

---

**World Trade Organization**  
Economic Research and Statistics Division

---

**"EVOLUTION OF ASIA'S OUTWARD-LOOKING ECONOMIC POLICIES:  
SOME LESSONS FROM TRADE POLICY REVIEWS"**

Michael DALY  
World Trade Organization

*Manuscript date: 17 August 2011*

---

**Disclaimer:** This is a working paper, and hence it represents research in progress. This paper represents the opinions of the author, and is the product of professional research. It is not meant to represent the position or opinions of the WTO or its Members, nor the official position of any staff members. Any errors are the fault of the author. Copies of working papers can be requested from the divisional secretariat by writing to: Economic Research and Statistics Division, World Trade Organization, Rue de Lausanne 154, CH 1211 Geneva 21, Switzerland. Please request papers by number and title.

**"EVOLUTION OF ASIA'S OUTWARD-LOOKING ECONOMIC POLICIES:  
SOME LESSONS FROM TRADE POLICY REVIEWS"**

by

Michael DALY<sup>1</sup>

**ABSTRACT**

This Working Paper contains some observations concerning the evolution of trade and trade-related policies in the Asia-Pacific region since the establishment in 1989 of the Trade Policy Review Mechanism (TPRM), whose goal is to improve the transparency of these policies. It also draws some lessons from the Reviews undertaken. In particular, the Paper examines how reforms, either unilateral or in connection with bilateral, regional or multilateral trade agreements, can be greatly facilitated by transparency, including cost-benefit (C-B) analyses of policies and measures that take full account not just of the interests of domestic producers, but also those of other groups, including exporters and domestic consumers. While high quality transparency is not cheap, the costs of achieving it pale in comparison with the financial assistance involved and efficiency losses associated with such assistance. Trade Policy Reviews (TPRs) throw light not only on measures that appear to contravene WTO rules, although that is not their purpose; more importantly, they identify measures not seemingly covered by WTO rules, which can, nonetheless, have economic effects equivalent to measures that are subject to these rules.

One of the main lessons from these TPRs is that impediments to economic development are largely homegrown. Consequently, unilateral structural reform, of which liberalization of both trade and foreign direct investment (FDI) has been an integral part, is of paramount importance. By fostering transparency, particularly evaluating the effectiveness of policies and measures in achieving their objectives and their overall impacts (intended or unintended) on the economy, the TPRM can be a catalyst for unilateral reform, including liberalization of trade and FDI. Although the latter has received added impetus from multilateral liberalization under the auspices of the GATT/WTO, the stalling of negotiations in connection with the Doha Development Agenda (DDA) should not preclude further unilateral liberalization. By contrast, the benefits of preferential trade agreements are far from obvious, notwithstanding their proliferation during the past decade throughout the Asia-Pacific region, where few governments have subjected these agreements to rigorous cost-benefit analysis.

Economies in the Asia-Pacific region, especially East Asia, have been much more successful than those in other regions in achieving sustained fast growth, and thereby raising living standards and reducing poverty. This success can be attributed not so much to transparency, which is largely lacking, but to, *inter alia*, their broad outward-looking development strategy. This strategy has involved in particular an increasingly high degree of integration into the global economy with heavy reliance on growth of manufactured exports, high rates of national saving to finance high rates of domestic investment, including public investment in physical and social infrastructure (notably education and health), supplemented by FDI (as well as maintenance of macroeconomic stability,

---

<sup>1</sup> The author is Chief of the Asia-Pacific Section in the Trade Policies Review Division. He has greatly benefitted from discussions with, and helpful comments from, Rohini Acharya, Steven Argy and Sergios Stamnas. He is also very grateful to Verena Hess, for her statistical assistance in computing the tariff and other indicators reported in this paper, Didier Poulard, for his research assistance, Vivienne Seigle, for editing the manuscript, and Tina Bernard, for preparing the paper. The opinions expressed are solely those of the author and, as such, should not be attributed to the WTO Secretariat or WTO Members.

reliance on a functioning market system to allocate resources, and committed, capable and credible governments). However, this development strategy has left growth very heavily dependent on domestic investment and exports, which dropped sharply in the wake of the global financial crisis that erupted in 2008. This, and resulting current account imbalances, and consequent trade tension, has prompted a rethink in a number of East Asian economies of their development strategies. As a consequence, China, Chinese Taipei, Korea and Malaysia, for example, are now attempting to wean their economies off investment and exports and give freer rein to domestic consumption.

As circumstances (including comparative advantage) change, and global resources become increasingly scarce, policies need to be continually reviewed in order to ensure that second-best measures are replaced by more cost-effectiveness ones. As improved productivity is the key to sustained development in the long run, policies need to be adapted to ensure that they facilitate, rather than inhibit, the efficient re-allocation of resources by markets in accordance with evolving comparative advantage. Reform needs to be ongoing, therefore. Transparency builds support for, and thus paves the way for, such reform.

**Keywords:** Trade Policy, Liberalization, Taxation, Transparency, WTO/GATT, Foreign Investment, Industrial Policy.

**JEL Classifications:** F13, F15, F16, F18, F21, F32, H25, H27, H57, O24, O25

TABLE OF CONTENTS

	<i>Page</i>
I. OVERVIEW	5
II. TRANSPARENCY AND ITS INSTITUTIONALIZATION	7
III. ASIAN DEVELOPMENT STRATEGIES AND RELATED INDUSTRIAL POLICIES	11
IV. TARIFFS – UNFINISHED BUSINESS	17
V. INTERNAL TAXATION	23
VI. OTHER MAJOR NON-TARIFF BARRIERS TO TRADE	30
VII. EXPORT RESTRAINTS	36
VIII. GOVERNMENT PROCUREMENT	41
IX. COMPETITION POLICY	43
X. TAX COMPETITION, ENVIRONMENTAL STANDARDS, AND WORKING CONDITIONS	45
XI. CONCLUSIONS	50

**Estragon:** Let's go.

**Vladimir:** We can't.

**Estragon:** Why not?

**Vladimir:** We're waiting for Godot.

*Waiting for Godot*

by

Samuel Beckett

## I. OVERVIEW

1. The over-arching trend that emerges from Trade Policy Reviews (TPRs) undertaken during the past 20 years or so of the vast majority of Asia-Pacific Members, whether developed or developing, is the continuing gradual liberalization of international trade and inward foreign direct investment (FDI). This liberalization has been an integral part of broad ongoing market-based domestic economic reforms aimed at improving productivity, and thus competitiveness, and thereby raising living standards and reducing poverty. These reforms, including trade and FDI liberalization, have been primarily unilateral, both in large countries, such as China and India, as well as in small countries.<sup>2</sup> For example, of the 21 percentage point fall in average weighted tariffs of all developing countries between 1983 and 2003, unilateral reductions accounted for two thirds of the fall. Unilateral reform of trade and trade-related policies reflects the recognition that impediments to improved productivity, growth and development are mainly home-grown. However, trade and FDI liberalization have received added impetus from multilateral liberalization under the auspices of the GATT/WTO, especially the implementation of agreements following the Uruguay Round negotiations. In addition, there has been a proliferation of regional and bilateral preferential trade agreements (PTAs), whose success in creating (rather than merely diverting) trade is far from obvious. Trade and FDI liberalization has continued notwithstanding the Asian financial crisis in 1997 as well as the more recent global financial crisis that erupted in late 2008 and, in its wake, the sharp and sudden drop in international trade, which has subsequently recovered.

2. Since the establishment of the Trade Policy Review Mechanism (TPRM) in 1989, both China and India have emerged as economic powerhouses in the region and, indeed, the world, owing to their strong growth facilitated by outward-oriented economic reforms. In particular, China's unilateral "open door" policy, introduced in 1978, was an integral part of its strategy to achieve a gradual transition from a virtually closed centrally-planned economy into a more market-based one. This "open door" policy, which culminated in China's accession to the WTO in 2001, involved the opening up of the economy to international trade and inward FDI, two of the main ingredients of the "East Asian Miracle". At the same time, manufactured exports together with investment were seen initially as the main engines of growth. The transformation of China's economy is such that in 2010, it replaced the United States as the world's largest manufacturer of goods, and overtook Germany to become the world's largest exporter, with nearly 60% of exports produced by "foreign invested enterprises" (whose labour productivity was more than nine times that in the rest of the economy), the second largest importer (behind the U.S.), and the third largest recipient of FDI (after the U.S. and EU). It also displaced Japan as the second largest economy. More importantly, however, during the past 20 years, real GDP growth has averaged almost 10%, GDP per capita has increased more than ten-fold (from US\$226 in 1978 to US\$356 in 1991 and US\$3,266 in 2008), and millions of Chinese have been lifted out of poverty.<sup>3</sup> China's export-oriented development strategy has some key similarities to the successful approaches previously taken by other East Asian economies, notably Japan, Korea, Chinese Taipei, Hong Kong, and ASEAN countries.

---

<sup>2</sup> World Bank, 2005, *Global Economic Prospects*.

<sup>3</sup> According to the World Bank, the percentage of the population living below the \$2 a day threshold, for example, fell from 84.6% in 1990 to 36.3% in 2005.

3. India too has undergone a remarkable transformation, albeit not as spectacular as China's.<sup>4</sup> Since 1991, it has been undertaking unilateral economic reforms, including progressive abandonment of an inward-looking strategy of import-substitution, whose protectionist policies had an anti-export bias. Instead, the Indian economy has been opened up to international trade and FDI, with exports (of goods and services) now considered one of the main engines of growth alongside domestic consumption and investment. Real GDP growth accelerated markedly from an average annual rate of 5.5% during the period 1989-1998 to reach 7.2% during the period 1999-2010.<sup>5</sup>

4. By contrast, Japan's highly export-oriented economy, which had been one the most successful OECD countries up to the beginning of the 1990s, has subsequently been in the doldrums. Whereas between 1960 and 1990, annual real GDP growth averaged 6.2% and, as a result, GDP per capita rose from 16% of the U.S. level in 1960 to a peak of 152% in 1995, during the past 15 years, real GDP has grown at an average annual rate of only 1.7% and GDP per capita fell to 86.4% of the U.S. level in 2009. Moreover, whereas Japan's average annual multi-factor productivity (MFP) growth was 3.7% in 1985-1990, the fastest among 13 OECD countries for which such data were available, the rate dropped to 1.1% in the period 1991-2007.<sup>6</sup> Trade liberalization was mainly unilateral and multilateral up until Japan's implementation of its commitments under the Uruguay Round agreements. Since then, however, unilateral trade liberalization and other structural reforms have been slow, while multilateral liberalization, in connection with the Doha Development Agenda (DDA), has stalled. Japan, which had no PTA apart from membership of APEC until 2000, has since been negotiating regional and bilateral PTAs, which appear to have done little to expand trade and revive its economic growth.

5. By comparison, Australia's economy was among the poorer performing OECD countries up until the mid-1980s. Since then, however, a wide-ranging economic reform programme has been introduced, a key feature of which was unilateral trade reform, albeit underpinned by multilateral trade liberalization with the conclusion of the Uruguay Round. The extent of structural reform in Australia is perhaps exemplified by the drop in the effective rate of assistance (ERA) for manufacturing during the past two decades or so from 25% to 5%.<sup>7</sup> Structural reforms were accompanied by macroeconomic reforms, notably the floating of the exchange rate in the early 1980s, which facilitated subsequent adjustment to tariff reductions. Structural reforms have been aimed at reducing, if not removing, distortions to competition in order to improve the functioning, and therefore flexibility of, markets for goods, services, labour and capital, thereby accomplishing a more efficient use of domestic resources. The outcome was a surge in MFP<sup>8</sup> growth to an average annual rate of 2.1%, during the 1993-94 to 1998-99 productivity cycle, more than double the long-term average rate of 0.8%,<sup>9</sup> propelling Australia's ranking from 12<sup>th</sup> (out of the 13 OECD countries for

---

<sup>4</sup> Whereas in 1978, India's and China's per capita GDP were roughly similar at US\$204 and US\$226, respectively, by 1991 India's per capita GDP had grown to US\$308 compared to China's US\$356, and in 2008 India's per capita GDP was US\$1,202 compared to China's US\$3,226.

<sup>5</sup> India, Ministry of Finance, *Economic Survey 2010-11*.

<sup>6</sup> World Bank, World Development Indicators.

<sup>7</sup> See Gary Banks, 2005, "Structural Reform Australian Style: Lessons for Others", Productivity Commission, May, p. 6. The ERA, a derivative method of Effective Rate of Protection (see footnote 51) measures net government assistance to an industry by comparing the difference between the value-added by the assisted sector to the value added generated by the same, but unassisted sector (at the world or reference price). It takes into account not only support directed at an industry, but the amount of support indirectly received or the tax paid by the industry because the Government has subsidized or taxed a supply industry.

<sup>8</sup> Multi- or total factor productivity (TFP) reflects the efficiency with which factors of production are used and is therefore a key determinant of an economy's performance. It should be distinguished from labour productivity, which is the amount of output per employee (or per hour worked). Among the main determinants of improvements in labour productivity are investment, which raises the amount of capital that labour has to work with, and MFP growth. One of the most important sources of MFP growth in the long run is technological progress.

<sup>9</sup> Productivity Commission, 2010, *Annual Report 2009-10*, 28 October, Canberra.

whom data were available) in 1985-1990 to 2<sup>nd</sup> (out of 17 countries) in 1990-2000.<sup>10</sup> Improved MFP growth thus accounted for more than half of the 3.1% average annual growth rate of incomes during the 1990s.<sup>11</sup> In the 1998-99 to 2003/04 cycle, however, average annual MFP growth dropped to 1.1%, slightly less than the long-term average of 1.3%, and in the next cycle to 2007-08, MFP growth fell to an annual average rate of -0.2%.<sup>12</sup> Reform has also made Australia's economy more flexible and resilient to external shocks, such as the Asian financial crisis in the late 1990s, recurring drought, and the more recent 2008 global financial crisis.

6. Until recently, unilateral and multilateral trade liberalization has arguably been the main driving force behind most Asia-Pacific countries' economic development. But during the past decade regional and especially bilateral PTAs have proliferated, although some have contained little liberalization and few have been fully implemented so that their impact on trade and FDI has hitherto been limited. WTO Members that had long eschewed such agreements, such as Japan, have come to embrace them. Consequently, whereas there were only five PTAs in effect in Asia in 2000, there are now 56. This proliferation of discriminatory PTAs and the prospect of larger regional and cross-regional trade blocs is one of the most striking developments during the past ten years.<sup>13</sup> However, there is little convincing empirical evidence that any trade (and investment) created by PTAs has substantially outweighed the trade (and investment) diverted by them. Indeed, a recent report by Australia's Productivity Commission (PC)<sup>14</sup> on its PTAs, including the one with the U.S., whose trade coverage is relatively high (and thus regarded by the two parties as an example of a "gold standard" agreement), is especially revealing in this respect as it is one of the few rigorous evaluations of such agreements in the Asia-Pacific region. The PC found little evidence from business to indicate that bilateral agreements to date have provided substantial commercial benefits (possibly because the main factors that influence decisions to do business in other countries lie outside the scope of such agreements). It concluded that although PTAs can reduce trade barriers and help meet other objectives, their potential impact is limited and other options may often be more cost-effective; by comparison, domestic economic reform offers relatively large economic benefits and should not, therefore, be delayed to retain 'bargaining coin'. As PTAs proliferate, export markets may increasingly reward the privileged producers, not the more efficient ones, to the detriment of productivity and, hence, growth in Asia-Pacific countries. They may also undermine multilateral liberalization as countries attempt to protect the diversionary preferences embodied in such agreements.

## **II. TRANSPARENCY AND ITS INSTITUTIONALIZATION**

### **(a) Domestic transparency**

7. The continual process of structural reform, including unilateral trade liberalization, can be greatly facilitated by a high degree of domestic transparency regarding the formulation, implementation, and evaluation of economic policies. Ideally, such transparency concerns the nature of, and rationale for, these policies, and involves independent evaluation of their cost-effectiveness; that is, their costs in relation to their benefits for consumers as well as producers. Such cost-benefit (C-B) analysis should be the foundation for evaluating all government policies, including public spending on infrastructure and regulations. The institutionalization of transparency, particularly a rigorous, evidence-based approach to public policy, enhances government accountability, public understanding, and therefore debate over the merits of policies. It also reduces the scope for rent-seeking and discretion in the use of policy measures, and thus corruption. Unfortunately, such

<sup>10</sup> OECD online information.

<sup>11</sup> Australia's greatly improved terms of trade, owing to increased commodity prices, also made a major contribution to growth in incomes.

<sup>12</sup> This recent slowdown in MFP growth highlights the need for the "third wave" of reform (Box 1).

<sup>13</sup> In some instances, PTAs may contain certain provisions that, in practice, cannot be confined to the parties to the agreements, or perhaps are extended to all trading partners (that is, the provisions are "multilateralized").

<sup>14</sup> In preparing its report, the PC drew on information received together with existing literature, including the analysis in the earlier Mortimer review, as well as its own quantitative analysis.

institutionalization of transparency is not a common practice in much of the Asia-Pacific region (or elsewhere in the world).

8. One notable exception in the region is Australia, whose institutions, notably the independent Productivity Commission (PC) and its predecessors, are exemplary in this regard (Box 1). The PC has been at the heart of evidence-based policy-making and reform in Australia over the past three decades.<sup>15</sup> However, the nature of its reports has changed dramatically over time from merely reporting the impacts of policies on industries under review to also reporting the effects, intended or unintended, on other industries and the economy as a whole.<sup>16</sup> It goes beyond the narrow interests of recipients of assistance to take into account the broader national interest. The PC conducts evaluations of a wide array of domestic policies, including those that are trade and trade-related, as well as regulation (and social and environmental topics), which are arguably more important than traditional barriers to trade (and FDI).<sup>17</sup> The essential ingredients of these evaluations are: independence<sup>18</sup>; rigorous analysis of costs and benefits (taking into account not just static, but also dynamic effects<sup>19</sup>, where feasible, as well as "second-best" considerations<sup>20</sup>); a reliable domestic data base; and openness of the evaluation process to public and expert scrutiny and feedback (which helps to educate the public and can provide insights into the likely impact and help avoid unintended consequences). Policy decisions are inevitably influenced by much more than purely economic analysis and objective empirical evidence. Nevertheless, the latter can play a useful, even decisive, role in informed policy-making. It can facilitate reform by helping to reduce, if not overcome, political obstacles. (New Zealand, which already has a relatively high degree of transparency, has recently established an institution similar to the PC.) It is not surprising that Australia was one of the initiators of the TPRM and the first volunteer to undergo a Trade Policy Review in 1989.

---

<sup>15</sup> See Productivity Commission, 2003, *From industry assistance to productivity: 30 years of the Commission*, December, Canberra. According to a previous Prime Minister, "evidence-based policy making is at the heart of being a reformist government" (Rudd, K., 2008, Address to Heads of Agencies and Members of Senior Executive service, Great Hall, Parliament House, Canberra, 30 April).

<sup>16</sup> Banks, G., 2009, *Evidence-based policy making: What is it? How do we get it?* (ANU Public Lecture Series, presented by ANZSOG, 4 February), Productivity Commission, Canberra.

<sup>17</sup> The PC is not the only public institution in Australia conducting cost-benefit analyses. Infrastructure Australia has stressed that any project it recommends for public funding must satisfy rigorous cost-benefit tests.

<sup>18</sup> In modelling the potential gains for Australia from a mooted PTA with the U.S., ACIL Tasman projected negligible gains at best, whereas the Centre for International Economics, in work commissioned by the Department of Foreign Affairs and Trade, obtained significant positive results. ACIL's finding has subsequently been confirmed by the PC's recent report on PTAs.

<sup>19</sup> Dynamic effects tend to be more difficult to quantify than static effects.

<sup>20</sup> In the presence of distortions, tariffs may be potentially beneficial, although they are "second best" in that other policies would be preferable, but are somehow not viable. For instance, if there is a positive externality associated with domestic production, and a production subsidy is not feasible to internalize it (owing to fiscal constraints, for example), a tariff may be a second-best means of doing so, even though it introduces a second distortion to correct the first (Deardorff, Alan V., 2007, "Are Second-Best Tariffs Good Enough?", mimeo). However, the theory of the second-best implies that, whenever possible, distortions should be addressed at source.

**Box 1: Institutionalization of transparency and its role in economic reform**

During the past two decades, Australia's economic performance has benefited greatly from its structural reforms: a key feature has been unilateral trade liberalization, including tariff reductions. However, while economic reform provides benefits to certain groups of the economy, it also imposes costs on others. Thus, transparency, through institutions such as the Productivity Commission (PC), has played an important role in facilitating economic reforms.

The PC is the Australian Government's principal review and advisory body on microeconomic policy and regulation. Its independence and transparent advice contributes to well-informed policy- and decision-making. The origin of the PC is as an institution that protected domestic industries, while avoiding "excessive" protection. In 1921, a Tariff Board was created as an independent inquiry and advisory body on tariffs, which, reflecting the consensus of the time, made policy recommendations to protect domestic industries. In the mid-1960s, the Board began to question the long-term effects on the wider economy of protecting individual industries, and began to estimate and publish information on the relative industrial protection levels, using the effective rates of protection and costs of the protection.

The Tariff Board evolved into the Industries Assistance Commission (IAC) in 1974, which provided advice about the costs and benefits not only of tariffs, but also of other forms of government assistance to industries. Since then, transparency, independence, and the evaluation of economy-wide effects of policies have become three fundamental principles of the IAC and its successors, the Industry Commission (1990-98) and the Productivity Commission (since 1998). Thus, since its establishment in 1998, these principles have been realized in the Productivity Commission by, *inter alia*: subjecting its advice to public scrutiny; operating independently under the protection and guidelines of its own legislation; and reflecting the interests of the community at large.

Transparency is an integral part of the PC's operation. Once it is authorized to conduct an inquiry, public opinions are collected through hearings, submissions, and feedback on draft reports. The PC thus assists structural reforms in a number of ways. By subjecting the arguments of vested interests to vigorous scrutiny, the PC provides the Government with advice concerning the long-term interests of the community as a whole. The PC's findings and recommendations have been based on extensive public input and feedback on draft reports, which, in some cases, changed the PC's final findings substantially. The inclusion of public submissions, hearings, and feedback on draft reports helps it to reach final recommendations and makes the Government aware of the likely reactions of the community and interest groups to different policy approaches. This can reduce unexpected responses, which could lead to policy reversals. All the PC's reports are published. These reports and analyses assist the Government in designing reform policies, and contribute to a wider awareness within the community of the costs of existing policies and the benefits from reform. The Government may refer any matter it considers appropriate to the PC, but is not obliged to take its advice.

Other independent advisory bodies as well as various task forces, notably the regulation taskforce, have contributed to the evaluation, and thus the transparency, of government policies. These bodies, too, have provided impetus to structural reforms. In addition, the National Competition Policy has provided a mechanism for the coordination of pro-competition reforms across the jurisdictions of the Australian federation, and this effort is continuing under the National Reform Agenda (NRA) agreed by the Council of Australian Governments (COAG) in 2006. The NRA encompasses not just the old competition agenda, but also improved regulatory design and the reduction of red tape, efficient infrastructure, and human capital, all of which are important for innovation and productivity performance over time. According to the PC's modelling of the NRA, the gains from this "third wave" of reform are potentially greater than from the first and second waves. Government departments also conduct their own internal evaluations of policies and policy measures with a view to reform.

*Source:* Productivity Commission (2003) and Banks (2005, 2009).

9. High quality transparency involving C-B analysis of policy measures takes time and is not cheap. For example, in 2009/10 the PC's budget was \$A 33.7 million.<sup>21</sup> Indeed, transparency may be considered prohibitively costly by less-developed countries, which also lack the institutional capacity

<sup>21</sup> Productivity Commission, 2010, *Annual Report 2009-10*, 28 October, Canberra.

to implement it. However, the costs of achieving transparency pale in comparison with the amounts of financial assistance involved, including tax revenues forgone in the case of tax incentives, and the possible deadweight efficiency losses associated with such measures (or indeed the taxes themselves). For example, a package of tax incentives offered by India to Ford in 1997 cost an estimated US\$200,000-US\$420,000 per job.<sup>22</sup> In a worst case scenario, policy measures may even be counterproductive in some instances. While C-B analyses of measures abroad can be enlightening in the absence of analysis of similar domestic measures, they are not a substitute, as economic, political and social circumstances as well as level of development and institutional capacity differ widely from one country to another. Consequently, one size does not fit all. Clearly, less developed economies would need technical and financial support to enable them to institutionalize transparency, including the gathering of reliable statistics, the lack of which inhibits evidence-based analysis of trade and trade-related policy measures, and thus the formulation of optimal policies.

**(b) The WTO's Trade Policy Review Mechanism (TPRM)**

10. Although transparency usually begins at home, the TPRM was based on a recommendation of the FOGS (Functioning of the GATT System) negotiating group in the Uruguay Round. While not as rigorous as the kind of domestic transparency achieved by the PC, for instance, the TPRM was designed to enhance the effectiveness of the domestic policy-making process through informed public understanding (Ostry, 1997).<sup>23</sup> It reflected Members' recognition of the inherent value of domestic transparency of government decision-making on trade policy matters for both Members' own economies and the multilateral trading system, and their desire to encourage and promote greater transparency within their own systems, albeit acknowledging that the implementation of domestic transparency had to be on a voluntary basis and take account of each Member's legal and political systems.<sup>24</sup> In other words, the TPRM recognizes that one size does not fit all.

11. WTO rules are based primarily on the principles of: (1) non-discrimination (most-favoured-nation and national treatment); (2) predictability (and stability); and (3) transparency. The transparency achieved by the notification of obligations contained in WTO Agreements is enhanced by the TPRM. The main purpose of the mechanism is to contribute to the smoother functioning of the multilateral trading system, by achieving greater transparency in, and therefore understanding of, Members' trade policies, practices, and measures, including the extent to which they themselves are transparent and reflect the principles of non-discrimination and predictability.

