

**“Trade And Global Integration”**

Dilip K Das

CSGR Working Paper No. 120/03

June 2003

THE UNIVERSITY OF  
WARWICK



## **Trade And Global Integration**

Dilip K. Das<sup>1</sup>

Toronto, CANADA

CSGR Working Paper No. 120/03

June 2003

### **Abstract:**

This paper focuses on the post-war process of creation of a global trading system and integration of world trade. As the former came into being, multilateral trade liberalization became an on-going feature of the global economy facilitating international trade, consequently importance of international trade in the global economy increased dramatically. Since the mid-1980s, mindset of policy makers in the developing economies regarding trade policy began changing in a discernible manner. The high- and middle-income developing economies liberalized their trade policy regimes and tried to integrate with the global economy. Several developing economies were highly successful in integrating with the global economy through trade. The change in the mindset of policy mandarins was clearly visible during the Uruguay Round and the on-going Doha Rounds of multilateral trade negotiations. Although the industrial economies were the primary beneficiaries of the multilateral trade liberalization in the past, for the developing economies trade, particularly trade in manufacturing goods, went on increasing monotonically. The kaleidoscope of global trading system turned several times and international trade has enormously expanded over the preceding half century, which in turn contributed substantially to global integration through trade, albeit in a selective manner.

Keywords: Globalization, integration, liberalization, trade

*Address for correspondence:*

Suite # 505

Meadowvale Gardens 1

2869 Battleford Road

Mississauga Ontario L5N 2S6

Canada

Tel: (905) 289 1264

Email: [dilip.das@sympatico.ca](mailto:dilip.das@sympatico.ca)

---

<sup>1</sup> Dr. Dilip K. Das was educated at the Graduate Institute of International Studies, University of Geneva, Switzerland. A former professor of international trade and international finance and banking, he was associated with Webster College Geneva; ESSEC, Paris; INSEAD, Fontainebleau, France; Australian National University, Canberra; Graduate School of Business, University of Sydney, Sydney. He has published extensively on international trade, international finance, international business and globalization related issues in the recent past. His most recent book is *An International Finance Reader*, London and New York, Routledge, 2003. Another book entitled *Financial Globalization and the Emerging Market Economies* is being published by Routledge, London.

## CONTENTS

1. Introduction
2. Global Trading System
3. Trade Policy Liberalization and Globalization
4. Changing Trade Patterns and Growing Integration
5. Trade and Globalization
  - 5.1 Empirical Evidence of Globalization in Trade
  - 5.2. Empirical Evidence of Globalization in Goods Market
  - 5.3 Regional Differences in Trade Integration
6. Conclusions and Summary

## **1. Introduction**

The kaleidoscope of global trading system turned several times and international trade has enormously expanded over the preceding half century, which in turn contributed substantially to global integration through trade, albeit in a selective manner. The first focus of this paper is the liberalization and globalization of trading system. The second focus is the changing pattern of world trade and its growing integration. Some trade analysts have drawn attention to the “interesting riddle in international macroeconomics”, that is, despite advances in technology and lowering of trade barriers, there is little empirical evidence of globalization in trade. Large empirical literature in international macroeconomics that uses gravity model concluded that there is no evidence of contemporary wave of globalization leading to a decline in the cost of trade over time. However, the stable distance coefficient could be explained by a continual transformation in the pattern of global trade. Besides, several empirical exercises found clear evidence of globalization in world trade as well as evidence of declining significance of geography. Their estimates clearly indicated a declining importance of geography, which stood for a spurt in globalization for the decade of the 1990s. The diminishing importance of geography is logically consistent with the phenomenon of expanding globalization.

The structure of this paper is as follows. Section 2 focuses on the global trading system, while Section 3 on the trends in liberalization of trade policy. Changing trade patterns and growing integration of world trade has been elaborated upon in Section 4. In Section 5, which is a large section, I try to establish the trade and globalization nexus. The last section concludes.

## **2. Evolving Global Trading System<sup>2</sup>**

At the end of the Second World War, interest, enthusiasm and commitment to trade liberalization was exceedingly high among the major trading economies of the world. In 1946, even before the International Trade Organization (ITO) charter<sup>3</sup> was approved, 23 of

---

<sup>2</sup> Multilateral trading system is technically a more correct expression than global trading system because not all the countries are members of the World Trade Organization (WTO). In March 2003, its membership was 144 countries, which included almost all the principal trading nations. In addition, 32 countries had observer status. This category included the Russian Federation and Saudi Arabia.

<sup>3</sup> The ITO Charter was ambitious and extended beyond the world trade disciplines. It included regulations on employment, commodity agreements, restrictive business practices, international investment and trade in services. Although the ITO Charter was finally agreed at a United Nations Conference on Trade and Employment in Havana in March 1948, ratification in some national legislatures proved impossible. The most

the 50 participants of the Bretton Woods conference decided to launch negotiations with an objective to reduce tariffs and bind them.<sup>4</sup> These economies were eager to give an impetus to trade liberalization and to “begin correcting the legacy of protectionist measures” which were in place since the early 1930s.

An attempt was made to create an ITO under the Havana Charter, which was negotiated in 1947.<sup>5</sup> It was intended that the ITO would join hands with the two Bretton Woods institutions. All the countries that signed the Havana Charter did not ratify the creation of the ITO as a supranational organization. The United States (US) Congress had strong reservations against several Articles of Agreement of the ITO. It was perceived by the US Congress as an organization having too many teeth. It was also felt that the ITO’s authority was spilling beyond international trade. As the ITO was stillborn, the General Agreement on Tariffs and Trade (GATT) was created in its place. The Protocol was signed on 30 October 1947 and the GATT entered into force on 1 January 1948. The Protocol of Provisional Application of the GATT was signed by 23 countries. These original "Contracting Parties" (or CPs) were: Australia, Belgium, Brazil, Burma, Canada, Ceylon, Chile, China, Cuba, the Czechoslovak Republic, France, India, Lebanon, Luxembourg, Netherlands, New Zealand, Norway, Pakistan, Southern Rhodesia, Syria, South Africa, the United Kingdom, and the United States of America.<sup>6</sup> The GATT expanded with the passage of time and continued to exist and function as a residual organization.<sup>7</sup> It became the only multilateral instrument governing international trade, performed its duties between 1948 and 1994.<sup>8</sup> It was created as a specialized agency of the United Nations and provided the rules for much of the global trade, albeit for all those 47 years it remained a provisional agreement and organization.

The GATT worked as a well-established supranational organization and presided over periods that saw some of the highest growth rates in global commerce. Since 1995, the World Trade Organization (WTO) is—as the GATT was during its life span—the only multilateral

---

serious opposition came from the United States (US) Congress, although the US Government was one of the principal driving forces and was trying to champion the cause of free trade.

