



WORLD TRADE  
ORGANIZATION

# WORLD TRADE REPORT 2004

Exploring the linkage between  
the domestic policy environment and international trade



## FOREWORD

The World Trade Report 2004 is the second annual publication in the WTO Secretariat's new series. As I indicated last year, the World Trade Report seeks to deepen public understanding of current trade policy issues and to contribute to more informed consideration of the options facing governments. Like last year, the Report begins with a review of recent world trade developments. This is followed by three shorter essays – on trade preferences, the temporary movement of natural persons, and geographical indications. The main topic of the Report this year is coherence.

As far as trade developments are concerned, 2003 was not as bleak a year as many had feared. Trade grew in real terms by 4.5 per cent, a rate still somewhat below the average for the 1990s but above what many forecasters had anticipated. These results were largely a reflection of a pick-up in economic activity in the second half of the year. Prospects for 2004 look much better than the results for 2003.

The Fifth WTO Ministerial Meeting at Cancún was a disappointment to many and did little to bolster business confidence. I fully share what I believe is the widely-held aspiration that signs of renewed commitment to moving the Doha Development Agenda forward will lead to concrete results in the near future. A failure by governments to deliver on the promise of Doha would be a blow to the trading system and would do nothing to support, let alone improve upon, near-term expectations regarding the performance of the world economy. I strongly urge governments to transform intimations of a willingness to move forward into concrete outcomes.

Turning to the three shorter essays in WTR 2004, the work on preferences comes at a crucial time. Fears about the erosion of preferences among beneficiary countries have emerged on the negotiating agenda more forcefully and explicitly than ever before. But just as beneficiary governments are concerned to maintain their margins of preference, others would wish to ensure that MFN trade liberalization is not arrested. This essay evaluates preferences in terms of their role in supporting the trade interests of beneficiary countries. A mixed picture emerges.

While preferences have been used to good effect by some countries at particular points in time, the benefits have been attenuated by a number of factors. These include the continuing reduction of preferential margins and complexities associated with preference schemes that reduce their attractiveness. Utilization levels of preferences have been low in many instances. An additional concern is that preferences may draw resources into activities that cannot survive under normal conditions of competition. Where this occurs, countries may be unwisely investing in future adjustment challenges. The essay concludes that preferences cannot last forever, and that while beneficiaries may be well advised to make what constructive use of them they can in the short-term, a longer-term perspective needs to contemplate a world without preferences.

The second essay addresses another issue of great topical interest – the possibility of reaping additional gains from trade in services through the facilitation of movement of persons across national frontiers on a temporary basis. Mode 4 of the General Agreement on Trade in Services contemplates such transactions and provides the means for governments to make commitments aimed at augmenting this source of additional national income. The analysis in the essay focuses on temporary presence. Temporary sojourners can bring significant benefits by stimulating other kinds of trade, supporting technology transfer and human capital development, and smoothing out cyclical variations in the demand for labour. At the same time, temporary presence avoids the deeper economic and social problems associated with migration. Commitments under Mode 4 of the General Agreement on Trade in Services are markedly less than those under other modes of supply. Perhaps here we have an additional way of boosting the gains from trade to mutual advantage. The empirical literature suggests that these gains could be large.

The third essay focuses on an issue upon which Members hold opposing views. Geographical indications (GIs) are a form of intellectual property right that seeks to protect investments in reputation as well as to provide consumers with information regarding the characteristics of products associated with particular regions and quality-related traditions. The central issue is how strongly such property rights should be protected by governments – protection already provided under the TRIPS Agreement in respect of wines and spirits is the standard sought by the protagonists of strong GI protection, whereas others believe the mainstream provisions of the TRIPS Agreement in this area are sufficient.

The main theme of this year's WTR – coherence – deals with issues central to the ability of countries to reap benefits from trade policies underwritten by the WTO as a rule-making institution and forum for negotiations. The basic premise of the Report is that returns from sound trade and investment policies are dependent not only on those policies themselves, but also on the underlying environment in a range of related policy areas. Policies affecting macroeconomic conditions, infrastructure and infrastructural services, the functioning of domestic markets and the robustness of institutions are key determinants of the ability of countries to benefit from engagement in the international economy.

The concept of coherence is somewhat elusive, since it can mean different things in different contexts. In this Report, coherence refers to the general notion that mutually supportive policies need to receive adequate attention from decision-makers and pull in the same direction. Many of these policies fall largely or exclusively under the responsibility of national governments. In practice, governments pursue multiple objectives, not all of which are necessarily easy to render consistent. Moreover, no unique set of policy options can be defined to meet particular objectives. For these reasons, coherence is more of a guiding principle than a precise objective.

Each of the subsections of the coherence part of the WTR (Section II) is devoted to a particular policy area. The discussion on macroeconomic policy and trade policy shows how closely linked these two facets of government decision-making are, and in particular how poor macroeconomic management and macroeconomic instability can frustrate trade policy goals. The limited and ultimately ineffectual role of trade measures as an instrument of macroeconomic management is also emphasized.

The analysis of the role of infrastructure and infrastructural services in permitting economic agents to benefit from domestic and foreign market opportunities focuses on transport, telecommunications, financial services and business services. The point that the absence of efficient and competitively priced infrastructure and infrastructural services hampers development across the board, and not just in respect of trade, is beyond dispute. What governments do about infrastructure is a fundamental determinant of whether nations progress or assume the status of economic laggard. The Report also makes the important point that trade can sometimes play a decisive role in the supply of efficient infrastructural services.

The part of the Report dealing with domestic market structures explains why governments have a responsibility to ensure that private agents cannot frustrate market opportunities by rendering markets incontestable. This subsection also deals with the results (positive and negative) of economic activities that are not captured in normal market relationships. Once again, it falls to governments to address these externalities. The analysis uses the examples of negative environmental spillovers and positive knowledge spillovers to illustrate the nature of choices faced by governments as they seek to fashion a sustainable, pro-growth and pro-development policy framework.

The analysis of governance and institutions emphasizes the importance of high-quality institutions to a well-functioning economy. Without effective institutions, markets cannot operate properly. The analysis also shows that the better institutions are, the more far-reaching will be the benefits of trade openness in terms of integration into the world economy. In addition, the social acceptability of the need for adjustment to change, including as a result of trade reforms, will be significantly enhanced if institutions of good quality are in place.

Finally, Section II looks at the role of international cooperation in supporting policy coherence. International cooperation can help in many ways, and governments have a wide array of options for cooperation at different levels of binding commitment. In the field of trade, for example, the WTO offers coordination opportunities for trade liberalization that provide additional benefits to all parties. It provides a framework for reducing uncertainty in trade policy, lowering transactions costs, and enhancing information flows. The effectiveness of the WTO, however, requires that governments continue to show commitment by carrying through undertakings made at Doha to negotiate improved market access and better rules. I am confident recent signs of a willingness to move forward will translate into concrete results that balance the rights and obligations of all Members in a mutually beneficial manner. I urge governments to press ahead with this endeavour as a matter of priority.