12. Transparency entails four key elements: (a) a description of the nature of policies and measures; (b) their rationale or objectives; (c) their costs (in terms of expenditures or taxes forgone); and (d) an economic evaluation of the effectiveness of policies and measures (relative to alternatives) in achieving their goals.<sup>25</sup> Accordingly, the TPRM enables the collective appreciation and economic evaluation of a full range of individual Members' trade policies and practices (too many to discuss in this paper) in order to ascertain the extent to which they contribute to the efficient allocation of resources, as well as their consistency with the broad principles of non-discrimination and predictability that underlie the WTO.

13. The TPRM is not, however, intended to serve as a basis for the enforcement of obligations under the Agreements, or for dispute settlement purposes. Nor is it intended to impose new rules on Members. Instead, it permits the evaluation of trade and trade-related policies and measures, including those that do not necessarily contravene, or indeed are seemingly not subject to, WTO obligations, such as fiscal policy, "exchange rate protection", export taxes, private anti-competitive

---

<sup>22</sup> World Bank, 2007, *An East Asian Renaissance*, Washington, D.C., p. 181.

<sup>23</sup> Sylvia Ostry, 1997, *The Post-Cold War Trading System: Who's First?*, University of Chicago Press, Chicago, 1997, pp. 201-303.

<sup>24</sup> The Results of the Uruguay Round of Multilateral Trade Negotiations: The Legal Texts, p. 434.

<sup>25</sup> In some Members, merely obtaining a clear description of a policy or measure and its objectives can be a major achievement.

practices, and regulatory subsidies. The monitoring and evaluation of Members' policies, practices, and measures under the TPRM throw light on how policies and measures not necessarily covered by WTO rules may nonetheless have an important bearing on the international movement of goods, services, capital, and labour, and can have effects equivalent to more conventional measures (such as import tariffs and direct subsidies) that are subject to existing WTO disciplines. The TPRs of the Asia-Pacific region have identified such measures, which, like many others, tend to be more detrimental to the country imposing them than to its trading partners; hastily or ill-conceived measures may even be counterproductive. Hence, a case can be made for removing or modifying such measures unilaterally, regardless of whether they are permitted by WTO rules.

14. By fostering transparency, particularly evaluating the effectiveness of policies and measures in achieving their objectives, the TPRM is sometimes welcomed by Members under review as a catalyst for introspection and, as such, can encourage unilateral reform, including trade liberalization. This is often the case for less developed countries that lack the institutional capacity to evaluate their policies and measures themselves and thus view the TPRM as a form of technical assistance enabling them to improve domestic transparency and thus the effectiveness of their policies. While specific recommendations are not made explicitly, recommendations are implicit in the Secretariat's Report.

15. In reviewing broad macroeconomic and structural policies, TPRs attempt to place trade and trade-related policies in their broader policy setting, thereby assessing the coherence of these policies in achieving their objectives. The mechanism involves periodic reviews by the Trade Policy Review Body (TPRB) of each Member's trade and trade-related policies, practices, and measures.<sup>26</sup> This Review is based mainly on a report drawn up by the WTO Secretariat, on its own responsibility, and a report supplied by the Member(s) under review. In the interests of transparency, both reports are published after the review by the TPRB.

16. Since the first TPR (of Australia) in 1989, most Members in the Asia-Pacific region (extending from Pakistan to the South Pacific) have been reviewed at least once. (By the end of 2011, the only ones that will still not have been reviewed are Myanmar, a founding Member of the WTO, together with Viet Nam and Tonga, both of which acceded to the WTO in 2007.) This paper is based largely on these 90 or so TPRs.

### **III. ASIAN DEVELOPMENT STRATEGIES AND RELATED INDUSTRIAL POLICIES**

#### **(a) Development strategies**

17. During the past 20 years, trade and foreign investment have played key roles in the broad development strategies of East Asian economies, which have achieved very rapid economic growth. Having tried and then largely abandoned unsuccessful inward-looking strategies of import substitution (as in Chinese Taipei, Indonesia, Korea, Malaysia and Singapore, for example<sup>27</sup>), which essentially involved sheltering domestic industries in the hope that they could compete in the home market against foreign competition, East Asian economies have followed a more outward-oriented strategy. Among the main common features of this strategy have been an increasingly high degree of integration into the global economy with heavy reliance on growth of manufactured exports, high rates of national saving (mandatory in some instances<sup>28</sup>) to finance high rates of domestic investment, including public investment in physical and social infrastructure (notably education and health), supplemented by FDI. However, some economies, such as Japan and Korea, have remained less open

<sup>26</sup> The U.S., EU, Japan, and China are reviewed every two years. The next 16 largest traders, of which nine (Australia; Chinese Taipei; Hong Kong, China; India; Indonesia; Korea; Malaysia; Singapore; and Thailand) are in the Asia-Pacific region, are reviewed every four years. Other Members are reviewed every six years, although a longer period may be allowed for least-developed countries (LDCs).

<sup>27</sup> See KUCHIKI, Akifumi, 2007, "Industrial Policy in Asia", Discussion Paper N° 128, Institute of Developing Economies; and World Bank, 2008, *The Growth Report*, Washington, D.C.

<sup>28</sup> Singapore, for example, established a mandatory saving scheme, the Central Provident Fund, which collects contributions from wages that are largely saved for retirement. Malaysia has a similar scheme. Both countries, as well as Japan and Korea, also have postal saving systems that cater to the needs of small savers.

to FDI than others. (The three other main common characteristics were: the maintenance of macroeconomic stability; reliance on a functioning market system to allocate resources; and committed, capable, and credible governments.<sup>29</sup>) Exports have been especially important for smaller East Asian economies whose domestic markets were not sufficiently large to enable domestic producers to exploit economies of scale, a potentially important source of TFP growth, without exporting. Their success in competing in the relatively open export markets of industrialized countries, rather than in their more protected domestic markets, was a leading indicator of the effectiveness of their industrial policies in improving their enterprises' productivity, and hence their international competitiveness. FDI not only contributed to productive capacity, by facilitating the importation of technology, ideas, and know-how from the rest of the world, it also contributed to technological progress, arguably the main source of TFP improvement, and thus sustained growth, in the long-run. The outcome of this development strategy and associated industrial policy is that among the 13 economies that have achieved high, sustained growth in the post-war period, nine were East Asian: China; Chinese Taipei; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Singapore; and Thailand.<sup>30</sup> Two others, India, which shifted from an import-substitution strategy to a more outward-oriented development strategy in the early 1990s, and Viet Nam appear to be on their way to joining this group. Five of these nine economies (Chinese Taipei; Hong Kong, China; Japan; Korea; and Singapore) continued to grow so as to reach high income levels. Despite Japan's slow growth during the past two decades and the 1997 East Asian crisis, the region continues to provide the best examples of sustained growth and poverty reduction since World War II.<sup>31</sup>

18. Interestingly, there is no instance of sustained high investment without high national saving rates; indeed, national saving rates of 20-25% have been common in fast growing East Asian economies. To the extent that national saving exceeded domestic investment, the surplus saving was exported.<sup>32</sup> In China, for example, national saving has reached more than half of GDP (51.4% in 2008)<sup>33</sup>, thereby greatly exceeding domestic investment (43.5% of GDP in 2008), which has resulted in persistent capital account surpluses. Mirroring these surpluses, China has also had to export those goods produced, but not consumed, domestically. Thus, the large gap between saving and investment is reflected in equally large and persistent current account surpluses, which have become a major source of friction with some of China's main trading partners (Box 2), who have alleged that China

---

<sup>29</sup> World Bank, 2008, *The Growth Report*, Washington, D.C., p. 22.

<sup>30</sup> The criterion used by the World Bank (2008) to identify these 13 economies was that they had achieved an average annual growth rate of 7% or more for at least 25 years since 1950.

<sup>31</sup> South Korea's economic performance is especially noteworthy. Whereas in 1960, its per capita GDP was only US\$156, 67<sup>th</sup> (less than in Ghana, Zambia or Zimbabwe, for example) among 104 countries, by 2006 it had reached US\$18,341, ranking South Korea 39<sup>th</sup> among 134 countries.

<sup>32</sup> The Asian financial crisis in 1997 probably provided a further impetus to national saving as countries in the region sought to reduce their reliance on conditional loans from the IMF, preferring instead to accumulate foreign exchange reserves.

<sup>33</sup> There are many reasons for China's high saving rate. As wage-earners tend to consume a higher proportion of their incomes than richer owners of capital, the relatively low and falling share of wages in GDP (which declined from 57% in 1983 to a mere 37% in 2005) helps to explain China's high national saving rate. Even the poor in China tend to save, and household saving rates are high; for example, rural families with annual income between Y888 and Y1,776 (roughly between US\$130 and US\$260) save 17.5% of their income. In addition to possible cultural reasons, the lack of a social safety net involving education, healthcare, and pensions together with China's rapidly aging population, all lead to a high level of precautionary saving by households. During the reform process, the gradual reduction of the role of state-owned enterprises (SOEs) in the economy means that there has been an increasing need to establish a social safety net that would replace the support system previously provided largely by SOEs. China's rapidly aging population also brings pressure on households to save for retirement; as a result of China's one-child policy, the ratio of employed people to those over 65 years of age is projected to move from nearly 7:1 in 2005 to approximately 4:1 in 2025. High enterprise saving can be attributed partly to an underdeveloped capital market. In particular, domestic private firms, despite their greatly improved productivity and profitability and their role in providing jobs, face more severe financial constraints than SOEs and foreign-invested enterprises (FIEs). Hence, they have to save or rely on savings from relatives or family members to finance their investment. (See WTO (2010), *Trade Policy Review: China*, Geneva.)

has been engaging in "unfair" trading practices, including "exchange rate protection" by resisting appreciation of its exchange rate.<sup>34</sup> The degree of exchange rate undervaluation is equivalent to a uniform tax on its imports and a uniform subsidy of its exports. Similar friction has arisen with other East Asian countries too, notably Japan.

19. However, current account surpluses (and deficits) reflect the gaps between national saving and domestic investment. It follows that the adoption of trade measures, such as export restraints in surplus countries (and import restraints, such as anti-dumping or countervailing measures, in deficit countries), is not an appropriate way to reduce current account imbalances. A more appropriate course of action in surplus countries would be to reduce the gap between national saving and domestic investment by, *inter alia*, addressing impediments to consumption (such as financial systems that may be less inclined to provide consumer credit, the high retained earnings of state-owned enterprises, the lack of a reliable social insurance system) and perhaps reducing government saving through looser fiscal policy, where appropriate.

20. This development strategy has left growth very heavily dependent on domestic investment and exports, which dropped sharply in the wake of the global financial crisis that erupted in 2008. This, and the resulting current account imbalances, has prompted a rethink in a number of East Asian economies of their development strategy. China, Chinese Taipei, Korea, and Malaysia, for example, are now attempting to wean their economies off investment and exports and give freer rein to domestic consumption.<sup>35</sup>

---

<sup>34</sup> WTO (2010), *Trade Policy Review: China*, Geneva. Rather than focus on the matter of China's alleged "undervaluation" or "manipulation" of its currency, the Secretariat's reports prepared in connection with China's TPRs have taken the view that a more flexible exchange rate regime would enable China to operate a more independent monetary policy, which would be better suited to ensuring low and stable inflation in both product and asset markets and allow market forces to assume a greater role in determining interest rates. As China's monetary authorities have been unable to "sterilize" fully capital inflows, the outcome has been higher domestic inflation, which has, in any event, pushed up the real exchange rate from 100 in 2005 to 116.5 in the first quarter of 2010. An appreciation of its exchange rate would help combat inflation by reducing the prices of imports. It could also help redress the current account and related imbalances, because reduced import prices could stimulate domestic consumption, and higher export prices (in foreign currency terms) would tend to reduce the profits and thus saving (particularly in the form of retained earnings) of exporting companies. According to the IMF's latest (2011) *World Economic Outlook*, China's current account surplus fell from 10.6% of GDP in 2007 to 5.2% in 2010.

<sup>35</sup> China's economy is characterized by a number of imbalances other than those concerning the high rate of national saving in relation to domestic investment and consequent large current account surplus; most of these imbalances are inter-related. Notwithstanding China's rapid growth owing to the high rates of domestic investment and exports (of manufactures), the efficient allocation of the vast amount of investment within the economy has been hampered by, *inter alia*, incentives and other forms of assistance accorded to manufacturing (rather than services or agriculture), where foreign-invested enterprises (FIEs) and state-owned enterprises have been favoured over domestic private firms. Investment has also been skewed towards physical capital at the expense of investment in human capital and research and development (R&D). Furthermore, the rapid pace of China's growth and heavy reliance on manufacturing, which tends to be more energy-using and polluting than services, for example, has exacerbated environmental problems. Moreover, while average incomes have risen and the number of people living below the poverty line has declined, the incomes of the rich have been growing much faster than those of the poor, so that income inequality has widened, especially between rural and urban residents. In addition, although the tax-to-GDP ratio has been rising, it would appear that not enough resources are devoted to "social infrastructure", such as education, health care, and basic pensions. Finally, in the longer term a demographic imbalance seems to be emerging owing to China's "one-child policy"; a sharp increase in the ratio of aged population (not in the labour force) relative to those that are employed is envisaged during the next two decades, putting pressure on pensions and curtailing the supply of labour.

**Box 2 Accounting for current account surpluses**

In an open economy, national income is the sum of domestic and net foreign expenditure on goods and services produced by domestic factors of production plus net income from abroad. The national income identity in an open economy is therefore:

$$\text{GNP} \equiv C + I + G + X - M + \text{NIA}, \quad (1)$$

where C, I, G, X and M, respectively, denote consumption, investment, government expenditure, exports and imports, and NIA denotes net income from abroad; the latter consists of interest and investment earnings received on foreign assets (net of payments on foreign liabilities) plus net unilateral transfers abroad. Thus, whereas exports add to the GNP of an economy, imports do not do so directly; imports add instead to the GNPs of foreign countries.

The net trade position of a country can be summarized by the current account (CA), which is the difference between export and imports of goods and services (X-M) plus net income from abroad (NIA); that is

$$\text{CA} \equiv X - M + \text{NIA}. \quad (2)$$

When imports exceed exports plus NIA, a country has what is known as a current account deficit (CA-). By contrast, when exports plus NIA exceed imports it has a current account surplus (CA+).

The difference between government spending (G) and taxes (T) is known as the government budget (or fiscal) balance; a budget deficit arises when G exceeds T, while a budget surplus, or government saving, occurs when T exceeds G.

As GNP is, by definition, equal to disposable income (DI), which can be either consumed or saved, plus taxes (T) collected from households and firms,

$$\text{GNP} \equiv C + S + T. \quad (3)$$

It follows from the identities (1), (2) and (3) that:

$$\text{CA} \equiv X - M + \text{NIA} = S + (T - G) - I \text{ or } \text{CA} = \text{NS} - I, \quad (4)$$

where national saving (NS) is the sum of private saving (S) plus government saving (T-G). In other words, the current account surplus (CA+) must be equal to the amount by which national saving exceeds investment. This fundamental equation highlights the close relation between the current account surplus and the gap between national saving and investment. (In 2009, China's NS and I, respectively, were 56.6% and 47.1% of GDP, a gap of 9.5%, the same as its current account surplus.)

As any international transaction automatically involves two offsetting entries in the balance of payments, the current and capital account balances must sum to zero. And as the current account is the change in a country's net foreign assets (including reserves), the current account necessarily equals the difference between a country's purchases of assets from foreigners and its sales to them; that is, the capital account balance preceded by a minus sign. Hence,

$$\text{CA} + \text{Net Capital Outflow} = 0, \quad (5)$$

which, when substituted into equation (4) gives:

$$\text{NS} - I = \text{Net Capital Outflow}. \quad (6)$$

(6) shows that if national (including government) saving is more than domestic investment, then the excess must be invested abroad. The resulting outflow of capital abroad tends to drive down the exchange rate, which makes its exports cheaper than otherwise, leading to a current account surplus. The latter thus reflects the extent to which the sum of government saving (T-G) plus private saving (S) exceeds investment.

**(b) Industrial policy**

21. In implementing the above development strategies in the early stages, East Asian Members of the WTO deployed fairly active industrial policies entailing various degrees and forms of direct or indirect government intervention.<sup>36</sup> These policies ranged from relatively little intervention involving few instruments in Hong Kong (in accordance with its principles of "Market Leads, Government Facilitates" and "Big Market, Small Government"<sup>37</sup>) to a high degree of intervention or "guidance" involving a wide range of instruments, as in China, whose economy had previously been centrally planned.<sup>38</sup> Most of these economies were developing countries whose factor markets, especially capital markets<sup>39</sup>, were much less developed. They were therefore arguably more susceptible to "market failure" than industrialized economies. This higher degree of susceptibility to market failure provides some rationale for government intervention (such as on "infant" or "strategic" industry grounds<sup>40</sup>), although correction of market failure was not the only driving force behind industrial policy. In any event, there is some doubt as to whether governments can allocate resources better than even imperfect markets. In influencing the allocation of domestic resources, however, governments largely refrained from defying their economies' comparative advantage.<sup>41</sup> As circumstances, including comparative advantage, have changed, policies have evolved over time as countries increasingly liberalized their economies, by lowering barriers to trade and FDI and changing their regulatory frameworks, so as to promote competition and thus a more efficient allocation of resources.

22. Industrial policy has consisted of a wide variety of policy measures, depending on the extent to which they are targeted (and thus possibly intended to "pick winners"), especially at so-called "infant industries". A broad distinction can be made between "selective" and "functional" measures. Whereas the latter are available to all firms or all firms in a particular line of activity, the former target specific industries or even firms within industries. They include: selective tariffs and non-tariff barriers to imports; export processing zones (EPZs) to mitigate the anti-export bias arising from import protection; export restraints on raw materials or partially processed goods (to encourage downstream processing, for example); export incentives (including credits); tax and non-tax incentives (including subsidized interest rates) for investment; government procurement favouring domestic suppliers; and exemptions from competition law (if such a law exists). Other forms of

---

<sup>36</sup> There is no consensus on what exactly constitutes industrial policy. The World Bank has defined industrial policy broadly as "government efforts to alter industrial structure to promote productivity based growth". See World Bank, 1992, *The East Asian Miracle: Economic Growth and Public Policy*, New York: Oxford University Press.

<sup>37</sup> WTO (2010), *Trade Policy Review: Hong Kong, China*, Geneva.

<sup>38</sup> Following the reversion of Hong Kong to China in 1997, the coexistence of these two distinct types of economy was facilitated by the concept of "one country, two-systems" embedded in Hong Kong's basic law.

<sup>39</sup> In Korea, *chaebols* (corporate conglomerates) have been a driving force behind its rapid industrialization based on strong export-led growth. Given the scarcity of entrepreneurial talent in the early stages of economic development, resources became concentrated in the hands of the founders of these enterprises. The *chaebols'* success reflected not only their ability to overcome imperfections in factor markets, such as those involving labour, capital, and technology, but also the benefits from the synergies and economies of scope that are possible within large enterprises. The *chaebols* had the added advantage of close links to the Government in a period when a large part of the Korean economy was regulated, a situation that led many to question the *chaebols'* dominant position. In particular, as part of its industrial policy aimed at promoting heavy industry and chemicals during the 1970s, the Government encouraged the growth of the *chaebols*. The close linkages between the *chaebols* and the Government as well as banks (which were nationalized until the mid-1970s) have allegedly impeded access to the Korean market and distorted competition in other markets. (See WTO (2000), *Trade Policy Review: Korea*, Geneva.)

<sup>40</sup> Temporary government assistance may enable firms to achieve economies of scale and associated lower costs.

<sup>41</sup> Since 1990, one of the main sources of productivity growth, and thus development, in Asia has been structural change involving the movement labour from low- to high-productivity sectors. The poorer productivity performance of Africa and Latin America is apparently due largely to the movement of labour in the opposite direction, from high- to low- productivity sectors (see McMillan, Margaret S., and Dani Rodrik, 2011, "Globalization, Structural Change and Productivity Growth", NBER Working Paper No. 17143, June).

intervention included: government-owned or government-linked enterprises (GLCs)<sup>42</sup>; a sound broad base of physical infrastructure (e.g., power supplies, ports, roads) and social infrastructure (e.g., educated labour force); subsidized infrastructure supplies and factory space (as part of EPZs, for example); provision of R&D facilities in government institutes as well as tax incentives for private R&D; and suppression of real wages through restrictions on collective bargaining and trade union activity.

23. Growth in output and productivity in the 1980s was considerably higher in East Asia than in other parts of the world. In the 1990s, however, although output continued to grow at high rates, productivity growth slowed considerably, reflecting an inefficient use of capital.<sup>43</sup> This development together with the eruption of the Asian financial (and economic) crisis in 1997 prompted greater scrutiny of industrial policies, particularly the close relationships between government and business, heavy reliance on bank debt, and the dominance of conglomerate firms. The outcome of this scrutiny was closer adherence to the evolving international consensus on industrial policy, which predates the Asian crisis, with more emphasis on an approach in which competition policy and the creation of a "more level playing field", for example, plays an important role. Such an approach involved a shift from "selective" measures to more "functional" measures. This kind of approach had already been adopted by Australia and New Zealand in the 1980s and contributed to their greatly improved productivity performance. This change in approach is also partly due to countries' membership of the WTO, which reduced the scope for using selective measures (such as tariffs in excess of bound rates, certain types of "specific" subsidies for domestic production and also for exports, and trade-related investment measures involving export or local-content targets). Nonetheless, there remain plenty of other industrial policy measures (including export taxes, preferential government procurement practices, and regulatory subsidies) that are only partially, or not at all, subject to WTO rules.

24. As a result of the recent global economic crisis, however, there appears to have been a revival of industrial policy, involving "selective" measures, in Asia as well as elsewhere. These measures include increased financial assistance and other forms of government support (in some instances dressed up in "green") to *inter alia*, banks (Japan), airlines (China and Japan), automobiles (Japan and Malaysia), electronics (Chinese Taipei and Japan) and computer chip manufacturers (Japan). China has also been providing subsidies to rural households to purchase electrical products and some cars.<sup>44</sup> In June 2010, Japan's Ministry of Economy, Trade and Industry (METI) announced a strategy to combat the "increasingly aggressive" industrial policies of some other major WTO Members (including China, and South Korea as well as France, Germany, the U.K., and the U.S.) by promoting five strategic sectors<sup>45</sup> with a view to increasing their collective market size by Y 27.4 trillion by 2020 and net employment by 2.6 million. Even in Hong Kong, China (HKC), which has long been one of the world's most market-oriented economies, the Government recently revisited its role in promoting economic development and decided to encourage the growth of six industries in which the economy is believed to

---

<sup>42</sup> Even in Singapore, where GLCs ostensibly compete on a commercial basis with private companies, their links to the Government can result in capital markets valuing GLCs more highly than private companies, thus giving them an advantage over the latter in the form of a lower cost of capital (WTO, 2004, *Trade Policy Review – Singapore*, Geneva, p. 55).

<sup>43</sup> Krugman (1994) has argued that East Asian economic performance is more of a myth than a miracle. It has been based on "perspiration" rather than "inspiration". Rapid growth was the consequence of high rates of input growth, notably investment, not East Asia's miraculous ability to extract more output from a given level of inputs; that is, total factor productivity.

<sup>44</sup> In 2010, China also announced that it intended to develop seven "new strategic industries" to propel its transition from a low-cost workshop of the world into a producer of high-value, high-technology goods. The seven industries are alternative fuel cars, biotechnology, environmental and energy-saving technologies, alternative energy, advanced materials, new-generation information technology, and high-end equipment manufacturing. Reportedly, the government wants the seven to have a 15% share of the economy by 2020 compared to about 2% at present ("China to take shot at aircraft duopoly," *Financial Times*, 5 August 2011).

<sup>45</sup> The five strategic sectors are infrastructure, environmental products, medical services, cultural industries, and new fields, such as robotics and space.

have a "competitive advantages"<sup>46</sup>, seemingly driven partly by its closer economic relationship with China. (Concurrently, HKC has introduced a comprehensive competition law, which it had previously eschewed on the grounds that the high degree of openness of its economy obviated the need for such a law.)

#### IV. TARIFFS – UNFINISHED BUSINESS

25. Tariffs have long been one of the main instruments of industrial policy in both developed and developing countries in the Asia-Pacific region. They have been widely used to protect domestic (especially "infant") industries from foreign competition, with seemingly little basis in cost-benefit analysis. Tariffs have also been a major source of tax revenue in developing and especially least developed countries. Irrespective of whether it is their intent, tariffs may be used by countries whose imports of certain products are a sufficiently large share of world imports to shift the terms of trade (the price of a country's exports relative to the price of its imports) in their favour.

##### (a) Trend in most-favoured-nation (MFN) tariffs<sup>47</sup>

26. Since the conclusion of the Uruguay Round (UR), however, the overall trend in *applied* MFN rates in the Asia-Pacific region continues to be downwards, whether in line with Members' UR commitments or due to unilateral action, despite the Asian crisis in 1997 and the sudden sharp drop in trade in the wake of the more recent global financial crisis. Although some WTO Members did raise a few of their *applied* MFN tariffs, such increases have been rare (even where the significant gaps between *bound* and *applied* MFN rates provide scope for such increases<sup>48</sup>). The downward trend in *applied* MFN tariffs means that the gap between *bound* and *applied* MFN rates has widened considerably in many countries since the conclusion of the UR (Chart 1 and Table A1). Hong Kong, Macao and Singapore have remained the most outward-oriented economies, with all imports (except six items in Singapore) entering these markets free from tariffs (although *bound* MFN rates are not necessarily zero).

