

A NEW INTERNATIONAL ENGAGEMENT FRAMEWORK FOR NORTH KOREA?

Contending Perspectives

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North Korea's Survival Game: Understanding the Recent Past, Thinking about the Future

Nicholas Eberstadt

Can the Democratic People's Republic of Korea (DPRK, also known as North Korea) survive—as a distinct regime, an autonomous state, a specific political-economic system, and a sovereign country?

Can it continue to function in the manner it has been performing since the end of 1991—that is, since the collapse of the Soviet empire? Or is it doomed to join the Warsaw Pact's failed Communist experiments in the dustbin of history? Or might it, instead, adapt and evolve—surviving in the sense of maintaining its political authority and power to rule, but transforming its defining functional characteristics and systemic identity?

My own work on the North Korean economy has generally been associated with what others have termed the “collapsist”¹ school of thought, and not unfairly. As far back as June 1990, I published an op-ed essay entitled “The Coming Collapse of North Korea” (Eberstadt 1990); since then, my analyses have questioned the viability of the DPRK economy and system.²

It is therefore perhaps especially fitting that someone such as I, having imagined the odds of the DPRK's post-Soviet survival to be very low, should be charged with explaining just how the North Korean system has managed to survive these past 13 or 14 years—and to speculate about the possibility of sustainable pathways that might permit regime, state, and system to endure that far, or farther, into the future.

The following pages propose to offer something other than an apologia *pro vita sua* (although the reader will have to decide exactly how well that obvious temptation has been resisted). It will proceed through three sections. The first focuses on some of the factors that may have abetted state

1 Compare Noland (2004, 12–19).

2 Perhaps, most memorably, including this quote from Eberstadt (1995): “There is no reason at present to expect a reign by Kim Jong Il to be either stable or long.”

survival in the DPRK in recent years. The second will discuss the sustainability of North Korea's current economic modus operandi. The final section will examine some of the questions pertaining to a DPRK transition to a more pragmatic variant of a planned socialist economy.

Financing the Survival of the North Korean State

How close to collapse has the DPRK system veered during the past decade? Could the system have disintegrated if events—domestic or international—had unfolded in a slightly different manner? Those speculative questions are unfortunately unanswerable and, for now, are quite untestable. We will probably have to await the eventual opening of the Pyongyang state archives to delve into those issues with any satisfaction—assuming that the DPRK's official files and data offer a sufficiently coherent and faithful record of events to aid such historical inquiries.

Available data do, however, cast light on one aspect of the DPRK's struggle to avoid collapse in the wake of the Soviet bloc's demise. These are the international data on North Korean trade patterns as reported by the DPRK's trade partners—"mirror statistics," as they are called by their users. Mirror statistics cannot tell us how close North Korea may have come to collapse in recent years, but they can help us explain how North Korea has managed to finance state survival.

Although the analysis of the modern North Korean economy has always been hampered by the extraordinary paucity of reliable data that might facilitate independent assessments, it is not exactly a state secret that the DPRK national economy was in the grip of stagnation—or incipient decline—in the 1980s and began to spiral downward once the aid and subsidized trade from the erstwhile Soviet bloc suddenly ceased at the start of the 1990s.

The steep and apparently unbroken decline in North Korean economic performance in the first half of the 1990s led to the outbreak of famine in the DPRK by the mid-1990s—the first and only instance of such mass hunger in an industrialized and literate society during peacetime. North Korea's patent economic dysfunction, and its leadership's seeming unwillingness or incapability to address and correct it, seemed to me to raise the possibility of one very particular kind of systemic collapse: economic collapse. I discussed this prospect in some detail in my 1999 book, *The End of North Korea*.

In discussing economic collapse, of course, I was not venturing guesses about the possibility of some dramatic political event that might bring the North Korean regime to an end—a coup d'état at the top, say, or a revolt from below. (Then, as now, the kinds of information that might permit such a judgment were clearly unavailable to outside observers, especially to those with no access to confidential sources of intelligence.)