Supachai Panitchpakdi

Director-General



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## TABLE OF CONTENTS

FOREWORD BY THE DIRECTOR-GENERAL .....	II
ACKNOWLEDGEMENTS.....	VI
DISCLAIMER .....	VII
LIST OF CHARTS, TABLES AND BOXES.....	X
ABBREVIATIONS .....	XIV
EXECUTIVE SUMMARY.....	XVI
<b>I TRADE AND TRADE POLICY DEVELOPMENTS</b>	
A RECENT TRENDS IN INTERNATIONAL TRADE AND POLICY DEVELOPMENTS	
1. Introduction: recovery of global output and world trade .....	2
2. Real merchandise trade and output developments in 2003 .....	5
3. Nominal trade developments in 2003.....	6
4. Overview of regional trade developments .....	8
5. Prospects for 2004.....	13
6. Selected medium-term trade developments by product.....	14
B SELECTED ISSUES IN TRADE AND TRADE POLICY	
1. Non-reciprocal preferences and the multilateral trading system .....	26
2. The liberalization of services trade through the temporary movement of natural persons.....	46
3. Geographical indications .....	72
<b>II COHERENCE</b>	
A INTERNATIONAL TRADE AND MACROECONOMIC POLICY	
1. Introduction .....	90
2. Trade and macroeconomics: some intuitive explanations .....	91
3. A theoretical framework.....	93
4. Is trade important for macroeconomic performance? .....	97
5. Is macroeconomic performance important for trade? .....	101
6. Policy responses to external disequilibrium .....	104
7. Concluding remarks .....	112
B INFRASTRUCTURE IN TRADE AND ECONOMIC DEVELOPMENT	
1. Transport services.....	114
2. Telecommunications .....	129
3. Finance.....	135
4. Business services.....	142
5. Summary and conclusions .....	148
C MARKET STRUCTURE, EXTERNALITIES AND POLICY INTERVENTION	
1. Market structure, externalities and the allocation of resources .....	150
2. Competition policy .....	152
3. Environment-related externalities.....	161
4. Knowledge and positive externalities.....	170

D	GOVERNANCE AND INSTITUTIONS	
1.	Domestic institutions and the size of trade flows.....	176
2.	Domestic institutions and social acceptance of trade reforms .....	181
E	POLICY COHERENCE AND INTERNATIONAL COOPERATION	
1.	International cooperation and national policy objectives.....	188
2.	What kind of international cooperation nurtures policy coherence? .....	194
3.	The case of the WTO: international cooperation and policy coherence.....	196
F	CONCLUSION	
	APPENDIX .....	200
	TECHNICAL NOTES.....	226
	BIBLIOGRAPHY.....	232

## LIST OF CHARTS, TABLES AND BOXES

### SECTION IA

### RECENT TRENDS IN INTERNATIONAL TRADE AND POLICY DEVELOPMENTS

Chart IA.1	Ratio of world trade to GDP and ratio of global FDI flows to world fixed investment, 1990-2003.....	4
Chart IA.2	Merchandise trade volume growth by region, 2003.....	6
Chart IA.3	North America's merchandise and commercial services trade, 2000-2003 .....	8
Chart IA.4	Western Europe's merchandise and commercial services trade, 2000-2003 .....	10
Chart IA.5	Transition economies' merchandise and commercial services trade, 2000-2003 .....	11
Chart IA.6	Merchandise trade of Africa and the Middle East, 2000-2003 .....	12
Chart IA.7	Asia's merchandise and commercial services trade, 2000-2003.....	12
Chart IA.8	Quarterly developments of trade and GDP in OECD countries, 2001-2003 .....	13
Chart IA.9	Share of major goods and services categories in world exports, 1985-2002 .....	14
Chart IA.10	World exports of agricultural products, 1990-2002 .....	16
Chart IA.11	Share of intra-trade in developing countries' exports and imports of agricultural products, 1990-2002 .....	16
Chart IA.12	Share of processed goods rises in world exports of agricultural products, 1990-2002 ....	17
Table IA.1	World trade and output developments, 1990-2003.....	5
Table IA.2	World exports of merchandise and commercial services, 2003 .....	6
Table IA.3	World merchandise trade by major region, 2003 .....	7
Table IA.4	Latin America's merchandise trade, 2003.....	9

### APPENDIX

Appendix Chart IA.1	Trade to GDP ratios in selected countries and regions, 1990-2003 .....	24
Appendix Table IA.1	World merchandise trade by region and selected country, 2003.....	20
Appendix Table IA.2	World trade of commercial services by region and selected country, 2003.....	21
Appendix Table IA.3	World exports of agricultural products by stage of processing, 1990-2002.....	22
Appendix Table IA.4	Share of processed products in exports and imports of agricultural products in selected economies, 1990-91 and 2001-02 .....	23

### SECTION IB1

### NON-RECIPROCAL PREFERENCES AND THE MULTILATERAL TRADING SYSTEM

Chart IB1.1	Landscape of non-reciprocal preference schemes, 2002 .....	30
Chart IB1.2	Average applied tariff by tariff regime for major developed markets, 2002 .....	31
Chart IB1.3	Number of international and national peaks by tariff regime for major developed markets, 2002 .....	32
Chart IB1.4	Average tariff for international and national peaks by tariff regime, major developed markets, 2002 .....	33
Chart IB1.5	GSP exports originating from LDCs by type of treatment in QUAD markets, 2001 .....	38
Table IB1.1	Duty free imports by major developed markets, non-reciprocal scheme and beneficiaries, 2002.....	34
Table IB1.2	Top 25 preference beneficiaries as a share of total exports to major developed markets, 2002 .....	35
Table IB1.3	Principal products of top 25 preference beneficiaries in major developed markets, 2002....	36
Table IB1.4	Highest preference margins by product in major developed markets, 2002 .....	37
Box IB1.1	Rent transfer and non-reciprocal preferences.....	27
Box IB1.2	Non-beneficiary concerns about preferential access: the case of canned tuna .....	43

