



Korea Economic Institute

**KOREA IN ASIA:**  
***KOREA'S DEVELOPMENT, ASIAN REGIONALISM,***  
***AND U.S.-KOREA ECONOMIC RELATIONS***

Claude Barfield

## Foreword

This study consists of five chapters. Chapter 1 is the introduction, and it covers the historical background of Korea's economic growth, its export growth, and U.S.-Korea economic relations since 1950.

Chapter 2 first traces the evolution of Korea's development strategies and phases beginning in the 1960s; it then describes the role of foreign investment and technology in the growth of Korea's economy. Chapter 2 concludes with a description and analysis of Korea's new development model, with its emphasis on science, the role of innovation, and the growth of service sectors.

Chapter 3 chronicles and analyzes Korea's trade and investment patterns since 1960, including assessments of Korea's growing position and competitiveness in world markets. Separate sections address the special place of the United States in Korea's trade relations and also Korea's recent increasing involvement with Asian trade and investment.

Chapter 4 deals with the impact of growing Asian regionalism over the past decade and with the substantial increase in proposals and negotiations for bilateral, subregional, and regional trading arrangements among both Asian nations and nations outside Asia. This chapter also analyzes the results of various simulation models of the welfare and trade impacts of proposed trade agreements; it uses proposed Korea-Japan and Korea-U.S. free trade agreements as key examples. It then explores the welfare effects on Korea and the United States of a number of other proposed bilateral and regional trade arrangements.

Chapter 5 presents conclusions and recommendations for future U.S. and Korea trade relations on three levels: how to reconcile common and competing goals in the World Trade Organization Doha Round; potential responses and priorities of Asian and non-Asian countries regarding future bilateral, subregional, and regional trade agreements; and, after describing in some detail current bilateral disputes, Chapter 5 suggests a new framework for dealing with these issues.

## Acknowledgments

I would like to thank Cordula Thum for her indispensable research and drafting support throughout the manuscript, Sung Woo-lim for his painstaking and thorough numbers crunching, and Andre Zlate for his work on the U.S.-Korea bilateral trade disputes. I am also grateful for the thoughtful comments from three outside readers: Bernard Gordon, Nick Eberstadt, and Yang Jun-sok. Needless to say, any remaining errors in fact or interpretation are my responsibility.

Claude A. Barfield  
August 2003

---

## Introduction and Historical Background

The goal of this study is to explore the current state of U.S.-Korea trade and economic relations, with special emphasis on the impact of the rise of Asian regionalism and the implications of an evolving Korean development model. This book explores possibilities for closer U.S.-Korea economic relations, the resolution of current trade disputes, and the development of common approaches (or at least an understanding of the differences in approach) to both multilateral trade negotiations and Asian regional initiatives.

### Korea's Economic Growth

During recent decades, the Republic of Korea (hereafter, Korea) has transformed itself from a poor, agrarian nation into one of the fastest-growing industrialized economies in the world. Until the launch of an initial economic development plan in the early 1960s, the country was heavily dependent on imported raw materials and manufactured goods. The economic development plan of 1962 was, indeed, a drastic turnaround for a heretofore low-income country.

Korea's phenomenal growth has been achieved as a result of the successful implementation of forward-looking economic strategies formulated in the 1960s and later. Korea adopted policies that emphasized, first, the enhancement of the country's export position and, later, the gradual adoption of market liberalization programs. These two complementary strategies have worked to propel Korea into a new era of industrial leadership and prosperity.

The results have been impressive. Over the relevant three decades (from the early 1970s to 2002) Korea's gross domestic product (GDP) grew from the equivalent of \$8 billion in 1970 to \$444 billion in 2002, with per capita GDP soaring from \$254 to about \$9,318 at current price levels (see *Table 1*). Wide-reaching changes include extensive expansion of the manufacturing sector, from around 577 billion *won* (approximately \$1.82 billion) in 1970 to over 163 trillion *won* (approximately \$123 billion) in 2001, and an increase in commodity trade volume, from \$835 million in 1970 to more than \$161 billion by 2002.

**Table 1: Major Indicators of Korea's Economy, 1960-2002**

Indicator	1970	1975	1980	1985	1990	1995	2000	2001	2002
Population (million)	31.44	34.68	37.41	40.42	43.39	44.55	45.99	47.34	47.64
Real GDP (1995 prices, billion U.S.\$)	8.00	21.10	62.20	93.40	252.50	489.40	461.70	422.20	443.93
Per capita GDP (U.S.\$)	254.45	608.42	1,662.66	2,310.74	5,819.31	10,985.41	10,039.14	8,918.46	9,318.43
<b>GDP by kind of economic activity (constant prices 1995, billion won)</b>									
Primary <sup>a</sup>	779.80	2,728.00	6,200.20	11,275.40	16,590.90	25,129.80	26,319.80	25,912.70	n.a.
Manufacturing	577.20	2,645.60	10,639.60	23,720.00	51,551.10	110,826.90	163,283.20	163,334.90	n.a.
Construction	139.80	478.60	3,040.60	6,125.50	20,333.50	42,564.10	41,788.00	44,879.30	n.a.
Industrial services <sup>b</sup>	880.20	3,222.80	12,792.10	28,531.40	66,004.80	148,085.80	211,454.20	225,031.30	n.a.
Government services <sup>c</sup>	491.90	1,559.90	6,792.60	14,983.30	33,305.30	73,116.40	105,274.60	94,146.20	n.a.
Nonprofit services	51.40	190.80	629.20	1,582.40	3,507.20	8,093.70	12,320.70	13,514.30	n.a.
Others	1.80	5.70	24.30	39.70	97.40	190.60	247.20	269.10	n.a.
<b>Sectoral employment (% of total labor)</b>									
Primary <sup>a</sup>	51.52	46.18	34.92	25.97	18.34	12.53	10.95	10.36	9.81
Manufacturing	13.18	18.60	21.60	23.41	27.16	23.48	20.15	19.66	19.01
Services	35.30	35.22	43.49	50.62	54.51	63.99	68.90	69.98	71.18
<b>Exports and imports</b>									
Exports (millions U.S.\$)	835.2	5,081.0	17,504.9	30,283.1	65,015.7	125,058.0	172,267.5	150,439.1	161,070.6
Ratio of exports to GDP	0.10	0.24	0.28	0.32	0.26	0.26	0.37	0.36	0.36
Imports (millions U.S.\$)	1,983.9	7,274.4	22,291.6	31,135.7	69,843.7	135,118.9	160,481.0	141,097.8	150,055.1
Ratio of imports to GDP	0.25	0.34	0.36	0.33	0.28	0.28	0.35	0.33	0.34

Sources: KOSIS various; BOK various. Data for 2002 are projections.

<sup>a</sup> Primary: agriculture and forestry, mining and quarrying

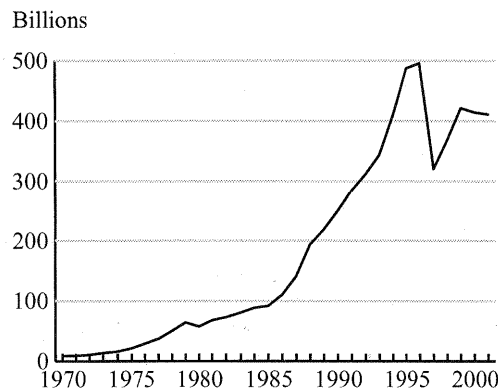
<sup>b</sup> Industrial services: Wholesale, retail trade, restaurants, hotels and transport, storage and communication and finance, insurance, real estate, business services

<sup>c</sup> Government services: producers of government services and public administration and defense, social and community services

The dramatic transformation of the Korean economy would be seen as impressive by any standard, but it is particularly striking against the backdrop of the country's history. Korea has experienced colonial rule and upheaval throughout much of the twentieth century. Few industries existed before and during the era of Japan's imperial control (1910–45). The Korean War (1950–53) also took its toll, leaving extreme devastation and a rapidly expanding, largely unemployed population. In 1960, the country was heavily dependent on imported raw materials and manufactured goods. The economic turnaround after 1961 was, indeed, a drastic development for a theretofore undeveloped nation.

Since 1970, Korea's GDP has recorded strong year-on-year growth, particularly after 1986 (see *Figure 1*). The 1997 Asian financial crisis caused the first big contraction during the observed period and brought a brief pause to rapid economic growth. GDP contracted 6.7 percent in 1998 after rising 5.0 percent in 1997 and 6.8 percent in 1996. Thanks to the sharp recovery of the current account surplus, the Korean economy quickly rebounded and continued to recover during the 1999–2002 period, although by 2002 nominal GDP in U.S. dollar terms had still not returned to the 1996 level because of the substantial depreciation of the won in response to the crisis.

**Figure 1: Korea's Annual GDP, 1970–2001, billions of U.S. dollars, current prices**



Source: BOK various.

### Korea's Export Growth

During recent decades, Korea's strong performance in exports has been the principal factor behind its successful growth and industrialization. The ratio of exports to GDP was only 10 percent in 1970, but it rose rapidly to 28 percent by

1980 and to 36 percent in 2002. As a result, Korea has become a major exporting nation, ranking 11th among Organization for Economic Cooperation and Development (OECD) member countries in the volume of exports as well as imports in 2001 (KOSIS various). Rapid expansion of exports accompanied the rapid growth of real GDP and has, in turn, brought fundamental changes in all sectors of the economy. The rapid expansion of exports was achieved mainly by the increase in production of manufactured goods since the early 1960s (see Table 1). As a result, the manufacturing sector's share increased from 577.2 billion *won* (equivalent to \$1.82 billion) in 1970 to 163.3 trillion *won* (equivalent to \$123.2 billion) in 2001, whereas the primary sector—for example, agriculture, forestry, fishing, mining, and quarrying—increased only from 779.8 billion *won* (equivalent to \$2.46 billion) to 25.9 trillion *won* (equivalent to \$19.4 billion) throughout the same period.

However, Korea's growth pattern resulted not only from Korea's outward, industry-, and growth-oriented development strategy, but also from the choices of various economic policies (Chenery and Syrquin 1975). Certainly Korea's high growth was ignited by the expansion of exports and sustained by the rapid growth of export industries. Many Korean industries were developed on the basis of the export-first principle.

Because of the outsized expansion of industrial capacity, the amount of domestic investment always exceeded the amount of domestic savings. The gap between investment and savings was filled with foreign borrowing, which was required despite the high domestic savings rate. This is one of the major reasons—along with the need to import oil and many other industrial raw materials—why Korea's foreign debt continued to rise until 1985.

Also, the debt-equity ratio of large Korean firms, which were forced to over-expand their production capacity, tended to be higher than debt-equity ratios in any of the other Asian Tigers.<sup>1</sup> As a result, low domestic savings, a high debt-equity ratio for most firms, and a large foreign debt characterized Korean growth.

The expansion of industrial capacity in Korea was achieved largely through the expansion of existing firms instead of through the creation of new firms. This pattern has persisted and has resulted in the expansion of a small number of very large firms and business groups (*chaebol*), causing a large gap between large and small firms. This in turn has led to a concentration of economic power, in particular during Korea's heavy industry and development phase in the 1970s.

The 1997 Asian financial crisis revealed a number of weaknesses in the Korean development model, and succeeding Korean presidential administrations have struggled with varying success to reform financial and competition laws and regulations. In 2003, Korea faces major challenges regarding its economic future in Asia, its competitive place in the world, and its traditional close economic and political alliance with the United States.

---

1. Asian Tigers comprise Hong Kong, Singapore, South Korea, and Taiwan.

## **U.S-Korea Economic Relations since 1950**

The United States and Korea have maintained strong economic and trade relations since the founding of the Republic in 1948. U.S. development assistance during the 1950s and 1960s provided a good deal of the financial resources needed to reconstruct the postwar Korean economy. Since the 1970s, trade has been a key component of Korea's development model, and the United States has consistently ranked as Korea's most important trading partner.