Economic collapse, for its part, seemed an exceedingly elastic term, but Eberstadt (1999a) attempted to use it with some conceptual precision. In

my analysis, “economic collapse” was not defined as an economic shock, an economic dislocation, a severe depression, or even a famine. “Economic collapse” was offered instead as a term to describe the breakdown of the division of labor in the national economy—the process through which ordinary people in complex productive societies trade their labor for food.³

North Korea in the mid- and late 1990s, I argued, was set on a trajectory for economic collapse because its domestic economy was incapable of producing the requisite goods necessary for the maintenance of a division of labor, and the regime seemed utterly unable to finance its purchases from abroad. Although it was impossible to determine from the outside the precise breaking point at which the division of labor would unravel, events were bringing the DPRK system progressively closer to that point.

The situation in early 2004 admittedly looks somewhat different. The ordinary North Korean today, of course, does not exactly live in the lap of luxury. On the other hand, by most accounts the typical North Korean no longer suffers from the desperate privation that characterized the mid- to late 1990s. As best can be told, the North Korean famine—which almost certainly claimed hundreds of thousands of victims and may well have killed a million people between 1995 and 1998⁴—ceased raging five years ago.

Officially, North Korean leadership indicated a new confidence in the DPRK's staying power back in September 1998, at the same Supreme People's Assembly that formally elevated Kim Jong-il to “the highest position of state.” That convocation publicly declared that the “arduous march” of the previous several years was completed and announced that the DPRK was now on the road to becoming a “powerful and prosperous state” (*kangsong taeguk*).⁵

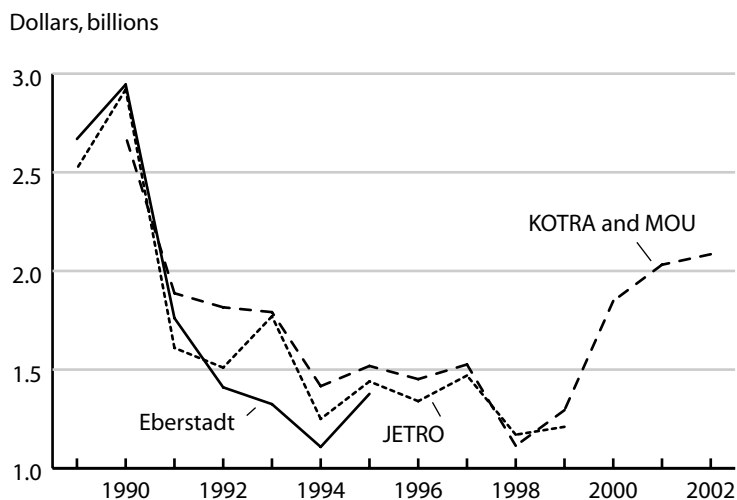
Whether or not the North Korean economy has enjoyed actual growth since 1998 (a question that remains a matter of some contention) it is clear that the economic situation has in some meaningful sense stabilized and improved since the grim days of the arduous march. But how was this accomplished? Mirror statistics provide some clues.

We can begin by looking at reconstructions of North Korea's overall trends for merchandise imports (see Eberstadt 2001 and *Figure 1*). In 1990, the reported value of imports was nearly \$3 billion (in current U.S. dollars). By 1998, the reported level had dropped below \$1.2 billion—a catastrophic fall of more than 60 percent. After 1998, however, North Korea's imports rebounded markedly. By 2001, the reported level exceeded \$2 billion and appears to have risen again in 2002. (Comparable data for 2003 are not yet

3 This conception of economic collapse was, to my knowledge, first developed and defined by Jack Hirshleifer (1987) of UCLA and RAND.

4 The modeling of Goodkind and West (2001, 219–38) suggests a range of 600,000 to 1,000,000 deaths for the late 1990s.

5 Not too long thereafter, the Bank of Korea (BOK, of the Republic of Korea) declared that North Korea's economy had resumed economic growth; BOK reports, in fact, have suggested positive growth in the DPRK for 1999 and every subsequent year. Whether the BOK analysis can withstand scrutiny is another question. For a skeptical look, see Eberstadt (2001, 1–25).