<b>SECTION IB2</b>	<b>THE LIBERALIZATION OF SERVICES TRADE THROUGH THE TEMPORARY MOVEMENT OF NATURAL PERSONS</b>	
Chart IB2.1	Mode 4 commitments: breakdown by categories of natural persons .....	54
Chart IB2.2	Ratio of compensation of employees' and workers' remittances payments to GDP, 2002 .....	57
Chart IB2.3	Ratio of compensation of employees' and workers' remittances receipts to GDP, 1995 and 2002 .....	59
Chart IB2.4	United States: Computer services imports by mode of supply and selected country, 2000 .....	62
Chart IB2.5	United Kingdom: Commercial services imports from India by mode of supply, 2000 .....	62
Chart IB2.6	Temporary foreign workers in selected economies by region, 2000 .....	63
Chart IB2.7	Temporary foreign workers in selected economies by economic area, 2000 .....	63
Chart IB2.8	Temporary foreign workers in Germany and in other EU Members from selected transition economies, 2000 .....	64
Chart IB2.9	United States: Payments of compensation of employees by origin, 2000 .....	64
Chart IB2.10	Workers' remittances receipts of developing Asia and Africa by economic area, 2000 .....	64
Chart IB2.11	Workers' remittances receipts of selected developing countries by region, 2000 .....	65
Chart IB2.12	Mode 4 workers by occupation in selected Arab Gulf countries, 2000 .....	66
Chart IB2.13	Temporary work permits granted in the United Kingdom by selected country, 1995-2000 .....	67
Table IB2.1	Principal studies on the impact of migration on trade .....	51
Table IB2.2	The relationship between Mode 4 and the other modes of services trade .....	53
Table IB2.3	Mode 4 commitments by allowed duration of stay and by category of natural persons .....	55
Table IB2.4	Entry restrictions by category of natural persons .....	56
Table IB2.5	Discriminatory measures by category of natural persons .....	56
Table IB2.6	United States: Computer-related Mode 4 imports by major country, 2000 .....	60
Table IB2.7	United Kingdom: Computer-related Mode 4 imports by major country, 2000 .....	61
Table IB2.8	Stock of Mode 4 foreign workers in selected Arab Gulf countries, 2000 .....	61
Table IB2.9	Temporary work permits for services-related occupations granted in the United Kingdom by selected country, 2000 .....	67
Box IB2.1	Balance of payments and Mode 4 .....	58
<b>APPENDIX</b>		
Appendix Chart IB2.1	Mode 4 workers in services industries in selected Arab Gulf countries, 2000 .....	71
Appendix Table IB2.1	United States: Approved H-1B petitions for initial employment by occupation, 2000 .....	70
Appendix Table IB2.2	Origin of workers' remittances received by selected developing countries, 2000-2001 .....	70
Appendix Table IB2.3	United Kingdom: Temporary work permits granted by services industry, 1995 and 2000 .....	71
<b>SECTION IB3</b>	<b>GEOGRAPHICAL INDICATIONS</b>	
Chart IB3.1	Nominal and deflated price of Darjeeling tea, 1972-2002 .....	86
Chart IB3.2	Price differential between Darjeeling and other teas, 1972-2002 .....	86
Chart IB3.3	Proportion of dust Darjeeling to leaf Darjeeling tea sold, 1973-2002 .....	87
Table IB3.1	Impact of regional classification on price of Bordeaux .....	84
Table IB3.2	Impact of regional classification on price of Australian wines .....	85
Box IB3.1	Key provisions in some international agreements on indications of geographical origin .....	73
Box IB3.2	The case of Darjeeling tea .....	87

<b>SECTION IIA</b>	<b>INTERNATIONAL TRADE AND MACROECONOMY POLICY</b>
Table IIA.1	Trade and macroeconomic conditions - selected empirical evidence ..... 98
Box IIA.1	The monetary model of balance of payments ..... 94
Box IIA.2	Trade and macroeconomic stability: an econometric experiment ..... 103
<b>SECTION IIB</b>	<b>INFRASTRUCTURE IN TRADE AND ECONOMIC DEVELOPMENT</b>
Chart IIB.1	The relative importance of transport costs and tariffs as a barrier to trade ..... 114
Chart IIB.2	Port handling charges and efficiency ..... 117
Chart IIB.3	Maritime service trade restrictiveness and port efficiency ..... 127
Chart IIB.4	Growth in telecommunication infrastructure, 1995-2001 ..... 131
Chart IIB.5	Share of services in intermediate purchases of major sectors in South Africa, 1990-2002 ..... 143
Chart IIB.6	United States' unaffiliated trade in business services by region, 2002 ..... 146
Chart IIB.7	European Union's trade in business services by sector, 2001 ..... 146
Table IIB.1	Freight costs by region, 2001 ..... 115
Table IIB.2	Transport cost as a source of comparative advantage ..... 115
Table IIB.3	United States' merchandise trade by transport mode, 2001 ..... 116
Table IIB.4	Sea freight rates on the three major liner trade routes, 2000-2002 ..... 117
Table IIB.5	Estimated unit road transport costs for container and selected routes ..... 118
Table IIB.6	Quality of infrastructure for land transportation ..... 118
Table IIB.7	Quality of airport infrastructure ..... 120
Table IIB.8	Days required at border for customs clearance ..... 124
Table IIB.9	Number of fixed and mobile lines per 1000 inhabitants and total number of Internet hosts ..... 131
Table IIB.10	Financial indicators, selected countries, 2001 ..... 136
Table IIB.11	United States: Business services exports by sub-sector, 1997-2002 ..... 145
Box IIB.1	Poor road infrastructure: Who pays the cost? The case of beer distribution in Cameroon ..... 119
Box IIB.2	How information communication technology (ICT) has transformed the transport sector ..... 121
Box IIB.3	Alternative measures of transport costs ..... 122
Box IIB.4	Transport cost, market access and rural income in the Democratic Republic of Congo ..... 125
Box IIB.5	Liberalization of port services: the case of Argentina and Brazil ..... 128
Box IIB.6	Openness to trade and infrastructural services ..... 138
Box IIB.7	"Offshoring" of business services ..... 147
<b>SECTION IIC</b>	<b>MARKET STRUCTURE, EXTERNALITIES AND POLICY INTERVENTION</b>
Chart IIC.1	Total imports of 12 cartelized products by developing countries, 1981-2000 ..... 156
Chart IIC.2	Environmental governance and water quality ..... 165
Chart IIC.3	Environmental governance and air quality ..... 166
Chart IIC.4	Contributions to growth of GDP, selected OECD countries, 1995-2001 ..... 170
Table IIC.1	Number of jurisdictions enacting competition laws ..... 155
Table IIC.2	Cooperation on competition policies in selected countries ..... 160
Table IIC.3	R&D spending as per cent of GDP: selected OECD and non-OECD countries ..... 171
Table IIC.4	Estimated social rates of return to R&D ..... 172
Box IIC.1	Simulating the environmental impact of trade liberalization ..... 168

**SECTION IID****GOVERNANCE AND INSTITUTIONS**

Chart IID.1	Average government effectiveness (1996, 1998, 2000) and GDP per capita (1995) ..	180
Chart IID.2	Openness and government effectiveness .....	181
Table IID.1	Highest, lowest and median values in institutional quality.....	180

**APPENDIX TABLES**

Appendix Table 1	Final MFN bound tariff profiles of WTO Members .....	200
Appendix Table 2	MFN applied tariff profiles .....	204
Appendix Table 3	Average MFN applied and bound tariffs for agricultural products by MTN category .....	210
Appendix Table 4	Average MFN applied and final bound tariffs and binding coverage for non-agricultural products by MTN category .....	216