In 2002, bilateral trade flows between the two nations were more than \$58 billion, with the United States occupying first place as Korea's top export market (representing more than 20 percent of total Korean exports) and second place as a source of imports. In turn, Korea was the eighth-largest export market for the United States and its sixth-largest source of imports.

Although still large, Korea dependence on the U.S. market has fallen dramatically since the 1970s, when the U.S. share of Korean imports was well over 50 percent. During the 1990s, the United States vied with Japan as Korea's single most important source for imports; but the Japanese share has fallen from a high of 40 percent in the early 1980s to about 20 percent in 2002. The United States is a far more important trade partner for Korea than Korea is for the United States; in recent years, U.S. trade with Korea has accounted for only 2 percent to 4 percent of total U.S. trade. Particularly since the Asian financial crisis in the late 1990s, the United States has run a significant trade deficit with Korea, increasing to almost \$9 billion in 2002.

The United States has been a leading supplier of foreign direct investment (FDI) in Korea, although Korea accounts for less than 1 percent of total U.S. outward investment—a reflection of the relatively minor role FDI has played in the Korean economy. Because of changed Korean government policies and the Asian financial crisis that depressed the value of Korean assets, investment in Korea grew strongly after 1997; between 1997 and 2000, the amount of total U.S. FDI in Korea exceeded aggregate U.S. investment for all prior years combined. In return, the United States has received a fairly large share of Korean outward investment, more than one-fourth of Korea's total.

For much of the period, the United States and Korea pursued their bilateral economic policy by using only the multilateral trading system of the General Agreement on Tariffs and Trade (GATT). Since 1990, however, the situation for both nations has changed markedly: first, the United States negotiated a bilateral trade agreement with Canada and then moved directly to form the North American Free Trade Agreement (NAFTA) with Canada and Mexico. It then went on to pursue the Free Trade Area of the Americas (FTAA) with Latin America and, late in the Clinton administration, other bilateral negotiations (Jordan, Chile, and Singapore). Under President George W. Bush, U.S. Trade Representative Robert Zoellick has announced a policy of "competitive liberalization" under which the United States—while still giving first priority to multilateral negotiations—will entertain offers of free trade agreements (FTAs) both regionally and bilaterally.

Korea came much later to a policy of pursuing trade agreements outside of the World Trade Organization (WTO). It did join the special “concerted unilateralism” of the Asia Pacific Economic Cooperation (APEC), but only in 1999 did the Korean government begin actively to plan and execute a series of bilateral and subregional FTAs, both in Asia and with other regions and countries (Chile, for example). The shift of Korea—and, most notably, Japan—to a policy of actively seeking out new partners for FTAs in Asia has major implications for the future of U.S.-Korea trade and investment relations. It is one of the main goals of this study to explore those implications.



---

## The Rise of Asian Regionalism in the Context of Worldwide Trends

The formation of bilateral and regional FTAs has been a worldwide trend in recent decades. Currently, more than 130 such agreements are in place (WTO 2000). The renewed impetus for intra-Asia and Asia-U.S. FTAs, combined with the equally strong movements centered around the EU and North and South America, has raised again the economic and political debate over the virtues and dangers of bilateral and regional preferential trade agreements—and whether they are building blocks or stumbling blocks to achieving global free trade. This puzzle has no clear answer.

So-called free trade agreements short of full multilateral concessions do result in discriminations between members and nonmembers and, as economists have frequently pointed out, produce both trade creation and trade diversion.<sup>8</sup> Trade creation results from a lowering of barriers between the members of bilateral, subregional, and regional agreements. Trade diversion occurs when exports from efficient sectors of a country outside the agreement are diverted merely because of lower tariff rates. This distorts international competition and may reduce world economic welfare. Judging such agreements from the multilateral perspective of the WTO depends in part on whether the trade creation effects outweigh the trade diversion effects.

Other considerations and factors also need assessment. One danger comes from the possibility that nonmembers of FTAs may be provoked to retaliate by raising tariff barriers or creating trade-diverting agreements with other nonmembers. The key question is whether incentives to consolidate smaller FTAs into larger FTAs and ultimately move to a global FTA are greater than counterincentives to block new entrants or block amalgamation of FTAs such as NAFTA and the EU-centered bilaterals. Fragmentation could very well prevail over a movement

---

8. For an excellent and timely analysis of the dangers of FTAs and of a world of large trading blocs, see Gordon 2001.

toward global free trade in the foreseeable future—without some changes in the WTO and new guidelines.

A stalemate that produces a proliferation of small FTAs with little movement toward consolidation has a number of downsides. In the first place, it would result in an enormously fragmented and complicated trading system—imagine a world of dozens of FTAs, each with its own interim timetables, tariff levels, and nontariff-barrier liberalization rules—and huge costs to multinationals such as IBM, Siemens, or Hyundai of sorting out trade rules for each trade group. Jagdish Bhagwati, an international trade economist, labeled this unfortunate phenomenon the spaghetti-bowl effect (Bhagwati and Panagariya 1996).

Another problem is how to accommodate the so-called rules of origin (ROOs) negotiated domestic content requirement of FTAs. In NAFTA, for example, 200 pages are devoted to ROOs, and this will be multiplied many times in a world of numerous overlapping FTAs.

Finally, some critics of FTAs have predicted—and recent history has proved them correct—that members of FTAs would discriminate against nonmembers when imposing trade remedies such as antidumping and safeguards rules. Indeed, in imposing the recent Section 201 steel safeguards action, the United States loudly stated that it had excluded Canada and Mexico from high steel tariffs on the basis of their membership in NAFTA—a policy that is contrary to the WTO founding principle of nondiscrimination. In May 2003, a WTO panel ruled that discrimination in favor of Canada and Mexico violated WTO rules. The United States is appealing the ruling to the WTO Appellate Body (ITR, 8 May 2003). As a part of the upcoming FTAA negotiations, a number of South American countries have already made it clear that exclusion from U.S. antidumping laws is a central goal.

### **U.S. and Korean Responses to Bilateralism and Regionalism**

For several decades after the founding of the multilateral trading system, both the United States and Korea eschewed trade agreements outside of the GATT. Only in the late 1980s did the United States—at the initiative of other trading partners—entertain the idea of bilateral and regional trading arrangements. It first negotiated an FTA with Canada and then went on to agree to the trilateral NAFTA under President George H. W. Bush. It was also under the former president Bush that the United States launched the effort to create the Free Trade Area of the Americas (FTAA) agreement. The administration of President George W. Bush shows how U.S. trade strategy has changed. Although the first priority for trade liberalization is still centered in WTO negotiations and the current Doha Round, the administration of the second President Bush has announced a complementary policy of “competitive liberalization,” under which the United States is committed to negotiating FTAs with all comers in all regions. Thus, agreements have been signed with Jordan, Singapore, and Chile; and negotiations have begun with Australia, Morocco, and the Central American Trade Association (Barfield 2002).

Like the United States, Korea long avoided agreements beyond the GATT and the WTO, but Korea's position changed dramatically at the end of the 1990s. Motivating factors for Korea's decision to pursue the establishment of FTAs were not only the fear of being left out of the recent trend of growing regionalism but also the onset of the Asian financial crisis. Some Korean policymakers believed that the current account deficit that preceded the financial crisis made painfully clear the danger of failing to secure stable access to foreign trade and financial markets.

The Korean government is currently pursuing FTAs with smaller strategic countries as a precursor to establishing trade agreements with its larger trade partners. Korea chose Chile as its first FTA candidate, but Korean officials are also studying the pros and cons of a number of other FTAs, including agreements with Japan, ASEAN, China, Mexico, and others.

The increased interest in FTAs raises the important question of whether these more limited, often regionally or bilaterally based trading agreements are beneficial to the participating economies. As FTAs become a more commonly considered policy option, it is increasingly important to evaluate how the economic effects of FTAs compare with the effects of broader multilateral trading arrangements as well as how the FTAs affect world trade flows in general.

For situations in which analysis is required prior to the fact—when a decision to establish an FTA needs to be made, for example—the most common technique in recent years has been simulation with a computable general equilibrium (CGE) model.<sup>9</sup> This model takes cross-sectoral data from a single base period, not only for trade but also for production and consumption, and imposes a detailed theoretical structure on the interactions among different data elements. These models take the form of equilibrium constraints and assumptions on economic behavior. The models are put to use by changing the underlying data (in the case of FTAs, removing tariffs between member economies) and observing how the remaining variables adjust.

### **Proposed Bilateral FTAs for Korea**

Japan and the United States are two countries that are important to Korea's external trade. What would be the effect of a bilateral FTA with each?

#### ***The Potential of a Korea-Japan FTA***

The proposal for a bilateral agreement between Korea and Japan has been discussed between the governments of the two countries and has attracted considerable interest from some affected domestic interest groups.

---

9. Another basic approach to the empirical assessment of FTAs is the gravity model approach. It uses a cross section of bilateral trade data and attempts to estimate a normal trade pattern. This technique can be useful in providing information on trade effects of FTAs (this is particularly the case if the cross sections are available for several time periods). Because this approach requires the application of statistical techniques to existing data, it is usually used after agreements are put in place, when it can confirm the presence of trade creation and/or diversion.

The most sensitive issues appear to stem from lingering political resentment over imperial excesses during the period when Korea was subject to Japan's control before 1945. The proposal has also been reviewed exhaustively by academic and government economists: five recent studies—a pair of studies (Sohn 2000; McKibbin et al. 2002) by the Korea Institute for International Economic Policy (KIEP) and single studies by the Institute of Developing Economies, Brown et al., and the Institute for International Economics (IIE)—have estimated the potential effect of a Korea-Japan FTA on welfare, trade, and productivity. All studies use CGE models to analyze the proposed agreement; some use static CGE models and some use dynamic CGE models. KIEP's second model (McKibbin et al. 2002) aims to rectify problems found in other studies.

### Static Models

The findings of the static models (Sohn 2000, Choi and Schott 2001, Brown et al. 2001, and IDE 2000) are summarized in **Table 22**. The most striking results of these simulations are that Korea's GDP and trade balance with Japan would be reduced. Sohn predicts that Korea's GDP level will decrease by 0.07 percent, Choi and Schott predict a 0.28 percent decrease, and Brown et al. predict a 0.23 percent decrease. Sohn predicts that Korea's trade balance with Japan will decline by \$60.9 million. The study by Choi and Schott concludes that Korea's bilateral trade balance with Japan would deteriorate.

It is well known that some Korean industries and farmers oppose a prospective Korea-Japan FTA precisely because it would exacerbate their bilateral trade deficit with Japan (Choi and Schott 2001; Yamazawa 2001). Japan would reap small welfare gains resulting from a small increase in its global exports and imports. Estimates of gains to Japan's GDP range from an increase of 0.01 percent to 0.18 percent. These static estimates do not indicate that there is a great deal of benefit to a bilateral FTA between Japan and Korea.

Japan's IDE report (2000) contradicts the findings of the other three static studies in the sense that it estimates that Korea's GDP would rise by 0.06 percent, a result that can be attributed to a difference in model structures, simulation methods, levels of shock of trade liberalization, and selection of data.

### Dynamic Models

With the introduction of dynamic effects,<sup>10</sup> Sohn (2000) and IDE (2000) models show larger effects of the proposed FTA on Korea's economy (**Table 23**). In real GDP, for example, IDE reports a large increase, 10.4 percent in Japan and 8.7 percent in Korea, and Sohn shows a 2.9 percent increase in Korea. Cheong (2002,

---

10. In dynamic models, firms of each area studied are assumed to exhibit intertemporal optimization behavior; that is, besides employing labor, capital, and land as well as intermediates to conduct production, firms also make investment decisions to maximize their intertemporal profits. Thus capital accumulates endogenously over time.

25) notes, “[T]hese estimates are very hypothetical and, therefore, criticized because the assumptions of the large change of TFP (total factor productivity) growth are purely exogenously given.”