<sup>4</sup> Tariff binding implies commitment not to increase a rate of duty beyond an agreed level. Once the rate of duty is bound, it may not be raised without compensating the affected trade partners.

<sup>5</sup> See *The Final Act of the United Nations Conference on Trade and Employment*, published by the Economic and Social Council of the United Nations, in 1947.

<sup>6</sup> As the GATT was an inter-governmental agreement, not an international organization, participants were called Contracting Parties or CPs. It was incorrect to call them members.

<sup>7</sup> At the time of its inception, the General Agreement on Tariffs and Trade (GATT) was signed by 23 countries, which included 12 industrial and 11 developing economies. Subsequently three developing economies withdrew. As it was an inter-governmental agreement, the GATT was not a legal entity.

instrument dealing with the rules and regulations of international trade between nations. The Final Act of the Uruguay Round (1986-1994) incorporated several other multilateral agreements on trade in goods like the Agreement on Agriculture (AoA), the Agreement on Textiles and Clothing (ATC), and the Agreement on Trade Related investment Measures (TRIMs) and had proposed the creation of the WTO as a fully-fledged international governing institution recognized in international law. In addition, the Agreement on the Application of Sanitary and Phytosanitary Measures covered safety requirement for products for human or animal consumption and the Agreement on Technical Barriers to Trade (TBT) covered technical regulations, standards, testing and certification. The Agreement on the Implementation of the GATT 1994 Articles VI and VII covered subsidies and countervailing duties as well as customs valuation respectively.

The most ambitious and putatively most important feature of the Uruguay Round agreement was the creation of the General Agreement on Trade in Services (GATS). It represented a multilateral framework of regulations for trade in services, parallel to the GATT. Although services sector was dominated by most matured industrial and newly industrialized economies (NIEs), it was not hitherto covered under the GATT. This sector covered a wide range of economic activities, including banking and finance, insurance, telecommunications, advertising, construction, transport, and computer and data processing. The office of the United States Trade Representative (USTR) had presented a strong case for initiating negotiations on trade in services with an objective to having a “hard” agreement. This objective could not be achieved because it fell afoul of several domestic lobbies in the US.

The European Union (EU) and Japan were in favor of a “soft” agreement covering trade in services and maintained constant pressure during the Uruguay Round for achieving this objective, while the developing countries *en masse* were against the formation of the GATS. The dominant cause of their opposition was the realization that they did not have comparative advantage in trade in services. As opposed to this, the industrial economies were perceived by the developing economies as having strong comparative advantage in this area of trade. The industrial economies overwhelmingly dominated global trade in services. Although not all, majority of the traded services tended to be technology-intensive and/or human-capital intensive. Therefore, dominance of industrial economies in this sector of multilateral trade

---

<sup>8</sup> The GATT was officially terminated on 31 December 1995, although the World Trade Organization (WTO) was born on 1 January 1995.

was natural. However, some developing economies did enjoy comparative advantage in labor-intensive services like construction, data processing and software designing. They could be expected to gain from trade liberalization under the aegis of the GATS.

In trade economics, the two expressions, namely, the GATT-1947 and the GATT-1994, are frequently used. The difference between the two is that the latter is the revised version of the original GATT Agreement of 1947. The text of the Agreement was significantly revised and amended during the Uruguay Round and the new version was agreed upon in Marrakesh, Morocco. Apparently, the GATT-1994 reflected the outcome of the negotiations on issues relating to the interpretations of specific articles. In its renewed version, the GATT-1994 includes specific understandings with respect to GATT Articles, its obligations and provisions, plus the Marrakwsh Protocol of GATT-1994. Although there were numerous changes in the Articles of Agreement, the noteworthy ones included those in Article II regarding tariff schedules, in Article XVII regarding state trading enterprises, in Article XXIV regarding regional trade agreements, in Article XXVIII regarding modifications of tariff schedule, and in the area of balance of payments provisions covered by Articles XII and XVIII. The GATT-1994 has superseded the GATT-1947. While GATT-1994 was a natural progression of multilateral trade regulations, it also enabled the CPs to by pass the need to formally amend the original GATT-1947. By creating a GATT-1994 they agreed to create a Single Undertaking, applicable to all. This was a pragmatic plan. All the members of the WTO only had to sign the GATT-1994, in lieu of GATT-1947 together with all of its subsequent amendments (Milner and Read, 2002).

An unprecedented 124 countries formally adopted the Marrakesh Agreement in 1994.<sup>9</sup> As set out above, the most significant tangible outcome of signing the Marrakesh Agreement was the birth of WTO on 1 January 1995.<sup>10</sup> Like the United Nations and the World Bank, it became a key institution of global governance. Its essential functions are: (i) administering WTO trade agreements, (ii) providing a forum for multilateral trade negotiations, (iii) handling trade disputes between members, (iv) monitoring national trade policies, (v) providing technical assistance and training for developing countries, and (vi) handling economic co-operation with other international organizations. These six functions have been

---

<sup>9</sup> The Uruguay Round of multilateral trade negotiations was completed in 1994. The formal agreement was signed in Marrakesh, Morocco, on 15 April 1994, therefore it is also referred to as the Marrakesh Agreement.

<sup>10</sup> Refer to footnote 8 above.

outlines in Article III of the Marrakesh Agreement.<sup>11</sup> They are performed by the Geneva-based WTO Secretariat in co-operation and collaboration with the national delegations of the WTO member states. These states determine and make the systemic moves through their delegations. To this end, most member states maintain their permanent missions in Geneva. They are essentially responsible for determining the multilateral rules of trade in goods and services, the agenda for multilateral trade negotiations (MTNs), policy initiatives, decision-making, and interpreting the WTO rules. Thus, the member states play a pivotal systemic role in the WTO, while the Secretariat plays the supporting role as an institutional facilitator.

The WTO supervises three multilateral trading agreements, namely, the Marrakesh Agreement, the GATS and Trade Related Aspects of Intellectual Property Rights (TRIPS). Built on the foundation laid by the GATT, as an institution the WTO has wider responsibilities than its predecessor, which in turn had strengthened the global trading system considerably. As stated above, the Marrakesh Agreement brought agriculture, textiles and apparel and trade in services into the ambit of global trade regulations. With the help of the Single Undertaking, the Marrakesh Agreement locked all signatory countries into a set of agreements.