## ABBREVIATIONS AND SYMBOLS

ACP	African, Caribbean and Pacific Group of States
AGOA	United States' African Growth and Opportunities Act
APEC	Asia Pacific Economic Cooperation
ASEAN	Association of South East Asian Nations
AVE	<i>Ad valorem</i> equivalent
BEA	Bureau of Economic Analysis
BIS	Bank of International Settlements
BOP	Balance of Payment
CBI	United States' Caribbean Basin Initiative
CEPAL	Economic Commission for Latin America and the Caribbean
CGE	Computable General Equilibrium
CIA	Central Intelligence Agency
CIS	Commonwealth of Independent States
COMECON	Council for Mutual Economic Cooperation
COMESA	Common Market for Eastern and Southern Africa
CRS	Computer Reservation System Services
CTS	Consolidated Tariff Schedules
CUTS	Consumer Unity and Trust Society
EIA	Environmental Impact Assessment
ENTs	Economics Needs Tests
EPZ	Export Processing Zone
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FATS	Foreign Affiliates Trade in Services
FDI	Foreign Direct Investment
FSC	Forestry Stewardship Council
FSF	Financial Stability Forum
FTA	Free Trade Area
FTAA	Free Trade Area of the Americas
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GIs	Geographical Indications
GREEN	General Equilibrium Environmental Model
GSM	Global System for Mobile Communications
GSP	Generalized System of Preferences
GTAP	Global Trade Analysis Project
HIPIC	Heavily Indebted Poor Countries Initiative
H-1B	H-1B temporary worker: an alien admitted to the United States to perform services in "speciality occupations"
HS	Harmonized system of tariff classification
IBF	International Banking Facilities
ICT	Information Communication Technology
ICTs	Intra-corporate transferees
IDB	Integrated Database
IF	Integrated Framework
ILO	International Labour Organization
IMF	International Monetary Fund
IT	Information Technology
ITC	International Trade Centre

ITS	International Trade Statistics
ITU	International Telecommunications Union
JOM	Japanese Offshore Markets
LDCs	Least-Developed Countries
MDGs	Millennium Development Goals
MEAs	Multilateral Environmental Agreements
MERCOSUR	Southern Common Market
MERGE	Model for Exchanging Regionalised Geographic Entities
MFA	Multifibre Arrangement
MFN	Most-Favoured-Nation
MNC	Multi-National Corporations
MTN	Multilateral trade negotiation categories
NAFTA	North American Free Trade Agreement
NPR-PPMs	Non product-related processes and production methods
OECD	Organisation for Economic Co-operation and Development
OFC	Offshore Financial Centre
PPP	Purchasing power parity
QUAD	United States, Canada, European Communities, Japan
R&D	Research and Development
RTA	Regional Trading Arrangement
S&D	Special and Differential Treatment
SARS	Severe Acute Respiratory Syndrome
SIA	Semiconductor Industry Association
SPARTECA	Australia's South Pacific Regional Trade and Economic Co-operation Agreement
TFP	Total Factor Productivity
TPR	Trade Policy Review
TRAINS	Trade Analysis and Information Systems
TRIPS	Trade-Related Intellectual Property Rights
TVEs	Township and Village Enterprises
UEMOA	Union Économique et Monétaire Ouest Africaine
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
VOIP	Voice-over Internet Protocol
WDI	World Development Indicators
WHO	World Health Organization
WIPO	World Intellectual Property Organization

The following symbols are used in this publication:

...	not available
0	figure is zero or became zero due to rounding
-	not applicable
\$	United States dollars
Q1,Q2,Q3,Q4	first quarter, second quarter, third quarter, fourth quarter
I	break in comparability of data series. Data after the symbol do not form a consistent series with those from earlier years.

Billion means one thousand million.

## EXECUTIVE SUMMARY

The first Section of the World Trade Report 2004 discusses recent developments in the structure, value and volume of international trade in goods and services, and trade prospects for 2004. It also includes analyses of non-reciprocal preferences, the international movement of persons supplying services, and geographical indications. The second Section of WTR 2004 then examines the subject of policy coherence, stressing the importance of complementary national policies to enable trade liberalization to create larger benefits for society. It focuses on four important areas of economic policymaking. They are: i) the macroeconomy; ii) the state of infrastructure and infrastructural services, particularly in areas linked closely to trade performance (transport, telecommunications, financial services and business services); iii) market structure, with special emphasis on the level of competition and presence of externalities; and iv) the quality of institutions. The last part of the second Section of the Report then explores the international dimensions of coherence, identifying the role of international cooperation in supporting coherent policy formulation at the national level, particularly in the field of trade policy.

### I. TRADE AND TRADE POLICY DEVELOPMENTS

#### Recent trends in trade

##### *The growth of global trade and output strengthened in 2003.*

In 2003, world merchandise trade grew by 4.5 per cent in real terms, a rate faster than in the preceding year but well below the average rate in the second half of the 1990s. The most dynamic trading regions in 2003 were Asia and the transition economies, which experienced double-digit import and export expansion in their merchandise trade. Import growth in North America exceeded the rate of global expansion and was again much higher than export growth. The volume of merchandise imports went up by 5.7 per cent in the United States, while exports rose somewhat less than 3 per cent, but the latter was the first annual increase after two years of contraction. In 2003, Western Europe's merchandise exports rose by less than 1 per cent, while imports edged up by nearly 2 per cent. Sluggish investment and consumer expenditure in the largest economies of the euro zone were the principal factors in Western Europe's disappointing trade performance. Sustained by a recovery in demand for many primary commodities, Latin America's exports rose by 4.5 per cent, although the region's imports stagnated. Africa as a whole recorded a trade surplus for the first time since 1991, but the continent's share of world exports (2.3 per cent) was still lower than ten years ago.

The global trade expansion was a consequence of improved economic growth, which strengthened considerably beginning in the second quarter of 2003. In the first quarter of the year, the appearance of Severe Acute Respiratory Syndrome (SARS) in East Asia and the build up of tensions that led to the military conflict in Iraq weakened consumer and business confidence in many regions. In OECD countries the composite leading (business) indicator hit its lowest level in March 2003 before improving from May 2003 onwards. The major stock markets showed a similar development, dropping until March but recovering thereafter and then expanding sharply until the end of the year.

Global growth was supported by expansionary monetary and fiscal policies in most regions. Fiscal deficits widened and interest rates declined or remained low. The fiscal deficit of the major developed economies rose to 4.9 per cent of GDP in the United States, to 2.7 per cent in the European Union and to 7.4 per cent in Japan. Interest rates decreased markedly, especially at the longer-term end in all developed markets.

Dollar prices of internationally traded goods rose by 10.5 per cent, due to a combination of higher prices for fuels and other primary commodities as well as the depreciation of the US dollar, in particular *vis-à-vis* the European currencies.

In 2003, higher dollar prices combined with stronger real trade growth led to the largest increase in the nominal value of international merchandise and services trade since 1995. The value of world merchandise exports rose by 16 per cent to \$7.3 trillion, while that of commercial services trade rose by 12 per cent to \$1.8 trillion.

In the case of merchandise trade, it is estimated that more than two thirds of the rise, in value terms, is attributable to dollar price changes.

***In 2004, global trade is expected to grow twice as fast as output.***

The strengthening of the global expansion in the second half of 2003 is projected to continue in 2004. Global GDP is expected to grow at 3.7 per cent in 2004, up from 2.5 per cent in 2003. In line with the economic recovery, global trade is expected to expand by 7.5 per cent in 2004, twice as fast as output. Most of the predicted acceleration in global output growth is attributable to North America, Western Europe and Latin America. Asia and the transition economies are expected to experience the same or weaker GDP growth in 2004 compared to 2003, but still above the world average. However, a number of risks are attached to these forecasts. Among these are a sudden correction in the United States current account deficit, a faltering of recovery in Western Europe and a sharp rise in energy prices.