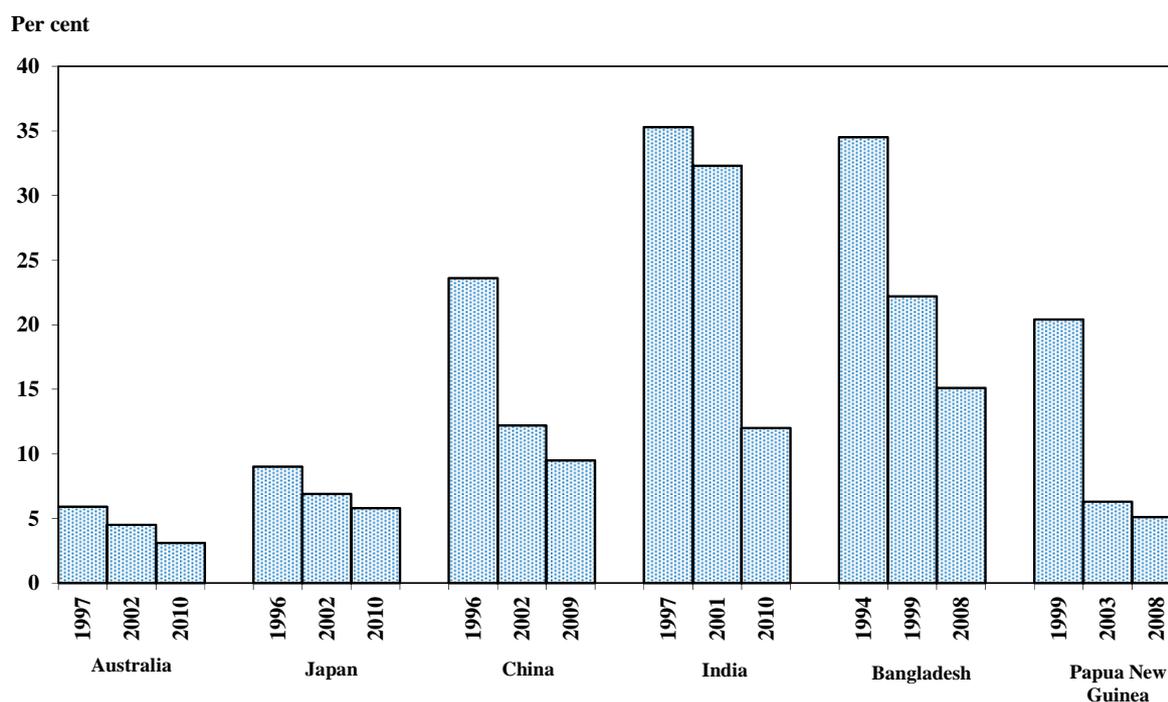
---

<sup>46</sup> The six industries are testing and certification, medical services, innovation and technology, cultural and creative industries, environmental services, and education services.

<sup>47</sup> The MFN principle, which is embodied in Article I (*General Most-Favoured-Nation Treatment*) of the GATT, stipulates that countries should not discriminate between trading partners' goods; that is, "... any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties." In other words, concessions accorded to one country's goods should be granted to those of *all* countries.<sup>47</sup> The MFN principle thus ensures import neutrality as far as goods are concerned. However, Article XXIV permits departures from the MFN principle in respect of regional and bilateral free-trade agreements, provided these preferential (and therefore discriminatory) agreements cover substantially all trade between the parties. More than 200 such agreements are currently in force even though no determination has yet been made by the WTO as to whether any of them is actually in accordance with Article XXIV.

<sup>48</sup> This gap provides room for countries to use *applied* MFN tariffs instead of contingency measures.

**Chart 1**  
Average applied MFN rates



*Source:* WTO calculations, based on data provided by the authorities of the Member countries.

27. In the industrialized Asia-Pacific Members, where *applied* MFN tariffs are generally at, or close to, *bound* rates, the simple averages of *applied* MFN rates for all products dropped considerably. For example, in Australia, the simple average *applied* MFN rate fell from 5.9% in 1997 to 3.1% in 2010, while in Japan the average fell from 9.0% in 1996 to 5.8% in 2010. In Korea, the average rate is considerably higher, although it fell from 14.4% in 1996 to 12.8% in 2008. However, these averages tend to underestimate the level of tariff protection. In particular, they do not necessarily include a number of specific duties for which *ad valorem* equivalents are not available, as in Japan and Korea, and which tend to conceal tariff "peaks" (Box 3). Moreover, while this seemingly low level of tariff protection might give the impression that tariffs are no longer a major barrier to international trade, especially as regards industrial goods in industrial countries, these low tariff averages disguise the fact that in Japan and Korea agricultural products are subject to much higher average rates of 15.7% and 53.5%, respectively.<sup>49</sup> By contrast, in Australia, a major exporter of agricultural products, the latter are subject to relatively low applied MFN tariffs, although passenger motor vehicles as well as textiles, clothing, and footwear are subject to relatively high rates.<sup>50</sup>

<sup>49</sup> High tariffs and other forms of support for agriculture are partly justified by those Members using them on the grounds of non-trade concerns, notably food security, income support for agricultural households, and preservation of the environment. While the view that such non-trade concerns are legitimate domestic objectives is widely shared among WTO Members, some attach more importance to these concerns than others. The focus of TPRs in the Asia-Pacific region, therefore, has been more about the appropriateness and effectiveness of various measures aimed at achieving these multiple objectives together with the magnitudes of total agricultural support. Total support for agriculture in Japan, including high tariffs, is almost as much as the sector's 1.2% share of GDP. This is also the case in Korea, where support for agriculture is virtually the same as the sector's roughly 3% share of GDP.

<sup>50</sup> As pointed out earlier, tariff reductions in Australia were facilitated by independent PC evidence that there would be significant economy-wide gains. Australia (and New Zealand) does have very strict SPS requirements, however, which constitute a formidable obstacle to imports of agricultural products (Section (6)(b)).

**Box 3: Specific vs *ad valorem* tariff rates**

Specific tariff rates not only conceal tariff "peaks", they also tend to distort domestic production patterns more than *ad valorem* tariff rates do, providing disparate levels of assistance for similar goods by taxing imports of cheaper products more heavily; this encourages domestic firms to produce cheaper goods, which have higher protection from imports. To the extent that least developed and developing countries are exporters of relatively cheap products falling within the same national tariff line, such duties tend to impose a heavier burden on their exports; specific duties thus tend to afford higher levels of tariff protection (in *ad valorem* terms) against imports from least developed and developing countries than from industrialized countries. Specific duties may also be more regressive than *ad valorem* duties because they impose a heavier burden on cheaper products within the same tariff line. Furthermore, as *ad valorem* equivalents (AVEs) are inversely related to import prices, specific duties progressively cushion domestic producers against competition from lower-priced imports, thereby counteracting cuts in specific rates. Consequently, they counteract the relative price effects of exchange rate changes on countries' trade balances. The use of specific duties can lead to an increase in real tariff protection insofar as the prices of traded goods decline (and to a fall in real protection to the extent that the prices of traded goods increase). Interestingly, WTO Members have agreed in the framework of negotiations concerning non-agricultural market access that duties on non-agricultural products shall be "bound in *ad valorem* terms".

On the other hand, specific duties are relatively simple to administer where the value-for-duty cannot be easily observed. They may also reduce pressure to resort to anti-dumping or countervailing (AD/CV) measures for protection because duty collected is unaffected by falling prices. Thus, as import prices fall, the AVEs of specific duties rise, and vice versa, thereby contributing to domestic price stability in the face of "excessive" fluctuations in world prices. In addition, unlike with AD/CV duties, any increases in real tariff protection associated with specific duties are on an MFN basis.

28. Although tariffs tend to be considerably higher in developing than in industrialized countries, they too have been falling, and in some important cases rapidly. For example, in the two major developing Members, namely China and India, simple average *applied* MFN tariff rates have been cut from 23.6% to 9.5% and from 35.3% to 12.0%, respectively. Nonetheless, agricultural products entering these two countries face tariffs that are, on average, as much as two to three times those applied to non-agricultural imports. In China, unlike India, tariff rates on textiles and clothing products are high relative to those levied on its other imported products.

29. In Bangladesh, the largest least-developed country (LDC) and a major food importer, the simple average *applied* MFN tariff rate has also fallen, albeit more slowly than in China or India, from 34.5% in 1994 to 15.1% in 2008/09. Despite Bangladesh being a major net food importer, agricultural products are subject to considerably higher applied MFN tariff rates than non-agricultural products.

30. It follows that tariffs remain an important obstacle to international trade (and thus a distortion to competition) and therefore economic development. Even in industrialized countries, where average *applied* MFN tariff rates are seemingly low, the existence of tariff "peaks" in certain sectors, notably textiles and clothing as well as agriculture, suggests that the domestic dead-weight and net welfare losses caused by tariff protection as well as the costs to consumers in those countries could be high. Such losses and costs to consumers are also likely to be high in developing countries, where overall tariff protection is greater than in industrialized countries, thereby constituting not only a serious impediment to trade between industrialized and developing countries (North-South trade), but also to trade among developing countries (South-South trade). Additional unsatisfactory features of tariffs include the lack of tariff bindings for non-agricultural products together with considerably gaps between *applied* and *bound* rates, largely in developing countries, the use of opaque specific (as opposed to *ad valorem*) rates, tariff quotas, and tariff escalation. Tariff escalation, which is evident in major industrialized and developing countries, especially as far as semi- and fully-processed goods are concerned, means that "effective" tariff rates can considerably exceed nominal rates.<sup>51</sup> If not

<sup>51</sup> The "effective rate of protection" (ERP) measures the protection provided by the entire structure of tariffs, taking into account those levied on inputs as well as those on final products. It is defined as  $ERP = (V_D - V_W)/V_W$ , where  $V_D$  is the value-added in the given sector at domestic prices, which includes tariffs, and  $V_W$  is

mitigated by special arrangements, such as the Generalized System of Preferences (GSP)<sup>52</sup>, the use of tariffs by major industrialized and developing countries as well as other Members to impede access to their goods markets can lead to welfare losses on a global scale as well as domestically, because they tend to hamper developing countries' efforts to achieve export-led growth (in the absence of significant favourable terms of trade effects).

**(b) Tariffs as a source of tax revenue**

31. To the extent that tariffs are used more as a source of tax revenues than as an instrument of trade policy, the lower and more uniform the rates and the less the number of exemptions, the better from the standpoints of administrative simplicity, transparency, and possibly economic efficiency (Box 4). Insofar as rates are non-uniform, the fewer the better; in this case, the rates should be positively related to the stage of processing. However, the consequent tariff escalation can constitute an impediment to the exports of processed products by developing countries and LDCs (if not mitigated by GSP or other preferential arrangements). *Ad valorem* tariff rates are preferable to specific rates not just on grounds of transparency, but also on grounds of their predictability and equity.

32. In those developing countries, especially LDCs, for whom tariffs are an important source of tax revenues to finance government expenditures essential for their economic and social development, further efforts to liberalize trade may be impeded to the extent that governments feel unable to find an acceptable way to recover any lost tariff revenue from alternative sources.<sup>53</sup> This has been an issue not just in connection with multilateral negotiations at the WTO under the Doha Development Agenda<sup>54</sup>, but also in the context of regional and bilateral PTAs, and, indeed, unilateral trade liberalization. Thus, trade liberalization involving tariff reductions is closely related to reform of countries' tax systems if alternative sources of tax revenues are to be found from internal sources. Some Members, such as Fiji, Papua New Guinea, and Tonga, have been fairly successful in doing so.<sup>55</sup> For example, they have increased their reliance on other indirect taxes, such as excises and broad-based consumption taxes involving full rebates for exports, especially the VAT, which, unlike tariffs, does not distort trade.

---

value added at world prices. If the nominal tariff on the final product is  $t$ , the share of each imported input  $i$  in the total value of the final product is  $a_i$ , and the nominal tariff on each imported input is  $t_i$ , then the effective rate of protection can be written as:  $ERP = (t - \sum a_i t_i) / (1 - \sum a_i)$ . Thus, if  $t = 10\%$ ,  $t_i = 5\%$  for all inputs and  $\sum a_i = 0.6$ , the ERP is nearly 20%. For a full discussion of this concept, see Corden, W.M., 1971, *The Theory of Protection*, London: Oxford University Press.

<sup>52</sup> In principle, LDCs do not face any tariff escalation once they are granted "duty-free and quota-free" access to the markets of developed countries, provided they comply with associated preferential rules of origin.

<sup>53</sup> Tariff revenues are affected by trade liberalization involving tariff reductions only insofar as they result in lower *applied* tariff rates. Multilateral negotiations concerning tariff reductions at the WTO, however, involve *bound* most-favoured-nation (MFN) tariff rates. In many developing and least developed countries, *bound* rates may considerably exceed *applied* rates and some tariff lines may not be bound at all.

<sup>54</sup> More specifically, in their Declaration at the Ministerial Conference held in Hong Kong in December 2005, WTO Members called for more clarity concerning the nature and scope of tariff revenue dependency as an obstacle to negotiations concerning non-agricultural market access (see WTO, 2005a, paragraph 32).

<sup>55</sup> Mullins, Peter, Michael Daly and Carson McNeill, 2008, "Tax Policy and Administration: Facing the Challenges of Trade Liberalization", a report prepared for the International Monetary Fund, February/March (mimeo).

**Box 4: Advantages of a more uniform *ad valorem* tariff**

In a purely static analytic setting, a movement towards a lower and more uniform *ad valorem* tariff (even if it means raising relatively low rates) tends to improve resource allocation and raise economic welfare. High and disparate tariffs cause inefficiency by penalizing efficient activities, including exports; by promoting a high-cost economy, especially where tariffs are levied on intermediate inputs and capital goods, they impair the competitiveness of exporters. Trade taxes on imports are partially shifted onto exports. Reducing tariff dispersion will tend to reduce these adverse effects. A uniform tariff is also more transparent and easier to administer. It removes many of the incentives for making false customs descriptions and classification. Moreover, by treating producers and importers alike, it is likely to reduce lobbying or socially unproductive "rent seeking" pressures on the Government, making it easier to deal with pleas for special treatment. This suggests that uniform tariffs should be a policy goal, even though levying higher tariffs on products with inelastic demand may, in principle, yield the desired tax revenue with less loss of welfare.

A uniform tariff can also pave the way for the eventual adoption of a flat-rate broadly-based consumption tax; that is, compensating for cuts in the uniform tariff rate with percentage point for percentage point increases in a flat-rate consumption tax (whether a generalized sales tax or a VAT).<sup>a</sup> For similar reasons, uniformity of tariff rates under PTAs would also appear to be desirable. In a dynamic setting, however, low or zero tariff rates on capital goods would be necessary to minimize, if not eliminate, inter-temporal distortions. If not uniform, the number of tariff bands should be as few as possible and the rates should rise in line with the degree to which imported goods are processed. Differences in rates should be as little as possible so as to minimize the degree of tariff escalation, which results in *effective rates of protection* (ERPs) exceeding nominal rates for more processed goods. A non-uniform tariff is often used to provide an "escalating" degree of tariff protection so as to encourage downstream processing.<sup>b</sup> This may be accomplished by levying relatively low duties on raw materials and capital goods with progressively higher tariffs applied to more processed goods involving greater value-added. The outcome is that *effective* protection increases as goods undergo further processing. Indeed, what may be mild escalation in nominal tariff terms can provide high effective (net) assistance to downstream activities. However, not only is tariff escalation a potential impediment to the efficient allocation of resources in the importing country, it also constitutes a major obstacle to local processing of domestically-produced primary products as well as of semi-finished goods in the exporting country; consequently, it impedes the industrialization of developing countries and LDCs seeking to export products with higher value added.

ERPs are also indicators of the potential effects of tariffs (and other border taxes) on the domestic allocation of resources. They capture not only the protection that domestic producers receive from tariffs levied on competing imported goods, but also the harm that they suffer from tariffs levied on their imported inputs. It follows that ERPs should not only be kept low, but also as uniform as possible across sectors of the economy in order to minimize the distortion across importing activities.

- a In small, open economies, the efficiency gains of switching from tariffs to greater reliance on domestic sales taxes can be large because the change is one from taxing net trade (consumption less production) to total consumption and removes an additional supply side distortion.
- b In an imperfectly competitive world, however, a de-escalating tariff, with higher rates on intermediate inputs than on final products, may encourage agglomeration of intermediate input suppliers and final goods. The benefits of such agglomeration, if they were high enough, could conceivably outweigh the direct benefits from trade according to traditional comparative advantage.

33. The underlying rationale for the basic strategy of coordinated tariff and indirect tax reform reflects economic efficiency and revenue considerations. Whereas tariffs are generally considered doubly distorting, both raising consumer prices and protecting the domestic production of import substitutes, excises and broad-based consumption-type taxes affect only consumer prices. By shifting from tariffs to a few excises and broad-based taxes on consumption, therefore, the distortion in production can be removed.<sup>56</sup> At the same time, tax revenue can be preserved (or even increased) and

<sup>56</sup> The desirability of a broad-based consumption tax, such as a VAT, may also be less compelling when a broad-based consumption tax is more costly to administer than a tariff. As pointed out later in Section (5)(b)(i), some countries deploy withholding taxes on imports as an advance payment to be set off against the importer's income tax or VAT liability (even though, judging from a recent ruling by the Dispute Settlement Body of the WTO, such withholding taxes may well contravene the GATT). Insofar as inputs used by informal operators are imported (or purchased from the formal part of the domestic economy), they cannot

the level of prices faced by consumers left unchanged (or reduced, if the shift is revenue neutral) by a percentage point for percentage point replacement of lower tariff rates by higher excise on the specific products affected, or by raising broad-based indirect taxes.<sup>57</sup>

34. For countries that do not have direct taxes, alternative sources of revenue are taxes on income and natural resource rents, which, although they do not distort trade flows, could affect foreign investment. However, in some Members (such as Cambodia, the Maldives, Nepal, and the Solomon Islands), which are heavily reliant on tariffs (and other border taxes) for tax revenues, the lack of capacity to implement internal taxes constitutes an important impediment to tariff reductions. For countries that already have direct taxes, the curtailment of incentives is another way to replace lost tariff revenues.

**(c) Tariffs and the terms-of-trade effect**

35. Imperfect competition (or rising marginal costs under perfect competition) may mean that the domestic price of the imported good does not increase by the full amount of the applied tariff. Instead, if the country's share of world imports is sufficiently large to influence world prices of the products on which the tariffs are levied, some of the burden may be shifted onto foreign exporters, whose products sell at lower world prices. In this case, there is a gain in the terms of trade for the importing country levying the tariff.<sup>58</sup> Hence, the "optimal" tariff can be used strategically to shift a country's terms of trade in its favour.<sup>59</sup> The notion of optimal tariff provides the traditional economic rationale for GATT/WTO agreements.<sup>60</sup> It may also help to explain why relatively large traders are reluctant to cut tariff rates unilaterally, preferring instead that their trading partners do so as well.

36. In fact, there is a large body of empirical literature suggesting that tariffs are not fully shifted (or "passed through") to domestic consumers, but borne partly by foreign exporters, thereby supporting the terms-of-trade argument.<sup>61</sup> There is also evidence that non-Members of the WTO systematically levied higher tariffs on goods that are supplied inelastically<sup>62</sup>, and that MFN tariff rates agreed during the Uruguay Round of negotiations are consistent with the terms-of-trade hypothesis.<sup>63</sup> Other import and export measures (section (7)) can have the same effect.

**(c) Tariffs as an instrument of industrial policy**

37. Even if there were legitimate grounds (e.g., "market failure") for government intervention to protect a particular domestic industry, tariffs are generally considered to be a less efficient instrument

---

escape the VAT entirely. VAT collected at the border commonly accounts for more than half of gross VAT receipts in developing countries. As far as the informal part of the economy is concerned, therefore, the VAT is equivalent to a tariff on imported inputs, although it would not appear to contravene WTO rules.

<sup>57</sup> In case of products that are imported, but not produced domestically, a revenue-neutral switch from tariffs to excises would have no implications for economic efficiency. However, whereas a tariff might induce domestic firms to begin production of the goods, with implications for economic efficiency, an excise tax would not.

<sup>58</sup> For example, China, whose share of total world imports of soy and soy oil is more than half, levies tariffs at rates of 3% and 9%, respectively, on these items. China is also the world's largest importer of iron ore, but levies no tariff on iron ore imports.

<sup>59</sup> The *ad valorem* rate of an optimal import tax equals the inverse of the absolute value of the elasticity of supply of exports.

<sup>60</sup> See Bagwell, Kyle, and Robert W. Staiger, 2002, *The Economics of the World Trading System*, The MIT Press, Cambridge, Massachusetts.

<sup>61</sup> A review of this literature can be found in Bagwell, Kyle, and Robert W. Staiger, 2002, *The Economics of the World Trading System*, The MIT Press, Cambridge, Massachusetts.

<sup>62</sup> For instance, whereas China's average tariff for products with low inverse elasticities was 21%, the average was 29% for products with high inverse elasticities (see Broda, Christian, Nuno Limão and David E. Weinstein, 2006, "Optimal Tariffs: The Evidence" NBER Working paper 12033, Cambridge, MA).

<sup>63</sup> See Ludema, Rodney D. and Anna Maria Mayda, 2010, "Do Terms-of-Trade Effects Matter for Trade Agreements? Evidence from WTO Countries," CEPR Discussion Paper No. 7695.

for doing so than direct subsidies. In the absence of strong terms of trade effects, a tariff tends to be doubly distorting by raising the domestic price of imports and allowing the protected industry's output price to rise to the same level. Domestic consumers then have to pay the higher price. By contrast, if a subsidy were used, the domestic price would still be the tariff-free import price, so that consumers would not be taxed, and the subsidy received by the domestic industry would allow it to compete with imports at world market prices. However, this argument in favour of direct subsidies ignores the costs associated with financing and disbursing a subsidy. Subsidies would tend to be financed by taxes, which are seldom levied in a non-distorting manner, and therefore entail economic costs. Moreover, least developed and developing countries in particular may well face formidable administrative obstacles to collecting the taxes to be disbursed as subsidies. At the same time, identifying recipients of subsidies and implementing subsidy programmes are not without costs either. Furthermore, whereas a tariff yields tax revenue (if it is not prohibitive), a direct subsidy constitutes a government expenditure, so that a tariff may be preferred for budgetary reasons, especially in countries where taxes account for a small share of GDP or fiscal deficits constitute a problem.

38. Tariffs have also been used ostensibly as an instrument of environmental protection and safety, as in the case of high, or even prohibitive, rates on second-hand passenger vehicles.

**(d) Tariffs as taxes on exports<sup>64</sup>**

39. Tariffs are not only a barrier to imports. Insofar as they are levied on imported inputs and reflected in the prices of final goods (and services) manufactured in the importing country, they also constitute export taxes to the extent that those final goods (and services) are tradable. Based on 2001 data, import tariffs in the Asia-Pacific region were equivalent to an export taxes of 5% in Malaysia, 10.4% in Sri Lanka, 12.1% in China, 18.2% in Bangladesh and much as 31% in India.<sup>65</sup> Probably the best way to ensure that they (and other indirect taxes) do not feed through to constitute taxes on exports is to use free-trade zones rather than tariff exemptions or more complicated drawbacks,<sup>66</sup> which can be costly to administer, as long as the outcome is not a dual economy. Such measures add to the complexity of border taxation, however.

**(e) Other border charges and levies**

40. In some Members, such as Bangladesh and Sri Lanka, other border charges (and discriminatory internal taxes), which are equivalent to tariffs, afford additional protection, which is not captured by the tariff indicators in Table 1. In Bangladesh, for instance, these border charges alone provided addition protection equivalent to half the average applied MFN tariff rate (of 15% in 2005/06).

## V. INTERNAL TAXATION

41. With tariffs declining, attention in TPRs have focused increasingly on non-tariff measures, including internal taxes, which, as recognized by GATT Article III (*National Treatment on Internal Taxation and Regulation*) can, like other laws and regulations, have economic effects that are similar,

---

<sup>64</sup> According to the Lerner symmetry result in international trade, an import tax is equivalent to an export tax under a fixed trade balance. An import tariff subsidizes domestic production and taxes domestic consumption of imports, while an export tax subsidizes domestic consumption and taxes domestic production of exports. Therefore, both have a similar impact on net import demand. See Lerner, A.P. (1936) "The symmetry between import and export taxes" *Economica* 3, August: 306-313.

<sup>65</sup> See Tokarick, Stephen, 2006, "Does Import Protection Discourage Exports?" IMF Working paper WP/06/20, January. The decline in tariff protection in these countries since 2001 has undoubtedly reduced this implicit export tax burden.

<sup>66</sup> The objective of is to mitigate, if not fully neutralize, the incidence of tariffs on the import content of exports; they involve a credit or refund for tariffs paid on such imports. However, to the extent that the amount of credit or refund exceeds the tariffs actually paid, the drawback constitutes an export subsidy. Such a situation may arise in the case of India's Duty Entitlement Passbook Scheme, which is intended not only to neutralize tariffs, but also to reduce the "cascading" of internal indirect taxes (other than VAT) on exports.

if not equivalent, to tariffs<sup>67</sup> and other border taxes, including those on exports, as well as production and export subsidies. They can also be used to deter or encourage international flows of capital and labour. However, it would appear that during the past 20 years, indirect and indirect taxation have become less distorting as far as trade and investment are concerned. This trend is largely the consequence of unilateral tax reforms, although WTO Agreements have played a role too. These Agreements include not just the GATT, but those concerning Subsidies and Countervailing Measures (SCM), Agriculture, Trade-Related Investment Measures (TRIMs), and services (GATS), which encompass direct as well as indirect taxation.