In the analysis of dynamic effects, Sohn (2000) assumes a 10 percent increase in productivity—an annual 1 percent increase during a 10-year period—for heavy and chemical industries in Korea. IDE (2000) assumes a 30 percent

**Table 22: Economic Impact of a Korea-Japan FTA, CGE static models**

Results		KIEP (2000)	IIE (2001)	Brown et al. (2001)	IDE (2000)
		GTAP parameters (static)			
Korea	Welfare level (%)	−0.19	—	—	0.34
	GDP (%)	−0.07	−0.28	−0.23	0.06
	Trade balance with Japan (\$ million)	−60.90	—	—	−38.85
	Total trade balance	−15.43	—	—	−2.70
Japan	Welfare level (%)	0.14	—	—	0.03
	GDP (%)	0.04	0.01	0.18	0.00
	Trade balance with Korea (\$ million)	60.90	—	—	38.85
	Total trade balance	—	—	—	54.79

Note: The Global Trade Analysis Project (GTAP) model is a multiregion, multisector, computable general equilibrium model, with perfect competition and constant returns to scale; [www.gtap.agecon.purdue.edu/default.asp](http://www.gtap.agecon.purdue.edu/default.asp).

**Table 23: Economic Impact of a Korea-Japan FTA, CGE dynamic models**

Results		KIEP (2000)	IDE (2000)
		GTAP parameters (dynamic)	
Korea	Welfare level (%)	11.43	7.09
	GDP (%)	2.88	8.67
	Trade balance with Japan (\$ million)	−4.4	−24.60
	Total trade balance	30.14	408.00
Japan	Welfare level (%)	—	9.29
	GDP (%)	—	10.44
	Trade balance with Korea (\$ million)	—	24.60
	Total trade balance	—	182.00

Note: The Global Trade Analysis Project (GTAP) model is a multiregion, multisector, computable general equilibrium model, with perfect competition and constant returns to scale; [www.gtap.agecon.purdue.edu/default.asp](http://www.gtap.agecon.purdue.edu/default.asp).

increase of productivity, at an annual rate of 3 percent during a 10-year period, for metal products, transportation equipment, electronic equipment, and other machinery and equipment industries. IDE also predicts a 10 percent annual increase for textiles and wearing apparel, other manufactures, and services industries for both countries.

Recent research by Cheong (2002) improved Sohn's estimation method by incorporating the effects of capital accumulation into a standard CGE model instead of specifying TFP growth exogenously.

#### KIEP's New Model

The result of a new KIEP study carried out in 2001 (McKibbin et al. 2002) is significantly different from those reported in previous studies (*Table 24*). This study used a new model with economies of scale, capital accumulation effects, and Korean parameters. The differences in the model (compared with the 2000 model) make a significant impact on the estimated effects of a bilateral FTA between Korea and Japan. In addition to having other extensive effects, Korea's GDP is predicted to rise by 0.22 to 0.33 percent in the short term and by 0.82 to 1.90 percent in the midterm to long term.

#### The Problem of Agriculture

The intense political opposition in both Japan and Korea to liberalization of agriculture makes it conceivable that a Korea-Japan FTA would seek to exclude

**Table 24: Economic Impact of a Korea-Japan FTA, the 2001 KIEP Model**

Results	GTAP parameters				GTAP + Korea parameters			
	CRS		Economies of scale		CRS		Economies of scale	
	Short term	Mid to long term	Short term	Mid to long term	Short term	Mid to long term	Short term	Mid to long term
Real GDP	0.22	0.82	0.30	1.90	0.21	0.96	0.33	1.79
Price level	0.37	-0.31	0.23	-0.46	0.48	-0.19	0.31	-0.26
Welfare level	0.28	0.44	0.33	1.31	0.30	0.66	0.38	1.39
Savings	0.68	3.06	0.60	7.91	0.77	2.84	0.71	5.05
Capital volume	0.13	1.38	0.12	2.50	0.13	1.76	0.13	2.52
Terms of trade	0.03	-0.46	-0.01	-0.76	0.13	-0.35	0.09	-0.49
Trade balance	-1.0	2.3	-1.0	6.4	-1.1	1.6	-1.1	3.4

Source: McKibbin et al. 2002, 48.

Note: The Global Trade Analysis Project (GTAP) model is a multiregion, multisector, computable general equilibrium model, with perfect competition and constant returns to scale; [www.gtap.agecon.purdue.edu/default.asp](http://www.gtap.agecon.purdue.edu/default.asp).

important segments of bilateral farm trade (as in the EU-Mexico FTA, the Japan-Singapore FTA, and, to a lesser extent, the Canada-U.S. FTA). However, excluding agriculture could run counter to Korea's and Japan's WTO obligations because regional trade agreements are permitted under the WTO only if (among other conditions) they include "substantially all trade."

In view of concerns that have been expressed over the possible exclusion of agriculture from a Japan-Korea FTA, the proposed FTA between the two countries is simulated in the static IIE study (Choi and Schott 2001) both with and without the agriculture sector. The exclusion of agriculture yields an unambiguous improvement in the welfare outcome for Korea. This suggests that the inclusion of agriculture in any Japan-Korea FTA would result in significant trade diversion, primarily in the form of increased South Korean agricultural exports to Japan (Choi and Schott 2001, 119). The removal of agriculture from the agreement eliminates this trade diversion. For a breakdown of recent trade between Korea and Japan, see *Table A-1* and *Table A-2* in Appendix A.

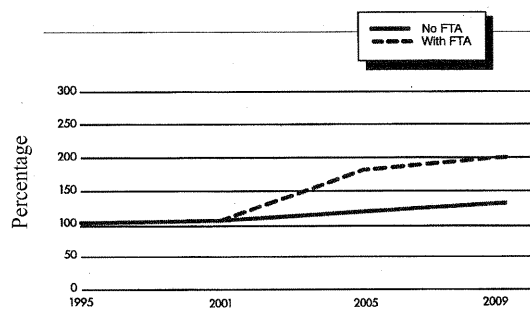
### ***The Impact of a Korea-U.S. FTA***

In 2001, both the U.S. International Trade Commission (USITC 2001) and the Institute for International Economics (Choi and Schott 2001) investigated the economic effects of a proposed Korea-U.S. bilateral free trade treaty. In addition, several studies of the welfare effects of a variety of subregional, regional, and cross-regional trading arrangements have looked at the impact on the U.S. and Korean economies of broader trade liberalization initiatives, up to APEC-wide negotiations.

On the basis of CGE modeling results, the USITC projected that four years after the implementation of a U.S.-Korea FTA, U.S. GDP would increase 0.2 percent over baseline growth, while Korean GDP would add 0.7 percent to current baseline growth. On the basis of somewhat different assumptions, Choi and Schott (2001) found a wider band of potential welfare effects for Korea, ranging from 0.4 percent to 2.0 percent. This small but positive effect for both countries should be placed in perspective, particularly for the United States, where total trade as a share of GDP was about 26 percent in 2000 and U.S.-Korea trade represents less than 3 percent of total U.S. trade. Thus, for all of these simulations, the impact on the U.S. economy would range from small to miniscule.

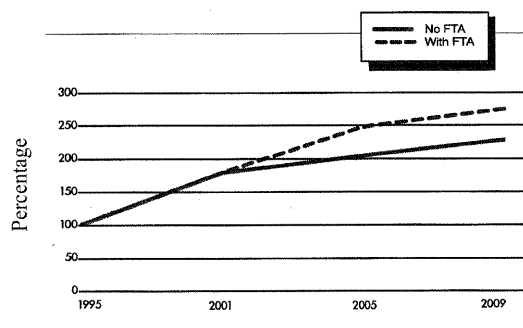
The USITC (2001) found that, after four years, total U.S. exports and imports would be approximately 0.8 percent and 1.0 percent higher, respectively, than if the FTA had not been implemented. For Korea, the FTA would result in an increase in total worldwide exports of 3.5 percent relative to the baseline, while total imports would increase by 6.2 percent. Bilaterally, the effects on exports and imports in each country would be more noticeable. The existence of an FTA would cause U.S. exports to Korea to be 54 percent higher than if there were no FTA (*Figure 18*); and Korea's exports to the United States are projected to be 21 percent higher (*Figure 19*).

**Figure 18: U.S. Exports to Korea with and without an FTA, 1995=100**



Source: USITC 2001, 5-5.

**Figure 19: Korea's Exports to the United States with and without an FTA, 1995=100**



Source: USITC 2001, 5-5.

#### At the Sectoral Level

The estimated effects on trade are quite large for both Korea and the United States in those sectors where trade barriers are currently high. Thus, the largest gains for the United States will be in agriculture and manufacturing. At a more detailed commodity level, U.S. exports of beef and cheese could possibly rise by 60 percent, and exports of beer could increase approximately 100 percent. U.S. exports of all manufacturing products to Korea would rise by about \$8 billion, while exports of agricultural products would rise by about \$10 billion.

Conversely, Korea's exports to the United States would also rise steeply in sectors, such as textiles, where U.S. barriers are excessive—with textile and apparel products rising by \$7 billion and other manufacturing products by \$2.9 billion (see *Table 25* and *Table 26*).



**Table 25: Effects of U.S.-Korea FTA on Selected U.S. Imports, 2005 (est.) relative to baseline (1995)**

Commodity	Korea	World	Korea	World
	%		millions of 1995 dollars	
Rice	1.72	1.13	— <sup>b</sup>	4
Meat products	14.04	0.87	— <sup>b</sup>	31
Fruits and vegetables	1.55	1.10	— <sup>b</sup>	56
Dairy products	550.35	1.39	15	28
Rest of agriculture	31.73	1.17	178	1,229
Natural (extractive) resources	0.56	— <sup>a</sup>	1	252
Textiles and apparel	125.19	3.37	7,008	3,150
Mineral and metal products	14.45	0.76	383	808
Other manufacturing	8.30	0.87	2,887	5,860
Services	-4.95	0.61	-209	1,094
<b>Total</b>	<b>21.40</b>	<b>0.98</b>	<b>10,262</b>	<b>12,512</b>

Sources: GTAP 2002; USITC 2001. a Less than 0.5 percent; b Less than \$500,000

**Table 26: Effects of U.S.-Korea FTA on Selected U.S. Exports, 2005 (est.) relative to baseline (1995)**

Commodity	Korea	World	Korea	World
	%		millions of 1995 dollars	
Rice	1,026.93	-1.47	— <sup>b</sup>	-14
Meat products	120.70	7.12	716	602
Fruits and vegetables	108.73	— <sup>a</sup>	69	-26
Dairy products	954.62	15.46	207	190
Rest of agriculture	216.00	9.27	9,432	8,084
Natural (extractive) resources	17.61	-1.00	91	-20
Textiles and apparel	49.19	-1.13	163	-196
Mineral and metal products	21.39	— <sup>a</sup>	396	-236
Other manufacturing	37.40	— <sup>a</sup>	8,021	1,109
Services	1.26	-1.07	8	-2,098
<b>Total</b>	<b>53.95</b>	<b>0.84</b>	<b>19,175</b>	<b>7,396</b>

Sources: GTAP 2002; USITC 2001. a Less than 0.5 percent; b Less than \$500,000

### Domestic Production

Changes in trade flows affect both sectoral and overall production in national economies. In most cases, an increase in exports provides the incentive to increase the output of a particular sector, while increased competition and imports usually result in a decrease in domestic production, at least in the short term. As

increases and decreases in incentives operate across a number of sectors, productive resources are reallocated, and cross-sectoral demand for different factors of production is altered. Because the supply of the factors of production is constrained at any given time, expansion of some sectors will be accompanied by contraction in other sectors.

For the United States, these induced production changes are quite small, given that U.S. trade with Korea is quite small in relation to total U.S. trade and production. The largest increase—just under 1 percent—would come in the combined agricultural sectors. The largest decrease would occur in the textiles and apparel industries, with output declining by 1.3 percent (*Table 27*). The decrease results from both a sharp increase in textile and apparel imports from Korea and the expansion of resources in U.S. agriculture, which squeezes factors of production out of textiles and apparel.