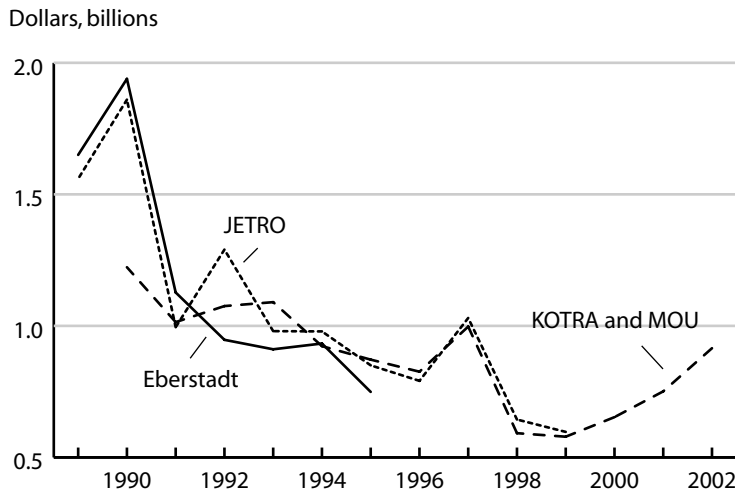
Figure 1: North Korea's Merchandise Imports, 1989–2002

Sources: Eberstadt (2000); JETRO (various years); KOTRA (various years); MOU (various years).

available.) These numbers indicate that North Korea was obtaining nearly 90 percent more in the way of supplies of goods from abroad in 2002 than it had in 1998. In 2002, in fact, the current dollar value of North Korean merchandise imports was at the highest level registered since the collapse of the Soviet Union.

How did North Korea pay for this upsurge in imports? Mirror statistics do not show that it did so through any corresponding jump in reported export revenues (*Figure 2*). Between 1990 and 1998, North Korea's reported merchandise exports collapsed, plummeting from about \$2 billion to less than \$600 million. By 2002, these had recovered somewhat, to a reported level of just over \$900 million. Nevertheless, by any absolute measure, the DPRK's reported export level remained remarkably low in 2002—less than half as high as it had been in 1990 and even lower than it had been in the bitter arduous-march year of 1997.

In a purely arithmetic sense, North Korea succeeded in effecting a substantial increase of merchandise imports despite only modest improvements in its almost negligibly low levels of reported merchandise exports by managing to increase its reported balance of trade deficit appreciably (*Figure 3*). In the arduous march period—the famine years of 1995–98—North Korea's reported surfeit of imports over exports averaged less than \$600 million a year. By contrast, in the years 2000–02—the *kangsong taeguk* era—the DPRK's reported trade deficit was more than twice that high, averaging about \$1.2 billion annually.

Figure 2: North Korea's Merchandise Exports, 1989–2002

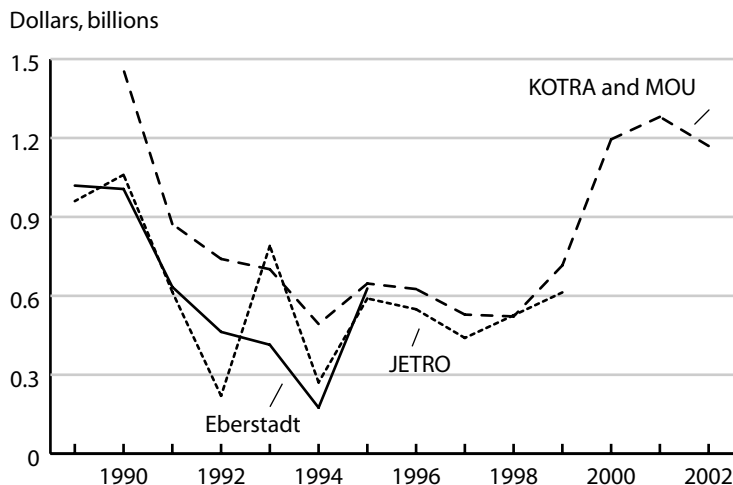
Sources: Eberstadt (2000); JETRO (various years); KOTRA (various years); MOU (various years).

But how was this reported trade deficit financed? The answer is not self-evident. After all, North Korea is a state with a commercial creditworthiness rating of approximately zero, having maintained for a generation its posture of defiant *de facto* default on the Western loans it contracted in the 1970s.

Historically, the DPRK relied on aid from its Communist allies—principally, the Soviet Union and China—to augment its imports. After the collapse of the USSR, China *perforce* emerged immediately as North Korea's principal foreign patron, and Beijing's largesse extended beyond its officially and episodically announced subventions for Pyongyang. The DPRK's seemingly permanent merchandise trade deficit with China actually constitutes a broader and perhaps more accurate measure of Beijing's true aid levels for Pyongyang (insofar as neither party seems to think the sums accumulated in that imbalance will ever be corrected or repaid).