**(a) Indirect taxation**

42. One of the most significant developments during the past two decades has been the growing importance of revenue from consumption-based taxes, such as excises and broadly-based sales taxes. While this is partly due to the decline in revenues from falling import tariffs, it also reflects increased cross-border competition for mobile tax bases; consumption is considered a much less mobile tax base than capital income, for example. A particularly noteworthy trend involves the widespread adoption of the VAT/GST, including in the Asia-Pacific region. Prior to 1989, very few economies in the Asia-Pacific (e.g., Chinese-Taipei, Indonesia, New Zealand, and the Philippines) had such a tax, but since then most developed and developing economies in the region have adopted this kind of tax.<sup>68</sup> A multi-stage VAT on consumption, based on the destination principle and thus incorporating the invoice-credit method, is widely acknowledged to have a number of advantages compared to a "cascading" retail sales tax, for example. It is not borne by business inputs and therefore does not distort production decisions. Such a VAT is also neutral with respect to international trade transactions as it is levied on domestically-produced and imported goods alike. Moreover, payment of full refunds to exporters is recognized as a reasonably simple way of implementing a tax purely on domestic consumption, without taxing (or subsidizing) exports. Consequently, the VAT is consistent with WTO rules. (It is also less vulnerable to evasion.)

43. In some countries (e.g., Bangladesh, India, Indonesia, Japan, Korea, Malaysia, the Philippines, Sri Lanka, and Thailand), there have been instances of internal taxes, including VAT and especially excises, being used as *de facto* tariffs to discriminate against imports of certain goods (including, alcoholic beverages, cigarettes, and passenger motor vehicles), contrary to the principle of "national treatment" on internal taxation (and regulation) found in Article III of the GATT. Use of internal taxes in this way has declined, however, partly because they have been successfully challenged under the WTO's dispute settlement procedures.

**(b) Direct taxation**

44. Governments in the Asia-Pacific region have continued to use a wide array of measures to deliver assistance to investment by enterprises in specific industries or activities, including exports, particularly via the direct tax system, notwithstanding the lack of convincing evidence that tax incentives are sufficiently cost-effective to justify their use.<sup>69</sup> (This is especially true in least developed countries for which the curtailment of incentives is also a way to replace lost tariff revenues, while keeping income tax rates moderate, if not low).

---

<sup>67</sup> The economic and revenue effects of an import tariff can be replicated by the combination of a destination-based consumption tax plus either a subsidy or a tax exemption for domestic production at equal rates.

<sup>68</sup> China initially adopted a production-based rather than the more common consumption-based VAT, but is in the process of moving towards the latter.

<sup>69</sup> One of the reasons (other than lack of transparency) delivery of assistance via the tax system is often preferred is that it can be made contingent upon the recipient enterprise being profit-making. However, unless they are refundable, tax incentives may be of little use to start-up or fast-growing companies that are in a non-taxpaying position, because of their high investment in relation to income.

*(i) Measures providing protection against imports*

45. Direct tax measures can also have effects very similar to an import tariff. For example, in Malaysia, income from annuities purchased from foreign-owned life insurance companies did not qualify for the personal tax exemption otherwise applicable to such income, even if those companies were established in Malaysia.<sup>70</sup> Although governments often argue that such restrictions are for prudential reasons and perhaps to prevent tax fraud, such tax relief is nonetheless equivalent to an import duty because it protects domestic providers of such financial services from foreign providers.<sup>71</sup>

46. Bangladesh and Pakistan, *inter alia*, continue to levy withholding taxes on imports as an advance payment to be set off against the importer's income tax liability (apparently to combat tax evasion). Such tax is creditable for corporate tax purposes, which means that it does not constitute an additional levy on imports as long as corporate (or personal) taxes payable are sufficient to be offset by the tax. If the importer is in a non-taxpaying position, however, possibly because the importer is operating at a loss for income tax purposes, enjoying a tax holiday<sup>72</sup>, or operating in the informal economy, and the levy is not refundable, it is equivalent to an import tariff (or surcharge).

47. In the case of corporate income tax, to the extent that the company is an importer who has sufficient market power to affect its terms of trade and shift the burden of the tax backward onto foreign suppliers of inputs who export them at lower prices, the tax is equivalent to a tariff.

*(ii) Measures as restraints on exports*

48. Similar withholding taxes are levied by Bangladesh and Pakistan, for example, on exports. Consequently, it is equivalent to an export tax (or surcharge). Also, insofar as an economy (or its exporters) is sufficiently large to influence its terms of trade, the burden of corporate income tax may be shifted forward, just like an export tax, by raising the prices of its exports.<sup>73</sup>

*(iii) Measures as export assistance*

49. On the other hand, some direct tax measures may constitute assistance to exports. Indeed, many WTO Members in the Asia-Pacific region, including Bangladesh, China, India, Malaysia, Papua New Guinea, and the Solomon Islands, provide relief from corporate taxes for income from exports or export activities.<sup>74</sup> Relief may take the form of lower corporate tax rates for export-oriented enterprises or adjustments to the tax base (such as a double deduction for certain expenses related to exports). In China, for example, "foreign-invested enterprises" (FIEs) exporting at least 70% of their output have, until recently, qualified for a 50% income tax reduction (or possibly

---

<sup>70</sup> See WTO, 2001, *Trade Policy Review – Malaysia*, p. 55.

<sup>71</sup> In Korea, it has been alleged that the purchase of a foreign automobile could trigger a tax audit, thereby dissuading taxpayers from purchasing imported cars.

<sup>72</sup> Such a levy would thus counteract the effects of tax holidays that are widely used in Bangladesh to attract FDI (although the effectiveness of tax holidays is, in any event, rather dubious).

<sup>73</sup> The incidence of corporate taxes has long been among the most controversial matters in tax policy analysis. Existing WTO rules are based on the assumption that whereas the burden of indirect taxes is generally shifted forward onto the product and is thus reflected in its price, direct taxes are not so shifted, but instead absorbed largely by the owners of the producing enterprise. For example, in a GATT Working Party on border tax adjustment, most delegations' opinion was that "direct taxes – even assuming that they were partly passed on into prices – were borne by entrepreneurs' profits or personal income." Consequently, whereas WTO rules allow an exported product to be relieved of all indirect taxes levied in the exporting country, thereby allowing border tax adjustments as in the case of VAT, for example, no such relief is allowed in respect of direct taxes payable by the producing enterprise. However, the presumption of forward shifting in the case of indirect taxes and backward shifting in the case of direct taxes may be challenged on empirical grounds, with possible implications for WTO rules (see Daly, Michael, 2006, "WTO Rules on Direct Taxation", *The World Economy* 29(5), pp. 527-557).

<sup>74</sup> Full or partial exemption of direct taxes on income related to exports is included in the illustrative list of export subsidies found in Annex I of the ASCM. Article 27.4 of the ASCM accorded developing country Members an eight-year transition period (beginning 1 January 1995) for phasing out export subsidies.

more if they were located in special zones) and a full refund of the income tax paid on the amount of their profits that they reinvested in export-oriented businesses (for at least five consecutive years). The economic effect of such measures is not fundamentally different from that of levying a non-discriminatory corporate income tax combined with an export subsidy (related in a potentially complicated way to the company's income tax situation).

(iv) *Assistance to domestic production and other activities*

50. Direct tax measures have long been used to assist domestic production of goods and services in certain sectors (such as agriculture, manufacturing and various services) and activities (such as R&D). Among the most common types of direct tax measures in the Asia-Pacific region are reduced rates of corporate tax, if not complete tax holidays, usually for a prescribed period of time. Reduced rates or tax holidays can apply to specific sectors or activities. Other widely used direct tax measures include accelerated depreciation allowances and investment tax credits, often aimed at specific types of activity. Indeed, specificity in the provision of relief from direct taxes can be achieved with superficially uniform rules by, for example, maintaining a uniform tax rate but manipulating other aspect of the tax base, such as depreciation schedules, or applying investment tax credits. Accelerated depreciation for machinery and equipment, for instance, would tend to reduce taxes, and therefore product costs, differentially across sectors depending on their capital intensity.<sup>75</sup>

51. In China, 40% of investment involving the purchase of domestically-made machinery and equipment can be deducted from enterprise income tax, thereby favouring domestically-produced machinery over imports. Malaysia and Singapore exempt from tax shipping company income derived from the operations of ships owned by domestic companies; this constitutes an incentive for the use of shipping services provided by resident companies.

(v) *Measures to deter or attract foreign investment*

52. While taxation may not necessarily be one of the main determinants of investors decisions regarding foreign investment, it would be surprising if it did not have some influence on those decisions.<sup>76</sup> A long standing potential deterrent to foreign investment is the double taxation. It arises most obviously if income from cross-border investment is taxed in both the country where the investment is made (the "source" country) and the country where the investor resides (the "residence" country). Bilateral tax treaties (based largely on the OECD "Model"<sup>77</sup>), which number some 3,300 worldwide, are designed to reduce, if not eliminate such double taxation. But some Asia-Pacific countries have few of these treaties; Chinese Taipei and PNG, for instance, do not have such treaties with major sources of inbound FDI, such as Japan or the United States.

53. Direct tax measures, including tax holidays and tax rate reductions, may also be used to encourage foreign investment, particularly from countries that tax income from capital on a "source"

---

<sup>75</sup> Canada apparently introduced accelerated depreciation for a particular type of capital used in manufacturing in reaction to a quite different U.S. tax provision – the DISC enacted in 1971 – which were subsequently found to be an illegal export subsidy under the GATT.

<sup>76</sup> A range of econometric studies and survey data over the past few decades show that incentives are only one among many determinants of investment decisions. Other key determinants include: the size of the market and proximity to other major markets; availability of sufficiently skilled labour (or at least the available capacity to train workers) at competitive wage rates; labour market flexibility, including the ability to reduce the labour force or exit an industry without undue complications; quality and reliability of infrastructure (including power and transportation); the extent to which intellectual property is protected; and macroeconomic and political stability. Incentives seem to influence the choice of location more within regional groupings, such as ASEAN (World Bank, 2007).

<sup>77</sup> A similar type of model could perhaps be developed for PTAs.

or "territorial" basis.<sup>78</sup> In China, for example, FIEs have been subject to a 15% corporate tax rate for three years following a two-year tax holiday instead of the standard 33% rate applied to purely domestic firms, thus according FIEs better than national treatment.<sup>79</sup> However, if the capital-importing ("source") country does have such treaties with the country in which the foreign investor resides, to the extent that the capital-exporting country taxes income from capital on a "residence" (or "worldwide") basis<sup>80</sup>, as in the cases of Japan and the U.S., for example, tax incentives accorded by the capital-importing country may be ineffective. They merely result in a transfer from the Treasury of the capital-importing country to that of the capital-exporting country, unless the treaty contains "tax sparing" provisions.<sup>81</sup>

(vi) *Transparency of tax incentives*

54. Tax incentives can be extremely opaque and very difficult to quantify. In recognition of the fact that they are alternatives to direct financial assistance, some countries publish regularly detailed tax expenditure accounts containing budgetary estimates of the tax revenues forgone as a consequence of individual tax incentives. Few countries do so in the Asia-Pacific region, however; those that do are OECD Members, namely Australia, where tax expenditure accounts are published annually, and Japan, Korea and New Zealand, where accounts are published periodically. Moreover, tax expenditures are seldom evaluated in order to throw light on their cost-effectiveness in achieving their objectives.<sup>82</sup> The experience of countries that do evaluate tax incentives indicates that they are rarely cost-effective (Box 5).<sup>83</sup> As regards investment incentives, for example, they run the risk of subsidizing good investments, which might have been undertaken in the absence of incentives, or turning intrinsically bad investments into profitable ones. Insofar as they stimulate the latter kind of investment, they may well distort the allocation of resources to the detriment of total factor productivity. Although still widely used, tax holidays are regarded as a particularly ineffective type of tax incentive compared to tax credits or accelerated depreciation allowances for investment.<sup>84</sup> It follows that elimination of incentives whose cost-effectiveness is dubious permits the broadening of the tax base, thus allowing lower tax rates across the board (including lower tariffs in countries heavily dependent on them for tax revenues), without necessarily involving any loss in total tax

---

<sup>78</sup> Taxation on a "source" (or "territorial") basis reflects the principle of capital import neutrality (CIN); that is, direct taxation should not influence *who* invests in a particular country. CIN is therefore concerned with "competitive" neutrality.

<sup>79</sup> This discrepancy in tax rates provides an incentive for "round tripping" by Chinese companies, thereby exaggerating the extent of FDI inflows into China.

<sup>80</sup> Such taxation reflects the principle of capital export neutrality (CEN); that is, direct taxation ought not to influence the decisions of businesses or individuals residing in a country as to *where* to invest. It thus reduces the threat of tax competition for FDI among different locations. CEN is thus concerned with "locational" neutrality and thereby reduces the threat of tax competition among different jurisdictions for FDI. It is accomplished by ensuring that the same total amount of domestic and foreign taxes are paid on an identical investment, irrespective of the country in which that investment is undertaken and the amounts of taxes levied by the foreign country.

<sup>81</sup> "Tax sparing" is a means of ensuring that the relief associated with tax incentives offered by developing countries to foreign investors is not offset by taxation in those investors' country of residence owing to the latter's use of the credit method for relieving international double taxation.

<sup>82</sup> The scope for improving the cost-effectiveness of tax (or other) incentives through targeting is limited by the ASCM Article 2 concerning "specificity". Specific subsidies are actionable insofar as they have "adverse effects" on the interests of other WTO Members.

<sup>83</sup> The essence of an evaluation of an investment incentive's cost-effectiveness is determining the extent to which the investment induced by it is *incremental*; that is, it would not have taken place in the absence of the incentive. This can be very difficult to determine. Most econometric studies show that forgone tax revenues exceed the increase in investment induced by the incentive. Even in the case of R&D, a study by Australia's PC found that the general tax concession for R&D acted mainly as a "reward" for research that firms would have undertaken anyway, rather stimulating much additional R&D (Productivity Commission, 2007, Public Support for Science and Innovation, Research Report, Canberra).

<sup>84</sup> See Zee, H. H., J.G. Stotsky, and E. Ley, 2002, for example, "Tax Incentives for Business Investment: A Primer for Policy Makers in Developing Countries," *World Development*, Vol. 30(9), pp. 1497-1516.

revenues. The outcome would be a more neutral, and therefore market-oriented, tax system regarding economic decisions, especially those concerning investment.

55. Interestingly, another trend during the past two decades in Asia-Pacific region (and globally) has been the steady decline in statutory corporate tax rates (Chart 2 and Table A2 – Statutory Corporate Tax Rates), possibly reflecting an element of tax competition. This has generally been accompanied by the broadening of the corporate tax base by scaling back deductions and exemptions.<sup>85</sup> For example, between 1997 and 2010, statutory corporate tax rates fell in all except four economies and by an average of 4.6 percentage points. The four exceptions were Sri Lanka and Thailand, where rates remained unchanged, Pakistan, where the rate rose from 30% to 35%, and PNG, where rates rose from 25% to 30% (perhaps to compensate partly for lower tariff revenues owing to reduced rates). Cuts in statutory corporate tax rates also reduced the value of remaining incentives. Hong Kong<sup>86</sup>, Chinese Taipei, and Singapore are noteworthy for their low rates of 16.5% or 17%, less than half Japan's rate of 40.69%, the highest in the Asia-Pacific region. The outcome of decline in tax rates in combination with the broadening of the corporate tax base has been a more neutral tax system as far as investment decisions are concerned.

#### **Box 5: Effectiveness of investment incentives**

Incentives for investment, notably tax holidays, have long been widely used in the Asia-Pacific. One of the main aims of these incentives is to attract foreign direct investment (FDI) and thereby develop local industry oriented towards exports. While it is difficult to judge the extent to which incentives have actually attracted FDI in the absence of cost-benefit analysis, there are grounds for doubting the effectiveness of such measures, based on empirical evidence from economies elsewhere. Moreover, in some instances the use of incentives may even be counterproductive.

In the first place, incentives are seldom among the main determinants of business decisions. This has been confirmed repeatedly by business surveys. Proximity to markets, the availability of sufficiently skilled labour at relatively low cost, adequacy of essential infrastructure, protection of intellectual property rights, and a stable economic and legal environment are usually much more important. Other countries' experience with evaluation of tax and non-tax incentives suggests that the cost of such measures to the Government (in terms of expenditure or tax revenue forgone) may exceed the investment generated. Their high cost is related to the difficulty in identifying *incremental* investment that would not have been undertaken without the incentives.

Tax cuts for foreign multinational enterprises (MNEs) that are taxed in their home countries purely on a "residence" basis (that is, they receive a full credit for taxes paid abroad) may have little, if any, effect on the incentive for those firms to invest in the country offering such relief. They merely result in a transfer from the Treasury of the capital-importing country offering the incentives to that of the capital-exporting country where the MNE resides. Such cuts would provide an effective incentive only insofar as MNEs are in an excess foreign credit position, taxes on repatriated income can be deferred, the MNE's home country exempts foreign-source income from domestic taxes, or "tax sparing" is allowed by double taxation treaties.

To the extent that incentives do stimulate particular types of investment, they may result in a less efficient allocation of national resources than would be the case if the Government remained neutral and refrained from influencing private decisions. Any adverse effect of incentives on resource allocation would manifest itself as lower total factor productivity. The belief that foreign investment should be assisted because it yields social benefits (externalities) that are not adequately taken into account by private investors, would appear to be overstated. Most benefits of foreign investment accrue privately and hence do not need the incentives. Moreover, it does not provide a justification for assisting foreign over domestic investment and, since it is usually extremely difficult to measure such externalities precisely, there is always the likelihood that incentives will turn out to be excessive.

**Box 5 (cont'd)**

<sup>85</sup> See Norregaard, John, and Tehmina S. Khan, 2007, "Tax Policy: Recent Trends and Coming Challenges", IMF Working Paper WP/07/274, December; and World Bank.

<sup>86</sup> For Hong Kong-sourced income, the tax base is very wide (Hong Kong Government, 2001, "Tax Base Study", KPMG Consultancy Study for the Advisory Committee on New Broad-based Taxes, p. 121).

Incentives are usually expensive for the Government, involving large losses in tax revenues. A tax system embodying many special incentives is also much more susceptible to tax avoidance and evasion, which further contribute to the loss in tax revenues. Incentives therefore tend to worsen the fiscal balance, reducing national savings and causing deterioration in the current account.

Lastly, use of investment incentives may provoke countermeasures by trading partners. Even where they do not contravene the WTO Agreement on Subsidies and Countervailing Measures, other countries may use them to justify countermeasures. In particular, countries may react by adopting incentives of their own, thus resulting in a beggar-thy-neighbour situation. Such an "incentives race" or "incentives shopping" tends to be harmful to all countries concerned. It is also likely to disadvantage developing countries needing tax revenues to finance their essential developmental needs.

Rather than offering incentives to attract foreign investment, governments might instead focus on removing existing impediments that deter investment. Countries often have a mix of policies that simultaneously impede and encourage foreign investment. Rationalizing these policies to remove impediments is likely to be the best approach.

In the case of taxation, the most efficient means of removing the specific obstacle to FDI posed by international double taxation of profits earned by foreign companies would be for capital-importing countries to expand the network of double taxation treaties with the governments of the countries in which foreign investors reside. Development of such a network would obviate the need for investment incentives, notably tax holidays, and be a more effective means of attracting FDI.

**Chart 2**  
**Statutory corporate tax rates in the Asia-Pacific region, 1997-2010**



Source: KPMG's Corporate Tax Surveys.

56. Despite the fact that they can be used to deliver assistance via the direct tax system, direct (unlike indirect) tax incentives have only been challenged twice under the WTO's Dispute Settlement mechanism, in one case (the United States' FSC programme) as an export subsidy and in the other

(U.S. states' tax incentives to Boeing) as export-contingent tax incentives tied to production. Few tax or non-tax measures assisting domestic production have been challenged under the mechanism.

## **VI. OTHER MAJOR NON-TARIFF BARRIERS TO TRADE**

57. As tariffs (and quotas) are reduced or removed, other potential impediments to trade have become more apparent. Two groups of measures are discussed here because of their importance to developing countries: contingency measures, such as anti-dumping, of which developing countries have been becoming major users; and technical and SPS regulations, which developing countries fear are becoming a major barrier to their exports.

### **(a) Contingency Measures**

58. Contingency measures, such as anti-dumping (AD), countervailing (CV) and safeguard (SG) actions, are permitted under the relevant WTO Agreements, subject to certain rules. The number of investigations initiated by WTO Members in the Asia-Pacific region, especially of alleged dumping, has risen significantly since 1995, but after peaking at 170 in 2002, declined and levelled off to about half that number between 2004 and 2009, notwithstanding the eruption of the global financial crisis in 2008 (Chart 3 – AD cases – and Table A3). The number of measures actually taken peaked at 129 a year later in 2003 and also declined to level off to about half that number between 2004 and 2009. This raises concerns about the appropriate use of the provisions, which were put into place to protect countries from "unfair" trade arising from "dumping" or from the use of subsidies; their use is viewed by some as a non-tariff barrier to trade. Concern has also been expressed about their improper use as a pretext to protect domestic producers of like products.<sup>87</sup> A significant percentage of all cases brought to the WTO's dispute settlement body continue to involve the use of AD measures.<sup>88</sup>

59. Between 1995 and the first half of 2010, WTO Members in the Asia-Pacific region notified 1,440 AD investigations, some half of which resulted in the imposition of final measures. The largest numbers of investigations were initiated by India (613), Australia (212), China (182), and Korea (111), which together accounted for roughly three-quarters of all initiations in the region (Chart 4 – AD initiations by main users). (Interestingly, India initiated the most investigations among all WTO Members, followed by the United States (442) and European Union (414); there does not appear to have been a surge in AD (or CV) measures taken by the U.S. or the EU against China over allegations that the latter's exchange rate is undervalued.) Roughly half of the anti-dumping measures initiated by WTO Members in the Asia-Pacific region were directed at chemicals (32%) and base metals (17%). However, only 893 of these initiations resulted in the imposition of actual measures. India (436), China (137), Australia (81), and Korea (70) accounted for most of these actual measures. Again India is the most frequent user of such measures among WTO Members. The Members in the Asia-Pacific region most affected by the 2,433 AD measures imposed by all WTO Members were China (563), Korea (165), Chinese Taipei (132), Japan (112), Thailand (97), Indonesia (92) and India (90). Indeed, these Members (along with the U.S. (127)) were the principal targets of these measures among all WTO Members, accounting for more than half of them.

60. Countervailing measures have been used more sparingly than anti-dumping measures in the Asia-Pacific region, with only 22 initiations since 1995 (up to June 2010), mostly by Australia and New Zealand, compared to a total of 250 by all WTO Members (Chart 5 and Table A4 – CV Measures). However, 145 of these measures were directed at the region, especially China and India, which were the targets of more than half of the total initiations worldwide. The main users have been the U.S. (104 initiations) and EU (56).

---

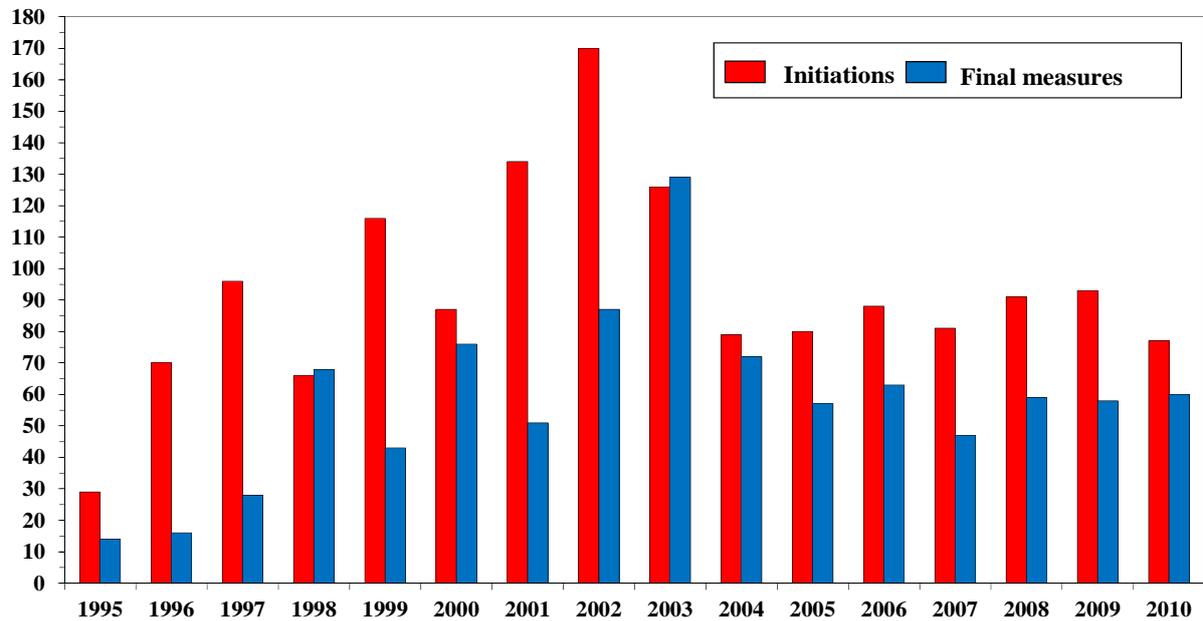
<sup>87</sup> Several Members have called for a review of procedures used to initiate anti-dumping and other trade defence measures. Such a review is now under way in the context of current negotiations; its aim is to clarify and improve disciplines while preserving the basic concepts, principles and effectiveness of the Agreements and their instruments and objectives, and taking into account the needs of developing and least developed Members.

<sup>88</sup> To date, there have been 49 requests for consultations involving anti-dumping measures.