***Two medium-term developments in international trade highlighted in this Report are the above average trade growth in manufactured goods and other commercial services and the increased importance of processed agricultural goods in world trade.***

Two notable developments in the structure of world trade are highlighted in the Report. The first is the varied trade performance of different categories of goods and commercial services since 1985. Manufactured goods and "other" commercial services experienced above average trade growth during this period. By contrast, agricultural and mining products, as well as transport services, saw a relative decline in their trade shares. The second medium-term development is a structural change in the composition of world trade in agricultural products, with processed agricultural goods becoming more important. This trend towards more processed goods in trade can be observed across countries and agricultural product groups throughout the 1990-2002 period. The question of how far trade policy may be responsible for these observed trends is a matter for further research.

**Non-reciprocal preferences**

***Non-reciprocal preferences have assumed unprecedented significance in discussions on market access in the Doha Development Agenda.***

Although not explicitly included in the Doha work programme, non-reciprocal preferences exert an important influence in the negotiating positions taken by a number of WTO Members. These Members are concerned that further multilateral liberalization will erode the preferential access they now enjoy in a number of important markets. Several proposals have been put forward in the current negotiations to address preference erosion, including a retention of preference margins, a delay in the erosion of preferences that will result from reductions in MFN tariffs, and compensation payments to preference beneficiary countries.

***Non-reciprocal preferences are inconsistent with MFN, and while they may have benefited particular suppliers at certain times, they generally offer limited additional real market access and may not promote the long-term economic development of beneficiary countries.***

Non-reciprocal preference schemes have been part of the multilateral trading system since the late 1960s. The experience with these schemes, however, has led to considerable uncertainty about their value and contribution to economic development. Since they are autonomous, preference-receiving countries have little or no control over their coverage and application. Nevertheless, these schemes continue to proliferate and regulations that govern their administration are becoming increasingly complex.

The initial concerns about introducing and legalizing non-reciprocal preference schemes remain valid today. These schemes are inconsistent with the fundamental principle of non-discrimination and are liable to lead to trade diversion. The degree of market access that is created by these schemes is often limited since the preference margins are quite small, and even in cases where they are significant, the utilization of the schemes is often low. Increasingly, they may threaten the progress of multilateral liberalization as preference-receiving countries seek to avoid an erosion of their margins. Ultimately, it is not clear to what extent preferences

promote development because of incentives for preference-receiving countries to specialize in products where they may not have long-term comparative advantage.

***Knowing that complete erosion of preferences is a matter of time, beneficiary countries will need to formulate a strategy.***

A number of developing countries who do not benefit from preferences are becoming increasingly concerned about the negative effects of preference schemes on their exports and have shown they are willing to take action through the dispute settlement machinery. These recent developments and the concerns noted above suggest that reliance on preferences is not a viable long-term strategy. One approach for dealing with the loss of preferential market access would be to make every effort to increase the utilization of preferences in sectors of export interest to preference beneficiary countries for as long as the schemes last. But such an approach would need to be mindful of possibly painful adjustments later. An alternative approach would be to address the situation directly, and prepare domestic industries for the adjustments ahead, recognizing that the elimination of non-reciprocal preference margins is ultimately inevitable.

### ***Liberalization of trade in services through the temporary movement of persons***

***Liberalization of the temporary movement of natural persons would generate the same kind of gains as the liberalization of trade in goods and some of the gains from migration.***

The temporary movement of natural persons is one of the four modes of supply foreseen in the General Agreement on Trade in Services. Liberalization of this mode of supply (Mode 4) means that people and not products would move across frontiers. Unlike migration, however, the movement of people under Mode 4 arrangements is temporary, not permanent. The movement of people can help to expand other types of trade thanks to personal contacts among people in different jurisdictions. Those movements can also represent a channel for technology transfer and the development of human capital. At the same time, the temporary movement of workers abroad does not constitute a "brain drain" from the originating country, and does not impose additional costs in terms of infrastructure and social and cultural integration in the receiving country. The movement of persons is also a way to reduce labour market pressures in both the originating and receiving country. To the extent that labour market shortages or surpluses are cyclical, the temporary movement of labour is more helpful in alleviating labour market pressures than permanent migration (which can create new labour market pressures if labour market conditions change).

The Report shows that special market access restrictions and discriminatory measures are being used quite intensively by WTO Members to limit competition between foreign and domestic workers. Liberalization of Mode 4 within GATS offers a greater level of flexibility to national governments by providing a higher degree of predictability and transparency in the temporary movement of natural persons than is the case with sector-specific arrangements in areas such as nursing and information technology, or under regional/bilateral schemes, which have frequently been used by national governments to solve labour market shortages.

***The value of Mode 4 movements is potentially important for many countries and sectors, and is already significant for some...***

One way of gauging the potential benefits from Mode 4 liberalization is to look at the value of transactions generated by Mode 4 movements. A cursory examination of the data may give the impression that the value is rather low, and some observers have concluded that Mode 4 liberalization is not important. But this value reflects the limited level of liberalization achieved so far. An analysis of specific bilateral and regional schemes liberalizing the movement of certain types of low-skilled workers shows that the value of Mode 4 movements can potentially be very large. Moreover, existing measurement methods are not very precise and are likely to understate the actual flows. This Report presents an alternative method of measuring such flows and shows that the estimated value of Mode 4 movements can change significantly when different measures are applied. The Report also confirms that the value of Mode 4 trade is already high for some countries and sectors, in particular if compared with the value of cross-border services trade.

*...and liberalization under Mode 4 would also have a positive and significant effect on merchandise trade and other modes of trade in services.*

The economic gains from Mode 4 liberalization are only partially measured by increased Mode 4 trade. Liberalization of Mode 4 is also likely to affect merchandise trade and trade in services under other modes. The Report shows that the effect of Mode 4 trade on total merchandise trade and other modes of trade in services is positive and significant.

### **Geographical indications**

*Geographical indications have become more important because of the expansion in global trade.*

Geographical indications (GIs) are a form of intellectual property. They refer to the use of a region's name by producers from the area in order to protect their reputation or to safeguard the expectations of consumers who have come to associate certain qualities with a product's origin. With growing global trade, some countries have seen the need to cooperate internationally to preserve the role of GIs as conveyors of information for consumers and give support to their role as marketing tools. Although there are other related international agreements, the TRIPS Agreement is the first agreement to deal with GIs as such. Under TRIPS, the normal level of protection (afforded to all products) refers to Members' obligation to provide the legal means for interested parties to prevent the use of indications deceiving consumers as to the geographical origin of a good or constituting an act of unfair competition.

Additional protection is afforded to wines and spirits under the TRIPS Agreement. The current debate in the WTO centres on the question whether this stronger protection is to be extended beyond wines and spirits. There are also negotiations under way concerning the establishment of a multilateral system of notification and registration of GIs for wines and spirits. These negotiations have proven extremely difficult, in particular in regard to the possible legal implications of such a register.

