffs, increased services competition, and efforts to reduce cross-border and customs delays costs—are effective as part of a larger trade strategy to promote growth. Such regional agreements can complement a strategy that, on the one hand, includes autonomous liberalization to promote productivity gains and, on the other hand, leverages domestic reforms to enhance market access. Although regional agreements can prove beneficial to member countries, they can have adverse effects on excluded countries. Lowering of border barriers around the world is crucial to minimizing these effects. The completion of the Doha Development Agenda by all countries in the World Trade Organization will reduce the risk of trade diversion associated with regional agreements and will decrease trade losses of countries excluded from agreements. For more information, please explore the web at http://globaloutlook.worldbank.org/globaloutlook/inside/.

5. **B-SPAN Events on Trade**

   B-SPAN is an internet-based broadcasting station that presents World Bank seminars, workshops, and conferences on a variety of sustainable development and poverty reduction issues. It provides regular broadcasts of World Bank events through "webcasts" over the Internet. For a list of recent trade related events in B-SPAN, please explore the web at


6. **Books, Journal Articles and Others**


Tarr, David and Peter Thomsom, ”The Merits of Dual Pricing of Russian Natural Gas,”, *The World Economy*, vol. 27(8), August 2004, pp. 1173-1194.


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C. Recent Trade Working Papers

1. Transfer of Technology to Developing Countries: Unilateral and Multilateral Policy Options, Bernard Hoekman, Keith E. Mascus, and Kamal Saggi (WPS# 3332), June 2004.


4. On the Inefficiency of Inequality, Maurice Schiff (WPS# 3360), July 2004.


8. Skilled Migration: The Perspective of Developing Countries, Frederic Docquier, and Hillel Rapoport (WPS# 3382), August 2004.


10. The Impact of Liberalizing Barriers to Foreign Direct Investment in Services: The Case of Russian Accession to the World Trade Organization, Jesper Jensen, Thomas F. Rutherford, and David G. Tarr (WPS# 3391), September 2004.


12. Agricultural Trade Reform and Poverty Reduction in Developing Countries, Kym Anderson (WPS# 3396), September 2004.

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D. Working Paper Abstracts

1. Transfer of Technology to Developing Countries: Unilateral and Multilateral Policy Options

Hoekman, Maskus, and Saggi analyze national and international policy options to encourage the international transfer of technology, distinguishing between four major channels of such transfer: trade in products, trade in knowledge, foreign direct investment, and intra-national and international movement of people. They develop a typology of country types and appropriate policy rules of thumb as a guide to both national policymakers and rule making in the World Trade Organization, as policies should differentiate between countries. The authors also develop some rules of thumb for policy intervention. These include: (i) Liberal trade policies for all types of countries; (ii)
Temporary encouragement of foreign direct investment inflows for low-income countries; (iii) Licensing for technical transformation and adaptive investments by local firms to apply technologies; (iv) Policy options for source economies to encourage international transfer of technology to poor countries, including fiscal incentives, improvement of flows of public-domain technologies with appropriate subsidies, and price differentiation for exports of intellectual property products.

2. **The Impact of Coffee Market Reforms on Producer Prices and Price Transmission**

Krivonos evaluates the impact of coffee sector reforms during late 1980s and early 1990s on coffee growers in the main coffee producing countries. Earlier evidence suggests that the reforms increased the share of producer prices in the world price of coffee. She tests this hypothesis with the help of cointegration analysis, and the results show that in most countries the long-term producer price share has indeed increased substantially after the liberalization. Moreover, the results suggest that the reforms induced a closer cointegrating relationship between grower prices and world market prices. Finally, estimation of an error-correction model reveals that short-run transmission of price signals from the world market to domestic producers has improved, such that domestic prices adjust faster today to world price fluctuations than they did prior to the reforms.