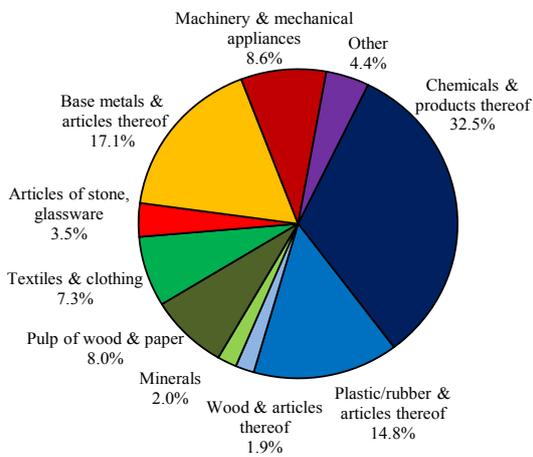
61. Although safeguards have been used much less than anti-dumping measures, with only 56 initiations of such measures in the Asia-Pacific region (compared to 216 worldwide) since 1995, Members in the region have been initiating safeguards more frequently since 2008 (Chart 6 and Table A5 – SG Measures). India is the main user of safeguards among all WTO Members with 26 initiations, of which 10 were in 2009. Indonesia was the second most frequent user of safeguards in the region (and fourth worldwide) with 12 initiations, 7 of which were in 2010. With 9 initiations, but only two since 2008, the Philippines has also been among the more frequent users of safeguards. However, the number of definitive safeguards has not shown much, if any, of an upward trend in the region, with none in 2008, 6 in 2009, and none in 2010.

**Chart 3**  
**Anti-dumping cases by East Asian members, 1995-2010**

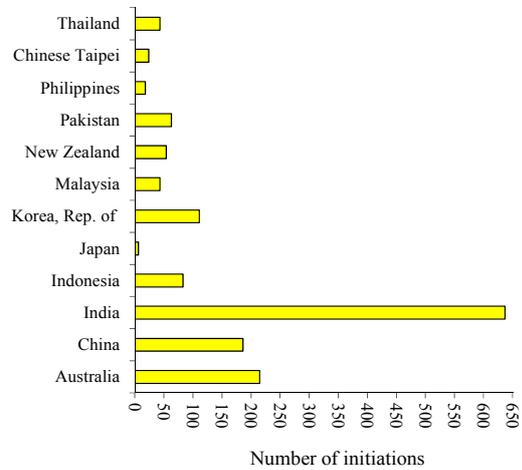
(a) By number of initiations and final measures



(b) Initiations by product

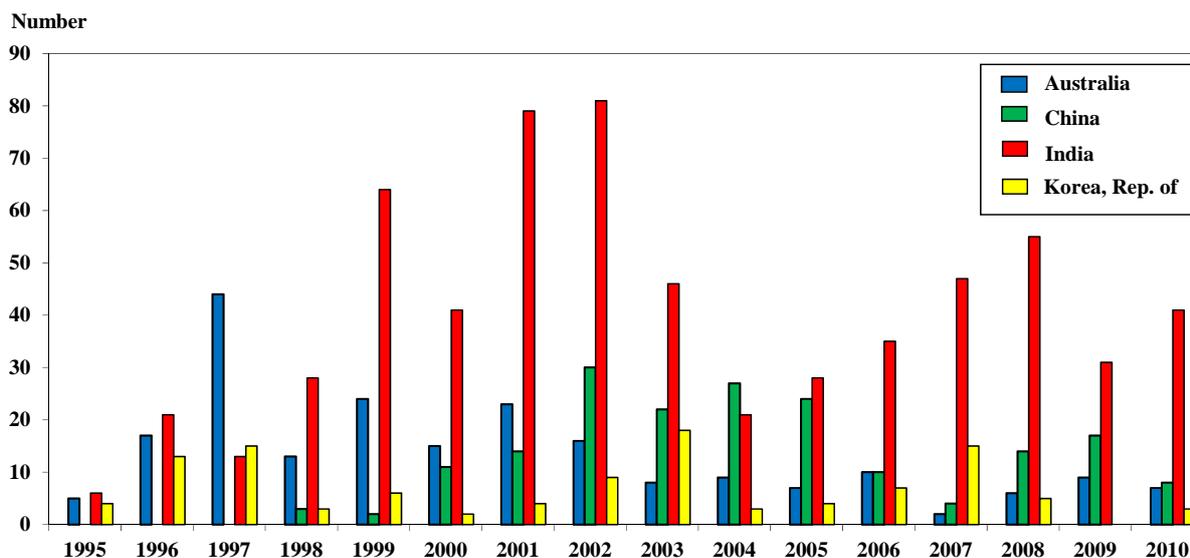


(c) Initiations by origin



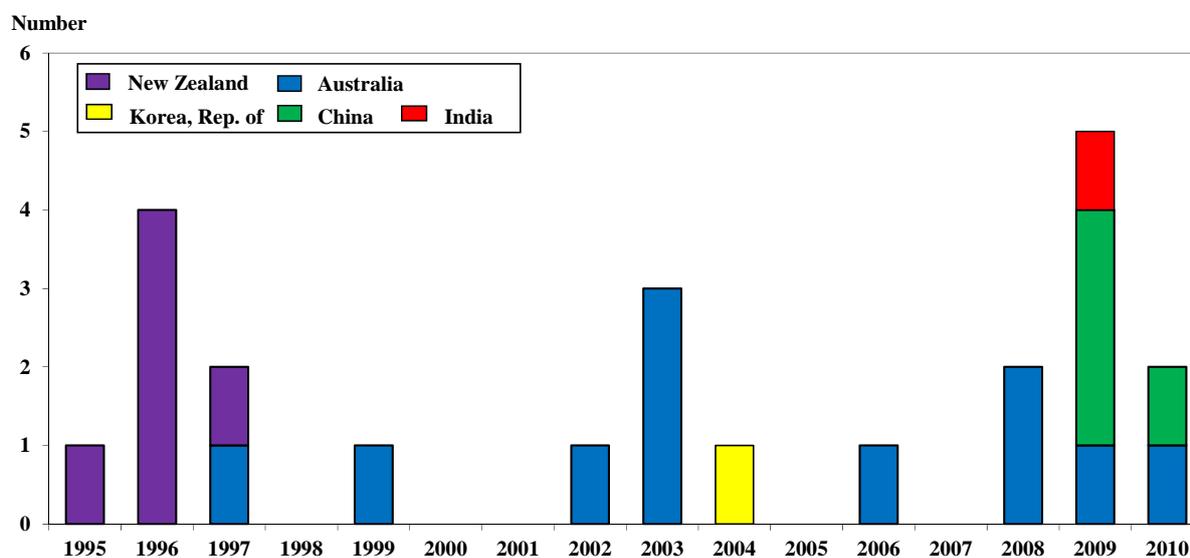
Source: Notifications to the WTO.

**Chart 4**  
Anti-dumping initiations by main users (East Asia region), 1995-2010



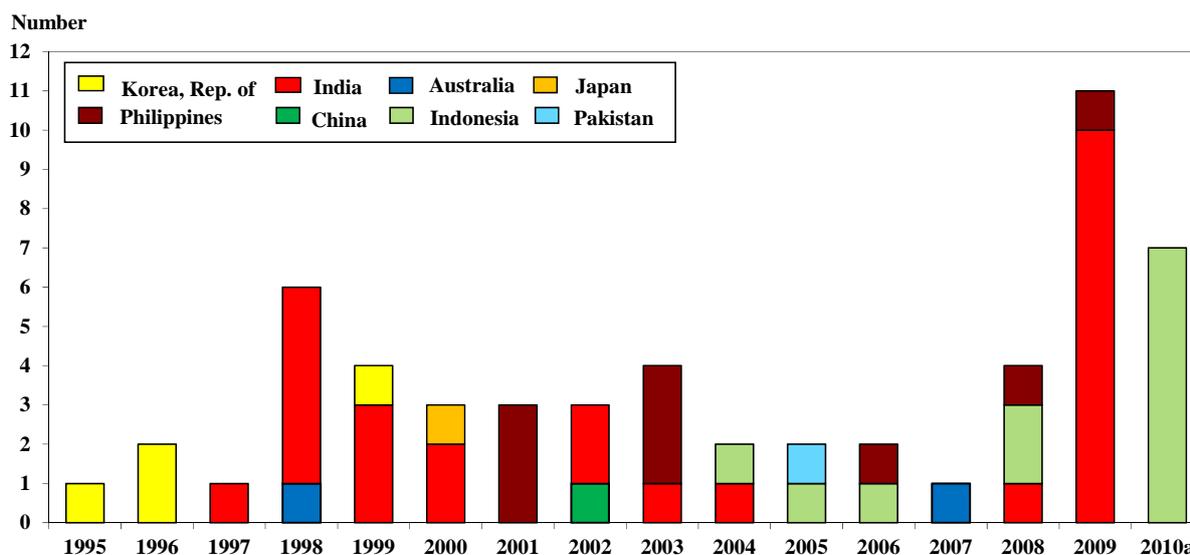
Source: Notifications to the WTO.

**Chart 5**  
Countervailing initiations in the East-Asia region, 1995-2010



Source: Notifications to the WTO.

**Chart 6**  
**Safeguard initiations in the East-Asia region, end-March 1995 to end-October 2010**



a Up to 31 October only.

Source: Notifications to the WTO.

### (b) Technical Barriers and SPS Measures

62. Certain internal regulations, including those concerning technical, safety and health standards have also become more evident impediments to trade.<sup>89</sup> Indeed, there are fears among some developing and least developed Members that such measures may be used in place of tariffs to distort trade. (To the extent that they result in higher domestic than world prices of the products concerned, the price gap is equivalent to a tariff.) In Australia and New Zealand, for example, where tariffs and other support for agriculture are low by international standards, sanitary and phyto-sanitary (SPS) measures are among the strictest in the world.<sup>90</sup> However, national standards and SPS measures are arguably barriers to trade mainly insofar as they do not correspond to internationally-accepted standards, such as those of the International Organization for Standardization (ISO), International Electrotechnical Commission (IEC), Codex Food Code, and World Organization for Animal Health (OIE) guidelines.<sup>91</sup>

63. Under the WTO Agreements on Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary (SPS) Measures, Members may require imports to meet certain national standards dealing with, *inter alia*, technical, health and safety, sanitary and phytosanitary, and environmental requirements. In some cases, the regulations are associated with international agreements. In others, however, the restrictions are subject to national requirements and entry of imports may be subject to presentation of health or conformity assessment certificates. While food safety and environmental concerns are clearly important, the risks associated with imports need to be balanced against the economic costs of national TBT and SPS measures, which are reflected to a large degree in higher domestic prices of products in comparison with world prices, taking into account not just the interests

<sup>89</sup> UNCTAD (2005) provides evidence of the increasing use of technical measures.

<sup>90</sup> While strict SPS regulations in Australia (at both the national and state level) and New Zealand are thought necessary to ensure that their reputation as reliable exporters of high quality agricultural products is not jeopardized by pests and diseases, they tend to impede imports of such products nonetheless.

<sup>91</sup> A recent review of the empirical literature suggests that there is often, but not always, a positive relationship between international standards and exports or imports, which is in line with the widely held view that international standards are supportive of trade (Swann, 2010).

of domestic producers, but also domestic consumers. Several studies suggest that removal of SPS regulations could generate welfare gains to consumers as well as net gains to society, if consumers compensated those producers adversely affected by the removal of such measures.<sup>92</sup> Interestingly, a full analysis of the cost and benefits of SPS measures is rare, even in Australia, where such analysis is widely undertaken of other measures, including regulations (and national standards).<sup>93</sup>

64. Since the establishment of the WTO, the number of technical regulations notified has grown steadily, over half of which have been made by developed countries. The number of SPS measures has also increased rapidly, with developed countries accounting for a large share. Technical regulations and SPS measures have been the source of frequent disputes in the WTO, partly due to their apparent non-conformity with international norms. Although many Asia-Pacific countries have a policy of bringing their measures into line with international norms, progress in this regard and the actual percentage of standards and SPS measures in individual countries that is equivalent to international norms vary considerably.<sup>94</sup> However, TPRs conducted during the past 20 years or so indicate that most Members in the Asia-Pacific region have, by and large, been bringing national standards more into line with international standards.

65. Nonetheless, non-conformity with international norms has led to the allegation, often by developing countries, that such measures are being used to restrict access for their exports. They also maintain that multiple testing requirements for different markets and complex conformity assessment requirements, makes the costs of these procedures prohibitive for them. This is especially true for LDCs that often do not have the technical or financial means to upgrade their production facilities to meet such requirements. Compliance with national TBTs and SPS measures also involve additional costs of doing business, especially for firms operating in different export markets.

66. The Doha Ministerial Meeting called for technical and financial assistance from Members to ease such problems faced by LDCs and some efforts have been made to this effect.<sup>95</sup> The move towards adopting new and harmonizing current standards with international norms is also a step in the right direction, although difficulties will continue to be posed by those standards for which no international equivalent exists.

67. Standards are an important potential impediment to trade not just as far as goods are concerned, but also in the case of services. For instance, one possible explanation of the limited

---

<sup>92</sup> OECD, 2002, "A Synthesis of Empirical Studies of SPS Regulations and a Proposal for Future Work," COM/AGR/TD/WP(2002)72, 27 August.

<sup>93</sup> Hitherto, there have been six disputes concerning Australia's SPS measures (compared to two and none, respectively, concerning those of Japan and New Zealand). Australia's former foreign minister Alexander Downer is quoted as having said: "I just want you all to know that all Australian quarantine decisions are science-based ... it's called political science" (Peter Hartcher, *Vale Alexander the not so great*, Sydney Morning Herald, 4 July 2008, p. 13). In connection with SPS measures, the new import risk analysis established by the Australian authorities in 2007 has rarely enabled new market access for agricultural products of foreign origin.

<sup>94</sup> Among industrialized East Asian countries, harmonisation ranges, for example, from 18% in 2010 in Chinese Taipei (down from 25% in 2004) to 62.1% in 2007 (compared to around 20% in 1996) in Korea, 80% in 2007 in Singapore (up from 76% in 2000) and in 90% in Japan (up from 25% in 1996). Some 80% and 43% of Australian and New Zealand standards, respectively, are equivalent to international standards (compared to around 50% in 1997 and 29% in 1996). Hong Kong, China does not have an official standards authority or standardization body and so standards are based mainly on international standards and/or prevailing overseas standards. Among the developing countries, the pace and extent of harmonization also varies widely: 23.5% in 2006 (compared to 17% in 2001) for Indian standards; China 46.5% in 2007 (up from 44.2% in 2002) in China; 58.1% in 2008 (compared to 21.6% in 1997) in Malaysia; 24.4% in 2006 (compared to 17.9% in 1995) in Thailand. In Bangladesh, a mere 7% of its standards were in line with international ones in 2006 (compared to 3% in 2000). The degree of harmonization varies according to the products concerned. There appears to be a high degree of harmonization for IT and electrical products, for example, and a low degree for food and agricultural products and especially building and construction.

<sup>95</sup> For example, the Standards and Trade Development Facility, was established in partnership between the FAO, the World Animal Health Organization (OIE), the World Bank, the WHO and the WTO to assist developing countries to build capacity in standards and to help them meet international standards.

participation of foreign companies in Chinese Taipei's local insurance market is that they must report to their parent companies under more stringent international accounting standards (e.g., International Financial Reporting Standards) than those to which domestic insurers are subject.<sup>96</sup>

## VII. EXPORT RESTRAINTS

68. Although Asia-Pacific economies' development strategy has involved policies aimed at facilitating manufactured exports, exports of food, metals and minerals have frequently been restrained by various measures; indeed, there appears to be a growing trend among natural resource-rich countries to curb exports of such resources. Not all of these export restraints are subject to WTO rules.<sup>97</sup> In particular, whereas import tariffs are subject to WTO rules, export taxes are not, even though, like tariffs, they may be used to shift the terms-of-trade in a country's favour and as an instrument of industrial policy, to the detriment of other countries. Prohibitions, quotas, licensing, minimum export prices (below world prices), export taxes or less than full rebates of VAT in respect of exports<sup>98</sup>, state-trading and marketing boards (sometimes enjoying export monopoly rights) are some of the main restraints that have been used. Among these restraints, export taxes appear to have increased during the past decade, especially as far as raw materials are concerned. Such restraints have a wide variety of objectives.

### (a) Objectives of export restraints

69. Quite apart from any economic objectives, export (and import) restraints are necessary to fulfil certain international obligations, such as the Convention on International Trade in Endangered Species (CITES), the Montreal Protocol on Substances that Deplete the Ozone Layer and United Nations' sanctions, aimed at prohibiting or regulating trade in certain items. These restraints usually involve prohibitions or licensing.

70. If an economy is a big enough exporter of a product, export restraints may be used (like tariffs and other non-tariff barriers to imports) to shift the terms of trade in the exporting (rather than the importing) country's favour (Box 6 – Economic effects of an export tax).<sup>99</sup> For example, Australia used to grant sole exporter or single-desk (i.e., monopoly or near-monopoly) rights to entities exporting, *inter alia*, grains and sugar, and New Zealand has done so for dairy products<sup>100</sup> and kiwifruit. China, which accounts for roughly 95% of the current global supply of "rare-earths", uses taxes and quotas to curtail exports of these minerals, which are critical constituents of many high technology goods. India, the second largest grower and exporter of cotton, has imposed bans on cotton shipments. Interestingly, in countries with competition laws, restrictions on cartels formed by domestic exporters are usually less strict than those on cartels originating from abroad.

---

<sup>96</sup> WTO, 2010, *Trade Policy Review: Chinese Taipei*, Geneva

<sup>97</sup> Whereas quotas and other quantitative restrictions on exports are generally prohibited by WTO rules, unless they are applied "temporarily" where there are "critical shortages", export taxes are allowed. However, export taxes may be subject to accession agreements. For example, China's Accession Protocol prohibits it from levying export taxes on products that are not listed in Annex 6 of the Protocol and limits any export taxes imposed on products that are listed in Annex 6 to the rates specified therein.

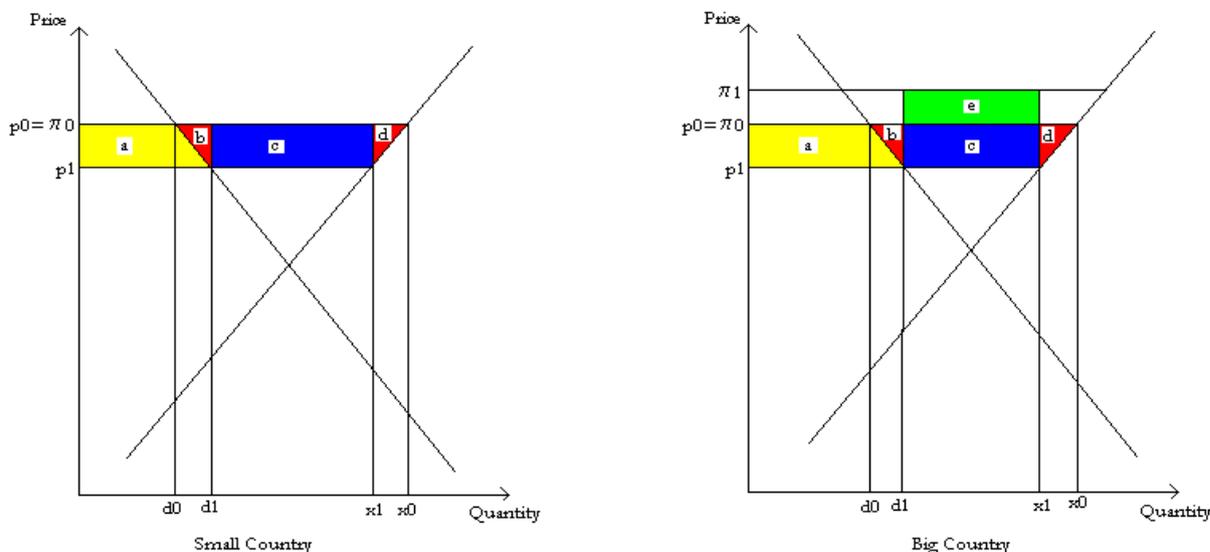
<sup>98</sup> VAT rebates on exports are viewed by some as export subsidies. As noted above, however, rebates are necessary to ensure that VAT is levied solely on domestic consumption and, as such, consistent with WTO rules. They can be considered as export subsidies only insofar as the amounts rebated exceed the VAT actually collected on inputs used in the domestic production of goods and services that are ultimately exported.

<sup>99</sup> For instance, Australia is the largest producer of iron ore, most of which is exported, followed by China, which is also the world's largest importer. Prices of iron ore are negotiated between Australia's two dominant producers, BHP Billiton and Rio Tinto, on the one side, and the China Iron and Steel Association (CISA) on the other. Chinese Taipei manufacturers accounted for roughly two-thirds of the world's made-to-order IC (integrated circuit) chip output in 2009.

<sup>100</sup> New Zealand abolished its Dairy Board, a single-exporter marketing board, in 2001. However, while its successor, Fonterra Co-operative Group, has no monopoly rights on dairy exports, it has had exclusive rights until recently to export to designated restricted markets. Fonterra is the world's leading exporter of dairy products and accounts for more than one-third of international dairy trade.

### Box 6: Economic effects of an export tax<sup>a</sup>

The figure below depicts the partial equilibrium effects of an export tax (or other equivalent restraint) imposed by a small country that cannot affect world prices, and a large one whose net supply (level of net exports) is sufficiently large to influence significantly world prices, and thus its terms-of-trade. Without such a tax, the domestic price ( $p_0$ ) is the same as the world price, ( $\pi_0$ ). At these initial prices, domestic demand ( $d_0$ ) is less than domestic supply ( $x_0$ ), and so the difference is exported to the rest of the world.



In the case of a small country, imposition of an export tax ( $t$ ) reduces exports and increases domestic supply, thereby reducing domestic price until  $p_1(1+t) = \pi_0$ , which, by definition, remains unchanged. At this equilibrium price, domestic producers are indifferent between selling their products on the domestic market and exporting them. As they can consume more ( $d_1 > d_0$ ) at a lower domestic price ( $p_1 < p_0$ ), domestic consumers benefit from the export tax; their surplus is increased by the yellow area denoted as (a). But domestic producers are adversely affected by the tax as they produce and sell less ( $s_1 < s_0$ ) at a lower price ( $p_1 < p_0$ ), so their surplus is reduced by  $a+b+c+d$ . However, the tax increases revenues by the blue area denoted as (c), which is the post-tax level of exports ( $x_1 - d_1$ ), multiplied by the per unit export tax ( $\pi_0 - p_1$ ). It follows that the loss of producers' surplus ( $a+b+c+d$ ) is larger than the gain in consumers' surplus (a) and export tax revenues (c). The net effect is a loss of domestic welfare measured by red areas (b+d), which are known as deadweight losses (Harberger triangles) in the theory of protection.

By contrast, in the case of a country whose share of world exports is sufficiently large, the drop in its exports owing to the tax can significantly increase the world price. Consumers' and producers' surpluses are identically affected. However, tax revenues increase (by e) in line with the rise in the world price to  $\pi_1$ . The post-tax level of exports is still ( $x_1 - d_1$ ), but the per unit export tax is now ( $\pi_1 - p_1$ ) instead of ( $\pi_0 - p_1$ ). An export tax thus raises domestic welfare if the green area denoted by (e) is larger than the deadweight losses reflected in sum of the red areas (b+d). The area (e) represents the rise in domestic welfare as a result of the improved terms-of-trade; that is, final exports ( $x_1 - d_1$ ) are sold at  $\pi_1$  not  $\pi_0$ , with  $(\pi_1 - \pi_0)$  representing the gain in the terms-of-trade for each unit exported. (The optimum export tax,  $t^*$ , is the inverse of the absolute value of the export demand elasticity.)

Irrespective of the stated objective of the export tax, insofar as it is levied on primary or intermediate products used in manufacturing, for example, the tax gives domestic downstream processors of the products concerned an advantage over processors abroad, who have to pay the world price for such products. A "de-escalating" export tax structure (a higher tax rate on exports of primary and intermediate products than on final goods) has been among the instruments of industrial policy used in East Asia countries to encourage the expansion of manufacturing to the detriment of primary and intermediate product sectors. This advantage is evidently higher in a large country ( $\pi_1 - p_1$ ) than in a small one ( $\pi_0 - p_1$ ). The advantage (plus the export tax revenues) is entirely at the expense of domestic producers of the product and efficiency if world prices are unaffected by the tax, but also partly at the expense of foreign consumers of the product, to the extent that world prices rise as a consequence of the tax. While this advantage does not involve a "financial contribution" (or taxes forgone) by the government levying the tax, and thus does not appear to be subject to WTO rules, it nonetheless constitutes

Box 6 (cont'd)

assistance to manufacturing, which can distort trade; such an implicit subsidy could be illegal if it can be shown to have "adverse effects" on the market place.

If the export tax is levied on grounds of resource conservation or environmental protection (because the product is polluting or energy-intensive, for example), while the tax can alleviate such problems by inducing a fall in domestic output of the product concerned ( $x_1 < x_0$ ), it is seldom the most effective way to achieve these conservation and environmental objectives; measures to curtail production would be more effective. (The magnitude of the fall in domestic production depends on the elasticity of supply.) Moreover, to the extent that the taxed product is processed downstream, and exports of the processed product are not similarly restrained, the effects of the export tax on the unprocessed product in meeting these objectives can be undone. Indeed, an export tax (or other constraint) may be used as an incentive to foreign enterprises to establish downstream processing plant to obtain access to key material inputs, bringing with them valuable know-how and technology.

- a This box is adapted from Bouet, Antoine and David Laborde, "The economics of export taxation: a theoretical and CGE-approach contribution". Viewed at: <http://www.oecd.org/dataoecd/56/3/43965958.pdf>.

71. Export restraints have been used to curtail exports of products that are considered prone to trade friction and thus pre-empt tariffs or AD/CV measures in export markets. For this reason, China, for example, eliminated VAT rebates on exports of goods such as textiles, furniture, plastics and lighters.<sup>101</sup> To the extent that explicit or implicit taxes are used to restrain the products concerned, the resulting tax revenues accrue to the exporting country's Treasury, whereas the revenues from tariffs and AD/CV measures levied on the imports of these products accrue to the Treasury of the importing country.