*The value of GIs for consumers emanates from the reduction of uncertainty about the qualities of a product.*

GIs can have an important role to play in markets for differentiated products, especially in the presence of asymmetrical information. GIs are one way to help consumers to recognize a product that they wish to buy again. Repeat purchases and the mark-up that may be obtained give an incentive to producers to maintain particular product qualities even at higher production costs. In order for these market mechanisms to function, free-riding by third parties must be prevented that would inevitably destroy the information capital embodied in a distinctive sign. Under such conditions, markets of differentiated goods will, in general, be characterized by a larger product variety and higher product quality on average, to the benefit of consumers.

*More research is needed on the effect of GI protection on product prices.*

With the exception of wines, there have not been many econometric studies on the contribution made by regional origin to price. Moreover, hardly any studies have been carried out to examine specifically whether a price premium is obtained when GI legislation is introduced. Our study of Darjeeling tea does not suggest that the GI protection given to this term had a noticeable effect on price. These results may suggest that protection is not enough and that it must be coupled with strict enforcement and significant investments in promotion of the product if consumers are to attach value to the indication. There is a need for further empirical research in this direction covering a larger group of products.

## II. COHERENCE

*The contribution of trade policy to growth and development depends in significant measure upon a range of related policies...*

Well designed trade policies aimed at gaining maximum advantage from engagement in the international economy can make a key contribution to growth and development. But the value of that contribution is influenced by a number of other policies. The notion of coherence has been deployed in this study to characterize a situation in which relevant policies are pulling together in a mutually supportive manner. In a world of multiple policy objectives and priorities, and one where no consensus exists on the ideal policy set, the concept of coherence cannot be given operational precision – rather it is indicative of the reality that policies are inter-dependent, and that poor policy or neglect in one area can undermine the efficacy of efforts in another. A coherent policy approach in the present context, then, would be one in which the benefits of sound trade policies are greater than they would be without supportive policies in other areas.

*...policies affecting the macroeconomic environment, infrastructure, the structure of domestic markets and the quality of institutions are important for successful engagement in the international economy.*

The Report seeks to demonstrate how in each of these areas – macroeconomic policy, infrastructure, the structure of domestic markets, and governance and institutions – policy stances that facilitate the attainment of trade policy objectives will form part of a coherent whole contributing to the realization of growth and development goals. Other policies could also have been chosen for a study of this nature, such as education and health, whose focus on human capital will also influence the quality of a nation's engagement in the international economy over the longer term.

*International cooperation also has a role to play.*

The Report also looks at ways in which international cooperation, supported by international institutions, can help to underwrite a coherent domestic policy framework. Coordinated approaches in various areas can help to avoid beggar-thy-neighbour policies, address international "spillovers", curb the abuse of market power, lessen transactions costs, reduce information asymmetries, and assist in capacity building. International cooperation can take many forms, some more binding than others, and international obligations are more effective when a shared perception exists that they yield mutual gain.

### Macroeconomic policies

*Trade and macroeconomic variables are intimately linked...*

Trade affects the level and composition of activity in the economy, and influences stability and growth. Both exports and imports are determinants of income and employment in the economy. Economists still argue about the causal direction of the relationship between trade and growth, but empirical literature has generally found a positive correlation between the two. Just as trade affects macroeconomic outcomes, changes in national income, employment, the general price level, aggregate investment and consumption also affect trade flows. An expansionary monetary and fiscal policy, for example, may be inflationary, affecting the competitiveness of domestic firms with respect to foreign firms. Similarly, an expansionary policy will increase spending, including on imports, and influence the allocation of resources between tradables and non-tradables.

*...and macroeconomic stability matters for trade.*

The importance of macroeconomic stability for trade is underscored by studies of economic recessions. These studies have pointed to the direct and indirect effects of economic contraction on trade flows. The direct effects come from the decrease in demand for imports when aggregate demand is reduced, while the indirect effects originate in increased pressures from domestic firms for protection against foreign competition. Moreover, increased protection in one country may lead to retaliation and beggar-thy-neighbour responses from other trade partners. This underscores the significant risks for trade occasioned by sharp falls in domestic demand.

Both exchange rate and domestic price stability are strongly correlated with trade performance and external imbalances. Trading partners with low rates of inflation tend to trade more intensively with each other and are more integrated than countries that have experienced greater volatility in the rate of inflation. Countries that experience high exchange rate volatility also tend to be less integrated. Those enduring larger output volatility are also more likely to have lower average trade growth. These results confirm that macroeconomic instability can be detrimental to the growth of trade.

***Balance-of-payments imbalances are a reflection of macroeconomic conditions and cannot be effectively addressed through trade policy.***

The origins of balance-of-payments disequilibrium can vary, and governments must choose between finding ways of financing such imbalances or of adjusting out of them. The choice depends on whether the problem is perceived as temporary or long-term. If imbalances reflect longer-term realities, macroeconomic adjustment rather than borrowing is probably needed. Trade restrictions are not effective in solving balance-of-payments problems. Any immediate impact of trade restrictions on the trade balance is likely to be dissipated through shifts in demand from restricted to unrestricted imports and as a result of the harmful effects of import taxes on the cost of export products.

### **Infrastructure**

***The effects on trade of the quality, cost and reliability of infrastructure and infrastructural services are far-reaching.***

Infrastructure and infrastructural services play a crucial role in supporting the flow of trade. Among key sectors in this regard are transport, telecommunications, financial services and business services. The ability of economic agents to respond to trading opportunities and to compete with imports often depends on the quality, cost and reliability of infrastructure and related services. In addition, the structure of trade will be affected depending on the relative importance of infrastructure and infrastructural services in different economic activities. Sectors that are “infrastructure-intensive” will be disadvantaged in comparison to those that are not in an environment of inefficient and costly infrastructure and infrastructural services.

***Many infrastructural services display non-competitive characteristics that call for government intervention, but market-oriented policies can also make infrastructural services more efficient and industries more competitive.***

Market imperfections such as network externalities, scale economies and coordination failures are prevalent in the case of some infrastructure services. Judicious regulatory intervention by governments, sometimes involving international cooperation, can be important in such circumstances. On the other hand, technological changes over the past decade or so have changed the competitive environment of some services, particularly telecommunications. Making infrastructural services more efficient therefore may require alternative policy measures, often different and more market-oriented than in the past. Moreover, the underlying infrastructure providing some of these services may have the characteristics of public goods, suggesting a role for government in the supply of physical infrastructure. Private as well as public investment may often be required, however, to improve physical infrastructure.

***Opening to trade in infrastructural services can be an important way of increasing efficiency and competitiveness.***

Infrastructural services support trade whether or not they themselves are traded. Increasingly, they are tradable and traded, and opening up to trade in these services is one channel through which their quality can be improved and costs reduced. In several of the transport service sectors, market opening can help to create competition in the industry, thereby increasing efficiency. For international transport services to work effectively, a degree of coordination is required. This may be partly assured through privately supplied business and logistics services, but international coordination of standard setting and trade facilitation also help to reduce costs and transit times for goods and services.