As Sampson (2000) puts it, the WTO is a “set of agreements that create legally binding rights and obligations for all the member states.” These agreements are mutually negotiated and signed by the member countries. The schedule of tariffs and other limitations and restrictions on imports of goods and services attached to the respective agreements of a country create similar legally binding rights and obligations for the members. These schedules bind the degree of openness of domestic markets. The WTO is essentially a member-driven organization. For instance, in the Trade Policy Review Board (TPRB) members review trade policy of other members. They analyze, discuss, and take stock of all the recent developments in global trading system. Periodically, they negotiate to liberalize tariff barriers, quota restrictions, non-tariff and barriers (NTBs). They deliberate over the global trading rules and change them whenever they consider it necessary. The last-named exercise is done within the context of formal multilateral rounds of negotiations (Das, 2001a).

---

<sup>11</sup> They are also a permanent feature of the WTO website.

The Articles of Agreement of the WTO, as rule, are lengthy and complex. They are essentially legal texts covering a wide range of trade and trade-related activities. However, five simple, fundamental principles run throughout these documents. They are: The global trading system should be without discrimination, progressively freer, predictable, competitive, and beneficial to less-developed countries. Non-discrimination, enshrined in Article I of the Articles of Agreement, is the corner stone of the global trading system. Member governments agree not to discriminate against the trade in goods and services of other members, either between supplying countries or between domestic and foreign suppliers of the same goods and services.<sup>12</sup>

### **3. Trade Policy Liberalization and Globalization**

Over the preceding half century, since the genesis of the GATT, importance of international trade has increased dramatically in the global economy. It has been a significant driving force behind the spread of globalization among the industrial economies first, and subsequently among a sub-group of developing economies. Capital flows are important in their own right but trade in goods and services is an indispensable instrument of globalization. Being one of the two principal channels of economic globalization, it has contributed to enormous benefits that came from mutual interdependence among nations and from integration of the global economy.

Trade liberalization has been an on-going feature of global economic activity over the past half century. The outward-oriented economic strategy adopted by the high-growth economies of East Asia first, and those of Southeast Asia after them, were noticed and admired by academics and policy makers in many countries. They had also seen the anemic outcome of inward-oriented import-substitution policies in South Asia. Consequently policy makers pragmatically tried to turn towards policies that involved more open trade regimes. In 1978, the People's Republic of China (hereinafter China) adopted the "open door" strategy (Das, 2001b). The Soviet Union and its East European allies were in complete disarray in the late 1980s. By 1990, virtually all of the centrally planned economies that had ideologically eschewed market-based policies had either collapsed or began adopting economic reforms

---

<sup>12</sup> For a more detailed account of the evolution of the global trading system, please refer to Hoekman and Kostecki (2001).

that brought foreign trade and investment into a prominent place in their development programs.

Four trends can be clearly identified in the global trading system during the preceding half century: (i) highly uneven pace of liberalization of markets in goods and services in both developing and industrial economies, (ii) increasing differentiation in treatment for different levels of developing economies by the global trading system, (iii) a growing number of regional trading agreements (RTAs) among both developing and industrial economies, and (iv) expanding scope and strength of RTAs. Against the background of a general decline in direct trade restrictions, global market openness has increased markedly over this period. According to the statistics published by the WTO, during 52 years between 1948 and 2000, merchandise trade in real terms grew much more rapidly than global GDP. Merchandise trade increased by 6 percent annually, or 22 fold, vis-à-vis global output growth of 4 percent per annum, or 7 fold. Global trade growth outpaced global GDP growth by a significant margin. World trade grew more rapidly than world GDP in all but a few years of cyclical downturns. During the decade of the 1990s, trade grew much more rapidly than GDP. On an average growth rate of world trade was more than twice that of the GDP growth rate. Measured in constant (1987) dollars, the ratio of global trade in goods and services to global GDP increased from 8 percent in 1950 to 29.5 percent in 2000 (WTO, 2001).

There were exceptions to the trade liberalization process. Many exceptions were made for domestic price support systems in agriculture, therefore, trade in agricultural effectively escaped multilateral discipline. During the 1960s and 1970s, trade in textiles and apparel was put under a system of quotas by the importing industrial economies. This system was called the multi-fiber arrangement (MFA). The MFA was clearly a discriminatory arrangement and against the fundamental principle of the GATT, or Article I of the Articles of Agreements. In addition, a large area of global trade, namely trade in services, had eluded multilateral trade discipline until the creation of the General Agreement of Trade in Services (GATS) in 1995. This was the first step towards creating a comprehensive framework to regulate trade in services.

During the recent period, 1994 was the watershed point for trade policy liberalization and globalization. The Marrakesh Agreement was signed and the 124 countries that participated in the Uruguay Round agreed upon the concept of a WTO. Secondly, during the same year,

21 members of Asia-Pacific Economic Co-operation (APEC) forum, which includes several large trading economies including Japan and the US, signed the Bogor Agreement. Together the APEC group accounts for more than half of the global GDP. They gave themselves a target of freeing trade completely by 2010 for the industrial countries and by 2020 for the developing member countries. Third, launching of the North American Free Trade Area (NAFTA) in 1994 was another significant achievement, having far-reaching ramifications for the Western Hemisphere. Fourth, the concept of uniting the economies of North and South Americas into a single free trade area (FTA) was announced at the Summit of the Americas, which was held in December 1994, in Miami. Many analysts took a triumphalist view of these developments and thought that free trade and ever-closer global economic integration have now become an increasingly achievable goal. The process of globalization entails interdependence between the decisions of policy makers. They need to think in unison and reinforce mutual decisions, while advancing towards the common goal. If some major global traders turn away from world markets, it would surely thwart those economies that would like to continue to be a part of the global integration process. This had happened during the 1930s when a downward spiral in world trade was set in motion in this manner.

The discipline of economics has had an enduring debate on trade liberalization and openness. Adam Smith has extolled the virtues of trade liberalization, openness and competition in his magnum opus, *The Wealth of Nations*. Other than global integration, liberalizing process underpins growth. Essentially there are three sources of economic growth, namely, growth in inputs, improvement in efficiency of resource allocation, an innovation. The process of opening up to trade and investment contributes to each of the three sources of growth. A large number of scholarly studies have contrasted the growth performance of East Asia at one extreme and South Asian and sub-Saharan Africa at the other. The contrast was stark and striking. East Asian economies were not only the growth champions but they integrated with the global economy faster than the 24 "more-globalized" or newly globalizing economies (WB, 2002). Any significant degree of relaxation of trade restrictions results in gains, unless there are other policies thwarting their impact. Trade liberalization undertaken from a period of declining growth rates, or even falling real GDP growth rate, can lead to a period of growth above the rates previously realized (Kruger, 2000).