72. Export restraints have been used to some extent in efforts to achieve macroeconomic objectives. China has seemingly used such measures partly in attempts to reduce its large current account surpluses. In order to control inflation, India has at times banned or suspended the export of certain foodstuffs (e.g. non-basmati rice, lentils, wheat, onions and edible oil) and raised minimum export prices (e.g., of basmati rice and onions). (Export restraints may also possibly be used to prevent the appreciation of the real exchange rate, and the resulting "Dutch disease", in natural resource-rich countries, as such appreciation can jeopardize efforts to diversify the economy's production and exports into manufacturing or tourism, for example.<sup>102</sup>)

73. Related to inflation, export restraints have also been aimed explicitly at ensuring security of domestic supply and thereby avoid sharp price increases of basic foodstuffs or other products. In the case of rice, for example, India and Viet Nam, respectively, the second and third largest exporters of rice in the world (behind Thailand), together with Bangladesh, Cambodia, and China have from time to time banned or otherwise restricted exports in order to make more rice available in the domestic market and thereby stabilize domestic prices.

74. Export restraints have also been used both to capture the resource rents associated with natural resource-based products and ostensibly to conserve natural resources, such as natural forests and fish stocks (in Indonesia, PNG, and the Solomon Islands, for example) and oil (in Malaysia).

75. Explicit export taxes (on fish in the Maldives and on fish and logs in the Solomon Islands) may be an important source of tax revenues. The same is true for implicit export taxes, notably less than full rebates of VAT in respect of exports (in China), where rebates have been curtailed for fiscal reasons. Other possibly implicit export taxes include advance income tax levied (by Bangladesh and Pakistan, for example) on exports in order to reduce income tax evasion. As pointed out earlier in

<sup>101</sup> Private transactions rather than taxes may be involved. Reportedly, some U.S. furniture makers have managed to extract cash from those Chinese competitors fearing anti-dumping duties on imports of wooden bedroom furniture in return for their requesting the Commerce Department's to remove the Chinese competitors from its review list. (*The Wall Street Journal*, "Cash Softens a Trade Blow", 15 February 2011).

<sup>102</sup> See WTO, 2010, *World Trade Report*, Geneva.

connection with similar taxes on imports, insofar as these taxes are not fully and immediately creditable or refundable against exporters' income taxes, they constitute export taxes.

76. Exports may also be restrained on environmental or health grounds. China, for example, eliminated VAT rebates on exports of some goods whose production involved large amounts of energy and/or natural resources or was highly polluting. It also maintains quantitative restrictions and taxes on exports of certain raw materials (used for the production of chemicals and steel, for example) as well as "rare earth" minerals, which are difficult and dirty to extract.

77. Finally, and perhaps more importantly, export restraints have also been frequently used explicitly as an instrument of economic policy in order to supply cheap raw materials and other inputs to domestic downstream processors on "infant industry" grounds; that is, to foster the development of domestic industries producing higher value-added products. Among the raw materials and inputs involved are timber, fish, rice, sugar, raw hides, cashmere, cotton, and minerals. Indonesia, for example, once one of the world's largest suppliers of round (unprocessed) logs, used export bans and taxes on these logs to transform it instead into the largest supplier of plywood. In India, the world's third largest exporter of iron ore, the federal government levies export taxes on iron ore to limit shipments and boost the availability for domestic steel makers, while Karnataka state has banned exports. India has also capped exports of cotton.<sup>103</sup>

#### **(b) Economic effects of export restraints**

78. Except in the cases of enforcing international obligations, shifting the terms of trade, or pre-empting trade defence measures, export restrictions are seldom the best (or "second-best") way to achieve the above economic objectives.<sup>104</sup>

79. Where there is scope for shifting the terms of trade, export taxes are preferred to other instruments, such as production taxes, quantitative restraints, export cartels or marketing boards. As an export tax is equivalent to a tax on domestic production and a subsidy to domestic consumption, an export tax reduces exports by simultaneously reducing production and increasing consumption.<sup>105</sup> By contrast, production taxes (or consumption subsidies) exploit only one way of reducing exports.<sup>106</sup>

80. Nor are export restraints the best way to achieve macroeconomic objectives, such as reducing current account deficits or combating inflation. As discussed in Section III, a current account deficit can be reduced only by reducing the gap between national saving and domestic investment. And monetary (and related exchange rate) policy is usually the most appropriate way to curb inflation. However, some inflation-targeting central banks have seemingly reacted to increases in the prices of imported commodities by tightening monetary policy and thereby raising the value of their currencies, even though adverse movements in the terms of trade are changes in relative prices that need to be accommodated, not resisted with monetary policy.

81. Irrespective of whether encouragement of domestic downstream processing is the explicit objective of the measures or not, export restraints would tend to reduce exports and divert some supply to the domestic market, thereby putting downward pressure on the domestic prices so that they

---

<sup>103</sup> Allegedly, the reduction in domestic prices induced by the imposition of restraints on exports of raw cotton in 2004 increased the indebtedness of farmers and thereby contributed to the increase in suicides of cotton farmers ("Protecting Cotton Industry at the Cost of Farmer Suicides Unjust", 16 July 2011, Meri News Nagpur).

<sup>104</sup> See Devarajan, Shantayana, *et al.*, 1996, "The Whys and Why Nots of Export Taxation", Policy Research Working Paper 1684, The World Bank, Washington, D.C.

<sup>105</sup> In standard theory, the optimal export tax is equal to the inverse of the absolute value of the world price elasticity of export demand for the product concerned. However, whereas the welfare of the exporting country would be increased by such a tax, importing countries would lose more than the exporting country would gain, so that world welfare would fall.

<sup>106</sup> See Bhagwati, J.N. and T.N. Srinivasan, 1994, *Lectures on International Trade*, Cambridge, MA: MIT Press.

are lower than world prices of the products concerned. The outcome is an implicit subsidy to domestic downstream processors. The larger the exporter's share of the world market for the product, the greater the gap between domestic and world prices, and thus the greater the implicit subsidy to domestic downstream processors compared to processors of the same products abroad. Such implicit subsidies are seldom the best way to achieve the various objectives of export restraints and can even have perverse economic effects.<sup>107</sup>

82. As regards food security, for example, export restrictions tend to depress domestic prices and hence discourage investment and production in domestic food production. Investment is particularly important because of its contribution to raising labour productivity, which tends to be much lower in agriculture than other sectors in Asia-Pacific economies.<sup>108</sup> (Relatively low labour productivity in agriculture has obvious implications not just for food security, but also for poverty levels and inequality between urban and rural incomes, and, indeed, the environment, insofar as scarce resources are not used efficiently.) Consequently, export restraints applied by some major food-producing countries exacerbated the situation in the global food market during the 2007-2008 crisis. Export restraints also disrupt global supplies and thus increase uncertainty and raise prices on world markets. Therefore, such export restrictions would tend to undermine food security in those countries, such as Japan and Korea<sup>109</sup>, which depend heavily on imported food products and discourage them from opening further their agricultural sectors to trade. Less distorting and more trade-friendly short-term alternatives would include reduced import tariffs on food products or cash transfers targeted at the most vulnerable groups. In the longer term, however, food security would be best assured by agricultural reform measures aimed at enhancing rather than retarding productivity improvement in agriculture. Such measures might usefully include: reducing tariffs on imports of food (as in the case of China, where tariffs rates on soy and soy oil were cut temporarily in 2008 amid concerns over food price inflation, and India, where tariff rates on selected food items were reduced to zero<sup>110</sup>); facilitating more investment in agriculture and supporting infrastructure, including irrigation, transportation, and storage facilities; and accumulating adequate (and transparent) reserves of basic foodstuffs.<sup>111</sup>

83. Similarly, in the case of inflation concerning other raw materials, the use of export restraints also reduces the incentives for suppliers of such materials to increase investment and thus production in the longer term, thereby exacerbating increases in their international prices. In mining, for example, where large amounts of long-term investment are necessary, business uncertainty owing to export restraints can deter or delay investment, thereby having a negative impact on the supply of raw materials.

84. Nor are export taxes the best instrument to secure a share of natural resource rents for governments, or to conserve such resources. As regards the latter rationale, used partly by Indonesia to justify its export taxes on logs, the consequent lowering of domestic log prices and associated transfer of rents from the owners of such natural resources to the downstream processors of logs not

---

<sup>107</sup> Indeed, in the Solomon Islands, for example, as a result of export restraints, round logs worth S\$1,380 on the export market were needed to produce one cubic metre of exported sawn-grade timber that sold internationally for only S\$1,348 so that sawn timber processing had subtracted value of S\$132 per cubic metre rather than added value (Asian Development Bank, 1998, *Solomon Islands 1997 Economic Report*, Manila).

<sup>108</sup> For example, in Japan, labour productivity in agriculture is one-quarter of the level in the rest of the economy, while in China and India, respectively, it is one-fifth and one-sixth. While the reasons for relatively low productivity vary from one country to another, among the most common are small fragmented farms and consequent lack of scale economies and mechanization, and, in some instances, deficient supporting infrastructure, including irrigation, storage facilities, and transportation.

<sup>109</sup> Japan, the world's largest net importer of food, the level of food self-sufficiency is around 40% (compared to 95% in China).

<sup>110</sup> Other measures taken by India included distribution of imported pulses and edible oils through the public distribution system (PDS).

<sup>111</sup> An inventory rate of 17% to 18% is deemed to be safe by the United Nations Food and Agricultural Organization.

only encouraged the latter to expand their production, but also reduced the financial incentives for them to adopt efficient, less wasteful technology and processing practices and for owners of such natural resources to engage in conservation practices, which would tend to accentuate rather than slow de-forestation.<sup>112</sup> In the cases of forestry and fishing, therefore, arguably better methods of securing a share of natural resource rents for governments and conserving such resources include the setting of quotas for logging or fishing so as to ensure sustainable yields and the auctioning of these quotas under a tender or bid system, or a suitable tax on resource rents.

85. Likewise export restraints are unlikely to be the best way to curtail pollution or to conserve energy. More efficient measures would include green taxes or a cap and trade mechanism on energy-using or polluting production activities, irrespective of whether the goods produced are sold domestically or exported. For example, China envisages stricter standards concerning air emissions and wastewater for the mining and processing of rare earth minerals that will increase their production costs and likely lead to higher export prices, thus reducing the need for export restraints, which have provoked disputes at the WTO with its trading partners.<sup>113</sup>

86. To the extent that the objective of export taxes is to raise tax revenues, export taxes (like tariffs on imports) tend to be more distorting than alternative internal taxes, such as excises, broad-based consumption or income taxes, taxes on resource rents, or "green" taxes.

## VIII. GOVERNMENT PROCUREMENT

87. Governments are major purchasers of goods and services. According to estimates by the OECD, such purchases account for roughly 20% of GDP in OECD countries and nearly 15% in non-OECD countries, making government procurement (GP) a substantial part of the global economy. The ratios of GP that is open to international trade are estimated at only 7.6% for OECD countries and 5.1% for non-OECD countries. Thus, government procurement (at both the central and sub-central levels) is a major instrument of protection, and therefore industrial policy, insofar as governments favour national suppliers, through, *inter alia*, "buy local" provisions (including price preferences) and award contracts using selected or single rather than open tendering. (To the extent that GP involves price preferences for national suppliers, for example, the margin of preference is equivalent to a tariff, and as such has similar potential economic effects as far as government purchases are concerned.) These practices tend to reduce the share of foreign suppliers in GP. Although such purchases may be subject to government audit, they are rarely subject to cost-benefit analysis.

88. Such favouritism is not subject to WTO disciplines, however, except insofar as Members are parties to the Government Procurement Agreement (GPA) and to the extent that such practices are covered by the GPA.<sup>114</sup> Only five WTO Members in the Asia-Pacific region, namely Japan (since 1 January 1996), Korea (1 January 1997), Hong Kong (19 June 1997), and Singapore (20 October 1997), and more recently Chinese Taipei (15 July 2009) are parties to the GPA. By contrast, neither Australia nor New Zealand is a signatory to the GPA, although New Zealand has been an observer since 2008 and Australia participates in the WTO Working Group on Transparency in Government Procurement; China is in the process of seeking accession to the GPA. The GPA has helped extend the WTO principles of non-discrimination, predictability and transparency to government procurement, although Members commitments in this regard (including thresholds and entities

---

<sup>112</sup> The reduced rents received by owners may have induced them to "slash and burn" forests in order to switch to more lucrative crops, such as palm oil, thereby contributing to forest fires in the region.

<sup>113</sup> In June 2011, a WTO panel ruled that restrictions and taxes on exports of certain raw materials used in the production of chemicals and steel violated the terms of China's Accession Protocol as well as Article XI of the GATT, which prohibits restrictions other than taxes, duties and charges on exports.

<sup>114</sup> The GPA sets out rules guaranteeing fair conditions for international competition for government procurement contracts at central and sub-central levels and prohibiting discriminatory treatment between local and foreign suppliers as well as between foreign suppliers from different countries. In order to join the GPA, a Member must reach agreement with other parties as to which government entities will be subject to the GPA requirements, what types of goods, services and construction bids are covered, and the threshold levels for covered contracts.

covered) vary considerably. In doing so, it has helped increase value for money and reduced the scope for discretion (and consequently corruption) in the awarding of government contracts, to the benefit of fiscal policy. This is especially important when fiscal deficits and government debt are high. Except in the case of those WTO Members that are parties to the GPA, there is, by and large, a lack of transparency concerning not only the size of GP, but more importantly "buy local" requirements, price preferences, tendering procedures, and foreign participation.

89. "Buy local" requirements and price preferences are among the key features of GP in the Asia Pacific region, even among WTO Members that are parties to the GPA. Japan, for instance, passed a law in 2010 promoting the use of wood in the construction of public buildings, but announced that it would promote the use of domestic wood, with a target of meeting more than half of domestic demand for wood with domestic supply.<sup>115</sup> Local suppliers in Chinese Taipei enjoy a margin of preference of up to 3% for contracts not covered by the GPA. Singapore also maintains a 2.5% price preference, but only for the supply of goods and services from other ASEAN members. Not surprisingly, "buy local" requirements and price preferences are common in WTO Members that are not parties to the GPA. For example, the indigenous (bumiputera) population in Malaysia is accorded a price preference ranging from 2.5% to 10%. In Thailand, domestic suppliers are granted a price preference of between 3% and 7% and ASEAN partners a preference of 2.5%. In Pakistan, local suppliers of engineering goods can be granted a price preference of as much as 25%. In Australia, certain states incorporate "buy local" and/or price preferences of as much as 10% and 20% for local (as well as New Zealand or U.S.) goods and related services in their procurement policies.

90. Among Asian parties to the GPA, the proportion of government contracts awarded through selective or limited tendering, rather than open tendering, was seemingly much higher in Hong Kong, Japan, and Chinese Taipei than in Singapore and Korea and appears to have risen in all except in Chinese Taipei. In Hong Kong, 77% of government contracts (exceeding certain thresholds) were awarded through selective and limited tendering in 2006-2009, up from 62% in 2001-2005 and 53% in 1998-2001.<sup>116</sup> Selective tendering is usually used for works contracts. In Japan, selective and single tendering accounted for 36.5% of the total in 2008 (up from almost 24% in 1995). In Chinese Taipei, procurement awarded through selective and limited tendering rose from 25% of all purchases in the period 1999-2004 to 33% in 2004-2008; such tendering was used for 10%, 26% and 55% of procurement involving construction, services and property, respectively. In Singapore, only 15% of the value of contracts involved restrictive or single tendering during the period 2004-2007 (up from 5.7% in 2004). Procurement by GPA-covered entities represented 45% of Korea's total procurement (excluding defence equipment) in 2004 (the latest year that was available), of which more than 3% (by value) was awarded using restricted (limited) tendering. No data were available on tendering procedures in other WTO Members in the Asia-Pacific region, including Australia and New Zealand, although China indicated that public tendering accounted for 70% of total procurement value in 2007.

91. Foreign participation in government procurement is much lower than the shares of imports in their GDP, even among the five Asian parties to the GPA<sup>117</sup>, which means that the GP market is much less open than private markets. In Japan, Singapore, and Korea, foreign participation in government procurement is much lower than in Hong Kong and Chinese Taipei and has been falling. In Japan, the value of government procurement of overseas goods and services supplied by either domestic or foreign suppliers was only 7.1% in 2008 (down from 18.4% in 1995). Foreign shares are much lower

---

<sup>115</sup> This policy goal is found in Japan's New Growth Strategy (WTO, 2011, *Trade Policy Review: Japan*, Geneva).

<sup>116</sup> The Hong Kong authorities maintain that as a result of technical and financial capability requirements and magnitude, selective tendering is normally adopted for works contracts, whereby contractors on the relevant approved list (established through open and transparent procedures) are invited to submit tenders.

<sup>117</sup> Imports (of goods and services) as a percentage of GDP were 17 in Japan (in 2008), 46 in Korea (in 2009), 66 in Chinese Taipei, 183 in Singapore, and 217 in Hong Kong, China (all three in 2010).

than 7.1%, however, for major items including wood and articles thereof (0.2%), electrical machinery and parts (0.8%), iron and steel (1.4%), road vehicles (1.9%), and office machines (2.1%). By contrast, foreign shares are over 30% for mineral products, medical equipment and pharmaceuticals. Selective and single tendering accounted for 36.5% of the total in 2008 (up from almost 24% in 1995). The low foreign share of road vehicles may be partly explained by the fact that of the 237 regulations on road vehicle safety standards in 2009, only 29% corresponded to international standards (up from 20% in 2005). Foreign participation in Singapore was only 5.2% of the total value of contract in 2002, the latest year available from the authorities (down from 24% in 1994). In Korea, although little more than 3% of total procurement (by value) was awarded using restricted (limited) tendering, foreign suppliers accounted for a mere 3.1% of procurement in 2005 compared to 9.9% during the period 1991-1995, immediately prior to Korea's accession to the GPA. By contrast, Chinese Taipei and Hong Kong appear to be the most open to foreign participation in their GP. Despite the low proportion of government contracts awarded through open tendering in Hong Kong (77%), at least 81% of goods procured by the Government in 2009 were imported, down from 96% in 2005 and 90% in 2001, while the share of non-Chinese-Taipei suppliers was 28.5% in 2008, up from 18.1% in 2004. Foreign produced goods and services (excluding defence expenditure) were 11% of the total value of contracts awarded by the Australia's Commonwealth (national) government in 2007/08, down from around 15% in 1995/96. No such data were available from New Zealand.

92. Interestingly, whereas Japan's thresholds for GPA coverage of contracts for central and sub-central government entities are, by and large, roughly in line with those of other developed GPA Members, its sub-central government entities thresholds for construction are substantially higher, thereby favouring domestic companies as far as public works are concerned.<sup>118</sup> The same is true for construction contracts in Korea. Most cases of proven infringement of Japan's Anti-monopoly Act (AMA) concern bid-rigging related to public works (with various cases involving government officials). While the AMA has helped to combat such bid-rigging, the lowering of the thresholds for construction contracts subject to the GPA could play a supporting role.

93. As regards fiscal stimulus packages implemented by economies in the Asia-Pacific region in reaction to the 2008 global financial crisis, the more open the economy is to trade, the more likely that the effects of this fiscal stimuli will leak abroad through imports, thereby reducing fiscal multipliers. As government investment (especially the construction of infrastructure) tends to have a lower import content than consumption, partly because of government procurement practices, it is not surprising that fiscal stimulus packages have focused on increasing government investment, which tends to involve a higher fiscal multiplier than those associated with increased consumption.

## IX. COMPETITION POLICY

94. Opening up their markets to competing foreign products and allowing new entrants is not a substitute for an actively enforced competition policy. Consequently, TPRs have focused not just on policies and measures taken by governments to distort competition and thus trade, but also on their failure to take appropriate steps to prevent anti-competitive practices by private (and independent state-owned) enterprises that can have similarly distorting effects, even though such practices are not generally covered by WTO rules.

95. During the past 20 years, there has been a gradual realization by Members of the importance of preventing anti-competitive practices and, as a consequence, more and more of them have unilaterally introduced competition laws with varying degrees of comprehensiveness to address such behaviour. Anti-competitive practices include, *inter alia*, abuse of dominant market position, monopoly agreements, and the concentration of enterprises so that they have, or are likely to have, the effect of eliminating or restricting competition, by fixing prices or limiting production. Whereas only a few developed countries in the Asia-Pacific region (notably Australia, Japan, Korea, and New Zealand) had such laws in 1989, since then, Chinese Taipei (1991) and developing countries, including India (2002), Papua New Guinea (2002), Singapore (2005), and more recently

---

<sup>118</sup> WTO, 2011, *Trade Policy Review: Japan*, Geneva.

China (2008), have introduced such laws. The scope of these laws varies widely from one country to another. While most laws tend to cover anti-competitive agreements and abuse of market power, not all include mergers (and acquisitions), which can restrain domestic competition. Moreover, restrictions on cartels originating from abroad tend to be stricter than those on cartels formed by domestic exporters. Some laws encompass state-owned enterprises while others do not. Other notable exemptions from some country's laws include those related to intellectual property rights, resale price maintenance, cooperatives, and certain sectors (such as telecommunications, energy, water, postal services) that may be subject to their own sector-specific regulation. Although any competition policy should include some basic principles aimed at preventing anti-competitive practices, one size does not necessarily fit all countries.

96. In deciding whether to introduce a comprehensive competition law, a country's policy needs to take into account, among other things, their level of development and the degree of openness of their economies. The more open an economy is, the more likely it is to foster competition and thereby improve productivity and thus the international competitiveness of domestic enterprises. Indeed, the question arises as to whether a competition law is necessary for open economies, especially small ones. This question follows from the fact that the lowering, if not elimination, of barriers to foreign trade and investment can by itself enhance competition in markets for goods and services and thereby also make it more difficult for domestic firms to exercise market power through anti-competitive practices. Until very recently, Hong Kong and Singapore, two of the most open economies in the world, eschewed such policies on the grounds that their extremely open trade regimes were sufficient to ensure competition.

97. There are, nonetheless, important reasons why competition law can play an important role, even in economies characterized by low tariff and non-tariff barriers to foreign competition. First, even in the most open economies, some markets will remain primarily local in nature, in which case, the absence of tariffs or non-tariff barriers to trade may not prevent domestic firms from successfully colluding to raise prices or engaging in other harmful practices. A second reason why competition law may have an important role to play, even in the absence of tariffs and other traditional trade barriers, concerns the existence of trans-national anti-competitive practices, notably cartels. The argument that competition law is unnecessary in the absence of impediments to trade and foreign investment depends on the notion of "contestability" that, if domestic firms seek to raise prices, foreign competitors will respond by increasing the supply of imports, or establishing a commercial presence, thereby posing a "threat". However, if the main foreign suppliers are members of a cartel that also includes the domestic firms, this supply response may be short-circuited.

98. Competition law also plays a key role in helping to prevent bid rigging in government procurement markets. Empirical evidence suggests that the costs of bid rigging to public treasuries can significantly exceed the costs of establishing a competition office to investigate and deter such activities.<sup>119</sup> Again, the possibility of rigged bids cannot be prevented merely by opening procurement processes to foreign competitors.

99. Competition law is also important for other reasons. In particular, the possible existence of "natural" monopolies in the supply of certain products and especially services (such as electricity, gas, water and telecommunications, where grids are necessary for distribution) means that a competition law may be required to ensure that the resulting market power is not abused, irrespective of whether these monopolies are state- or privately-owned. Moreover, in many jurisdictions, it is recognized that competition law has a role to play in preventing abusive practices relating to intellectual property rights in the domestic economy owing to the temporary monopoly power granted to owners of intellectual property. It is unlikely that the mere absence of tariffs and other traditional trade barriers can suffice to prevent such practices, particularly since patents or copyrights can themselves affect the ability to supply domestic markets through imports.

---

<sup>119</sup> See "Study on Issues Relating to a Possible Multilateral Framework on Competition Policy" (WT/WGTCP/W/228, 19 May 2003), pp. 57-61.

100. For the reasons cited above, the absence of formal barriers to international trade or investment is unlikely to make competition law redundant, even in small economies. However, the *application* of competition law can be tailored to take account of the role of foreign competition in particular markets. For example, in markets where foreign competition is indeed robust and imports respond quickly to domestic price increases, a merger of domestic firms may not raise competition policy concerns. Accordingly, these factors are recognized as possible justifications for allowing mergers to proceed in various jurisdictions. In addition, the deliberate opening of markets to foreign competition has been used as a remedy to avoid the possibility of mergers having anti-competitive effects in particular cases. These points illustrate that, although market openness does not make competition law redundant, trade and competition policy can indeed be applied in ways that are mutually supporting.

101. It follows that an open trade regime does not necessarily obviate the need for a comprehensive competition law. Interestingly, after long eschewing such a comprehensive competition law, Singapore introduced one in 2005 and Hong Kong's legislature is currently considering whether to implement such a law.<sup>120</sup> In order to prevent monopolies arising in their domestic markets or reduce their exposure to international cartels, more developing countries need to consider how competition policy can protect the interests of their own producers and consumers.