For Korea, the reverse would occur: production in textiles and apparel would increase by 18.2 percent, while production would decrease in other sectors because of both an increase in U.S. imports and the squeeze on factors of production. Specifically, the USITC (2001) estimates that after four years, total Korean agricultural production would be 5.5 percent lower as a result of U.S. imports and a booming textile and apparel sector. Also, trade diversion and the loss of market access would cause other regions to suffer small welfare losses as a result of the U.S.-Korea bilateral FTA: GDP in the EU would drop 0.1 percent against the baseline, and GDP for the rest of East Asia would drop by 0.16 against the baseline.

**Table 27: Effects of U.S.-Korea FTA on Korea and on the World, 2005 (est.) relative to baseline (1995)**

Commodity	Korea	World	Korea	World
	%		millions of 1995 dollars	
Rice	— <sup>a</sup>	−0.82	4	−300
Meat products	0.72	−2.97	1,006	−24
Fruits and vegetables	— <sup>a</sup>	−0.78	99	−136
Dairy products	0.54	−2.32	641	−137
Rest of agriculture	0.98	−8.44	13,636	−8,222
Natural (extractive) resources	— <sup>a</sup>	— <sup>a</sup>	−39	−85
Textiles and apparel	−1.30	18.19	−3,678	12,525
Mineral and metal products	— <sup>a</sup>	−0.95	−108	−1,217
Other manufacturing	— <sup>a</sup>	— <sup>a</sup>	584	−1,519
Services	— <sup>a</sup>	1.41	22,857	7,352

Sources: GTAP 2002; USITC 2001.

<sup>a</sup> Less than 0.5 percent

---

## Prospects for Future U.S.-Korea Trade and Investment Relations

This final chapter describes the issues facing the United States and Korea in three venues—the multilateral, the regional, and the bilateral. Specifically, the study addresses common and competing goals for the two countries in the Doha Round of WTO negotiations, the challenges and potential responses to growing regional arrangements in Asia, and, finally, bilateral trade and investment issues. Where appropriate, recommendations are advanced to the governments of both countries.

### Common and Competing Goals in WTO Doha Round

The launching of the Doha Round of WTO multilateral trade negotiations in November 2001 presented new challenges for U.S.-Korea trade relations. Among the goals set forth in the Doha Declaration are new or amended negotiated agreements on industrial tariffs, services, intellectual property, agriculture, subsidies, government procurement, tariff peaks in textiles, and other areas. In addition, there are the so-called Singapore issues that were agreed at the 1996 ministerial meeting in Singapore. These included working parties on investment and the environment, transparency in government procurement, trade facilitation, and trade and development. This study will not attempt to analyze all of these issues; it will merely highlight some of the most important in relation to the United States and Korea.

Recent economic studies with the CGE model have evaluated how the Doha Round will affect the Korean economy. One study (Choi and Park 2002) simulated eight separate policy scenarios ranging from virtually full liberalization in all manufacturing, agricultural, and services sectors back through various partial liberalizations (25 percent, 50 percent, etc.). Results showed that real GDP and welfare for Korea would increase, respectively, by 2.55–4.21 percent and 3.06–4.62 percent under the various scenarios calculated. Similar studies for the U.S. economy demonstrate positive welfare effects of 1.59 percent (the scenario as-

sumes a 33 percent reduction in all trade barriers, including reduction in agricultural protection, tariffs on manufactures, and services barriers (Brown et al. 2002, table 4).

### ***U.S. and Korean Goals at Doha***

Both the United States and Korea go into the Doha Round with a set of liberalization goals, some of which are quite similar and some of which are at odds with those of the other trading partner. In general, the United States and Korea are likely to team up on industrial tariff reduction (although there will be separate priorities and modalities for proceeding) and on services liberalization (although again with different priorities and with different sensitive sectors). The major conflicts will come in reform of agriculture and reform of WTO antidumping rules.

In December 2002, the United States formally proposed a bold and sweeping reduction of all industrial tariff rates among WTO nations by 2015 (USTR 2002e). Under the U.S. proposal, during phase one (2005–10), all duties now set below 5 percent would be eliminated. The effect of this proposal would be to make more than three-quarters of imports into the United States, the EU, and Japan duty free by 2010. The United States also proposed a separate initiative for “highly traded goods” under which zero-for-zero negotiations would be undertaken with the goal also of eliminating all tariffs by 2010. Among the sectors suggested for inclusion in these negotiations were agricultural equipment, construction equipment, chemicals and allied products, information technology and electronic products, pharmaceuticals, steel, toys, medical equipment, and wood products. Finally, the U.S. proposal would “harmonize” all high-tariff products (particularly textiles and apparel) at 8 percent by 2010, and then eliminate all tariffs in these sectors by 2015.

Korea will probably welcome much of the U.S. proposal. For example, although it asks for deep and quick tariff reductions, the U.S. proposal largely follows a formula approach (labeled the Swiss formula in WTO terms) as opposed to an across-the-board or request–offer approach (Choi et al. 2002). For only a select group of sectors does it suggest a zero-for-zero approach. In addition, one of Korea’s announced goals for the Doha Round is a sharp reduction in high and peak tariffs (Choi et al. 2002, 127–8). Undoubtedly, however, there are some industrial sectors (such as chemicals and automobiles) where political sensitivities will present problems. On balance, though, the United States and Korea will generally be working from a common framework in this area.

For services, the United States has made liberalization in individual sectors its chief negotiating goal. In a July 2002 announcement (USTR 2002d), the USTR targeted some 15 sectors including telecommunications, financial services, express delivery, energy and environmental services, education, professional services, distribution services, advertising, and audiovisual services. In addition, the United States urged as a general priority a sizable increase in sectoral commitments to commercial presence (investment) and to temporary entry for pro-

fessional services workers (Yerkey and Pruzin 2002). For its part, Korea has submitted request–offer communications to some 36 WTO members, mainly in the areas of telecommunications, construction, distribution, financial services, and maritime services (Choi et al. 2002, 77–8). In the financial-services area, Korea has an advantage over many other developing countries in that as a result of the Asian financial crisis in 1997 it initiated a number of financial-services regulatory reforms on its own or as a result of negotiations with the IMF (Choi et al. 2002, 100).

For the United States, maritime services will present the most difficult negotiating issue, not only with Korea but also with many other WTO members. There will almost certainly be a strong attack on U.S. protection in this area, with many members balking at opening other services areas without some movement in maritime services on the part of the United States. Korea, on the other hand, is likely to find strong pressure to liberalize its relatively closed legal, education, medical, and health services sectors (Choi et al. 2002, 77–8).

Agricultural negotiations will present the greatest challenges in the overall Doha Round negotiations and for the prospects of reaching accommodation between the United States and Korea. Korea will join Europe and Japan in resisting major changes, while the United States will take a leadership role, along with the Cairns Group<sup>11</sup> of agricultural nations and many developing countries, in pushing for sweeping reforms (Choi et al. 2002, 65–7).

The United States has already attempted to preempt the opposition by setting high goals for reform of WTO rules on agricultural supports. In July 2002, the USTR unveiled an ambitious proposal to cut farm subsidies in the WTO trade talks (USTR 2002c). Under the U.S. proposal, WTO members would be required to eliminate all agricultural export subsidies over a five-year period after the negotiations conclude in 2005. Further, the United States wants a reduction in average global import tariffs on farm products from about 62 percent in 2003 to 15 percent over the same five-year period. Finally, the U.S. proposal would reduce trade-distorting government subsidies for agriculture by more than \$100 billion by restricting subsidies to 5 percent of the total of domestic agricultural production.

Because it does not export large quantities of farm products, Korea will not be affected by the proposals of the United States and others such as the Cairns Group for drastic reductions in export subsidies (Choi et al. 2002, 71). Korea will, however, be subject to major adjustment challenges if agreements are reached in the Doha Round for big reductions in tariffs and trade-distorting internal subsidies. Important areas will be dairy goods (applied tariffs are just under 40 percent), beef (tariffs are in the 30–70 percent range), fruit, vegetables, beverages, and juices (many tariffs are in the area of 50 percent), and prepared foods such as

---

11. Argentina, Australia, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Guatemala, Indonesia, Malaysia, New Zealand, Paraguay, Philippines, South Africa, Thailand, and Uruguay are members of the Cairns Group.

peanut butter, soups, jams, and jellies (the tariff range is 30–50 percent). Finally, in a class by itself is the problem of rice; strict Korean quotas limit rice imports severely.

Korea, along with Japan and the EU, has already attacked the U.S. proposal as going beyond the mandate given for the trade talks at Doha (Bridges 2002). These are just the opening gambits in a negotiating struggle that will be decided at the very last moments of the Doha Round.

Another difficult negotiation—the results will once again be known only at the very end of the round—is on reform of WTO antidumping rules. On antidumping reform, the United States (and the EU to some extent) will find itself isolated from almost all other members of the WTO. In the run-up to Doha, in controversy over the goals and framework of future negotiations, skirmishing over antidumping reform began even before the round was launched. In a last-minute compromise that papered over deep differences, the Doha Declaration provides for negotiations “aimed at clarifying and improving disciplines” under the WTO’s existing antidumping and subsidies agreements, but the mandate also states that such negotiations will preserve the “basic concepts, principles and effectiveness of these Agreements and their instruments and objectives.” (WTO 2001a).

Korea, along with other vociferous *demandeurs* for reform, has joined a group called Friends of Antidumping (Choi et al. 2002, 142–4). In June and October of 2002, the group put forward a substantial, specific list of changes to existing rules, including the elimination of the practice of zeroing-out export prices that are above the average of the home market; rewriting and tightening the instructions regarding how costs of production are calculated; similarly tightening the criteria for determining whether an industry in the importing country has been materially injured; mandating that antidumping duties be set only high enough to repair the alleged injury, and not higher; and, finally, introducing a public-interest test to all national antidumping regimes that would take into account the costs of dumping duties to downstream industries and ultimate consumers.

In December 2002, the United States signaled its strong opposition to many of the proposals put forward by the Friends of Antidumping, arguing that the proposals violate the Doha Declaration and do not preserve the “basic concepts, principles and effectiveness” of the antidumping agreement. The issue is now fully joined, and a game of chicken is likely to be played out over the next two years. Many developing countries have adamantly stated that they will not sign off on other trade liberalization agreements in the Doha Round unless major reforms of the antidumping agreement are enacted. The Office of the United States Trade Representative (USTR), on the other hand, is under a strong mandate from the U.S. Congress to hold the line. Thus, this issue, along with agricultural reform proposals, will almost certainly be decided as a part of some kind of grand bargain in the final days of the Doha Round negotiations.

On the Singapore issues—transparency in government procurement, trade facilitation, investment, and competition policy—the United States and Korea

will more often find common cause than disagreement, particularly on the less controversial issues of trade facilitation and government procurement. In general, it is the EU that is pressing for inclusion of investment and competition policy in the negotiations.

The United States has no strong negotiating goal regarding competition policy, not least because of continuing divisions among U.S. government agencies. It is interesting that Korea is taking the lead in pushing for some kind multilateral framework for competition policy, in contrast with the opposition of most developing countries, particularly countries in Asia (Choi et al. 2002, 249–51). Neither the United States nor Korea will be among the WTO members pushing for significant new WTO rules and regulations on investment although the United States may play to the galleries by offering itself as a mediating force between the EU and developing countries.

On another new issue, trade and the environment, the most likely outcome is for an agreement to continue studying the relation between multilateral environment agreements (MEAs) and WTO rules. Developing countries, however, will oppose negotiating fixed rules governing these relations during this round. The Korean government, at least rhetorically, has pledged to take an active part in any environmental negotiations.

#### ***U.S.-Korea WTO Trade Dispute Cases***

The United States and Korea have increasingly turned to the new WTO dispute settlement system for independent judgments on trade disputes (See **Table B-1** in Appendix B for details of each case). Since the creation of the WTO in 1995, U.S.-Korea trade disputes have resulted in twelve WTO dispute settlement cases that have affected a small but important share of the U.S.-Korea trade flows. Choi and Schott (2001) state that U.S.-Korea WTO dispute settlement cases filed before 2001 (the first 10 cases) involved almost \$2.5 billion of U.S. exports to Korea and about \$1.9 billion of Korea's exports to the United States in 1999. This was about 8 percent of total U.S.-Korea merchandise trade volume.