There are important microeconomic implications of trade liberalization and relaxation of restrictions, which lead to spread of economic activities. Fujita *et al* (1999) have posited a

spatial theory of trade liberalization.<sup>13</sup> According to them trade liberalization triggers a chain reaction that catalyzes the growth of secondary and tertiary economic activities in a city, a region and beyond. Consequently costs falls and output rises, attracting more firms in the same or related areas. A chain reaction is set in motion, with one stage of development reinforcing the next stage. As more firms are set up or move in, an agglomeration of economic activities is created. As exports rise, these agglomerations become more successful. Average costs for the firms in the agglomeration further decline and profits rise, providing further impetus to expansion. Output expands further stimulating expansion of agglomeration. Responding to the needs of end products producers, intermediate input producers and non-tradable services producers set up new businesses, giving greater impetus to the process of agglomeration expansion (WDR, 2000). New intermediate inputs make production more efficient in the agglomeration, lower the costs of production and enhance the profitability of the end product producers. They also raise quality standards. This cycle continues until it covers the region and then goes beyond. More businesses are attracted until the agglomeration becomes saturated or congested. The expansion cycle stops when the infrastructure becomes a constraint and costs begin to rise. When a successful agglomeration stops its growth in this manner, it provides an impetus to another one in the same region.

#### **4. Changing Trade Patterns and Growing Integration**

During the 1950-73 period, an unprecedented acceleration took place in global merchandise trade, exceeding 8 percent a year in real terms. The large beneficiaries of this trade expansion were the industrial economies. Six Rounds of MTN under the aegis of the GATT had contributed to this brisk growth.<sup>14</sup> The next decade-and-a-half (1973-1990) saw two oil shocks, high inflation rates plaguing the industrial economies, and the debt crisis of 1982-84. Although the Tokyo Round (1873-79) of MTNs was launched and completed during this period, and the Uruguay Round was launched in September 1986, growth rate of world trade

---

<sup>13</sup> Refer to Chapters 14 and 15 in particular. See also Chapter 17, which describes a "seamless world economy" although the real world is anything but seamless.

<sup>14</sup> These six Rounds of MTNs were: the first was launched in Geneva (1947), the second in Annecy (1949), the third in Torquay (1951), the fourth in Geneva (1956), the fifth in Geneva (1960-61) called the Dillon Round, and the sixth again in Geneva (1964-67) called the Kennedy Round.

decelerated to 4 percent per annum in real terms. During the decade of 1991-2000, it again recovered to 6.5 percent per annum.

Prior to the 1980s, developing economies predominantly exported primary commodities, which exposed them to volatility in commodity prices resulting in terms-of-trade deteriorations. It also raised concern regarding developing a dependency on manufactured imports. A consequence of post-1980 liberalization endeavors was a large increase in imports and exports from other developing economies as well as a change in their composition in a dramatic manner. During the post-1980 globalization era, as noted above, exports of manufactures from the developing economies increased significantly. Their exports to other developing countries have continued to soar. Furthermore, exports of services have become much more important to a group of developing countries than they ever were in the past.

In 1980, manufactured exports were merely 25 percent of their total exports of the developing economies as a group. By 1998, this proportion soared to 80 percent. The proportion of manufactured exports increased monotonically, without any interruptions, except for a transient decline in 1997. This was caused by the Asian economic and financial crisis. Two important characteristics of trade in manufactures are: First, the prevalence of intra-trade and, second, increasing trade in components. A corollary of rising trade in manufactures was a consistent decline in the share of agricultural products. By 1998, its proportion declined to 10 percent of total developing country exports. High rate of capital accumulation in several high- and middle-income developing countries on the one hand, and technological growth and imports on the other, contributed to strong shift toward manufacturing activity and exports of manufactures. The fact that a sub-group of developing countries—like sub-Saharan Africa—was left behind cannot be ignored. They continued to be exporters of commodities, and remained sensitive to fluctuations in commodity agricultural prices (WTO, 1999).

Another important development was in the direction of exports. During the pre-1980 era, less than 17 percent of exports from developing countries were destined for the other developing countries<sup>15</sup>. By 1997, this proportion had reached 42 percent—a two-and-a-time increase in less than two decades (WB, 2001). This increase in the importance of intra-developing trade resulted not only from trade liberalization in the developing economies but also due to

---

<sup>15</sup> Although there was a slow rise and in 1980, their proportion had reached 17 percent of the total developing country exports.

increase in the share of GDP of developing countries in the global economy. The rising level of intra-developing country trade can partly be explained by supply-side factors. Developing countries became more important as markets for each other's goods and services. With 42 percent of the developing country trade being intra-trade, the barriers that these countries face from each other are clearly more important than they were in the past. If globalization has to progress, tariff barriers against manufactures in the developing countries need to come down further. Hertel and Martin (2001) computed that over 70 percent of the tariff barriers faced by manufactured exports from developing economies are now imposed by other developing economies. Results of a GTAP exercise<sup>16</sup> conducted by Anderson *et al* (2001) demonstrated that the benefits of developing countries from abolishing their own protection are fifty percent larger (\$65.1 billion in 1995 dollar) than those obtainable from abolishing industrial country protection (\$43.1 billion in 1995 dollar). These estimates are extremely conservative in that they ignore the gains from eliminating antidumping duties and other similar forms of protection.

Although it started from a low level, trade in commercial services from developing countries increased substantially over the last two decades. The proportion of export of services from high-income developing economies in global exports of services increased by from 17 percent to 20 percent between 1980 and 1997. For low- and middle-income developing economies it increased from 7 percent to 17 percent (Martin, 2001). Two important inferences have emerged from this new trend. First, a significant group of developing economies has succeeded in making a structural shift to capital- and technology-intensive exports by promoting capital accumulation and raising the skill level of their workforce. Second, the striking recent developments in the export pattern of the developing economies have significant ramifications. The most important one is reduction in the volatility of export revenues.

---

<sup>16</sup> GTAP or Global Trade Analysis Project is a modeling framework which is designed to facilitate quantitative analysis of policy issues. Developed from the GTAP project established in 1992, it has been widely used to examine such issues as the impact of the Uruguay Round and future pattern of global trade. GTAP captures linkages within economies and among them by modeling the economic behavior and interaction of producers, consumers and governments. It is therefore possible to trace implications of a policy change like tariff cuts to other parts of the economy as well as other regions and economies in the model. Within GTAP consumers are assumed to maximize utility and producers to maximize profits. Markets are assumed to be perfectly competitive. There are constant returns to scale. Different regions and economies are linked in the model through trade. Some of these assumptions mean that the gains from trade liberalization will typically be understated. One such assumption is constant returns to scale.