## **X. TAX COMPETITION, ENVIRONMENTAL STANDARDS, AND WORKING CONDITIONS**

102. Although various impediments to inward foreign direct investment (FDI) remain, most of which are not yet covered by WTO rules<sup>121</sup>, realization of FDI's important role in improving growth and productivity, and thus competitiveness, has prompted most Asian economies to increase their attractiveness to FDI by reducing impediments unilaterally or through bilateral<sup>122</sup> or regional agreements. Countries' desire to attract capital, the most mobile factor of production, raises some similar concerns in several major policy areas, notably public finances (including the matters of taxation, public expenditure and incentives), environmental protection, and working conditions. Whereas taxation has long been an important, as well as controversial, issue in multilateral trade negotiations, environmental protection and employment conditions have come to the forefront of the trade and investment negotiations only more recently.<sup>123</sup>

103. Insofar as they are more onerous for foreign investors than for domestic investors, taxes and environmental or labour regulations can be used to deter FDI, contrary to national treatment.<sup>124</sup> However, there is concern that countries' desire to attract capital and consequent liberalisation of international capital flows might, under certain circumstances, contribute to the unacceptable degradation, not just of countries' tax bases and therefore public finances (to the detriment of essential public services and social programmes), but also of the environment and working conditions. More specifically, the usual definition of national treatment would not prevent countries competing for FDI by levying lower taxes on foreign investors than on its own investors (as in the case of China, where until recently foreign invested enterprises were subject to a much lower statutory corporate tax rate

---

<sup>120</sup> The draft law covers only anti-competitive agreements and abuse of market power, with no provisions for mergers at this stage (other than the existing merger control regime in the telecommunications sector).

<sup>121</sup> The only WTO agreements dealing with impediments to investment involve TRIMs and GATS insofar as commercial presence is involved.

<sup>122</sup> These agreements include bilateral investment treaties (BITs) and tax treaties.

<sup>123</sup> Wide differences between Members as to how to deal with the vexed issues of the environment and labour standards were among the many matters contributing to their failure to agree to launching a new round of multilateral trade negotiations during the WTO Ministerial in Seattle in November 1999. This came on the heels of the collapse of negotiations concerning a Multilateral Agreement on Investment (MAI) at the OECD.

<sup>124</sup> National treatment ensures that whatever policies a Member chooses to implement with regard to taxation, environmental protection and employment conditions, foreign investors would be treated no less favourably than domestic investors. This obligation would not impinge upon national governments' freedom to levy taxes and establish their own environmental and labour market regulations.

than domestic enterprises). Nor would it prevent countries from applying looser environmental protection or labour market regulations (including those concerning minimum wages and collective bargaining) to foreign than to domestic investors. (Papua New Guinea, the Philippines, and Indonesia, for example, reportedly lowered their environmental standards to attract FDI into mining<sup>125</sup>, while Bangladesh does not allow the formation of labour unions or strikes in its export processing zones.) Indeed, concerns over the possibility of looser labour market regulations (including those concerning minimum wages and collective bargaining) as well as environmental protection being applied to foreign than to domestic investors so as to attract FDI has resulted in the U.S. attaching provisions to its PTA with Singapore, and New Zealand doing the same in its PTAs with Thailand, for example, prohibiting such regulatory subsidies.<sup>126</sup> Nor does national treatment prevent countries from setting equally low tax rates or regulatory standards for foreign and domestic investors alike in order to attract FDI (the so-called "haven" problem), thus leaving the way open for a "race to the bottom" concerning the tax base and provision of public services, environmental protection and employment conditions. For instance, China now supplies roughly 95% of the world's rare earth minerals because other countries would not accept the environmental costs of its production.<sup>127</sup>

### (a) Tax competition

104. Notwithstanding various impediments to foreign investment, capital is characterized by a relatively high degree of international mobility. Consequently, taxes levied on income from capital are arguably the most vulnerable to international tax competition, tax planning and tax evasion. This could result in the burden of taxation gradually shifting instead to less mobile factors<sup>128</sup>, such as labour (except, possibly, highly-skilled, and therefore more geographically mobile, individuals), and property owners, or to consumers. Thus, the process of globalisation could undermine countries' ability to implement comprehensive and progressive income taxes, forcing them instead to rely much more on alternative types of taxes to finance public expenditure, including that on public goods, notably infrastructure, and redistributive programmes.

105. The immediate threat posed by tax and other forms of competition for FDI should not be exaggerated, however. In the first place, notwithstanding the trend towards increased globalisation, empirical evidence suggests that capital is still quite immobile internationally.<sup>129</sup> Furthermore, there is some doubt as to the extent to which tax incentives in the host country do in fact have a strong influence on decisions regarding FDI.<sup>130</sup> After all, taxation is merely one of several factors determining such decisions; as pointed out earlier (section (5)(b)(v)), others tend to be more important determinants of FDI than taxation.<sup>131</sup> Some determinants, such as infrastructure and availability of

---

<sup>125</sup> Consumer Unity and Trust Society (CUTS), 2003, "How Mining Companies Influence the Environment", Briefing Paper No. 1, Jaipur.

<sup>126</sup> With a view to increasing the share of manufacturing in its GDP and attracting foreign investment, India is reportedly formulating a new policy that would allow greater flexibility in its labour laws and environmental standards in National Manufacturing Investment Zones ("India working on new manufacturing policy", 22 May 2011, Asia Pulse Pty Limited).

<sup>127</sup> Malaysia, for example, closed a rare earth processing plant (built by a Japanese firm) in 1992 owing to protests.

<sup>128</sup> Insofar as relatively immobile factors do indeed bear the burden of such taxes, it would be better to levy taxes on such factors directly so as not to discourage direct investment from abroad.

<sup>129</sup> For a review of the reasons for this situation, see Gordon, Roger, H., 1992, "Can Capital Taxes Survive in Open Economies?" *Journal of Finance*, vol. 47(3), pp. 1159-80, July.

<sup>130</sup> Interestingly, a PC inquiry into state assistance, including tax incentives, to industry showed that bidding wars for investment constitutes not only a negative sum game nationally, but in many cases a zero sum game for the winning state (Banks, G., 2002, "Inter-State bidding wars: calling a truce", Speech to the Committee for Economic Development of Australia, Brisbane, 6 November).

<sup>131</sup> Even in the case of taxation, as pointed out earlier (section (5)(b)(vi)), the potential for tax competition is reduced to the extent that income from cross-border investment is taxed in accordance with the principle of capital export neutrality (CEN).

skilled labour are the outcomes of public expenditures financed by taxation so that the latter cannot be considered in isolation.<sup>132</sup> In any event, despite the marked downward trend in statutory corporate tax rates in the Asia-Pacific region during the past 20 years or so, corporate taxes have broadly held up, both as a share of GDP and as a share of total tax revenues, at least in OECD Members (namely Australia, Japan, Korea, and New Zealand), partly because these cuts have been accompanied by the broadening of countries' income tax bases by means of the curtailment of tax incentives. China, for example, recently ended its reduced tax rate for FIEs by unifying the statutory corporate tax rate for these and domestic enterprises. Nonetheless, it might be appropriate for Members in the region to cooperate with each other to prevent what they agree to be "harmful" tax competition.

**(b) Environmental standards**

106. Further liberalization of international investment flows and sound environmental policies should be mutually reinforcing. The reduction in impediments to international investment flows can contribute to the optimal use of world resources, which is beneficial to the global environment.<sup>133</sup> At the same time, it facilitates the dissemination of best-practice production methods and new technologies, which usually embody higher environmental standards. (It does not impinge upon national governments' freedom to implement their own policies concerning health, safety and environmental standards, provided those standards are no more stringent for foreign than for domestic investors as required by the NT principle.)

107. Nonetheless, the suggestion is sometimes made that the liberalization of investment flows might, under certain circumstances, contribute to the degradation of environmental standards. To the extent that environmental regulations significantly increase the costs of firms operating in pollution intensive industries, these increased costs of doing business could cause such firms to migrate to countries where such regulations are less stringent (the so-called "pollution haven" hypothesis). While this argument that loose environmental regulations could affect comparative advantage, thereby altering international trade and FDI flows has both intuitive appeal and considerable theoretical support, there has been little empirical evidence in this regard. A survey of the empirical evidence concluded that while environmental regulations do impose large and significant costs on polluting industries, these cost have not appreciable affected international trade or investment.<sup>134</sup> As far as the Asia-Pacific region is concerned, this conclusion is broadly supported by more recent evidence from China<sup>135</sup> and ASEAN countries.<sup>136</sup> There are several reasons for the difficulty in detecting significant effects of environmental regulation on trade and investment competitiveness. First, for most industries, pollution abatement costs constitute only a small component of total costs. Second, the industries that do incur the largest pollution abatement costs happen to be those that are the least mobile internationally owing to transportation costs, fixed plant costs or agglomeration economies. Third, most trade and FDI flows are still among industrialised countries that share similarly high

---

<sup>132</sup> There is a growing literature that higher levels of trade systematically lead to larger public sectors, especially in developed countries.

<sup>133</sup> Insofar as elements of market failure and other distortions exist, including those relating to the environment, there is the theoretical "second-best" possibility that the removal of impediments to FDI flows might result in an overall deterioration in welfare.

<sup>134</sup> Jaffe, A., S. Peterson, P. Portney, and R. Stavins, 1995, "Environmental Regulations and the Competitiveness of U.S. Manufacturing: What does the evidence tell us?" *Journal of Economic Literature* 33, 132-163.

<sup>135</sup> Contrary to the pollution haven hypothesis, FDI from non-Chinese sources is seemingly attracted to provinces with more stringent environmental regulations (see Dean, Judith M., Mary E. Lovely and Hua Wang, 2004, "Foreign Direct Investment and Pollution Havens: Evaluating the Evidence from China" U.S. International Trade Commission, Washington D.C.).

<sup>136</sup> Elliot, Robert J.R., and Kenichi Shimamoto, 2008, "Are ASEAN Countries havens for Japanese Pollution-Intensive Industry?", *World Economy*, Vol. 31, Issue 2, pp. 236-254.

levels of environmental stringency, which suggests that environmental regulations have stronger effects on trade and FDI flows between industrialised and developing countries.<sup>137</sup>

108. In this regard, the authorities in China, one of the main destinations for FDI and now the world's largest exporter as well as the world's biggest polluter, have been taking measures to arrest environmental deterioration. These measures include: a pollution levy system, which is by far the broadest application of price-based pollution control in the developing world<sup>138</sup>; reduced VAT rebates on exported goods deemed energy-intensive and highly polluting, which, as we have seen earlier, are not the best way to achieve this objective; preferential "green" credit to "environmental-friendly endeavours" at the expense of energy intensive-industries; subsidized loans for desulphurization; and drawing up a public data base of the country's worst polluters. As a consequence, in China the energy intensity of production, for example, has been declining. More broadly, China is now emphasizing the need for slower, cleaner growth involving a target of 7% annual growth in GDP, substantially less than the average annual rate of almost 10% achieved during the past two decades on the grounds that it needs to manage resources better and cannot "continue to sacrifice the environment at the cost of high-speed growth".<sup>139</sup> India too has been implementing measures to improve the environment, including following China's example concerning a data base.

### (c) Working conditions

109. The issue of trade and labour standards moved to the forefront of the policy agenda following the conclusion of the Uruguay Round Agreements.<sup>140</sup> Given the rapid expansion of international investment flows, links between FDI, wages and working conditions have also been attracting attention, especially in industrialized countries. Interest in working conditions generally, and labour standards in particular, was initially prompted by the protracted rise in unemployment during the late 1980s and early 1990s and wage inequality in many OECD countries (especially the U.S. and Britain), leading some observers to seek external explanations for these phenomena, including claims of "unfair" competition from firms operating in foreign countries whose comparative advantage is allegedly based on low wages and substandard working conditions. However, this view has been challenged by others who regard internal structural rigidities, particularly in labour markets, together with technological change as the main causes of high unemployment and growing wage inequality and who claim that differences in working conditions and labour standards do not have any significant effect on trade flows or foreign direct investment.<sup>141</sup>

---

<sup>137</sup> See Josh Ederington, Arik Levinson and Jenny Minier, 2003, "Footloose and Pollution-Free", NBER Working Paper No. W9718.

<sup>138</sup> The levy actually paid is the outcome of negotiations between the firm and the Government. Survey evidence suggests that state-owned enterprises pay lower rates than privately-owned firms.

<sup>139</sup> WTO Reporter, 2011, "Wen Says China's GDP Growth to be Lowered in Part because of Environmental Concerns", 3 March.

<sup>140</sup> Much attention tends to be focused on "core" labour standards (OECD, 1996, *Trade, Employment and Labour Standards*, Paris). These are: elimination of child labour exploitation, prohibition of forced labour, freedom of association, the right to organize and bargain collectively, and non-discrimination in employment. The choice of these labour standards is based primarily on the fact that they embody important human rights, and that they derive from the Universal Declaration of Human Rights. It is argued that observance of these core standards might also pave the way for better working conditions. The relevance of these standards for investment decisions arises from their link to labour costs -- either directly, where, for example, prohibition of forced or child labour translates into higher labour costs, or indirectly, where freedom of association and collective bargaining provide employees with the opportunity to negotiate higher wages and better working conditions. The more labour intensive the production process, the more relevant are labour costs to investment decisions.

<sup>141</sup> Growing wage inequality in the U.S and U.K., especially in the 1980s, together with rising unemployment (but rather stable wage inequality) in continental Europe have led to a popular view that these two phenomenon are related to negative relative demand shocks against unskilled labour in the industrialized countries (possibly owing in part to stronger competition from developing countries where unskilled labour is

110. While economic theory suggests that multinational firms can have a both positive and negative effects on workers in developing countries, a review of the empirical literature concluded that "there is virtually no careful and systematic evidence demonstrating that, as a generality, multinational firms adversely affect their workers, provide incentives to worsen working conditions, pay lower wages than in alternative employment, or repress workers' rights."<sup>142</sup> On the contrary, there is a very large body of empirical evidence that the opposite is true; in countries where they operate, multinational enterprises tend to pay higher wages than domestic enterprises.<sup>143</sup> In Indonesia, for example, foreign-owned enterprises paid 12% more to production workers and 20% more to non-production workers than locally-owned firms.<sup>144</sup> Foreign ownership increases wages by raising labour productivity and expanding the scale of production, and in the process, improving working conditions. Insofar as foreign ownership does raise wages of the multinational firms' employees relative to other workers owing to their higher labour productivity, it may also increase income inequality in the country welcoming the foreign investment, as in the case of most countries in the Asia-Pacific region for which data are available. The increases were particularly sizeable in China, Korea and Thailand. However, increased inequality is not necessarily detrimental to the country concerned provided living standards are rising and poverty rates are falling across the broad population, as in China, for example. Empirical evidence also indicates that multinational firms are not typically attracted to countries with weak labour standards<sup>145</sup>; instead, evidence of a positive association over time between successfully sustained trade reforms and improvements in "core" labour standards suggests a mutually supportive relationship also between investment liberalization and improvements in the same standards.<sup>146</sup>

111. Again, China has implemented measures, including the Labour Contract Law<sup>147</sup> and Minimum Wage Regulations.<sup>148</sup> Consequently, according to the ILO, minimum wages (in real terms) have grown by more than 8% annually over the period 2001-2007 and real wages have risen by 12.6% annually between 2006 and 2009 (compared with a drop of 2% in Indonesia and rise of 1.3% in Thailand), roughly in line with manufacturing labour productivity, which has grown at an average annual rate of between 10% and 15% since 1990. With Hong Kong's implementation of a minimum wage in 2001, most Asian economies now have a minimum wage law or are considering one; Singapore is an exception.

---

relatively plentiful and cheap), combined with flexible wages in the so-called Anglo-Saxon economies, but institutional and thus wage rigidities in continental Europe (the "Krugman hypothesis").

<sup>142</sup> Drusilla K. Brown, Alan V. Deardorff and Robert M. Stern, 2003, "The Effects of Multinational Production on Wages and Working Conditions in Developing Countries", NBER Working paper No. W9669, May 2003.

<sup>143</sup> OECD, 2008, *The Impact of Foreign Direct Investment on Wages and Working Conditions*, Paris.

<sup>144</sup> Lipsey, R.E., and F. Sjöholm, 2004, "FDI and Wage Spillovers in Indonesian Manufacturing," *Review of World Economics*, Vol. 140(2), pp. 321-332.

<sup>145</sup> However, some cases have been recorded where governments appear to deny basic labour standards to workers or deliberately do not to enforce them with the aim of improving sectoral trade competitiveness or attracting investment into export-processing zones (EPZs).

<sup>146</sup> The OECD study also argues that failure to observe core labour standards can hamper a country's economic efficiency and the growth of its exports. Child labour exploitation, discrimination in employment, slavery and exploitation of labour in general are liable to perpetuate an inefficient economic situation and to generate an unstable social/business climate.

<sup>147</sup> Interestingly, it has been suggested that U.S. multinational enterprises (MNEs) operating in China tended to oppose the new Labour Contract Law that entered into force on 1 January 2001, as they felt they may need to apply labour provisions more rigorously than their local counterparts owing to pressure from U.S. consumers (Halegua, A., 2007, "The Debate Over raising Chinese Labour Standards Goes International," *Harvard Law Policy Review*, 5 April). If applied world-wide to all U.S. MNEs, such pressure would be in accordance with the principle of CEN as far as labour standards are concerned.

<sup>148</sup> WTO, 2008, *Trade Policy Review – China*, Geneva, p. 17. China has not only being raising minimum wages, but also exemption thresholds for personal income tax.

## XI. CONCLUSIONS

112. The following are among the main lessons that can be drawn from the some 90 Reviews conducted of WTO Members in the Asia-Pacific region since the Trade Policy Review Mechanism was established over 20 years ago. First and foremost, impediments to economic development are largely home-grown. Consequently, unilateral reform of policies and measures is of paramount importance. Nonetheless, trade and FDI liberalization have received added impetus from multilateral liberalization under the auspices of the GATT/WTO; indeed, multilateralism builds broader support for trade liberalization among exporters by providing them with the opportunity of more open export markets. However, with the negotiations currently stalled at the WTO in connection of the Doha Development Agenda (DDA), unilateral liberalization of trade and FDI is the way to go, rather than waiting for further multilateral liberalization. By contrast, the benefits of PTAs are not so obvious. Notwithstanding their proliferation during the past decade throughout the Asia-Pacific region, mainly for "defensive" reasons, few governments in the region have subjected these agreements to rigorous cost-benefit (C-B) analysis. One major exception in this regard is Australia, where the independent Productivity Commission recently found little evidence that Australia's bilateral agreements to date have provided substantial commercial benefits. It concluded that although PTAs can reduce trade barriers and help meet other objectives, their potential impact is limited and other options often may be more cost-effective; by comparison, unilateral domestic economic reform offers relatively large economic benefits.

113. Reforms, whether unilateral or in connection with bilateral, regional or multilateral trade agreements, can be greatly facilitated by transparency, including C-B analysis of policies and measures, that take full account not just the interests of domestic producers, but also those of other groups, including exporters and domestic consumers. However, high quality transparency involving C-B analysis is not cheap. Indeed, transparency may be considered prohibitively costly by less developed countries, which also lack the institutional capacity to implement it. Nevertheless, the costs of achieving transparency pale in comparison with the amounts of financial assistance involved and the deadweight efficiency losses associated with such assistance. It follows that less developed economies would need technical and financial support to enable them to institutionalize transparency. TPRs reveal not just measures that appear to contravene WTO rules, although that is not their purpose. More importantly, they throw light on measures not seemingly covered by WTO rules, but which can, nonetheless, have economic effects equivalent to measures that are subject to these rules.

114. Economies in the Asia-Pacific region, especially East Asia, have been much more successful than those in other regions in achieving fast growth, and thereby raising living standards and reducing poverty. This success can be attributed to their common outward-looking strategy. This strategy has involved, *inter alia*, an increasingly high degree of integration into the global economy with heavy reliance on growth of manufactured exports, high rates of national saving to finance high rates of domestic investment, including public investment in physical and social infrastructure (notably education), supplemented by foreign direct investment (FDI) as well as maintenance of macroeconomic stability, reliance on a functioning market system to allocate resources, and committed, capable, and credible governments. It is doubtful whether Asia's success can be replicated without satisfying some, if not most, of these conditions.

115. The consequent high levels of national saving in relation to domestic investment has, in some instances, notably Japan and more recently China, been reflected in large current account surpluses, which have caused friction with those of their trading partners experiencing current account deficits, particularly as far as exchange rates are concerned. It follows that the appropriate way to redress these imbalances is to focus on the sources of saving-investment gaps rather than on monetary and exchange rate policies, or resorting to measures aimed at managing trade. Their heavy dependence on domestic investment and exports for growth, and the resulting current account imbalances, has prompted a rethink in a number of East Asian economies of their development strategies. China, Chinese Taipei, Korea and Malaysia, for example, are now attempting to wean their economies off investment and exports and give freer rein to domestic consumption.

116. In implementing the above development strategy in the early stages, governments in the Asia Pacific region deployed fairly active industrial policies entailing various degrees and forms of direct or indirect government intervention, seemingly on grounds of, *inter alia*, "market failure", including the perceived need to foster "infant" or "strategic" industries. Nevertheless, the cost-effectiveness of these policies is doubtful; for example, in the case of tax incentives for investment, which have been among the preferred instruments of industrial policy, most C-B analyses show that forgone tax revenues usually exceed the increase in investment induced by the incentives. Hence, it is far from obvious that governments can allocate resources better than even imperfect markets. In influencing the allocation of domestic resources, however, governments have largely refrained from defying their economies' comparative advantage. As circumstances, including comparative advantage, have changed, policies have evolved over time as countries increasingly liberalized their economies, by lowering barriers to trade and FDI and changing their regulatory frameworks, so as to promote competition and a thus more efficient allocation of resources. Since the onset of the global financial crisis, although Members in the region have, by and large, refrained from taking protectionist measures, there appears to have been a revival of industrial policies, possibly facilitated by large fiscal stimuli packages.

117. While the overall trend in nominal *applied* MFN rates in the Asia-Pacific region continues to be downwards, the tariff remains a major instrument of industrial policy in many countries and thus a distortion to competition. Even in industrialized countries, where average nominal *applied* MFN tariff rates are seemingly low, "effective" rates can be considerably higher. Moreover, the existence of tariff "peaks" in certain sectors, notably textiles and clothing as well as agriculture, suggests that the domestic dead-weight and net welfare losses caused by tariff protection as well as the costs to consumers in those countries could be high. Such losses and costs to consumers are also likely to be high in developing countries, where overall tariff protection is greater than in industrialized countries. However, some developing countries that were previously heavily dependent on the tariff for tax revenues have managed to reduce tariff rates and successfully replaced the lost revenues with less distorting internal taxes, such as excises and VAT.

118. With tariffs declining, NTBs and internal measures, some of which are not covered by WTO agreements, have become more evident. For example, the number of anti-dumping measures taken by WTO Members in the Asia-Pacific region rose significantly subsequent to 1995, but after peaking at 129 in 2003, declined to level off to about half that number between 2004 and 2009. This raises concerns about the appropriate use of the provisions, which were put into place to protect countries from "unfair" trade arising from "dumping" or from the use of subsidies; their use is viewed by some as a non-tariff barrier to trade.

119. Although Asia-Pacific economies' development strategies have involved policies aimed at facilitating manufactured exports, there appears to have been a growing trend in instances (mainly involving food, metals and minerals) where exports have been restrained by various measures for a wide variety of reasons. Such restraints are seldom the best way to achieve their various objectives and can even have perverse economic effects. In this regard, whereas import tariffs are subject to WTO rules, export taxes are not, even though they too can be used to influence the terms of trade and as an instrument of industrial policy.

120. Government procurement continues to be a major instrument of industrial policy, even in the five Asia-Pacific economies covered by the GPA. As a consequence, foreign suppliers appear to have less access to government procurement market in a country than they do to the market as a whole.

121. There has been a gradual realization by Members in the Asia-Pacific region that opening up their markets to competing foreign products and allowing new entrants is not a substitute for an actively enforced competition policy. Consequently, more and more of them have unilaterally introduced competition laws with varying degrees of comprehensiveness to address anti-competitive behaviour.

122. There is no strong empirical evidence that countries' desire to attract inward FDI has resulted in a "race to the bottom" as regards public finances, environmental protection or working conditions.

123. Finally, some of those policies and measures identified by TPRs that are not, or only partially, covered by WTO rules (e.g., export taxes, government procurement practices, regulatory subsidies) can have economic effects similar to those that are. This suggests that consideration needs to be given to bringing them within the purview of the WTO. The same applies to private anti-competitive practices, which can prevent competition and distort trade.