Although the two countries have initiated an equal number of cases against each other, a pronounced difference exists between the products and protection instruments involved in the cases of each country. WTO dispute settlement cases filed by Korea came in reaction to the U.S. antidumping and safeguards regime. Three out of the six Korean cases addressed U.S. antidumping measures against Korea's exports of electronic products (color television receivers, July 1997), semiconductors (DRAMs of 1 megabyte and above, August 1997), and steel products (steel plate, sheet and strip, August 1999). Two more cases addressed U.S. safeguards actions against steel products (steel line pipe, June 2000; and a wide range steel of products, March 2002). One separate case reflected complaints against the U.S. Continued Dumping and Subsidy Act of 2000 (the Byrd Amendment, January 2001) (WTO 2002).

Cases brought by the United States were concerned mostly with Korea's regulatory systems such as distribution provisions, certification and test stan-

dards, tariffs, and government procurement practices. Five cases out of the six filed by the United States against Korea were related to agricultural and food products: testing and inspection of agricultural products (April 1995), the shelf life of products (May 1995), inspection of agricultural products (May 1996), taxes on alcoholic beverages (May 1997), and imports of fresh, chilled, and frozen beef (February 1999). Another case addressed government procurement issues (February 1999).

The WTO dispute settlement cases between the United States and Korea clearly reveal the diverse nature of trade policies implemented by the two countries with respect to both the domestic sectors for which they seek protection and the trade protection instruments they use. Differences in their protected sectors and in their use of trade instruments are likely to create divergent priorities for the two countries during further bilateral and multilateral trade negotiations and are hallmarks of the greatest challenges facing negotiators from the two countries.

### **The Rise of Asian Regional Agreements: U.S. and Korean Perspectives**

The sudden increase in the number of negotiated and proposed regional and sub-regional trade agreements over the past few years has taken both trade officials and scholars by surprise. Although trade economists have long studied the potential effects of various FTAs around the world, recent events and proposals have spawned a veritable cottage industry of studies by academics and national departments of trade. Economic effects constitute one important basis for judging the pros and cons of individual new trade agreements, but also to be factored in are a number of geopolitical factors—security, diplomatic, and political goals and realities.

Costs and benefits of new trade agreements by Asian countries—whether with one another or with other trading partners—will likely depend as much on geopolitical factors as economic consequences. This is particularly true with regard to the United States and South Korea because the exigencies created by the Cold War and a divided Korean peninsula (never more intrusive than at present) created a relationship in which political and security issues are inextricably entwined with economic issues.

Chapter 4 provided a discussion of the economic effects of two bilateral FTAs that have been much discussed: a Korea-Japan FTA and a Korea-U.S. FTA. Selected larger subregional trade arrangements would have other economic effects and impacts on the U.S. and Korean economies as well as noneconomic consequences. To simplify this analysis, the results of one set of simulations (Scollay and Gilbert 2001) will form the basis for judgment.

The specific results used in *Table 28* are the net economic welfare effects and the terms of trade (changes in exports and imports) effects. Scollay and Gilbert (2001) used a static model that captures only short-term effects, but not dynamic, longer-term effects such as the exploitation of economies of scale and



**Table 28: Effects of Various Asian Trade Agreement Formations on Korea's and U.S. Welfare, Exports, and Imports**

Formation	Changes in Korea's:				Changes in U.S.:		
	Welfare (% of initial GDP)	Exports (export values FOB, % change from base y)	Imports (imports values CIF, % change from base y)	Welfare (% of initial GDP)	Exports (exports values FOB, % change from base y)	Imports (imports values CIF, % change from base y)	
APEC formation	APEC MFN basis	23.40	23.15	0.01	7.16	6.56	
	APEC preferential basis	26.28	26.08	-0.01	7.26	6.69	
	APEC MFN (excluding U.S.)	22.17	21.92	0.06	1.58	1.43	
	APEC MFN (excluding U.S. and Japan)	22.06	21.81	0.05	1.34	1.20	
	AFTA-CER-Japan-Korea- China (western Pacific)	23.66	23.54	-0.06	-1.33	-1.26	
East Asian and western Pacific formation	Japan-Korea	8.21	8.12	-0.01	-0.25	-0.23	
	Japan-Korea (excluding agriculture)	6.24	6.16	-0.01	-0.23	-0.22	
	Japan-Korea-China	19.49	19.42	-0.02	-0.35	-0.34	
	AFTA-Japan-Korea	12.07	11.96	-0.02	-0.67	-0.64	
	AFTA-Japan-Korea-China (East Asia)	22.96	22.85	-0.03	-0.80	-0.78	
	AFTA-CER-JAPAN-Korea- China (western Pacific)	23.66	23.54	-0.06	-1.33	-1.26	
	AFTA-CER-Japan-Korea	12.94	12.83	-0.05	-1.16	-1.08	
	AFTA-CER	-0.30	-0.30	-0.01	-0.21	-0.20	
FTAA, APEC bloc East Asian APEC formation	FTAA	-0.62	-0.62	0.06	3.69	3.43	
	APEC MFN and FTAA	22.90	22.65	0.07	9.59	8.82	
	preferential and FTAA	25.71	25.50	0.06	10.02	9.26	
	Western Pacific bloc and FTAA	23.13	23.01	0.01	2.29	2.10	
Global	Global liberalization	39.96	39.38	-0.05	19.98	18.48	

Source: Scollay and Gilbert 2001.  
Definitions: base y: base year (base year = 1.00); APEC MFN basis: Assumed that APEC members continue to practice open regionalism, understood in the sense of collective implementation of unconditional MFN liberalization, or concerted unilateralism; APEC preferential basis: Assumed that members remove tariffs against each other, but not against nonmembers; CIF: Cost, insurance, and freight; FOB: Free on board

the impact over time of positive changes in investment and productivity. Their model is therefore likely to be at the lower bound of positive effects. These results are not, of course, exact and should be taken as giving the range and direction of change. In many circumstances, CGE models such as these have produced conflicting results, but simulations of liberalization by various APEC countries have shown a broad consistency among earlier and current studies.

For Korea, from a purely welfare gain-loss perspective, the larger Asian FTAs yield the most positive results:

- An APEC preferential liberalization under which APEC members remove tariffs against each other but not against nonmembers would boost Korea's economy by an additional 1.63 percent of GDP;
- A western Pacific (AFTA<sup>12</sup>-CER<sup>13</sup>-Japan-Korea-China) FTA would boost Korea's GDP by 1.20 percent;
- An AFTA-Japan-Korea-China (East Asia) FTA would add 1.18 percent;
- An APEC most-favored-nation (MFN) liberalization under which APEC members remove tariffs against each other *and* against nonmembers would add 0.94 percent of GDP to Korea's economy;
- An APEC FTA, excluding the United States, would boost Korea's economy by 0.94 percent; and
- An APEC FTA, excluding Japan, would boost it by 0.93 percent.

The Scollay-Gilbert model indicates that potential bilateral FTAs with Japan have a negative effect on Korea's GDP: -15.0 percent with agriculture excluded; -0.28 percent with agriculture included.

For the United States, the picture is more complicated; several explanatory points need to be made before tracking the impact of individual FTAs on U.S. GDP. First, in most cases the impact is miniscule, and, given the imprecision of CGE model results, the best interpretation would be that these FTAs would have practically no positive or negative impact on U.S. GDP. Second, given the size of the U.S. economy, it may well be (though this is not inevitable) that the future dynamic effects (economies of scale, productivity enhancement) of trade liberalization that are not captured would produce much more positive results. Third, given the relative openness of the U.S. market in manufacturing and agriculture, the real welfare gains from future liberalization may come in the services sectors, where current models are inadequate and may well understate future positive benefits.

In general, however, progressively more comprehensive East Asian-western Pacific trade blocs that exclude the United States result in progressively greater welfare losses for the United States. Thus, the United States would be negatively

---

12. ASEAN free trade area.

13. Australia-New Zealand Closer Economic Relations (CER) Trade Agreement.

impacted most by a western Pacific FTA (−.06 percent of GDP); followed by a Japan-Korea-CER-AFTA (South Asia, plus Japan and Korea) FTA at −0.015 percent and an East Asia FTA (Japan-Korea-China-AFTA) at −0.013 percent. On the other hand, various APEC-based liberalizations generally yield small but positive welfare gains for the United States.

For many of the proposed or consummated Asian FTAs, trade diversion from countries excluded from each particular pact is pervasive though often small. For Korea, particularly, the impact of trade diversion from U.S. companies will present an important calculation and problem. For the United States, although the amount of diversion may be small in terms of GDP, for the affected industries and sectors the impact might provoke substantial constituent opposition and pressure from the U.S. Congress.

In the end, geopolitical factors in both the United States and Korea will play significant roles, especially given recent events and trends in Asia. For example, China in the past several years has begun to move decisively toward a leadership role in trade with Southeast Asia, as evidenced by its persistent wooing of the nations of ASEAN for an FTA. Japan has signaled a redirection of its trade policy toward more intra-Asian trade agreements; however, unlike China and possibly because of a general stasis in Japanese internal politics, Japan has largely failed to carry through its new goals. Korea must decide whether it really wants to pursue bilateral or trilateral trade arrangements (Korea-Japan, Korea-China, or Korea-China-Japan) that will quite possibly lead to greater political involvement with these two powers and less with the United States. Would a move toward integrating with United States and Latin America make more sense for Korea from both an economic and a political standpoint?

While the United States is much the larger economic and political power—indeed, the only superpower—it, too, faces real challenges in responding to the rapidly evolving patterns of Asian regionalism. Both economics and geopolitics dictate that the United States cannot afford to be left out of these Asian trends; yet little thought seems to have gone into the specifics of a U.S.-Asia regional policy. USTR has trumpeted “competitive liberalization” and has announced its intent to negotiate FTAs with many and sundry nations—Chile, Singapore, Jordan, Morocco, Australia, and Central America—but neither U.S. Trade Representative Zoellick nor any other U.S. official has provided any sense of priority or order to this process.

### ***Optimal Choices for the United States and Korea***

The best option for both the United States and Korea is to take a leadership role and summon the political courage to make the necessary compromises to achieve a successful outcome to the WTO Doha Round (Gordon 2003). A proliferation of numerous bilateral or trilateral FTAs would be the most negative outcome among the choices of various Asian regional pacts. For small-scale FTAs, in almost all cases the economic welfare of the participants is little enhanced; more important, each such arrangement would increase the level and complexity of trade diver-

sion and create a bewildering set of new trade rules and rules of origin—Bhagwati and Panagariya's spaghetti-bowl effect. A plethora of small FTAs would also most likely lead to greater trade tension and conflicts. Finally, the attention and resources that would need to be devoted to these small FTAs would divert human resources and political capital from the attainment of larger trade and investment goals.

Thus, as the economic studies cited above amply demonstrate, the first and best regional options revolve around APEC. For both the region as a whole and for individual nations, APEC-wide liberalization yields the most significant economic welfare gains. Politically, negotiations within the APEC framework get around the problem of integrating Taiwan, Hong Kong, and China into a trade framework. And both Australia and New Zealand, which are often left out of subregional FTA proposals, could be included.

The largest challenge to APEC today is the modality that hitherto has governed the negotiating process. So-called concerted unilateralism, by which each APEC nation liberalizes unilaterally and no reciprocal rules are applied, has not to date produced meaningful results; and APEC liberalization seems to have stalled. The United States and Korea—and, most significantly, Japan and China, as the other major forces behind APEC liberalization—face crucial choices in the immediate future. One path, which seems increasingly unlikely, is to reinvigorate concerted unilateralism. The other is to explore the possibility of adopting a more traditional modality: that is, converting APEC into a reciprocity-based and binding FTA.

Economic simulations show that, whatever the means to get there, an APEC preferential agreement does result in the greatest welfare gains for APEC members, both large and small; however, the problems inherent in this approach are enormous. Would Japan and Korea, for instance, agree to binding rules for agriculture? Would the United States make unacceptable demands regarding labor and the environment? In addition, an APEC-wide FTA would have the strongest negative impacts on other regions such as Europe and Latin America in the multilateral trading system. This could increase trade friction and conflict; or, conversely, it could spur these regions to take the lead in greater MFN liberalization through the WTO.