Efficient and well priced telecommunication services have a positive impact on the volume of trade and affect the pattern of international specialization. A good telecommunications system is crucial for cross-border trade in services and just-in-time delivery of goods. State-owned monopolies in some countries lack the financial and technical resources to upgrade infrastructure and services to meet the requirements of businesses and consumers. Reforms will generally involve at least some privatization as well as trade liberalization in order to ensure adequate service. Governments still have a regulatory role in guarding against anti-competitive practices affecting access to networks and in ensuring universal service.

Financial services play a crucial role in the process of transferring the ownership of products across borders and hedging risk associated with international trade flows. The pricing and quality of such services are key components of the transaction costs incurred by traders. Since sectors differ in their need for external finance, the cost of credit and the ability to access it also affect comparative advantage. Trade in financial services can improve the effectiveness of the financial system, although this sector faces particular challenges as trade liberalization, combined with liberalization of international capital flows and weak regulation, can contribute to a destabilized financial sector. While trade liberalization does not require openness on the capital account, meaningful liberalization requires a certain degree of openness to international capital flows. This openness would need to be safeguarded by appropriate regulation and international cooperation on supervision and surveillance. More generally, adequate prudential regulation, with or without foreign participation in the financial sector, is a pre-condition for macroeconomic stability.

The business services sector is growing rapidly, both nationally and in international trade. The possibility of acquiring specialized services from outside sources lowers costs, creates jobs and opens up possibilities for technology transfer. A particular benefit arising from an expanding business service sector is that the services offered allow small and medium enterprises to enter markets that would otherwise be inaccessible.

#### **Market structure, externalities and policy intervention**

***The full gains from trade liberalization may not accrue to countries if markets are not functioning efficiently.***

If domestic product markets, or capital and labour markets (factor markets), are functioning poorly, the capacity of economic agents to adjust and take advantage of new trading opportunities will be impaired. The source of market malfunction may relate to anti-competitive behaviour, aspects of government policy or to external factors (externalities) that markets are unable to account for fully. Corrective policies may therefore be required to increase the contestability of markets and address positive and negative externalities.

***Competition policies are often needed to secure the gains from liberalization.***

Competition and trade policies share the objective of promoting competition and achieving efficiency. International trade and investment liberalization increase the competition that domestic producers face from foreigners. In this sense, a small trade-dependent economy with open trade and investment policies may be able to use links with the outside world to ensure competition. But liberal trade and investment regimes are not always enough to secure competitive markets. Other impediments to contestability may necessitate a regulatory response from governments.

Two examples are considered to show how openness requires complementary competition policy in order to secure the full benefits of trade liberalization. One concerns cross-border mergers and the other international cartels. First, while mergers can bring economic benefits from economies of scale, sharing of know-how, and so on, anti-competitive effects can arise from reduced rivalry in the market. In these cases, the regulation of mergers would limit the impact of anti-competitive behaviour on international trade and increase the benefits for consumers. Second, foreign exporters may be members of a cartel that aims to reduce output and raise prices. Then even if trade barriers are low or non-existent, the benefits of open trade will not be passed on to consumers because the cartel colludes to keep prices high. Available evidence indicates that significant shares of developing country imports were affected by international cartels prosecuted in the 1990s.

The question of how best to deal with the international effects of anti-competitive behaviour has been hotly debated. Three broad approaches have been considered: harmonizing national competition laws and practices (convergence), improving cooperation amongst national competition authorities and creating a multilateral framework. Whatever option or combination of options is chosen, the need for some degree of international cooperation is not in doubt, and such cooperation is likely to intensify and actively involve a growing number of countries over time.

***Regulatory or fiscal policies to address externalities are part of a coherent framework for growth and development...***

Externalities refer to the consequences of economic decisions that are not mediated through the marketplace. Although externalities can have important effects, their benefits (in the case of a positive externality) or costs (in the case of a negative externality) are not reflected in market prices. Hence, consumers and producers, whose behaviour depends on these market-determined signals, are unable to take these additional costs and benefits into account.

***...and policies to address the challenges of environmental degradation are a good example.***

In the case of trade and the environment, the presence of negative externalities may cause trade liberalization to produce unwanted outcomes. Since producers and consumers do not face the full cost of their actions and treat environmental resources as free goods, one possibility is that trade could result in a greater than optimal scale of economic activity and produce environmental damage.

One way to correct negative externalities is to apply a tax on the activity causing the externality at a rate equal to its marginal environmental damage (the Pigouvian tax). The fundamental principle is that the Pigouvian tax should be applied directly to the activity which generates the negative externality. Despite the centrality of this proposition in economic theory, governments do not make widespread use of environmental taxes. Most prefer to pursue environmental objectives through command and control measures, such as performance standards or mandated technologies, licences, permits, zoning regulations, registration, or other regulations. The preference for direct intervention arises from distributional concerns, uncertainty about the costs and benefits of abatement, and the costs of monitoring and enforcement. Irrespective of the specific measures used (whether emission taxes or command and control measures), coupling trade liberalization with appropriate environmental measures leads to higher incomes and improved environmental quality. Trade liberalization creates economic gains from exploiting a country's comparative advantage. If some of these gains are accompanied by increased emissions or pollution, mitigating measures to curb these effects help to preserve the gains from liberalization.

***The use of trade measures to address environmental externalities is only a second-best response.***

But what if coherence is lacking in national policies and countries do not correct for environmental externalities? Could not trade measures be used to correct the environmental damage? The use of a trade measure, whether applied by an importing or an exporting country, to address the environmental problem would constitute a second-best policy response. The first-best option is still to apply a corrective measure to the source of the externality. This conclusion holds even in the case of an externality that has a transboundary or global nature. Moreover, where environmental risks affecting the global commons are a symptom of poverty and underdevelopment, financial transfers or technical assistance would be far more effective instruments of policy than restrictive trade measures.

***Knowledge creation is critical to growth and knowledge externalities transcend national borders...***

Knowledge creation is central in explaining the long-term growth path of countries. Its importance can be seen from the fact that productivity is often the single most important source of growth, explaining on average a little over 40 per cent of GDP growth in OECD countries.

Knowledge externalities exist because the consumption of knowledge is non-rival – in other words, once knowledge is discovered, its use by some does not lead to a reduction in the ability of others to use it for a similar or different purpose. Furthermore, the positive spillover associated with knowledge and knowledge creation does not stop at a country's borders. There are a number of possible conduits for the international transmission of knowledge, including international trade, the movement of natural persons (particularly but not limited to scientific personnel) and cross-border direct investments.

*...and open trade and investment policies, investments in education, and intellectual property protection and standards help countries to capture the spillover effects.*

The need for public policy to encourage knowledge creation and diffusion arises because left on their own, firms will tend to underinvest in research and development (R&D). This is because they are not able to appropriate the benefits that spill over to other firms from their R&D efforts. Technology spillovers can have both national and international dimensions. Public interventions aimed at promoting the transfer and diffusion of technology might include public funding of basic research, whether in government institutions or universities, patent protection laws and R&D tax credits.