**Table A1**  
**Structure of MFN tariffs in selected countries**  
(Per cent)

	Australia				New Zealand				Japan				Korea, Rep. of			
	MFN applied			F.B. (2010) <sup>a</sup>	MFN applied			F.B. (1996) <sup>a</sup>	MFN applied			F.B. (2010) <sup>a</sup>	MFN applied			F.B. (2008) <sup>a</sup>
	1997	2002	2010		1996	2002	2009		1996 <sup>b</sup>	2002 <sup>b</sup>	2010 <sup>b</sup>		1996	2002	2008	
1 Bound tariff lines (per cent of all tariff lines)	96.2	96.7	96.5	96.5	99.6	99.6	99.5	99.6	98.9	98.9	98.9	98.9	91.0	91.5	90.8	90.8
2 Simple average rate	5.9	4.5	3.1	10.1	7.1	4.1	2.4	11.6	9.0	6.9	5.8	5.9	14.4	13.5	12.8	17.1
WTO agricultural products	1.5	1.5	1.6	4.1	4.5	2.1	1.8	7.4	..	20.1	15.7	16.0	56.2	52.8	53.5	62.5
WTO non-agricultural products	6.5	5.0	3.3	11.2	7.5	4.4	2.5	12.3	..	3.9	3.5	3.5	7.7	7.3	6.5	9.3
Textiles and clothing	17.0	12.4	5.4	24.0	13.9	9.5	4.2	19.2	8.7	7.0	6.6	6.6	7.8	9.8	9.7	18.4
ISIC 1 - Agriculture, hunting and fishing	0.3	0.3	0.3	1.3	1.6	0.5	0.4	2.2	..	7.2	4.4	4.3	51.9	49.2	48.1	59.8
ISIC 2 - Mining	0.6	0.4	0.5	2.2	1.4	0.1	0.1	1.8	..	0.1	0.1	0.1	2.7	2.7	2.4	4.1
ISIC 3 - Manufacturing	6.3	4.8	3.3	10.8	7.5	4.3	2.5	12.2	..	6.9	6.0	6.1	12.0	11.3	10.5	14.6
First stage of processing	0.5	0.5	0.4	1.5	1.4	0.6	0.4	1.8	..	9.2	5.7	5.7	36.9	35.1	34.4	42.8
Semi-processed products	5.9	4.2	2.9	10.1	4.1	2.2	1.4	7.2	..	4.8	4.7	4.8	11.1	10.5	8.8	10.9
Fully processed products	7.0	5.5	3.7	11.8	9.6	5.6	3.2	15.5	..	7.8	6.7	6.8	11.2	10.4	10.2	15.4
3 Duty free tariff lines (per cent of all tariff lines)	40.5	47.4	46.2	19.8	49.9	54.8	57.7	37.1	34.9	36.7	41.4	40.5	2.0	8.3	15.9	15.5
4 Tariff quotas (per cent of all tariff lines)	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	1.6	1.7	1.8	1.8	1.7	1.7	1.7	1.7
5 Non- <i>ad valorem</i> tariffs (per cent of all tariff lines)	0.3	0.3	0.3	0.4	3.4	2.7	0.1	2.8	7.1	7.1	6.6	6.4	0.5	0.6	0.7	1.0
6 Non- <i>ad valorem</i> tariffs with no AVEs (per cent of all tariff lines)	0.0	0.0	0.0	0.1	3.4	0.3	0.0	2.8	..	1.2	2.0	1.9	0.5	0.6	0.7	1.0
7 Domestic tariff "peaks" (per cent of all tariff lines) <sup>c</sup>	10.7	11.4	3.9	5.6	6.3	9.4	5.6	5.9	..	6.0	6.6	6.7	2.4	2.5	2.6	3.0
8 International tariff "peaks" (per cent of all tariff lines) <sup>d</sup>	10.7	4.1	0.2	13.7	9.1	8.0	0.0	35.0	..	7.6	7.4	7.5	8.7	8.9	8.9	19.7
9 Overall standard deviation of tariff rates	11.6	9.9	6.5	10.9	8.8	5.9	3.0	12.2	40.8	32.6	16.0	16.1	57.5	53.1	52.1	54.9
10 Nuisance applied rates (per cent of all tariff lines) <sup>e</sup>	0.0	0.0	0.0	9.3	0.0	0.0	0.0	0.1	..	6.1	1.3	1.2	2.7	2.9	1.9	2.0

	Pakistan				India				Bangladesh				Sri Lanka			
	MFN applied			F.B. (2006) <sup>a</sup>	MFN applied			F.B. (2010) <sup>a</sup>	MFN applied			F.B. (1999) <sup>a</sup>	MFN applied			F.B. (2009) <sup>a</sup>
	1996 <sup>b</sup>	2002 <sup>b</sup>	2007 <sup>b</sup>		1997 <sup>b</sup>	2001 <sup>b</sup>	2010 <sup>b</sup>		1994 <sup>b</sup>	1999 <sup>b</sup>	2008 <sup>b</sup>		1997	2003	2010	
1 Bound tariff lines (per cent of all tariff lines)	..	..	98.0	98.0	..	73.3	75.6	75.6	..	13.2	15.0	15.0	36.7	..	36.4	35.8
2 Simple average rate	41.7	17.4	14.5	61.3	35.3	32.3	12.0	46.4	34.5	22.2	15.1	163.0	11.8	9.8	11.5	32.4
WTO agricultural products	43.9	20.0	14.8	96.1	35.2	40.7	33.2	118.3	..	24.6	18.2	189.3	27.6	21.3	25.6	50.1
WTO non-agricultural products	41.3	17.0	14.5	56.7	35.4	31.0	8.9	32.1	..	21.9	14.6	38.1	9.3	8.0	9.2	21.1
Textiles and clothing	52.5	21.9	19.3	24.1	43.7	31.3	9.7	28.7	..	31.5	21.1	44.4	6.8	5.2	7.4	12.2
ISIC 1 - Agriculture, hunting and fishing	38.1	14.1	8.8	88.6	26.7	32.9	28.9	95.4	..	21.2	17.3	179.8	21.9	16.8	20.8	48.4
ISIC 2 - Mining	28.3	11.4	6.7	58.9	25.5	21.3	5.1	36.2	..	12.1	12.2	25.0	6.9	5.3	6.3	50.0
ISIC 3 - Manufacturing	42.1	17.7	15.0	59.9	36.1	32.5	11.1	43.2	..	22.5	15.0	155.6	11.2	9.3	10.9	28.9
First stage of processing	35.0	12.3	7.6	73.3	25.6	29.3	22.5	76.8	..	17.7	15.6	179.1	16.2	12.5	15.7	45.7
Semi-processed products	38.8	15.4	10.7	52.2	35.7	32.3	8.6	40.7	..	20.6	14.1	147.8	7.2	4.4	4.1	16.8
Fully processed products	44.5	19.7	17.9	64.2	37.3	33.0	12.2	43.6	..	24.1	15.6	153.2	13.4	12.1	14.5	32.5
3 Duty free tariff lines (per cent of all tariff lines)	0.8	0.0	5.8	0.0	1.4	1.1	3.2	1.9	3.7	8.4	3.8	0.2	19.8	10.0	44.4	0.4
4 Tariff quotas (per cent of all tariff lines)	..	0.0	0.0	0.0	..	0.1	0.1	..	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 Non- <i>ad valorem</i> tariffs (per cent of all tariff lines)	1.9	0.7	0.6	0.0	0.2	5.3	6.1	8.0	0.1	0.1	0.5	0.0	0.6	1.3	3.9	1.8
6 Non- <i>ad valorem</i> tariffs with no AVEs (per cent of all tariff lines)	1.9	0.7	0.6	0.0	0.2	5.3	6.1	8.0	0.1	0.1	0.5	0.0	0.6	1.3	3.9	1.8
7 Domestic tariff "peaks" (per cent of all tariff lines) <sup>c</sup>	0.4	0.8	1.1	0.0	0.2	1.3	2.2	6.5	0.1	0.0	0.0	0.0	0.3	0.3	0.3	0.1
8 International tariff "peaks" (per cent of all tariff lines) <sup>d</sup>	82.7	54.9	40.0	97.0	90.5	93.9	11.9	87.7	76.8	55.8	41.8	96.1	26.5	21.9	23.9	69.0
9 Overall standard deviation of tariff rates	22.5	11.6	11.7	22.3	14.5	13.0	14.2	40.8	17.7	13.2	8.9	69.0	14.2	12.4	14.7	20.2
10 Nuisance applied rates (per cent of all tariff lines) <sup>e</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	..	0.0	0.0	0.0	0.0	27.1	0.0	0.0

	Malaysia				Indonesia				Singapore				Thailand			
	MFN applied			F.B. (2002) <sup>a</sup>	MFN applied			F.B. (1998) <sup>a</sup>	MFN applied			F.B. (2005) <sup>a</sup>	MFN applied			F.B. (2011) <sup>a</sup>
	1997	2005	2009		1998	2003	2006		1996	2003	2008		1999	2003	2011	
1 Bound tariff lines (per cent of all tariff lines)	..	..	..	80.6	95.6	..	..	95.6	..	..	..	69.6	..	73.7	73.6	73.6
2 Simple average rate	8.1	8.1	7.4	15.6	9.5	7.2	9.5	37.5	0.0	0.0	0.0	6.9	17.0	13.0	11.2	28.1
WTO agricultural products	3.9	3.2	2.8	11.0	8.8	8.6	11.8	47.7	0.0	0.0	0.0	9.4	33.1	25.0	26.5	37.0
WTO non-agricultural products	8.6	8.7	7.9	16.5	9.6	7.0	9.2	35.8	0.0	0.0	0.0	6.4	14.7	11.2	9.0	26.0
Textiles and clothing	17.5	12.5	12.2	20.4	14.6	10.5	10.9	29.3	0.0	0.0	0.0	10.0	24.7	18.6	14.7	29.0
ISIC 1 - Agriculture, hunting and fishing	0.6	0.4	0.7	7.1	4.2	4.1	4.2	42.0	0.0	0.0	0.0	9.9	28.8	20.6	20.5	29.7
ISIC 2 - Mining	0.9	0.8	0.8	8.1	4.0	3.9	3.9	39.8	0.0	0.0	0.0	10.0	5.1	2.3	1.6	23.4
ISIC 3 - Manufacturing	9.7	9.6	8.7	16.2	10.0	7.5	9.8	37.1	0.0	0.0	0.0	6.7	16.5	12.8	10.8	28.0
First stage of processing	1.0	0.9	1.1	7.8	4.3	4.1	4.7	40.8	0.0	0.0	0.0	9.5	20.2	13.2	14.1	28.8
Semi-processed products	7.0	9.0	8.7	16.9	7.7	6.2	7.0	35.9	0.0	0.0	0.0	6.1	12.2	7.0	3.9	27.4
Fully processed products	11.9	10.4	9.1	16.3	11.8	8.6	11.1	37.8	0.0	0.0	0.0	6.9	19.0	16.6	13.8	28.2
3 Duty free tariff lines (per cent of all tariff lines)	57.7	57.8	60.3	5.7	20.2	21.8	22.0	1.8	99.9	99.9	99.9	22.5	3.5	4.1	18.6	2.0
4 Tariff quotas (per cent of all tariff lines)	..	..	0.2	..	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.0	1.2	1.2
5 Non- <i>ad valorem</i> tariffs (per cent of all tariff lines)	4.4	0.7	0.8	4.7	0.0	0.2	0.2	0.0	0.1	0.1	0.1	1.4	21.5	23.1	9.2	9.6
6 Non- <i>ad valorem</i> tariffs with no AVEs (per cent of all tariff lines)	4.4	0.7	0.8	4.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	1.4	20.7	20.3	8.8	9.5
7 Domestic tariff "peaks" (per cent of all tariff lines) <sup>c</sup>	15.8	13.9	11.7	0.4	1.8	1.6	5.1	0.5	0.0	0.0	0.0	0.0	3.6	3.9	5.6	0.8
8 International tariff "peaks" (per cent of all tariff lines) <sup>d</sup>	25.9	23.4	22.2	45.2	14.5	3.6	10.6	94.9	0.0	0.0	0.0	0.0	45.5	30.3	24.2	87.7
9 Overall standard deviation of tariff rates	13.9	12.6	11.5	0.8	15.7	11.2	13.7	12.7	0.0	0.0	0.0	4.1	16.3	14.3	14.1	14.9
10 Nuisance applied rates (per cent of all tariff lines) <sup>e</sup>	0.1	0.2	0.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	21.4	10.3	0.1

	China				Hong Kong, China				Macao				Chinese Taipei			
	MFN applied			F.B. (2009) <sup>a</sup>	MFN applied			F.B. (2010) <sup>a</sup>	MFN applied			F.B. (2005) <sup>a</sup>	MFN applied			F.B. (2009) <sup>a</sup>
	1996	2002	2009		1996	2002	2010		1996	2005	2010		1996	2002	2009	
1 Bound tariff lines (per cent of all tariff lines)	..	100.0	100.0	100	..	..	44.9	44.9	..	28.6	..	28.6	..	99.7	100.0	100.0
2 Simple average rate	23.6	12.2	9.5	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3	9.5	7.8	8.2
WTO agricultural products	33.8	18.2	15.2	14.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.4	24.7	22.1	23.0
WTO non-agricultural products	22.1	11.2	8.6	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4	6.6	5.0	5.4
Textiles and clothing	32.8	17.5	11.5	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.7	10.0	8.8	8.9
ISIC 1 - Agriculture, hunting and fishing	25.2	13.1	11.1	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.5	18.1	17.9	18.6
ISIC 2 - Mining	5.7	2.5	1.9	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.7	0.6	1.0
ISIC 3 - Manufacturing	23.9	12.3	9.5	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8	9.1	7.2	7.6
First stage of processing	20.4	11.2	9.5	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.1	16.0	16.3	17.2
Semi-processed products	17.0	9.5	7.1	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	5.9	5.0	5.5
Fully processed products	27.8	13.8	10.9	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.1	9.9	7.4	7.7
3 Duty free tariff lines (per cent of all tariff lines)	1.9	4.9	9.4	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	18.4	30.1	28.8
4 Tariff quotas (per cent of all tariff lines)	..	0.8	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.2	1.2
5 Non- <i>ad valorem</i> tariffs (per cent of all tariff lines)	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.1	1.8	1.8
6 Non- <i>ad valorem</i> tariffs with no AVEs (per cent of all tariff lines)	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.9	0.0	0.0
7 Domestic tariff "peaks" (per cent of all tariff lines) <sup>c</sup>	1.1	1.8	2.1	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9	3.4	5.2	4.9
8 International tariff "peaks" (per cent of all tariff lines) <sup>d</sup>	55.2	29.0	14.9	15.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.8	11.7	9.3	9.6
9 Overall standard deviation of tariff rates	17.4	9.1	7.5	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5	30.2	29.4	29.9
10 Nuisance applied rates (per cent of all tariff lines) <sup>e</sup>	1.0	2.0	2.7	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	5.5	4.4	3.6

	Papua New Guinea				Solomon Islands				Fiji				Maldives			
	MFN applied			F.B. (2008a)	MFN applied			F.B. (2009)a	MFN applied			F.B. (2006)a	MFN applied			F.B. (2008)a
	1999 <sup>f</sup>	2003	2008		1998	2003	2009		1999	2003	2009		1996	2002	2008	
1 Bound tariff lines (per cent of all tariff lines)	..	100.0	100.0	100.0	..	..	100.0	100.0	50.5	49.5	49.5	49.5	..	96.6	96.3	96.3
2 Simple average rate	20.4	6.3	5.1	32.8	22.7	..	9.1	78.8	10.0	7.9	11.3	40.2	..	20.8	21.4	37.1
WTO agricultural products	33.2	14.7	12.5	43.7	35.1	..	9.3	71.3	10.9	8.2	11.5	40.6	..	18.5	17.2	44.9
WTO non-agricultural products	18.4	5.0	3.9	31.1	20.8	..	9.1	80.0	9.9	7.8	11.3	40.0	..	21.1	22.0	35.9
Textiles and clothing	23.6	11.0	8.3	29.9	28.6	..	9.9	79.9	11.1	12.7	15.7	40.0	..	21.2	22.8	30.0
ISIC 1 - Agriculture, hunting and fishing	37.2	18.0	15.8	49.0	32.2	..	9.2	68.5	6.8	4.3	8.4	40.0	..	18.4	18.1	35.2
ISIC 2 - Mining	12.2	0.4	0.2	20.2	12.3	..	9.9	80.0	1.3	3.0	5.5	n.a.	..	24.3	23.8	30.0
ISIC 3 - Manufacturing	19.6	5.8	4.5	32.1	22.3	..	9.1	79.5	10.4	8.2	11.6	40.2	..	20.8	21.5	37.2
First stage of processing	30.2	12.5	10.6	40.6	29.2	..	9.6	71.9	5.6	4.5	8.0	40.1	..	19.9	19.0	32.8
Semi-processed products	13.3	2.2	1.7	24.1	15.4	..	8.5	78.8	5.3	5.2	7.8	40.0	..	16.8	17.3	30.4
Fully processed products	22.3	7.4	5.9	36.2	25.6	..	9.3	80.3	13.4	10.1	14.0	40.2	..	23.2	23.1	39.8
3 Duty free tariff lines (per cent of all tariff lines)	2.5	76.1	76.7	0.0	0.0	..	0.6	0.0	34.8	9.5	3.0	0.0	..	0.1	0.2	0.0
4 Tariff quotas (per cent of all tariff lines)	0.0	0.0	0.0	0.0	0.0	..	0.0	0.0	0.0	0.0	0.0	0.0	..	0.0	0.0	0.0
5 Non- <i>ad valorem</i> tariffs (per cent of all tariff lines)	1.1	1.0	1.0	1.3	1.9	..	1.3	2.2	1.4	3.9	4.5	1.1	..	0.0	0.0	0.0
6 Non- <i>ad valorem</i> tariffs with no AVEs (per cent of all tariff lines)	1.1	1.0	1.0	1.3	1.9	..	1.3	2.2	1.4	3.9	4.5	1.1	..	0.0	0.0	0.0
7 Domestic tariff "peaks" (per cent of all tariff lines) <sup>c</sup>	1.4	22.8	14.4	0.6	8.0	..	0.0	0.0	0.0	18.0	0.0	0.0	..	1.4	1.5	2.6
8 International tariff "peaks" (per cent of all tariff lines) <sup>d</sup>	30.2	22.8	14.4	72.1	54.7	..	0.0	95.3	18.3	18.7	18.5	98.9	..	59.9	64.0	100.0
9 Overall standard deviation of tariff rates	19.1	12.2	10.1	18.1	18.4	..	2.0	14.3	9.5	9.4	10.6	2.1	..	12.5	13.4	43.1
10 Nuisance applied rates (per cent of all tariff lines) <sup>e</sup>	0.0	0.0	0.0	0.0	0.0	..	0.0	0.0	0.0	0.0	0.0	0.0	..	0.0	0.0	0.0

.. Not available.

F.B. Final bound.

a Year of tariff schedule used to calculate final bound rates.

b Fiscal year.

c Domestic tariff peaks are defined as those exceeding three times the overall simple average applied rate.

d Tariff peaks are defined as those exceeding 15 per cent.

e Nuisance rates are those greater than zero, but less than or equal to 2%.

f Pre-1 July 1999.

Note: Calculations are based on national tariff line level. All calculations exclude "in quota" rates. Ad valorem equivalents (AVEs) of non-*ad valorem* duties are used insofar as they are available. Where AVEs are not available, the *ad valorem* tariff component is used for compound and alternate rates. Calculations on bindings are only based on number of tariff lines being bound.

Source: WTO Secretariat calculations, based on data provided by the Members.

**Table A2**  
**Statutory corporate tax rates in the Asia Pacific region, 1997-2010**  
 (Per cent)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Increase/ decrease in percentage points
Australia	36	36	36	36	34	30	30	30	30	30	30	30	30	30	-6.0
Bangladesh	40	40	35	35	35	35	30	30	30	30	30	30	27.5	27.5	-12.5
China	33	33	33	33	33	33	33	33	33	33	33	25	25	25	-8.0
Chinese Taipei	25	25	25	25	25	25	25	25	25	25	25	25	25	17	-8.0
Fiji	35	35	35	35	34	32	32	31	31	31	31	31	29	28	-7.0
Hong Kong, China	16.5	16.5	16	16	16	16	16	17.5	17.5	17.5	17.5	16.5	16.5	16.5	0.0
India	35	35	35	38.5	39.6	35.7	36.8	35.9	36.6	33.7	34	34	34	33.99	-1.0
Indonesia	30	30	30	30	30	39	30	30	30	30	30	30	28	25	-5.0
Japan	51.6	51.6	48	42	42	42	42	42	40.7	40.7	40.7	40.7	40.6	40.69	-10.91
Korea, Rep. of	30.8	30.8	30.8	30.8	30.8	29.7	29.7	29.7	27.5	27.5	27.5	27.5	24.2	24.2	-6.6
Malaysia	30	28	28	28	28	28	28	28	28	28	27	26	25	25	-5.0
New Zealand	33	33	33	33	33	33	33	33	33	33	33	30	30	30	-3.0
Pakistan	30	30	35	43	34.7	35	35	35	35	35	35	35	35	35	5.0
Papua New Guinea	25	25	25	25	25	25	30	30	30	30	30	30	30	30	5.0
Philippines	35	34	33	32	32	32	32	32	32	35	35	35	30	30	-5.0
Singapore	26	26	26	26	25.5	24.5	22	22	20	20	20	18	18	17	-9.0
Sri Lanka	35	35	35	35	35	42	35	35	32.5	32.5	35	35	35	35	0.0
Thailand	30	30	30	30	30	30	30	30	30	30	30	30	30	30	0.0
Viet Nam	35	35	35	32.5	32	32	32	28	28	28	28	28	25	25	-10.0
Average for Asia Pacific	32.2	32.0	31.8	31.9	31.3	31.5	30.6	30.4	30.0	30.0	30.1	29.3	28.3	27.6	-4.6

Source: The above figures are extracted from KPMG's Corporate Tax Survey.

**Table A3**  
**Anti-dumping measures, 01/01/1995-31/12/2010**

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
<b>By reporting country</b>																	
Australia	1	1	1	20	6	5	10	9	10	4	3	4	1	3	2	2	82
China				3	2	5		5	33	14	16	24	12	4	12	15	145
India	7	2	8	22	23	55	38	64	52	29	17	16	25	31	30	31	450
Indonesia			4	2	7		1		1	8	4	2		5	1	5	40
Japan	1							2						4			7
Korea, Rep. of		5	10	8		5		1	4	10	3	8		12	4		70
Malaysia		2	2	4	1	1		1	7		7						25
New Zealand	3	4		1			2	1		2	4	2	3				22
Pakistan								1	2	4	1	6	4		6	5	29
Philippines		2	1	1	3	4											11
Singapore	2																2
Chinese Taipei			1	5	1	1		2				1	1			2	14
Thailand			1	2				1	20	1	2		1		3		31
<b>Total above</b>	<b>14</b>	<b>16</b>	<b>28</b>	<b>68</b>	<b>43</b>	<b>76</b>	<b>51</b>	<b>87</b>	<b>129</b>	<b>72</b>	<b>57</b>	<b>63</b>	<b>47</b>	<b>59</b>	<b>58</b>	<b>60</b>	<b>928</b>
<b>By exporting member</b>																	
Australia			1	1	2	2			1	2				2		1	12
Bangladesh							1							1			2
China	26	16	33	24	21	30	32	36	41	44	41	38	48	53	55	52	590
Hong Kong, China		3	1	1	1	1	1	2	2				1		2	1	16
India	4	1	5	7	9	7	6	6	7	10	2	12	3	6	4	2	91
Indonesia		2	4	7	4	11	5	9	12	2	7	10	3	6	7	8	97
Japan	5	6	5	9	11	22	9	5	11	6	7	8	4	4		1	113
Korea, Rep. of	4	6	3	14	15	23	12	13	22	13	8	10	6	8	7	3	167
Malaysia	3	3	3	4	3	4	1	4	3	6	3	6	5	2	7	3	60
Nepal								2									2
New Zealand				1			1		1							1	4
Pakistan	1		1				1		1	2							6
Philippines			1			1		1	1			2					6
Singapore				3		3		7	7	1		2	5	3		1	32
Sri Lanka										1					1		2
Chinese Taipei	2	2	7	12	8	17	9	13	11	10	8	7	7	8	7	7	135
Thailand	5	8	2	5	1	12	7	8	8	6	6	8	4	4	10	7	101
Viet Nam				1		1	1		1	2	4	2	2	2	4	2	22
<b>Total above</b>	<b>50</b>	<b>47</b>	<b>66</b>	<b>89</b>	<b>75</b>	<b>134</b>	<b>86</b>	<b>106</b>	<b>129</b>	<b>105</b>	<b>86</b>	<b>105</b>	<b>88</b>	<b>99</b>	<b>104</b>	<b>89</b>	<b>1,458</b>
<i>Memorandum:</i>																	
Total anti-dumping measures	119	92	127	181	190	237	170	218	224	154	138	140	108	139	137	121	2,495

Source: Notifications to the WTO.

**Table A4**  
**Countervailing initiations, 01/01/1995-31/12/2010**

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
<b>By reporting country</b>																	
Australia			1		1			1	3			1		2	1	1	11
China															3	1	4
India															1		1
Japan										1							1
New Zealand	1	4	1														6
<b>Total above</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>23</b>
<b>By exporting member</b>																	
Australia					1												1
China										3		2	8	11	13	6	43
India	1		3	6	5	7	8	2	8	1	1	1	1	2	1	1	48
Indonesia				1	5	1	2				1	1				1	12
Korea, Rep. of				5	4	1	1	2		1	1	1				1	17
Malaysia					2						1			1	1		5
Pakistan						1										1	2
Philippines					1												1
Singapore					1												1
Chinese Taipei			1		5					1							7
Thailand	1				5	1				1	1					1	10
Viet Nam																1	1
<b>Total above</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>12</b>	<b>29</b>	<b>11</b>	<b>11</b>	<b>4</b>	<b>8</b>	<b>7</b>	<b>5</b>	<b>5</b>	<b>9</b>	<b>14</b>	<b>20</b>	<b>7</b>	<b>148</b>
<i>Memorandum:</i>																	
Total countervailing initiations	10	7	16	25	41	18	27	9	15	8	6	8	11	16	28	9	254

Source: Notifications to the WTO.

**Table A5**  
**Safeguard initiations and measures by reporting country, 29/03/1995-31/10/2010**

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010 <sup>a</sup>	Total
<b>(a) Initiations by reporting country</b>																	
Australia				1									1				2
China								1									1
India			1	5	3	2		2	1	1				1	10		26
Indonesia										1	1	1		2		7	12
Japan						1											1
Korea, Rep. of	1	2			1												4
Pakistan											1						1
Philippines							3		3			1		1	1		9
<b>Total above</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>11</b>	<b>7</b>	<b>56</b>
<i>Memorandum:</i>																	
Total safeguard initiations	2	5	3	10	15	25	12	34	15	14	7	13	8	10	25	18	216
<b>(b) Measures by reporting country</b>																	
China								1									1
India				4	1	1		2			1				3		12
Indonesia												1			2		3
Korea, Rep. of			1			1											2
Malaysia																	0
Pakistan																	0
Philippines								1	1	3					1		6
<b>Total above</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>24</b>
<i>Memorandum:</i>																	
Total safeguard measures	0	1	3	5	5	7	9	14	15	6	6	7	5	6	10	2	101

a Up to 31 October only.

Source: Notifications to the WTO.