Two other obvious potential configurations in Asia are a western Pacific FTA or an East Asian FTA. A western Pacific trade bloc, joining Northeast Asia, Southeast Asia, and Australia–New Zealand would also generate substantial welfare gains for participants; but, as with an APEC FTA, it would have a negative impact on the economic welfare and terms of trade of nations outside the agreement—most notably the United States. For Korea, and for other nations, the political consequences of joining such a bloc could be damaging if their membership produced a backlash from U.S. industry that would translate into protectionist intervention by the U.S. Congress. It is, therefore, in the interest of both the

United States and Korea to work to avoid either a western Pacific or East Asian FTA that does not include the United States.<sup>14</sup>

Both Korea and the United States face the immediate problem of the disjuncture between the economic logic underlying Asian regional proposals and political realities. Asian nations today are busily proposing and negotiating small, bilateral FTAs, largely because they present fewer political problems. This trend, however, will result in a bad economic outcome and in greater political tensions and conflicts. Thus, it is in the interest of both the United States and Korea to think beyond the short-term economic and political attractions of small FTAs and use their influence to channel the pressures for greater Asian regional arrangements toward large-scale economic agglomerations such as APEC or an inclusive western Pacific-based FTA.

### *Proposals for Reform of Article 24 of the GATT*

The United States and Korea should also unite to clarify and strengthen multilateral rules governing all forms of bilateral and plurilateral trade agreements through amendments to Article 24 of the GATT. Because of the dangers of static and numerous FTAs, the newly launched Doha Round of WTO negotiations should be a vehicle for major reform of the rules governing bilateral, subregional, and regional agreements. Such a reform would be in the interest of both the United States and Korea, and the two nations could make common cause in pressing for such reforms. The issue should be of particular importance for Korea now that its government has announced that it does not intend to exclude agriculture from future FTAs. Korea, therefore, will want especially to see to it that other Asian FTAs are held to stricter accountability under new WTO rules.

The GATT in Article 24 has always accommodated bilateral and plurilateral agreements and also provided rules by which they should be governed. During the Cold War in the 1950s, however, these rules were violated so that Europe could build a new economy based on bilateral and regional discrimination against outside nations. The time has come, however, to rethink and reformulate rules for FTAs and enforce the sensible rules on the books that have been ignored for four decades (Barfield 2002).

---

14. Yang Jun-sok has thoughtfully made the case for Korea's joining an Asian-based FTA that does not include the United States. He has noted that Korea and other Asian nations have views different from the United States on a number of trade issues: antidumping and safeguards policies, intellectual property, government procurement, investment, the timing of agricultural-market opening, and labor and environmental standards. He believes that individual countries of Asia are in a weak bargaining position on these and other issues but that together in a trade bloc they could negotiate from greater strength with a U.S.-based (presumably FTAA) trade bloc. Yang also notes, however, that it is not clear that in the near or medium term Asian countries will be able to agree to an FTA, and on some issues—investment, agriculture, and even antidumping—there may well be divisions that match issues with the United States.

Current WTO rules provide for two restrictions on FTAs:

- They must operate across the board and not exclude major sectors of the economy; and
- Tariffs on imports from nations outside the proposed FTA must not on the whole be higher than they were before the conclusion of the agreement.

Because of the huge measurement and definitional problem, the second rule will always be difficult to enforce—particularly now that nontariff barriers in services and intellectual property need to be incorporated somehow in the trade restriction formula. The first rule is much more clear-cut, however, and enforcement will be essential given the contemplated structure of a number of Asian bilateral and subregional agreements.

Initially, both Japan and Korea planned largely to exclude agriculture from the FTAs they propose. Neither wanted to expose its weak and uncompetitive agriculture sector to international competition. Recently, however, both Japan and Korea have announced that they would not exclude this important sector from their future FTAs proposals. This is good news and should be supplemented by support for major changes in Article 24. It is in the interest of Korea as well as Japan to join the United States and other WTO members in clarifying that FTAs must include all major sectors of the economy.

Several new restrictions should also be considered in order to tie FTAs more closely to the global free trade goals of the WTO:

- The WTO should prescribe that, for future FTAs, the member nations agree that they will adopt the lowest tariff and the most liberal trade and investment rule as the baseline for the agreement. This would mean that in no instance would other WTO members face increased trade barriers as a result of bilateral, subregional, or regional agreements.
- A new rule should dictate that, after a certain period (somewhere between five and ten years), the terms of the FTAs would be opened up on an MFN basis to all members of the WTO.
- Nations entering into FTAs should be obligated to submit to full surveillance by the new WTO trade policy review mechanism. The WTO should have the authority to monitor and trace evolving trade patterns by sector and by industry before and after the agreement is signed. In this manner, it could assess the amount of trade diversion and issue rulings dictating changes in the framework of the FTA in question or compensation for injured parties.
- Article 24 of the GATT should be amended to include a mandate that all FTAs be open to any other members of the WTO should they apply. This principle of open regionalism would become an indispensable tool in thwarting the creation of preferential trade blocs and in encouraging what trade economist Richard Baldwin has called the “domino theory” of regionalism—that is, increasing the pressure for

countries outside of FTAs to take steps to secure membership in one or more regional arrangements and thus providing momentum for a future global free trade arrangement. If these reforms to Article 24 are put in place, they will go far to ensure that FTAs become building blocks rather than stumbling blocks for global free trade and competition.

### **Current Trade Disputes and Investment Issues between the United States and Korea**

With more than \$58 billion in trade flows, Korea and the United States will naturally confront bilateral trade issues and disputes, and government executives and private-sector corporate officials of the two countries may even exchange acrimonious comments. Such situations occurred in the past, but no current U.S.-Korea trade dispute—although they are important and worrying—rises to the level of crisis. An attempt at detached and unbiased brief descriptions of the issues raised in key sectors and with regard to key policies that affect trade flows is followed by recommendations to handle these disputes in a less contentious manner through public-private partnerships with business, labor, and other civil-society organizations.

Korea must also deal with the overhang of history, particularly its industrial policies of the 1970s and 1980s. In a number of instances—automobiles, steel, and semiconductors are notable examples—the previous overt Korean government aid to these sectors colors the current negotiating positions of the United States and other Korean trading partners. The situation is further complicated by the short-term negative impact of the 1997 financial crisis, which produced new temporary government bailouts. Even where evidence of current overt government protection or subsidy is weak or unclear, suspicion remains that informal guidance and government bureaucrats and institutions are still offering help.

#### ***Automobiles***

While it was subject to a series of government controls designed to prevent excess competition among domestic producers as well as limit importation from foreign car manufacturers, the Korean automobile industry throughout the 1980s and the 1990s recorded major growth. Moving from ninth place among world car manufacturers in 1991 to fifth place in 1994, Korea exported more than half of its domestic car production by 1998 (USTR 1998, 270). At the same time, Korea imported fewer cars than any other major auto-producing country, which caused a major auto trade imbalance and subsequent trade friction with the rest of the world.<sup>15</sup>

---

15. In 1996, the foreign share in the Korean auto market was less than 1 percent, a proportion that still holds true. In Japan it is 6 percent; and in France, Germany, and the United States it is over 25 percent (Manyin 2002).

Since the early 1990s, the United States has expressed serious concerns with respect to the limited access of exported U.S. automobiles to the Korean “sanctuary” market. Complaints constantly mentioned:

- High taxes and tariffs;
- Stringent standards and certification procedures;
- Restrictions on advertising and retail financing; and
- Anti-import sentiments and actions.<sup>16</sup>

Nowadays, the auto trade imbalance between the United States and Korea continues to disappoint U.S. manufacturers, whose market share in Korea has remained insignificant.<sup>17</sup> Open access to the Korean market still depends on several outstanding trade issues that are subject to current negotiations between the two countries:

- Korea imposes an 8 percent tariff rate on imported cars<sup>18</sup> (more than three times higher than the U.S. tariff), plus multiple taxes levied on top of that. The U.S. position is that taxes based on engine size have a disproportionate effect on imported vehicles. Despite isolated tax reductions,<sup>19</sup> tariffs and remaining taxes continue to hinder the competitiveness of U.S. cars in the Korean market.
- The United States is concerned with a range of standards and classification issues, including the Korean government’s plans to implement a pass-by noise standard, apply new taxation standards for sport-utility vehicles, and change the fuel economy labeling laws and tire safety inspection rules (USTR 2001).
- U.S. manufacturers complain about the negative sentiment of Korean consumers toward imported automobiles (Manyin 2002).

---

16. In December 1996 and early 1997, the Korean National Tax Office engaged in a broad audit action directed at all leasers of imported autos. Although the action was withdrawn after complaints by foreign governments, the threat of tax audits for lessees has continued to have a chilling effect on import sales.

17. With 7,747 automobiles exported to Korea in 2001, U.S. car makers retained a modest 0.7 percent share in Korea. At the same time, Korean exports to the United States soared. With a record of 470,000 vehicles exported to the United States in 2001, Korean manufacturers attained a 2.7 percent market share (USTR 2002a, 278).

18. U.S.-Korea bilateral consultations led to automobile tariff reductions from 15 percent to 10 percent in 1994, and to 8 percent in 1995 (USTR 1995). The United States has continued to demand additional tariff cuts, from 8 percent to 2.5 percent.

19. Notable is Korea’s temporary reduction, from November 2001 through June 2002, of the special consumption tax (USTR 2002a). During bilateral negotiations in August 2002, the Korean government committed itself to alter tax regulations on cars with an engine size above 2400cc to 10 percent by 2004 (Cooper 2002a, 3). During a December 2002 bilateral meeting, it was agreed that sport-utility vehicles exported to Korea would not be subject to a special exercise tax between 7 and 14 percent (Cooper 2002c, 2).



The Korean government counterclaims that the low market share of imported automobiles is due to Korean consumers' decreased purchasing power after the 1997 crisis and their preference for smaller vehicles, the lack of advertising, and the poor marketing of foreign brands. The Korea Automobile Importers and Dealers Association (KAIDA) underlines the constant increase of foreign car imports and claims that the market share of imported cars is much higher in value terms because imported cars are normally upscale models sold to wealthy customers. However, the absolute number of car imports in Korea remains insignificant when compared with the domestic sales of Korean automobiles (*Table 29*).

As with U.S.-Japan automobile relations, one key mitigating factor in the future will be the rise of cross investment in the two countries' automobile companies and FDI, particularly investment by Korean companies in greenfield plants in the United States. Thus, the partnership between General Motors and Daewoo, launched on 15 October 2002 (Cooper 2002b, 3), and the new Hyundai Motors manufacturing plant in Alabama<sup>20</sup> (Starner 2003) represent an effective way to not only redress the imbalance in the U.S.-Korea bilateral automotive trade but also trigger meaningful corporate restructuring in Korea's motor vehicle sector, allowing U.S. firms to compete successfully in the Korean market.

U.S. negotiators should also face up to certain realities. Over the near term, U.S. automobile exports to Korea are likely to be squeezed from two sides. Japanese companies that until 1999 were excluded from the Korean market will certainly move to compete more vigorously in the small-car, low end of the market. Because the high-end, luxury-car market in Korea up until now has been dominated by German (BMW, Mercedes) and Japanese (Lexus) brands, U.S. automobile companies are not likely to see a large increase in exports to Korea. It would still make political sense, however, for the Korean government to lower the 8 percent tariff on imported cars. Such a move would remove a major negotiating point and would likely expose the weakness of U.S. automobile exporters in a more open, competitive market.

### *Steel*

Neither the United States government nor the Korean government comes to the table with clean hands regarding public intervention and protection with regard to the steel industry. The United States has long been concerned with the Korean government's involvement in and support for—through extensive ownership and subsidization—Korea's steel industry and related steel-using sectors. In turn, Korea and other U.S. trade partners have long criticized the policies of the U.S. government that protect the increasingly uncompetitive integrated steel companies. Current U.S.-Korea bilateral trade dialogue focuses on termination of the Korean government's ownership in the Korean steel industry, market-based restructuring

---

20. In April 2002, Hyundai Motors began construction in Alabama of an automobile manufacturing plant that should produce 300,000 automobiles per year beginning in 2005.