As supply-side improvements became standard features of their economies, the developing economies, particularly the emerging market economies, gradually increased their exports to industrial economies. The GATT framework and discipline helped the NIEs and other emerging market economies in this endeavor. Consequently, many industrial economies in the EU and the US found that their merchandise imports exceeded their merchandise output (Das, 2001; Feenstra, 1998). This led to increased competition in merchandise product markets in the industrial economies. The composition of exports from the NIEs underwent a rapid transformation. They became exporters of engineering and medium-technology goods in the 1980s. India and the NIEs from Latin America fell in this category. By 1990, China also became a successful and large exporter of medium-technology products to the developing and industrial economies. The production of high-technology products like electronics, electrical goods and information technology (IT) related products from the NIEs in East and Southeast Asia increased substantially during the decades of the 1980s and 1990s. These NIEs acquired comparative advantage and an impressive competitive edge in high-technology products and, therefore, became competitive in several product lines in the industrial economy markets.

Globalization was a tangible benefit of (i) liberalization and (ii) supply-side economic improvements for a sub-group of developing countries. Many low-income developing economies failed to participate in growth-inducing and potentially poverty-reducing benefits of trade liberalization, and also were not able to integrate with the global economy at all. Research into the pace of integration with the global economy came up with interesting results. A sample of 93 developing countries was divided into rapid, moderate and slow or weak integrator with the global economy. Results show that only one out of twenty-eight so-called least developed countries in the sample fell in the rapid integrator category, while only seven more were moderate integrator. Thus, the majority of the poorest countries -- those most in need of the spur to growth that trade and global integration can provide -- were left behind in the race towards effective participation in the global markets. Their share in the global trade declined steadily, from 0.8 percent to 0.4 percent between 1980 and 1997 (WB, 2000). This sub-group of economies is not only not globalizing but is making a retrograde motion. Contrary to the performance of this group, high- and middle-income developing economies did a laudable task of integration with the global economy

## **5. Trade and Globalization**

I began this paper by saying that the kaleidoscope of global trading system turned several times and international trade has enormously expanded over the preceding half century (see Section 1), which in turn contributed substantially to global integration through trade, but this has happened only selectively. Not all the economies participated in this process of global integration through trade. Immediately after the Second World War ended, industrial economies expanded their trade, which in turn supported their integration and globalization. As stated in the preceding section, they received institutional support from the GATT in this endeavor.

Although eleven developing countries were among the 23 founding members of the GATT in 1947, developing countries did not actively participate in GATT operations. Until the Dillon Round (1960-61), they remained more or less passive onlookers and accepted little role in the GATT Rounds of MTNs. Their participation began during the Kennedy Round (1964-67), with some 35 of them attending the launching meeting. However, during the proceedings of the NTNs they still continued to be essentially passive and aloof. In the Tokyo Round (1973-79) a larger number of them attended the launch meeting and their participation in the proceedings of the MTNs took a serious, although marginal, form. This could be called the veritable beginning of their participation in the proceedings of the MTNs.

The developing economies chose to articulate their grievance against the global trading system in and through the United Nations Conference on Trade and Development (UNCTAD), which had no role in formulating global trade rules and policies. The UNCTAD was a successful mouthpiece of the developing economies. The developing economies emphasized the need for and demanded Special and Differential Treatment (SDT) in world trade, and they received it. To this end, Part IV was added to the Articles of Agreement of the GATT. Although a case could be made for the benefits of SDT and for trade preferences through the Generalized System of Preferences (GSP), yet as the developing economies had opted out of the rule making process, they could not possibly have any influence over the formulation of the rules of the global trading system.

Reluctance, or inability, in participation in the Rounds of MTNs had its cost for the developing economies. They found that had painted themselves into a corner and that they could not prevent the industrial economies from taking trade in textiles and apparel out of the

GATT system. Once it was outside the GATT regulations, the industrial countries were free to use quotas to restrict imports of textiles and apparel into their markets. Several developing economies had comparative advantage in producing and exporting textiles and apparel. Similarly, trade in agriculture was kept out of the ambit of the GATT discipline until the Uruguay Round (1986-94). Being reluctant MTN participants as well as small trading countries in terms of volume of trade, the developing countries found that they just had to put up with the trade regulations that were skewed against their exportable lines of products. The developing economies bore a large share of responsibility for the world trading system being tilted against them (Srinivasan, 2002).

Therefore, integration of developing economies into the global trading system was slow and did not really begin until the mid-1970s when a group of them emerged as competitive exporters in several product markets. This group comprised the newly industrialized economies (NIEs).<sup>17</sup> The success of the NIEs on the trade and globalization fronts had a good deal of demonstration effect. Before commencing their globalization the developing economies had to move up the industrial curve and acquire comparative advantage first in labor-intensive goods and then capital- and technology-intensive products. There was a sea change in the attitudes in several developing countries after 1980. As set out in Section 5, during this period, a larger group of them succeeded in liberalizing domestically and integrating with the global economy. This country group began to be known as the emerging market economies. When economies export goods and services in which they have comparative advantage, they not only integrate with the global economy but also enhance global welfare.

As alluded seen above, domestic support and subsidization of agriculture has continued to be high in the industrial economies. Developing economies' response to such policies need not be creation of trade barriers of their own or stalling their unilateral trade liberalization moves. Instead they should vigorously participate in the on-going Doha Round (2001-05) of MTNs and hold the industrial economies to their commitments to eliminate agricultural subsidies. This should help those developing economies that have comparative advantage in agricultural and food products and are, or can become, exporters in this line of products. However, this situation is complicated by the fact that there is a small group of developing economies that

---

<sup>17</sup> Namely, Korea (Republic of), Hong Kong SAR, Singapore, and Taiwan.

have historically benefited from cheap and subsidized agricultural products. Majority of these economies are in sub-Saharan Africa. As the current scenario indicates, reduction in subsidies will take a good deal of time and efforts from the developing economies, because the industrial economies have taken a well-entrenched stand on this issue. But it is well worth their while because it will surely help them in the medium-term to enhance their exports in areas where they have comparative advantage and in their desire to globalize.

### **5.1 Empirical Evidence of Globalization in Trade**

Some analysts have drawn attention to the fact that despite advances in technology and lowering of trade barriers, there is little empirical evidence of globalization in trade. Obstfeld and Rogoff (2001) have referred to this as an “interesting riddle in international macroeconomics”. A large empirical literature in international macroeconomics that uses gravity model concluded that there is no evidence of contemporary wave of globalization leading to a decline in the cost of trade over time.<sup>18</sup> The cost of trade was defined broadly to include transportation cost, communication cost, search cost, information cost, and the like. For analysis in the area of international trade, use of empirical gravity models has become so widespread that these models have earned the sobriquet of “workhorse of international trade”. While gravity models explain cross-country trading patterns exceedingly well, they reveal no evidence of globalization causing a decline in the costs of trade. Such results are odd, counterintuitive and highly implausible.