Implicit Chinese aid, however, cannot account for North Korea's import upsurge of 1998–2002. To the contrary: China's implicit aid to North Korea—its reported balance of trade deficit—fell during these years, dropping from about \$0.34 billion to about \$0.27 billion. North Korea's non-Chinese balance of trade deficit, by contrast, apparently soared upward (*Figure 4*). Whereas in 1997 the DPRK reportedly managed to obtain only a net of \$0.05 billion more merchandise from abroad than its commercial exports would have paid for after factoring out China, by 2002 the corresponding total was more than \$0.9 billion.

Indeed, if we remove China from the picture, the line describing North Korea's net imports of supplies from abroad rises steadily upward between

Figure 3: North Korea's Merchandise Trade Deficit, 1989–2002

Sources: Figure 1 and Figure 2.

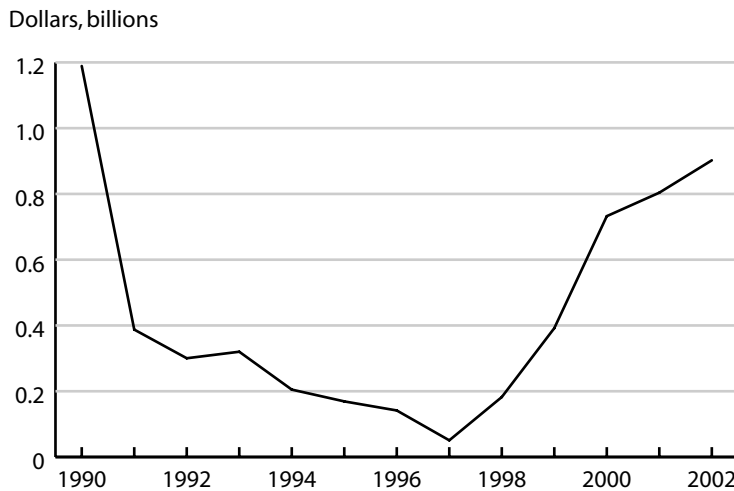
1997 and 2002. It is this graphic that captures the economic essence of North Korea's shift from its arduous-march period to its *kangsong taeguk* epoch.

And how was this jump in non-Chinese net imports financed? Unfortunately, we cannot be precise about this because many of the sources of funds involve illicit transactions. North Korea's international counterfeiting, drug trafficking, and weapons and weapons-technology sales all figure here although the sums raised from those activities are a matter of some dispute.

Nor do we yet know exactly how much of the South Korean taxpayers' money was furtively channeled from Seoul to Pyongyang during this period. One set of prosecutorial investigations has convicted former president Kim Dae-jung's national security adviser and several other aides of illegally transferring up to \$500 million to Kim Jong-il's Bureau 39 on the eve of the historic June 2000 Pyongyang summit (Ward 2003, 9; Lem 2003, 2). The possibility of other unreported official Seoul-to-Pyongyang payoffs during the 1998–2002 period cannot be ruled out as yet—nor of course can the potential volume of any such attendant funds be determined.

Broadly speaking, however, we can explain the timing and the magnitude of the 1998–2002 upswing in North Korea's non-Chinese net imports in terms of the North Korea policies that were embraced during those years by the United States and its Northeast Asian allies. The year 1998 heralded the inauguration of President Kim Dae-jung in South Korea and the advent of South Korea's Sunshine Policy for détente and reconciliation with the North. In 1999, the United States followed suit with the unveiling of the Perry process (the grand-bargain approach to settling outstanding disputes with the

Figure 4: North Korea's Merchandise Trade Deficit, Excluding Trade with China, 1990–2002



Sources: Figure 1; Figure 2; General Administration of Customs (various years).

DPRK that the *Korea Times* on 7 February 2000 reported was hailed by the ROK foreign minister as “based on our engagement policy toward North Korea”). Both Japan and the European Union (EU) joined in the pursuit of engagement with North Korea during these years as well, although in differing degrees.