3. **A Flexible Modeling Framework to Estimate Interregional Trade Patterns and Input-Output Accounts**

There are tremendous disparities in economic development across regions in large developing countries such as Brazil, China, India, and Indonesia. This study implements and tests a mathematical programming model to estimate interregional, interindustry transaction flows in a national system of economic regions based on an interregional accounting framework and initial information on interregional shipments. A complete national input-output table plus regional sectoral data on gross output, value-added, exports, imports, and final demand are used as inputs to generate an interregional input-output system that reconciles regional market data and interregional transactions. The model is tested on a four-region 10-sector example against data aggregated from a multi-regional global input-output database, and test results from seven experiments are evaluated against eight mean absolute percentage error indexes. This model has capacity to discover the true interregional trade pattern from highly distorted initial estimates. The paper also discusses some general guidelines for implementing the model for a large-dimension multi-regional account based on real national and regional data.

4. **On the Inefficiency of Inequality**

A number of studies have examined the implications of preference interdependence. This paper models individual utility as depending either on the level of other people’s consumption or on the difference in consumption levels. It assumes that the impact of an increase in other people’s consumption on individual utility diminishes with the level of consumption, raising individual utility when that consumption is very small and lowering it when that consumption is very large. Based on that plausible assumption, the paper shows that, whether individual utility depends on the level of other people’s consumption or on the difference in consumption levels, (i) welfare declines with inequality, (ii) equilibrium inequality is inefficient, and (iii) the optimal intervention leads to a more
equal distribution. Implications for the role of development institutions are examined.

   
   Busse empirically explores the linkages between environmental regulations and international trade flows. Using a comprehensive new database for environmental regulations across countries, the author performs a thorough empirical investigation of that linkage for 119 countries and five high-polluting industries. No evidence is found to support the pollution hypothesis that industries facing above-average abatement costs with environmental regulations would prefer pollution havens and relocate their activities. The exception is iron and steel products, where a negative and statistically significant link is established, implying that higher compliance with international treaties and conventions and more stringent regulations are associated with reduced net exports. 

   High-income countries, where environmental regulations are usually more stringent in comparison to middle or low-income countries, have experienced a considerable decline in the export-import ratio of iron and steel products since the late 1970s. There is no clear evidence that national governments choose sub-optimal policies that result in insufficient regulations, so the case for environmental standards within the WTO framework is relatively weak.

6. **Genetically Modified Rice Adoption: Implications for Welfare and Poverty Alleviation**
   
   The first generation of genetically modified (GM) crop varieties sought to increase producer profitability through cost reductions or higher yields, while the next generation of GM food research is focusing on breeding for attributes of interest to consumers. “Golden rice” has been genetically engineered to contain a higher level of vitamin A and thereby boost the health of poor people in developing countries. Anderson, Jackson, and Nielsen analyze the potential economic effects of adopting both types of innovation in Asia, including its impact on rice producers and other consumers. They do so using the global economy wide computable general equilibrium model known as GTAP. The results suggest that farm productivity gains could be dwarfed by the welfare gains resulting from the potential health-enhancing attributes of golden rice which would boost the productivity of unskilled workers among Asia’s poor.

7. **Measuring the International Mobility of Skilled Workers (1990–2000): Release 1.0**
   
   Docquier and Marfouk provide new estimates of skilled workers’ emigration rates for about 190 countries in 2000 and 170 countries in 1990, in both developing and industrial countries. Using various statistical sources, they revisit Carrington and Detragiache’s measures by incorporating information on immigrants’ educational attainment and country of origin from almost all OECD countries. The authors show that the largest numbers of highly educated migrants are from Europe, Southern and Eastern Asia, and, to a lesser extent, from Central America. Nevertheless, as a proportion of the potential educated labor force, the highest brain drain rates are observed in the Caribbean, Central America, and Western and Eastern Africa. The database delivers information that is rich enough to assess the changes in the international distribution of migration rates, to test for the (push and pull) determinants per skill group, to evaluate the growth effects of migration on source and destination countries, and to estimate the relationships between
migration, trade, foreign research and development, and remittances.