**Table 29. Sales of Imported and Domestically-Produced Cars in South Korea**

Units/Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003 (January- April)
Sales of Imported Cars	3,865	6,921	10,315	8,136	2,075	2,401	4,414	7,747	16,119	5,927
Sales of Domestically- Produced Cars	1,140,399	1,149,409	1,238,940	1,151,287	568,063	910,725	1,057,620	1,065,161	1,225,210	391,182
Market Share of Imported Cars in Total Domestic Sales (%)	0.34	0.60	0.83	0.70	0.36	0.26	0.42	0.72	1.30	1.49

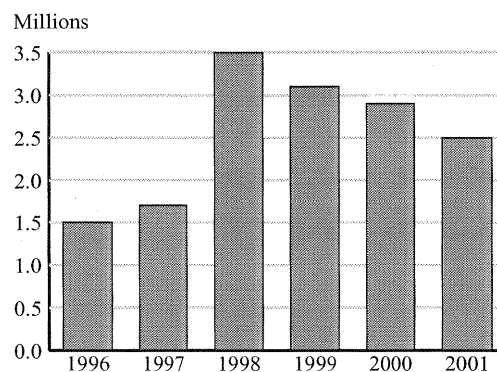
Source: KAIDA, 2003, <http://www.kaida.co.kr/eng/statistic/DomesticCar.jsp>.

of the Korean steel industry and elimination of government subsidies, and continued U.S. protection of integrated steel companies through the use—and misuse—of trade remedy laws (antidumping and safeguards).

After the consolidations and bankruptcies in Korea during the 1990s, the 1997 depreciation of the *won* helped large Korean integrated producers, who saw their export profitability soar due to a decrease of their *won*-denominated costs to levels among the lowest worldwide.<sup>21</sup> Korea's steel exports to the United States more than doubled in 1998 over the previous year (**Figure 20**). In February 2000, the United States announced safeguards measures on steel, with the introduction of high tariff-rate quota restriction with a three-year duration. However, in February 2002, the WTO Dispute Settlement Body ruled that the U.S. action was inconsistent with the Agreement on Safeguards (Manyin 2002).

In March 2002, however, the United States announced additional large-scale safeguards measures on various steel products, with tariffs ranging from 8 percent to 30 percent for three years (ITR 2002).<sup>22</sup> As expected, Korea together with a group of another seven countries challenged U.S. safeguards measures at the WTO. In July 2003, a WTO panel ruled that these safeguards were illegal under WTO rules (ITR 2003b). The Bush administration immediately appealed the rul-

**Figure 20: U.S. Imports of Steel from Korea, 1996 2001, millions of short tons**



Source: Manyin 2002, 8.

21. In contrast, the 1997 financial crisis and related currency depreciation in Korea were particularly damaging for mini-mill-based firms, many of which went out of business because of high *won*-denominated prices for imported ferrous scrap.

22. Canada and Mexico were excepted, and Korea's POSCO (Pohang Iron and Steel Company) through its West Coast joint venture was granted an exception for 750,000 metric tons of hot-band steel.

ing, and a decision by the WTO appellate body will be forthcoming by the end of 2003 (Meller 2003).

As the sixth-largest exporter to the U.S. steel market in 2001, Korea exported steel to the United States worth \$1,052 million, representing more than 5.7 percent of U.S. steel imports (WTO 2001b, 120). Therefore, Korea is likely to become one of the economies most affected by the U.S. safeguards because the U.S. measures cover approximately 70 percent of Korea's steel exports and induce a potential 20 percent export reduction effect (McKibbin et al. 2002).

The U.S. safeguards measures supplement the use of antidumping and countervailing measures as protection instruments for the steel industry. As of June 2002, the United States maintained effective antidumping measures for 18 product categories imported from Korea; 13 of these involved steel. Most of the steel measures (8 out of the 13) were imposed after the import surge of 1998.<sup>23</sup> As in the area of safeguards, Korea has won several WTO cases against the United States. Following the escalation of international trade protectionism and sluggish economic performance in the United States, Korea's steel exports to the United States dropped by more than 30 percent in value terms between the record year 1998 and 2001 (Manyin 2002, 8). Unfortunately for Korea, while winning individual cases can give psychological satisfaction, only a wholesale revamping of national trade remedy laws in the WTO will yield long-term positive economic consequences.

The United States has long demanded that the Korean government reduce public ownership and cease subsidies for domestic steel firms. However, it still maintains control over the Industrial Bank of Korea (IBK), POSCO's second-largest single shareholder. With more than 60 percent of the Korean steel industry's output in 1999, POSCO's monopoly position for some key steel products makes government control even more worrisome (Manyin 2002, 9–10). In fairness to the Korean government, the POSCO situation is in transition. While it is true that IBK is POSCO's second-largest shareholder—the share amounts to only 3 percent—foreign investors now own 60 percent of POSCO. In addition, the government has announced plans to fully divest itself of IBK stocks when market conditions improve. Once again, as with steel, history colors current perceptions; as a tactical move, the new Korean administration would be well advised to divest itself quickly of IBK stock.

As for the U.S. position, one can only hope—without great optimism, however, given the strength of the steel lobby in Congress—that the current outburst of protection will be the last major effort in relation to the steel industry. Economics and technology may in the end finally decide the issues. The more advanced U.S. mini-mills now account for about half of all steel produced in the

---

23. Antidumping measures concerned stainless steel wire rod, stainless steel plate in coils, stainless steel sheet and strip in coils, cut-to-length carbon quality steel plate, polyester staple fiber, structural steel beams, stainless steel angle, and steel concrete reinforcing bars.

United States, and the number of workers in integrated mills is down to fewer than 150,000 (from more than 500,000 in the early 1980s). The recent wave of bankruptcies—and, more important, the liquidations—of a number of integrated mills may have paved the way for a restructured domestic steel industry, one that can more effectively compete with new technologies both at home and abroad (Barfield forthcoming).

### *Semiconductors*

Semiconductors, the largest export and import item for the United States, have constituted a key trade issue between United States and Korea ever since the latter half of the 1990s. Korea's semiconductor exports to the United States amounted to \$2.2 billion in 2000, accounting for more than 5 percent of Korea's exports to the United States and for much more than its exports to the United States of iron and steel (\$1.5 billion) (Manyin and Cooney 2003). The United States has accused Korea of subsidizing and building up the production capacity of Korean semiconductor manufacturers, government support that has occasionally triggered dramatic falls of the global prices for semiconductors.

In 1998, reacting to the low prices of semiconductors worldwide, Korean companies reduced their production. Later that year, Korean authorities pursued a big-deal strategy to restructure Korea's semiconductor industry; they allowed Hyundai Electronics (the world's second-largest manufacturer) to take over LG Semicon (the world's third-largest manufacturer), creating the world's largest semiconductor manufacturer with a 20 percent global market share. Some observers were surprised that the U.S. Federal Trade Commission objected to neither the production cut nor the takeover. Industry analysts recognized that a big-deal approach would increase chip prices by reducing competition and, thus, eliminate U.S. discontent with the price drops associated with excessive competition and overcapacity in the chip industry (Yang 2000, 123–4; Graham 2000).

In 2001, a major trade dispute erupted between the United States and Korea; it was related to Korea's support packages for Hynix, the semiconductor division of Hyundai Electronics. In January 2001, the state-owned Korea Development Bank (KDB) included Hynix in a bond-refinancing program, under which creditor banks rolled over 80 percent of the company's debt of 1.625 trillion *won* (\$1.35 billion), repackaged it, and resold it to the public with government guarantees. In May 2001, 17 of Hynix's Korean creditor banks bought 1 trillion *won* (\$833 million) in Hynix bonds. More than 5 trillion *won* (\$4.2 billion) was attached to a new financial package from bank creditors in October 2001, including debt-for-equity swaps, further debt rollovers, new loans, and loan write-offs. The support culminated in December 2002 when Hynix was granted relief for \$4.2 billion in debt, including debt rollovers, loans from state-owned creditors, decreased interest rates, debt-for-equity swaps, and preferential loans for Hynix's key accounts (Manyin and Cooney 2003).

Critics of the debt relief for Hynix assert that government-controlled banks orchestrated the assistance packages as government-sponsored bailouts that kept

Hynix afloat and allowed it to export semiconductors at below-market prices. In response, Korea argues that decisions to aid Hynix have been entirely in the hand of the company's creditors, guided by commercial considerations. Many state-owned banks accepted losses of 75 percent through debt write-offs rather than increase their exposure to Hynix. The Korean government also argues that foreign banks (Citibank and Commerzbank) that oversee credit decisions of Hynix's main creditor (Korea Exchange Bank) supported the rescue packages (Manyin and Cooney 2003).

In November 2002, Micron initiated a countervailing-duty case against Hynix and Samsung, stating that the Korean government's subsidies allowed Korean companies to cut prices and take market share in the United States from both Micron and Infineon (a German company). In June 2003, the U.S. Department of Commerce ruled that Hynix had received unfair subsidies and, pending a decision by the USITC that subsidies were harming U.S. companies, Hynix became subject to countervailing duties of 44.7 percent (the EU also had imposed countervailing duties of 33 percent several months before). In turn, the Korean government announced that it would contest the decision before the WTO (ITR 2003a).

### *Pharmaceuticals*

With \$4.9 billion in sales in 1999, Korea ranked 12th among the largest pharmaceutical markets worldwide. Imports of pharmaceuticals by Korea accounted for 20 percent of the domestic market. U.S.-Korea trade disputes about pharmaceuticals concern market access for U.S. imports, which have been hindered by a series of factors:

- Lack of transparency in the Korean Ministry of Health and Welfare (MOHW);
- Discriminatory nature of Korea's safety and testing requirements for foreign drugs;
- Poor protection for intellectual property rights (IPR) for medical patents; and
- New reimbursement policy proposals for prescription drugs.

The United States takes issue with Korea's policy on pharmaceuticals in several ways:

- Several U.S.-Korea agreements exist to provide a framework for dialogue, transparency, and prenotification between the two countries with respect to health care changes and reform issues intended by the Korean government.<sup>24</sup> However, the United States complains that Korea has often failed to provide the U.S. government with advance notice of proposals for reforms and changes (USTR 2002a).

---

24. The agreement on pharmaceutical pricing issues was concluded in 1999, and the bilateral health care reform working group was established in January 2002.

- Following the introduction of health care reforms and cost-containment measures from 1999 to 2001, new issues arose that concerned safety and testing requirements for foreign drugs in Korea. They include batch testing of biologics and vaccines for product registration; border testing for already approved biologics, vaccines, and drugs; requirements for duplication in Korea of clinical trials already completed outside Korea, ostensibly because of ethnic sensitivity; and authorization for local clinical studies.
- Lax intellectual property protection, limited concern for business confidentiality, and inadequate security for data continue to pose market access barriers for foreign drug manufacturers in Korea (USTR 2002a).
- The United States is particularly concerned with the proposed implementation of a reference price system that transfers some of the pharmaceutical costs from the insurer to the patient (USTR 2002a). Under the reference price system, if a patient chooses to use a medication that exceeds a certain price ratio, the patient would assume partial monetary responsibility for that selection. Korea argues the measure is necessary to overcome the current crisis of Korea's National Health Insurance Scheme (NHIS), which recorded a \$2 billion deficit at the end of 2002 (Embassy 2003). Conversely, the United States believes that the reference price system would not only deprive Korean consumers of appropriate drugs based on safety, efficacy, and quality but also discriminate against foreign drug manufacturers, particularly against the providers of new, research-intensive drugs. Furthermore, Korea is also considering changes to the A-7 pricing system,<sup>25</sup> changes that are particularly worrisome for the U.S. government (USTR 2002a, 279–80).