In their strict performance specifications—their defining actions, as opposed to their official rationales or stated intentions—Sunshine Policy and engagement policy effectively meant, and continue to mean, organized activity by Western governments to mobilize transfers of public resources to the North Korean state. (If this formulation sounds provocative, reflection on the particulars of those multilateral policies will indicate it is also functionally accurate. They include the Hyundai/ROK National Tourism Office payments for vacations to Mt. Kumgang, the U.S. “inspection fee”⁶ of 500,000 tons of food aid granted in 1999 for permission to visit a suspect underground North Korean facility at Kumchang-ri; the continuing food and fertilizer shipments from Seoul and the occasional food transfers from Japan; the secret payment for the historic June 2000 Pyongyang summit; and the new, albeit modest, flows of aid from EU countries in the wake of the flurry of diplomatic normalizations between Pyongyang and EU states in 2000–01.) Thus, it is perhaps not surprising that North Korea’s financial fortunes

6 This is Pyongyang’s description of the transaction.

Table 1: U.S. Assistance to North Korea, 1995-2004

Calendar or fiscal year	Food aid, per fiscal year		KEDO assistance, per calendar year (\$ million)	Medical supplies, per fiscal year (\$ million)	Total (\$ million)
	Metric tons	Commodity value (\$ million)			
1995	0	0.0	9.5	0.2	9.7
1996	19,500	8.3	22.0	0.0	30.3
1997	177,000	52.4	25.0	5.0	82.4
1998	200,000	72.9	50.0	0.0	122.9
1999	695,194	222.1	65.1	0.0	287.2
2000	265,000	74.3	64.4	0.0	138.7
2001	350,000	102.8	74.9	0.0	177.6
2002	207,000	82.4	90.5	0.0	172.9
2003	40,170	33.6	2.3	0.0	35.9
2004	60,000	n.a.	0.0	0.0	n.a.
Total	1,953,864	648.8 ^a	403.7	5.2	1,057.6 ^a

Sources: Figures for food aid and medical supplies from USAID (various years) and USDA (various years); KEDO (various years). Table courtesy of Mark Manyin, Congressional Research Service.

a Through 2003 only.

should have improved so markedly in 1998 and in the years immediately following.

To some readers, it may sound perplexing and counterintuitive to hear the United States—the DPRK’s longtime principal opponent and antagonist in the international arena—described as a major contemporary backer of the North Korean state. Yet this is now in fact the case. Figures compiled by Mark Manyin of the Congressional Research Service provide the details (*Table 1*). In the 1996–2002 period, Washington provided Pyongyang with just over \$1 billion in food aid, concessional fuel oil, and medical supplies; it is interesting that nearly \$350 million of these resources were transferred in 2001 and 2002 under the aegis of the George W. Bush administration.

By the second half of the 1990s, North Korea’s reliance on U.S. aid for financing its international purchases and supplies of goods was, in some quantifiable respect, more pronounced than for almost any other state for which Washington funded military, economic, and/or humanitarian assistance programs (*Table 2*). Total U.S. aid allocations to key recipients Israel and Egypt for the five years 1996–2000, for example, amounted to 34 percent and 67 percent of those states’ respective export earnings for 2000. U.S. 1996–2000 assistance to North Korea, by contrast, actually exceeded the DPRK’s reported year 2000 commercial export revenues. (Incidentally, because most of the U.S. aid resources in *Table 1* were not tallied in the inter-

Table 2: U.S. Aid and National Exports, Selected Comparisons**Current Comparison with Selected Countries**

Country	Total military and economic aid, 1996-2000 (U.S. dollars)	Exports of goods and services 2000 (U.S. dollars)	Total period aid as percentage of single-year exports (percent)
Pakistan	253,300,000	9,575,000,064	2.65
Ukraine	743,400,000	19,522,000,896	3.81
El Salvador	234,700,000	3,645,691,392	6.44
Nicaragua	206,600,000	962,200,000	21.47
Jordan	1,221,000,000	3,534,132,736	34.55
Israel	14,880,000,000	44,146,860,032	33.71
Egypt	10,595,200,000	15,931,033,600	66.51
Haiti	485,000,000	506,236,864	95.80
DPRK	661,500,000	653,100,000	101.29

Historical Comparison with Taiwan and ROK

Country	Total military and economic aid¹ (U.S. dollars)	Total exports² (U.S. dollars)	Total period aid as percentage of single-year exports (percent)
DPRK	1,021,800,000	751,100,000	136.04
Taiwan	2,512,100,000	220,750,000	1,137.98
ROK	4,346,200,000	56,000,000	7,761.07

Sources: Manyin 2004; KOTRA (various years); MOU (various years); USAID (various years); World Bank (2002); and IMF (1962).