8. Skilled Migration: The Perspective of Developing Countries
Docquier and Rapoport focus on the consequences of skilled migration for developing countries. They first present new evidence on the magnitude of migration of skilled workers at the international level and then discuss its direct and indirect effects on human capital formation in developing countries in a unified stylized model. Finally they turn to policy implications, with emphasis on migration and education policy in a context of globalized labor markets.

9. Loss Aversion and Trade Policy
Freund and Özden provide new survey evidence showing that loss aversion and reference dependence are important in shaping people’s perception of trade policy. Under the assumption that agents’ welfare functions exhibit these behavioral elements, they analyze a model with a welfare-maximizing government and with the lobbying framework of Grossman and Helpman (1994). The policy implications of the augmented models differ in three important ways: (i) There is a region of compensating protection, where a decline in the world price leads to an offsetting increase in protection, such that a constant domestic price is maintained; (ii) Protection following a single negative price shock will be persistent; (iii) Irrespective of the extent of lobbying, there will be a deviation from free trade that tends to favor loss-making industries.

10. The Impact of Liberalizing Barriers to Foreign Direct Investment in Services: The Case of Russian Accession to the World Trade Organization
Jensen, Rutherford, and Tarr use a computable general equilibrium model of the Russian economy to assess the impact of accession to the World Trade Organization (WTO), which encompasses improved market access, tariff reduction, and reduction of barriers against multinational service providers. The model incorporates productivity effects in both goods and services markets endogenously through a Dixit-Stiglitz framework. As a result, the estimated gains from WTO accession are much larger than would be obtained from a typical model with perfect competition. The ad valorem equivalent of barriers to foreign direct investment have been estimated based on detailed questionnaires completed by specialized research institutes in Russia. The authors estimate that Russia will gain about 7.2 percent of the value of Russian consumption in the medium run from WTO accession and up to 24 percent in the long run. They estimate that the largest gains to Russia will derive from liberalization of barriers against multinational service providers.

11. Trade, Standards, and the Political Economy of Genetically Modified Food
Anderson, Damania, and Jackson develop a common-agency lobbying model to help understand why North America and the European Union have adopted such different policies toward genetically modified (GM) food. Their results show that when farmers lobby policymakers to influence standards, and consumers and environmentalists care about the choice of standard, it is possible that increased competition from abroad can lead to strategic incentives to raise standards, not just lower them as shown in earlier models. The authors show that differences in comparative advantage in the adoption of
GM crops may be sufficient to explain the trans-Atlantic difference in GM policies. On the one hand, farmers in a country with a comparative advantage in GM technology can gain a strategic cost advantage by lobbying for lax controls on GM production and use at home and abroad. So it is rational for producers in the European Union to reject GM technology if that enables them and consumer and environmental lobbyists to argue for restraints on imports from GM-adopting countries. This theoretical proposition is supported by numerical results from a global general equilibrium model of GM adoption in America with and without an EU moratorium.

12. **Agricultural Trade Reform and Poverty Reduction in Developing Countries**

Anderson offers an economic assessment of the opportunities and challenges provided by the World Trade Organization’s Doha Development Agenda, particularly through agricultural trade liberalization, for low-income countries seeking to trade their way out of poverty. After discussing links between poverty, economic growth, and trade, he reports modeling results showing that farm product markets remain the most costly of all goods market distortions in world trade. The author focuses on what such reform might mean for developing countries both with and without their involvement in the multilateral trade negotiations. What becomes clear is that if those countries want to maximize their benefits from the Doha round, they need also to free up their own domestic product and factor markets so their farmers are better able to take advantage of new market opportunities abroad. The author also addresses other concerns of low-income countries about farm trade reform: whether there would be losses associated with tariff preference erosion, whether food-importing countries would suffer from higher food prices in international markets, whether China’s WTO accession will provide an example of trade reform aggravating poverty and the impact on food security and poverty alleviation.