### ***Intellectual Property Rights***

During the 1990s, Korea was a constant member of the Special 301 priority watch list, partly because of intellectual property–related concerns. Despite significant steps to strengthen its IPR enforcement and legislation, reforms still need to prevent production and sale of pirated products into Korea's domestic market, exportation of products pirated in Korea, and importation of products pirated in third countries (USTR 2002a; USTR 2002b).

Although Korea has progressed on strengthening its intellectual property legislation, especially the Copyright Act and the Computer Program Protection

---

25. In 1999, Korea agreed to price new, innovative drugs at the average ex-factory price of A-7 countries (France, Germany, Italy, Japan, Switzerland, UK, United States).

Act, the United States believes that additional changes are still needed.<sup>26</sup> Trade-secret protection remains particularly deficient, with government regulations requiring submission of very detailed product information as part of certification procedures. In turn, cases have been recorded when government bodies made confidential business information available to Korean competitors (USTR 2002a, 269).

With regard to pharmaceuticals, Korea is committed to provide full protection against unfair commercial use of test data submitted for marketing approval. However, remaining problems are mostly due to the lack of coordination between Korean health authorities and IPR authorities on marketing approvals for drugs. Situations occurred when this lack of coordination resulted in granting of marketing approval for products that may infringe existing patents (USTR 2002a, 269).

On the positive side, in July 2002, the Korean Trade Commission issued the first ruling on parallel importation; it ordered two unauthorized domestic distributors of popular U.S. computer games to stop importation and ruled in favor of a third distributor that has a trademark for similar products sold in Korea (Lim 2002). The ruling provided a set of guidelines regulating parallel importation, which had never been specifically banned or restricted in Korea.

### *Agriculture*

Korea represents the fourth-largest export market for U.S. agricultural products, and 44 percent of Korea's farm imports in 2000 came from the United States (Manyin 2002, 12). Korea has long resisted opening up its markets for agriculture, particularly for rice and beef, and U.S. producers have long complained about Korea's tariff and nontariff barriers in agriculture.

Under the Uruguay Round's Agreement on Agriculture, Korea bound tariffs for agricultural products, set its tariff rate for rice at 5 percent, committed itself to lower duties on more than 30 agricultural products of primary interest to U.S. exporters, and established tariff-rate quotas intended to provide minimum access on markets previously closed. However, some duties remain very high,<sup>27</sup> and over-quota tariffs are prohibitive for a number of agricultural products<sup>28</sup> (USTR 2002a, 255–6). In addition, some requirements related to standards, testing, la-

---

26. Amendments to the Copyright Act should strengthen technical protection measures, clarify the establishment of liability for online service providers, clarify the availability of injunctive ex parte relief in civil enforcement actions, and include provision of exclusive transmission rights for sound recordings and provision of the full 50 years of protection for preexisting sound recordings (USTR 2002a, 268).

27. Korea imposes tariff rates of above 40 percent for several products of interest for U.S. exporters: beef, shelled walnuts, table grapes, canned peaches and fruit cocktail, distilled spirits, apples, pears, and citrus fruits.

28. Natural and artificial honey, skim and whole milk powder, barley, barley malt, potatoes and potato preparations, and popcorn.



beling, and certification continue to pose excessive market barriers for U.S. exporters of agricultural goods.

The beef quota agreed in 1989 under GATT was completely eliminated in 2001, but beef tariffs currently remain at 42 percent. Korea also failed to provide the committed minimum market access for imported beef in 1997, 1998, and 1999. Furthermore, U.S. beef exporters faced impediments to entry and distribution because of Korea's restrictive domestic regulation and excessive support for domestic farmers. In July 2000, a WTO panel concluded that Korea's import regime discriminates against imports from the United States and other foreign suppliers owing to the requirement that foreign beef be sold in separate retail stores and the imposition of other restrictions. In September 2001, Korea complied with the WTO panel findings, putting an end to one of the most contentious U.S.-Korea trade issues in recent years (USTR 2002a, 258-9).

The Korean government exercises full control over the purchase, distribution, and end use of rice, and imported rice is allowed only for industrial or processing purposes. Importation was long limited to low-quality rice,<sup>29</sup> which is relegated to storage facilities in Korea. Most important, rice importation is subject to quantitative restrictions unlikely to be dismantled before 2004 (USTR 2002a, 259). Korea has repeatedly stated that it would not allow imported rice to be distributed directly to consumers; this has generated strong protests from international trade partners, including the United States.

Current disagreements also concern Korea's labeling and rule-of-origin requirements for genetically modified foods, quarantine policies, import certification requirements, and test standards, all of which U.S. exporters perceive as import barriers.

Clearly, Korea—like Japan and the EU—maintains one of the world's most restricted markets for agricultural products through a variety of tariffs, quotas, and other administrative means. As the United States itself has proclaimed in other bilateral and regional trading negotiations, however, many of these issues do not lend themselves to bilateral solutions but must be a part of overall multilateral settlement in the Doha Round. Further, the United States has undercut its own leadership in regard to agricultural trade liberalization by enacting a new farm support bill that increases internal support subsidies as well as export subsidies. Somewhat in mitigation, however, the United States has advanced (in good faith because the U.S. agricultural sectors, by and large, have endorsed the proposals) a sweeping set of liberalizing changes that will set the parameters of reform in the Doha Round. Thus, in the end, while it is understandable that Korea would resist major reforms ahead of the Doha negotiations, the new Korean administration will be well advised to begin to prepare domestic political and agricultural interests for significant changes down the road.

---

29. In 2001, Korean state trading enterprises for the first time purchased high-quality rice from the United States.

### ***Telecommunications***

The United States complains about problems encountered in the Korean telecommunications sector and requests that:

- Licensing not discriminate against services suppliers and equipment makers on the basis of nationality or choice of technology;
- Foreign suppliers of telecommunications equipment and software be treated fairly in areas including procurement, certification, type of approval, protection of IPR, and technology transfer; and
- Restrictions on foreign investment in the Korean telecommunications sector be totally lifted.

Although Korea has committed itself to grant foreign firms national treatment consistent with its WTO obligations, the United States believes that excessive Korean government influence over private operators' selection of technologies and interference in private-sector negotiations involving foreign licensing and technology transfers are detrimental to the quality of services U.S. suppliers of telecommunication services and equipment can provide to Korean clients. The limited market access for suppliers of U.S. equipment and software will continue as a hot topic during U.S.-Korea trade negotiations. Although Korea agreed in 2001 to raise the ceiling for foreign equity ownership in telecommunications from 33 percent to 49 percent, this did not apply to foreign investment in local system operators and program providers. In broadcasting, retransmission of foreign channels is restricted to 10 percent of the total of all cable and satellite-broadcasting channels, and FDI in local systems operations and program providers is limited at 33 percent (USTR 2002a, 271, 282–3).

The United States also has a long history of investment restrictions in the area of television and telecommunications. Both countries would be well advised to abolish these restrictions and admit that earlier arguments related to national security questions are no longer valid or can be handled through other means without compromising defense requirements.

### ***Financial Services***

Since the 1997 financial crisis, Korea's financial services sector has undergone major structural reforms that aim "at increasing transparency and investor confidence, and generally purging the sector of moral hazard, that is, the assumption that government would make good all losses and not permit large companies to fail" (O'Driscoll et al. 2002, 262).

With \$47.9 billion in premiums paid in the 2001 fiscal year, Korea is the second-largest insurance market in Asia, after Japan, and is the sixth largest in the world. Market access for foreign insurance companies in Korea, including national treatment provisions, has been greatly improved since Korea's accession to the WTO in 1996 and to the WTO's Financial Services Agreement in 1997. Following Korea's 1997 financial crisis, nationalization and recapitalization measures worked to strengthen the unstable banking sector and prepare it for

privatization. In 1998 and 1999, the Korean government opened capital markets to foreigners, allowing nonhostile M&As of domestic financial institutions. In April 1999, Korea introduced import-export-related liberalization of foreign exchange and, in January 2001, introduced the capital transaction permission system. Korea subsequently removed the limits on foreign ownership of listed bonds and commercial papers, lifted restrictions on foreign securities traded in local markets, and removed almost entirely the limits on foreign investment in Korean stocks (USTR 2001, 291). In January 2002, following pressure from the IMF and the U.S. government, the Korean government announced a consistent plan to privatize major state-owned banks.

U.S. financial companies still complain about a nontransparent regulatory system and unduly complicated approval requirements for the introduction of new products and services in this area where they possess a clear competitive advantage. Although foreign banks are free to open subsidiaries and direct branches, Korea still restricts operations of foreign-bank branches on the basis of branch capital requirements. Such restrictions limit loans to individual customers as well as foreign exchange operations and transfers, and they impose capital adequacy and liquidity requirements.

For their part, Korean financial services firms correctly point to the complexities inherent in the U.S. federal system of banking and insurance regulation. In some cases, regulations of U.S. states still discriminate in significant ways against foreign companies. More often, the difficulties stem not from overt protection but merely from the complexity of the myriad state and local regulations that impede foreign (including Korean) financial services providers from competing effectively in these state and local markets. As with the changes pressed by the United States regarding Korean financial services laws and regulations, these issues are long range in nature and should not be the subject of precipitous retaliatory trade actions from either side.

### **Proposal for Dealing More Effectively with Bilateral U.S.-Korea Trade Disputes**

With more than \$58 billion in total trade between the United States and Korea, it is inevitable that U.S. government and private-sector officials and the Korean government and private-sector officials will find that, even with the best of intentions, numerous trade disputes and conflicts will take more and more of their time. It is timely, therefore, to think creatively about methods and institutional arrangements to minimize and even head off at least some of these tensions and disputes.

U.S. and Korean officials might look to the model for bilateral economic relations that has had some success in easing tensions and fostering closer economic ties between the United States and Europe—the new arrangements created to carry out the New Transatlantic Agenda agreed to by the United States and the EU in 1995. That agenda included goals relating to fostering peace, development, and democracy; but it is largely devoted to contributing to the expansion of

trade and closer economic relations as well as building bridges across the Atlantic Ocean through contacts among business, labor, consumer groups, science organizations, and other civil-society groups (Pollack and Shaffer 2001).

Even though the New Transatlantic Agenda has not realized its highest initial aspirations regarding the settlement of some of the most difficult transatlantic trade issues, it has resulted in the creation of new institutions such as the Transatlantic Business Dialogue (TBD), the Transatlantic Labor Dialogue, and the Transatlantic Consumer Dialogue that have brought together government officials, private-sector leaders, consumer advocates, and leaders of other civil-society organizations to discuss common problems and recommend actions to top public officials. The groups meet twice a year and provide a continuing institutional basis for public-private interaction on common problems—and a venue through which disagreements can be vetted (Pollack and Shaffer 2001).

The most successful of these institutions thus far has been the TBD, which has been out front in pressing the United States and Europe for decisions on a number of issues. It has taken the lead, for example, in pushing for a series of mutual recognition agreements (MRAs) in areas such as pharmaceuticals, telecommunications equipment, and medical devices. The aim of these MRAs is to harmonize regulatory requirements or at least provide criteria for accepting separate-but-equal regulations. TBD participants have also been active in pressing their respective governments to mute potentially corrosive trade quarrels such as those related to the U.S. Helms-Burton Act and genetically modified organisms (GMOs). The TBD is not always successful—as the fight over GMOs between the United States and Europe clearly demonstrates—but the TBD process provides “thicker” transatlantic exchanges that have fostered a better negotiating climate.

The Korean and the U.S. governments should consider replicating and institutionalizing these public-private arrangements to deal with economic issues that face the two countries. It is true that the U.S.-Korea Chamber of Commerce and the U.S.-Korea Business Council have performed admirably, but they and other organizations would benefit from a more formal, institutional setting that brings together on a regular basis government officials and the business communities. Other public-private dialogues with labor, environmentalists, and consumer groups should also be considered.

While the U.S.-Korea trade and investment relationship is not as mature as that between the United States and Europe, it has developed to the point that new, more imaginative institutional and substantive roles for a variety of actors in the policy process should at least be placed on the bilateral trade agenda.