1 For the DPRK, figures represent total aid for 1995-2002; for Taiwan and the ROK, figures represent total aid for 1955-1962.

2 For the DPRK, figures represent total exports for 2002; for Taiwan and the ROK, figures represent total exports for 1962.

national commercial ledgers upon which mirror statistics rely,⁷ the DPRK's actual level of reliance upon non-Chinese net supplies from abroad was consistently higher for 1998-2002 than Figure 4 suggests.) Ironical though it may seem, when considered in relation to the economy's evident capability to finance its international needs from its own regular commercial exports, Washington's aid lifeline for the DPRK in recent years looks more consequential than any of the bilateral assistance relationships that Washington has arranged for treaty allies or friendly states in any spot on the globe.

7 In theory, none of these U.S. assistance resources should be included in mirror statistics, but real-world practice is haphazard. U.S. heavy fuel oil shipped to the DPRK in South Korean vessels, for example, has often been registered as North-South trade in Ministry of Unification inter-Korean trade statistics.

This is not the first time, of course, that U.S. aid has helped a state on the Korean peninsula to survive. After the 1953 Korean armistice, Washington devoted tremendous resources to propping up and strengthening the Syngman Rhee government in Seoul—a regime fascinated with “aid-maximizing stratagems” (Cole and Lyman 1971) and manifestly disinterested in improving its then-miserable export performance. To be sure, judged by the metric of U.S. aid compared with recipient-country exports, the U.S. Cold War project for preserving the ROK was vastly more intensive than Washington’s post-Cold War programs sustaining the North Korean state (Table 2). In the late 1950s, on the other hand, U.S. bilateral aid was just about the only game in town for states seeking Western largesse, in marked contrast to today. And if we were able to consider all the aid packages—overt, covert, or semiformal—that were extended to the DPRK by Western governments in the *kangsong taeguk* period, we might well discover that the ratio of such outside assistance to local commercial earnings began to approach the scale of disproportion earlier witnessed in, say, the late-1950s U.S. project to preserve the independence of the Republic of China (Taiwan). (Clearly, that earlier Taiwan effort would have undoubtedly been the more aid intensive by our selected metric; although lower, the aid intensity of the recent DPRK arrangements would perhaps fall within the same approximate order of magnitude.)

We can never know what would have happened if the United States and its allies in Asia and Europe had refrained from underwriting the survival of the North Korean state in the late 1990s and the early years of the present decade. (Such exercises in counterfactual speculation—imaginary history, as they are known to their modern-day devotees⁸—can make for fascinating reading, but they are ultimately inconclusive.) We do not know, furthermore, just how close North Korea came to the critical breaking point of an economic collapse during the arduous-march period between Kim Il-sung’s death and Kim Jong-il’s formal anointment. What we know—or think we know—can be stated succinctly. The DPRK was failing economically in the mid-1990s, moving closer to the notional point of an economic collapse. In the late 1990s and early years of the current decade, the prospect of economic collapse was diminished materially by an upsurge in provisions of goods from abroad—goods, in turn, that were financed in considerable measure by new flows of Western foreign aid.

Whether or not Western aid flows were the indispensable or instrumental factor in averting a North Korean collapse cannot for now be discussed with the sort of historical knowledge and texture that can be brought to bear in a discussion of the averted collapse of the Ottoman Empire in March 1915. What seems beyond dispute is that the upsurge of Western aid for the DPRK

8 A growing number of eminent historians and respected social scientists seem to be engaging in this pastime. See, for example, Polsby (1982), Ferguson (1997), and Cowley (2003).

under Sunshine and engagement policies played a role—possibly a very important role—in reducing the risk of economic collapse and in increasing the odds of survival for the North Korean state.