For countries seeking to capture spillover effects, receptiveness to foreign direct investment is an advantage, combined with the creation of a climate conducive to knowledge transfer and diffusion. Policies that encourage competition in domestic markets can increase the pace of technology transfer from multinational enterprises. Improving the educational levels and skills of the domestic labour force, and ensuring appropriate intellectual property protection and standards are also likely to encourage higher technology transfers and increase positive spillovers.

Open trade allows countries to benefit from the role of international exchange as a conduit for knowledge-related externalities. Countries not only derive (static) benefits from trade liberalization through increased efficiency in resource allocation – they also obtain the (dynamic) benefits of higher productivity which increases the rate of economic growth.

### Governance and institutions

*The quality of institutions is a primary determinant of how well markets function...*

The notion of an institution embodies several elements – formal and informal rules of behaviour, ways and means of enforcing these rules, procedures for the mediation of conflicts, sanctions in the case of a breach of the rules, and organizations supporting market transactions. The quality of institutions has long been recognized as an important component of a well-functioning market. The state of institutions will therefore likely affect the amount of trade and welfare generated by trade liberalization. Moreover, the level of social acceptance of trade reform may be affected by a country's institutions.

Well developed institutions will help to reduce transactions costs for market participants and thus increase the efficiency of markets. If institutions are working effectively, they i) channel information about market conditions, products and participants; ii) reduce risk by defining and enforcing property rights and contracts; iii) circumscribe arbitrary interventions in markets by politicians and interest groups; and iv) safeguard competition in markets. The availability of information and the assessment of risk are particularly important concerns for foreigners trading with a country. Even if a country lowers its trade barriers, outsiders may be reluctant to trade with the country if, for instance, they do not believe contracts can be enforced or are not sure whether payments will be made.

*...and a positive relationship exists between the quality of institutions and openness.*

The Report demonstrates the existence of a strong positive relationship between the quality of institutions and openness. The quality of institutions is measured by three indicators – government effectiveness, the rule of law and control of corruption. The better the quality of institutions, the greater the difference it makes

whether a country has high or low tariffs. If the composite variable used to measure corruption indicates that this problem is sufficiently severe, lower tariffs may have no effect on openness.

***The quality of public institutions influences the degree of social acceptance of trade liberalization during the process of adjustment and its aftermath.***

The social acceptance of trade liberalization is important during the period of adjustment to reform and also after the economy has adapted to the new situation. The adjustment burden of trade liberalization is likely to be concentrated in the import-competing sector and may lead to resistance against reform, even though reform is beneficial for the economy as a whole, and also in the long-run for many of the workers employed in the import-competing sector. There are two main approaches to increasing the social acceptance of trade reform. One approach focuses on the creation of “winners” from trade reform as quickly as possible in order to counterbalance pressure against trade liberalization. This can, for instance, be achieved by policies that increase the quantity and quality of information about new export markets available to potential exporters. The other approach focuses on keeping the losses of those who will suffer from adjustment to the minimum, for instance through the introduction of (well-targeted and temporary) social safety nets.

Even in the aftermath of successful trade liberalization, governments may need to respond to any long-term negative effects that some economic agents experience. These include distributional effects and an increased exposure to external risk. The distributional effect of trade liberalization can be in the direction of more or less income inequality, depending on the comparative advantage of the liberalizing country, its pattern of protection before liberalization and the functioning of the labour market. In cases of increased total uncertainty or increased inequality, social acceptance of trade reform could be undermined. This can be avoided if public institutions intervene more intensively in the provision of insurance (against unemployment, for instance) where openness significantly increases a country’s net exposure to risk (trade may also reduce exposure to internal risks), and in the redistribution of wealth where openness contributes to increases in inequality.

***Policy coherence and international cooperation***

***International cooperation can help national governments in several ways to secure greater benefits from coherent policy structures at home...***

In the field of trade liberalization, joint action among governments to reduce trade barriers helps lessen the risk that some countries can obtain terms-of-trade advantages at the expense of others, thereby creating an incentive for a mutually advantageous market opening that might not otherwise occur. Joint action to liberalize trade also generates greater domestic support for freer trade by engaging the interests of export industries that stand to gain from reduced barriers in other countries. Finally, international trade agreements help decision-makers to pursue trade-enhancing policies in a manner that makes them harder to challenge by domestic interest groups.

As noted above, cooperation is needed to deal with international spillovers in such areas as environment policy and the dissemination of knowledge. The discussion on competition policy in the Report identifies another instance where international cooperation produces shared benefits. Rules that require pre-commitment from governments in relation to policies they will pursue, as well as acceptance of a dispute resolution mechanism, reduce exposure to uncertainty. International cooperation also reduces transactions costs, provides economic agents and governments with a greater flow of information, and in some cases lessens risks of regulatory failure. International cooperation can also play a valuable role in augmenting infrastructure and human capital in low-income countries, thereby assisting the latter to take greater advantage of opportunities offered by the international economy.

***...but cooperative arrangements at the international level can entail differing degrees of commitment...***

Governments have to choose how far they want to tie their hands through international commitments and determine how far policy uniformity serves the national interest. At the lightest level of international cooperation, governments may do little more than exchange information. Consultation implies a slightly

stronger form of international commitment, while coordination can lead to agreement on the adoption of particular policy stances. Finally, governments may commit explicitly to a shared policy regime replete with enforcement mechanisms, such as the World Trade Organization.

*...and from the perspective of coherence, the optimum level of international cooperation is not necessarily that which seeks the highest possible level of engagement.*

A key pre-requisite for effective international cooperation is that the administering agencies charged with the relevant tasks possess both the necessary information and policy instruments to discharge their responsibilities. Secondly, governments may not be close enough in their perceptions of the benefits that will flow from international commitments in particular areas, or agree on how burdens should be shared, to reach useful agreement. Difficulties of this nature would argue for lighter forms of cooperation, and persistence in searching for fuller commitments could result in coercive and unstable relationships that may have negative welfare consequences over time. A third consideration is that governments may be tempted to avoid responsibility and blame by assigning policy challenges to an international context when real solutions lie at home.

*The WTO's role in promoting international cooperation on trade matters has made a valuable contribution to economic governance.*

Governments have repeatedly shown a commitment to cooperation in the WTO. The clearest evidence of this commitment is manifested through rounds of trade negotiations, continuing efforts to forge rules for the conduct of trade, broad-based observance of the dispute settlement system and a continually expanding membership. This forward progress in international cooperation under the WTO implies a common perception that the WTO is worth preserving – that is, there is more to be gained from maintaining the system through policy behaviour based on shared commitments than from independent national action. But at any point in time governments hold differing views on how much trade liberalization should be undertaken and by whom, what rights and obligations the rules should confer, and what subject areas they should cover. Such differences in interests and priorities reflect a high degree of variance among Members across several dimensions – including size, income levels, the degree of openness, development needs, and the capacity to absorb change and benefit from it. These differences will only be addressed if governments continue to see value in cooperation under the WTO system and demonstrate a willingness to pre-commit on agreed policies and rules of behaviour.