The results of various gravity model exercises that estimated distance coefficient yielded stable distance coefficients over time. As noted above, this does not seem plausible because distance between two trading economies is taken as a proxy for all the trade related costs in the traditionally estimated gravity models. These costs have putatively declined to a great extent over the last quarter century. If the globe is shrinking because trade related costs are declining, this should be reflected in the results and the estimated distance coefficients should fall in value. Although attempts have been made to explain this oddity in results, explanations do not seem convincing.

---

<sup>18</sup> The gravity model has been extensively used in empirical trade research. Its foundation lies in Newtonian physics. It comprises a single equation, postulating that the amount of trade between two countries depends positively on economic mass and negatively on resistance. In its simple form, the gravity model relates bilateral trade between countries during a given time period to the economic mass of the two countries and the distance between them. Over time, the gravity model of trade has been elaborated to incorporate a wide variety of other factors. It reveals that countries that are closer to each other (less distance) and more similar in terms of historical and cultural factors are better integrated through trade in goods and services.

One explanation for stable distance coefficient is the continual transformation in the pattern of global trade. This includes the entry of new products in the global market place and the shift towards trade in differentiated products. Also, over time some previously non-traded goods may have become tradable because of technological advances and declining transport costs. It is likely that the previously non-traded goods were not captured in the gravity equation estimate of the first period. In addition, totally new products, which did not exist in the past, could be added to the list of tradables. If this is true, the estimated coefficient on distance could remain stable. There is also a possibility of increase in the estimated coefficient of distance if the trade costs of the newly entered products are higher than the trade costs of goods traded in the first and the second periods.

Leaving the explanations aside, Anderson and van Wincoop (2001) spotted a major flaw in the gravity model computations. They found that most of the analyses did not comply with the specifications of the theoretical model. They said that most of the empirical exercises lacked “gravitas” and the users did not pay attention to the theoretical foundations of the model, hence the counterintuitive results like stability in distance coefficients were obtained. According to them those who used gravity model made an error in the choice of variables. While there are two relative costs that are important for bilateral trade, while most users of the gravity model pick the absolute cost for their computations.

As opposed to the above results, Coe *et al* (2002) found clear empirical evidence of globalization in world trade as well as evidence of declining significance of geography. They used both cross-section and panel data. The evidence was found to be clearly discernible in the cross-section regressions done for each year from 1975 to 2000, and in panel estimates over the same period. Their estimates are different from what was seen in the general gravity model exercises because of two reasons: First, they estimated a non-linear version of the gravity model. Second, they used an additive error term rather than the standard log-linear version. They believed that the non-linear version is superior on theoretical and empirical grounds and explains the data better.

Coe *et al* (2002) modified the empirical procedure because they believed that “the non-linear specification utilizes the information in the observations where bilateral trade is zero. The log-linear specification discards this information which may lead to biased or inconsistent

parameter estimates". In their non-linear specification of the gravity model, coefficient estimates on various measures of geography clearly declined over time. Their measures of geography were distance, remoteness, and size. Their estimates indicated that there was a declining importance of geography, which in turn stood for a spurt in globalization for the decade of the 1990s. The diminishing importance of geography is logically consistent with the phenomenon of globalization.

## **5.2. Empirical Evidence of Globalization in Goods Market**

Measuring integration in goods market is a relatively easy exercise and has been attempted by several scholars.<sup>19</sup> It is easy because long-term time series statistical data are readily available from the IMF publication, *Direction of Trade Statistics*. In this empirical exercise bilateral trade flows are used as an indicator of goods market integration, apparently larger flows implying greater market integration. In these exercises, the level of goods markets integration is determined in the traditional manner, using the gravity model.

Parsley and Wei (2001) improved upon the gravity model analysis. In order to ascertain the robustness of trade-flow-based approach, it is a good idea to look at the prices of goods across markets. Smaller price differentials stand for greater goods market integration. Parsley and Wei (2001) used price dispersion to measure goods price integration. The empirical exercise conducted by them selected 95 tradable goods and 83 cities across the globe. The study was conducted for the data for the decade between 1990 and 2000. They selected disaggregated goods which were standardized by weight and volume. Their sample included goods like light bulbs, frozen chicken, toilet paper, tonic water and similar items. For ensuring comparability, data was compiled from the same source, the Economic Intelligence Unit (EIU).

The next step was to compute standard deviation of the of the price differences of the selected goods for every pair of cities for each year. Falling values of standard deviation in this empirical analysis should represent greater market integration and movement towards globalization through trade. The final step was to use standard deviation in econometric

---

<sup>19</sup> For instance, refer to, Engel and Rogers (2001), Rogers (2002), Hufbauer, Wada and Warren (2002).

analysis of the factors underlying goods market integration, including transport costs, tariffs and currency arrangements.

Both, the price-based analysis and the trade-flow-based analysis or the gravity model computations, led to similar results regarding pattern and determinants of goods market integration and globalization. Inferences that emerged from both the approaches are enumerated as follows: (i) Goods market integration increased considerably over the 1990-2000 period. Downward trends were observed in standard deviation of price differences for two-city pairs. (ii) Higher distance, proxied by higher transport costs, contributed to lower goods market integration. In the trade-flow-based gravity model analysis, bilateral distance always had a negative coefficient, signifying that the greater the distance between countries the smaller the trade between them. As opposed to this, in the price-based approach the distance variable consistently had a positive coefficient signifying that the price dispersion for identical products—which stands for lack of market integration—tends to increase with distance. (iii) Some regional trading arrangements (RTAs), particularly North American Free Trade Area (NAFTA) and the EU, were found to have a significant effect on the goods market integration. (iv) Institutionalized currency arrangements like a currency union or a currency board increase goods market integration among the members (IMF, 2002).

### **5.3 Regional Differences in Trade Integration**

While it is acknowledged that a group of developing economies has become well integrated into the global trading system since 1980, there is a noteworthy unevenness and disparity in the degree of integration.<sup>20</sup> In order to analyze which countries or regions are well integrated into the global trading system and which are laggards, IMF (2002) developed a measure of expected trade across different regions and compared it with the actual trade volume. The rationale was that the difference between expected trade volume and actual trade volume represented a measure of artificial barriers to trade as well as institutional and policy environment. To establish the expected trade volume benchmark, the versatile gravity model was utilized.

---

<sup>20</sup> This section draws on IMF (2002). For greater details on this issue readers should refer to Chapter 3 (IMF, 2002).

A country or a region was considered as “undertrading” if actual bilateral trade volume, on average, was substantially below the level predicted by the gravity model without explicit policy variables. Conversely, a country or a region was considered as “overtrading” if actual bilateral trade volume, on average, was substantially above the level predicted by the gravity model without explicit policy variables. Rose (2002) posited that as the gravity model is based on natural causes of trade, that is, it determines the volume of trade that should take place without trade policy and other institutional impediments, undertrading and overtrading must represent above—or below—average level of impediments. This methodology captures the overall impact of a country’s trade policies and institutional environment. Bilateral trade flow data for 131 developing and industrial economies was taken by Rose (2002) for the 1995-99 period for the analysis of undertrading and overtrading. The data source was the *Direction of Trade Statistics* published by the IMF.

The upshot of this analysis was that a great deal of undertrading took place in several regions. This group of economies were either not integrating with the global trading system, or integrating in an inadequate manner. The cause was policy and institutional distortions in trade and macroeconomic regimes and institutional environment. Three regions demonstrated a large degree of undertrading, namely, the Middle East, North Africa and South Asia. As opposed to this, the degree of undertrading was small in Latin America. The sub-Saharan economies traded a little more than the benchmark set by the gravity model. Countries in East and Southeast Asia turned out to be strong traders and overtraded. They do seem to be better integrated with the global trading system than the other regions. Another interesting revelation was that undertrading was less pervasive in intra-regional trade than in extra-regional trade. One possible reason for this conclusion was that the RTAs like MERCOSUR and APEC were active in various regions.

Among the undertrading regions, during 1980-2000 period, some regions turned from weak to weaker traders. This group of economies was the non-globalizing economies. This observation applies to sub-Saharan Africa and the Middle East. However, North Africa turned from slight overtrading to slight undertrading region over this period. Other regions that improved their trade performance included East and Southeast Asia, South Asia, South America, and especially Caribbean and central America. The first named country group showed maximum gains. The most important conclusion of this exercise is that in three regions (namely, the Middle east, North Africa and South Asia) undertrading remained a

serious problem. These three country groups have not been able to remove the above-average level of artificial barriers to trade in their policy and institutional environment, consequently they have been able to manage only a weak integration with the global trading system.

## **6. Conclusions and Summary**

After the end of the Second World War, interest, enthusiasm and commitment to trade liberalization was exceedingly high among the major trading countries of the world. Even before the International Trade Organization (ITO) charter was approved, 23 of the 50 participants of the Bretton Woods conference decided, to launch negotiations with an objective to reduce tariffs and bind them. An attempt was made to create an ITO under the Havana Charter, which was negotiated in 1947. All the countries that signed the Havana Charter did not ratify the creation of the ITO as a supranational organization. In particular, the US Congress was against ratifying it. The GATT was created in lieu of the ITO, which worked as a well-established organization and presided over periods that saw some of the highest growth rates in global commerce. An unprecedented 124 countries formally adopted the Marrakesh Agreement in 1994. A tangible outcome of signing the Marrakesh Agreement was the birth of World Trade Organization (WTO) on 1 January 1995. Since 1995, the WTO is the only multilateral organization dealing with the rules and regulations of international trade between nations. The WTO is a set of agreements that create legally binding rights and obligations for all the member states. These agreements are mutually negotiated and signed by the member countries. In addition, the General Agreement on Trade in Services (GATS) was created during the Uruguay Round of the MTNs. The GATS was most ambitious and putatively most important feature of the Uruguay Round agreement.

Since the genesis of the GATT, importance of international trade in the global economy increased dramatically. It has been a significant driving force behind the spread of globalization among the industrial economies first, and subsequently among a sub-group of developing economies. Trade liberalization has been an on-going feature of global economic activity over the past half century. The outward-oriented economic strategy adopted by the high-growth economies of East Asia first, and those of Southeast Asia after them, were noticed and admired by academics and policy makers in many countries. This strategy had a good deal of demonstration effect globally.

Since the 1980s, there has been a radical change in thinking about trade policy in the developing economies, particularly in the middle- and higher-income ones. In many of them, macroeconomic and trade policy changes are being used to address the problems related to current account imbalances. The change in the mindset of the policy makers was reflected in the wave of unilateral trade reforms that swept in the developing economies. This was the most profound and far reaching manifestation of their interest in participation in global trade. The average levels of tariffs were slashed from 30 percent in 1980 to 15 percent in the late 1990s. To be sure, there were differences among developing economies in their commitment to the strategy of liberalization. The declines in tariff barriers, alluded to above, must not be seen in absolute terms. They need to be carefully examined for their impact because it is possible that declining tariffs are supplanted by NTBs. Frequency of total core NTBs was measured for 1989-98 period. The results show a sharp decline in NTBs, including state trading monopolies, in all the regions except South Asia.

The change in the mindset of the policy mandarins in the developing economies was clearly manifested during the Uruguay Round. The developing economies turned from passive onlookers in the MTNs to active players. During the 1950-73 period, an unprecedented acceleration took place in world merchandise trade, exceeding 8 percent a year in real terms. The large beneficiaries of this trade expansion were the industrial economies. Six Rounds of MTN under the aegis of the GATT had contributed to this brisk growth. Prior to the 1980s, developing economies predominantly exported primary commodities. In 1980, manufactured exports were merely 25 percent of their total exports. By 1998, this proportion soared to 80 percent. The proportion of manufactured exports increased monotonically, without any interruptions, except for a transient decline in 1997. Another important development was in the direction of exports. During the pre-1980 era, less than 17 percent of exports from developing countries were destined for the other developing countries. By 1997, this proportion had reached 42 percent. This increase in the importance of intra-developing trade resulted not only from trade liberalization in the developing economies but also due to increase in the share of GDP of developing countries in the global economy. Although it started from a low level, trade in commercial services from developing countries increased substantially over the last two decades. As supply-side improvements became standard features of their economies, the developing economies, particularly the emerging market economies, gradually increased their exports to industrial economies. Globalization was a tangible benefit of (i) liberalization and (ii) supply-side economic improvements for a sub-

group of developing countries. Many low-income developing economies failed to participate in growth-inducing and potentially poverty-reducing benefits of trade liberalization, and also were not able to integrate with the global economy at all.

The kaleidoscope of global trading system turned several times and international trade has enormously expanded over the preceding half century, which in turn contributed substantially to global integration through trade, albeit in a selective manner. It has been noted above that while eleven developing countries were among the 23 founding members of the GATT in 1947, developing countries did not participate in GATT operations. Until the Dillon Round (1960-61), they remained more or less passive onlookers and accepted little role in the GATT Rounds of MTNs. Although their participation began during the Kennedy Round (1964-67), it was marginal. Instead they stressed on demanding Special and Differential Treatment (SDT) in world trade and they received it. To this end, Part IV was added to the Articles of Agreement of the GATT. Trade in textiles and apparel was not covered by the GATT discipline. Once they were outside the GATT regulations, the industrial countries were free to use quotas to restrict imports of textiles and apparel into their markets. Similarly, trade in agriculture was kept out of the ambit of the GATT until the Uruguay Round. Therefore, integration of developing economies into the global trading system was slow and did not really begun until the mid-1970s when a group of them emerged as competitive exporters in several product markets.

Some trade analysts have drawn attention to the “interesting riddle in international macroeconomics”, that is, despite advances in technology and lowering of trade barriers, there is little empirical evidence of globalization in trade. A large empirical literature in international macroeconomics that uses gravity model concluded that there is no evidence of contemporary wave of globalization leading to a decline in the cost of trade over time. However, the stable distance coefficient could be explained by continual transformation in the pattern of global trade. Besides, some empirical exercises found clear empirical evidence of globalization in world trade as well as evidence of declining significance of geography. Their estimates indicated that declining importance of geography, which stood for a spurt in globalization for the decade of the 1990s. The diminishing importance of geography is logically consistent with the phenomenon of globalization. Exercises that focused on the prices of goods across markets concluded that goods market integration increased considerably over the 1990-2000 period. Downward trends were observed in standard

deviation of price differences for two-city pairs. Also, higher distance, proxied by higher transport costs, contributed to lower goods market integration. It was observed that the greater the distance between countries the smaller the trade between them. As opposed to this, in the price-based approach the distance variable consistently had a positive coefficient signifying that the price dispersion for identical products—which stands for lack of market integration—tends to increase with distance.

## References

- Anderson, K., J. Francois, T. Hertel, B. Hoekman and W. Martin. 2001. "Potential Gains from Trade Reforms in the New Millennium". Washington DC. The World Bank. (Processd).
- Anderson, J.E. and E. van Wincoop.2001. "Gravity with Gravitas: A Solution to the Border Puzzle", Cambridge. MA. National Bureau of Economic Research. Working Paper No. 8079. Revised version available on the Internet at [www.virginia.edu/~econ/vanwincoopx.htm](http://www.virginia.edu/~econ/vanwincoopx.htm).
- Coe, T.D., A. Subramanian, N.T. Tamirisa. 2002."The Missing Globalization Puzzle". Washington DC. International Monetary Fund. Working Paper. WP/02/171.
- Das, Dilip K. 2001a. *Global Trading System at Crossroads: A Post-Seattle Perspective*, London and New York. Routledge.
- Das, Dilip K. 2001b. "Liberalization Efforts in China and Accession to the World Trade Organization", *The Journal of World Investment*, Vol. 12, No. 4. pp. 761-789.
- Engel, C. and J.H.Rogers.2001. "Deviations from Purchasing Power Parity: Causes and Welfare Costs", *Journal of International Economics*, Vol. 55. No. 10. pp. 29-57.
- Feenstra, R.C.1998. "Integration of Trade and Disintegration of Production in the Global Economy", *Journal of Economic Perspective*, Vol. 12. No. 4. pp. 31-50.
- Fujita, M., P.R. Krugman and A.J. Venables. 1999. *The Spatial Economy: Cities, Regional and International Trade*, Cambridge. MA. The MIT Press.
- Hertel, T. and W. Martin. 2001. "Liberalizing Agriculture and Manufactures in a Millennium Round: Implications for Developing Countries", in B. Hoekman and W. Martin (eds.) *Developing Countries and the WTO: A Pro-Active Agenda*, Oxford. Basil Blackwell. pp. 110-142.
- Hufbauer, G., E. Wada and T.Warren.2002. *The Benefits of Price Convergence: Speculative Calculations*, Policy Analysis in Economics. Paper No. 65. Washington DC. Institute for International Economics.
- International Monetary Fund (IMF). 2002. *World Economic Outlook*, October. Washington DC.
- Krueger, A.O. 2000. "Factors Affecting Export Growth and Performance" in Dilip K. Das (ed.) *Asian Exports*, Oxford. Oxford University Press. pp. 25-74.
- Milner, C. and R. Read. 2002. "Introduction: The GATT Uruguay Round, Trade Liberalization and the WTO", in C. Milner and R. Read (eds.) *Trade Liberalization, Competition and the WTO*, Cheltenham. UK. Edward Elgar. pp. 1-22.
- Obstfeld, M. and K. Rogoff.2001. "The Six Major Puzzles in International Macroeconomics: Is There A Common Cause?" Cambridge. MA. National Bureau of Economic Research. Working Paper No. 7777.

Parsley, D.C. and S. J. Wei.2001. "Limiting Currency Volatility to Stimulate Goods Market Integration: A Price-Based Approach", Cambridge. MA. National Bureau of Economic research. NBER Working Paper No. 8468.

Rogers, J.H.2002. "Price Level Convergence, Relative Prices, and Inflation in Europe", Washington DC. Board of Governors of the Federal Reserve system. International Finance Discussion Paper No. 699.

Rose, A. K.2002. "Estimating Protectionism from the Gravity Model", Washington DC. International Monetary Fund. (mimeo)

Sampson, G.P. 2000. *Trade, Environment and the WTO: the Post Seattle Agenda*, Baltimore, MD. Johns Hopkins University Press.

Srinivasan, T.N.2002. "Globalization: Is it Good or Bad?" Stanford. CA. Stanford Institute for Economic Policy Research. Economic Policy Brief. December 23.

*World Development Report (WDR)*. 2000. Washington DC. Published for The World Bank by Oxford University Press.

The World Bank (WB). 2001. *Global Economic Prospects and Developing Countries*, Washington DC.

The World Bank (WB). 2002. *Globalization, Growth and Poverty*. New York. Oxford University Press.

World Trade Organization (WTO). 1999. *The Legal Texts: the Results of the Uruguay Round of Multilateral Trade Negotiations*, Cambridge. Cambridge University Press.

World Trade Organization (WTO). 2001. "Doha WTO Ministerial: Briefing Notes: 52 Years of GATT/WTO" Geneva. Available on the Internet at [http://www-leva.wto-ministerial.org/english/the\\_wto\\_e/minist\\_e/min01\\_e/brief\\_e/brief21\\_e.htm](http://www-leva.wto-ministerial.org/english/the_wto_e/minist_e/min01_e/brief_e/brief21_e.htm).