Current Parameters in Financing State Survival for the DPRK: Ideological and Cultural Infiltration, Military-First Politics

Although North Korea's flirtation with economic collapse did not commence until after the disintegration of the Soviet bloc, the DPRK's relative (and perhaps also its absolute) economic decline has been a long-term process, and by some indicators was already well under way in the Cold War era. The DPRK's trade performance vividly describes this record of long-term economic decline (and, because international trade bears more than incidentally upon the state's risk of economic collapse, it reflects systemic survival prospects as well). From our twenty-first-century vantage point, we may not recall how steep and steady this long decline has been.

There was a time—within living memory—when the DPRK was not known for being an international-trade basket case. In 1970, the level of per capita exports in North Korea and South Korea was roughly comparable (\$21 compared with \$27—in then-much-more-valuable dollars) (Eberstadt 1995, chap. 1). As late as 1980, in fact, North Korea's export profile, though hardly robust, was also not manifestly disfigured. In 1980, for example, the DPRK's level of reported per capita exports was just slightly higher than Turkey's, and more than five times higher than India's (see *Table 3* on page 87). That same year North Korea's reported imports exceeded reported export revenues, but by a margin that was in keeping with performance of other developing economies, including quite successful ones. The DPRK's 1980 ratio of imports to exports, for example, was just slightly higher than Chile's—but it was a bit lower than either Thailand's or South Korea's (see *Table 4* on page 90).

By 1990 the picture had worsened considerably; see *Table 5* on page 94 and *Table 6* on page 98. Despite a politically determined surge in exports to the USSR under the terms of the 1985–90 Soviet-DPRK economic cooperation accord, per capita exports now ranked in the lowest quartile of the world's economies—in a league with Equatorial Guinea and Kenya—and the ratio of imports to exports had risen so that North Korea was among the quartile of states where this imbalance was greatest. By 1990, North Korea's disproportion between imports and exports placed it in the ranking next to such heavily aid-dependent economies as Jordan and Ghana.

By 2000, as one might suspect, the DPRK was an outlier within the world system (see *Table 7* on page 102 and *Table 8* on page 107). That year, the DPRK's reported per capita export level would have ranked 158 among the 168 countries tracked in the World Bank's world development indicators:

below Chad and at less than half of India's level. (Reported per capita exports from Turkey were now nearly 25 times as high as from the DPRK.) Although the nominal level of per capita exports for the world was nearly 2.5 times higher in 2000 than in 1980,⁹ North Korea's nominal reported per capita export level fell by almost two-thirds during those years. At the same time, North Korea's imbalance between reported imports and export earnings (with the former 2.8 times as great as the latter) looked to be among the 10 most extreme recorded that year. A glaring discrepancy between imports and exports does not automatically betoken dependence on aid. In the case of several outliers in Table 8, Lesotho and West Bank/Gaza among them, the discrepancy speaks to the importance of remittances in the local balance of payments. However, North Korea's ratio of reported commercial export revenues to reported imports was even lower in 2000 than in such all-but-permanent wards of the official development assistance community as Haiti and Burkina Faso.

When it comes to trade performance and patterns of international finance, North Korea's downward trajectory and its current straits—its structural descent from Turkey to Haiti in just one generation, at least in terms of the aforementioned particulars—represent in part the misfortune of circumstance. The sudden and unexpected downfall of the Soviet bloc was a disaster for the North Korean economic system: a disaster, indeed, from which the DPRK economy has not yet recovered.

But it would be a mistake to ignore the degree to which North Korea's aberrant and seemingly dysfunctional trade regimen today is actually a result of a conscious purpose, deliberate design, and considered official effort. There exists a deeply embedded regime logic in the DPRK's tangential and precarious relationship with the world economy—and, far from being irrational, it is based on careful and cool-headed calculation of regime survival.

Consider the DPRK's trade performance over the past generation with the 29 countries the International Monetary Fund (IMF) terms the "advanced economies"¹⁰ (or what North Korean terminology would designate as the "capitalist" or "imperialist" countries). Between 1980 and 2000 the total size of the import market for this collectivity grew from about \$1.8 trillion to about \$6.1 trillion.

The DPRK, we recall, is precluded by Washington's thicket of sanctions and restrictions against U.S.-DPRK commerce from exporting any appreciable volume of goods to the United States, and the United States offers the world's single largest import market. If we exclude the United States from the picture, the remaining advanced-economy market for foreign imports is never-

9 Global calculations derived from IMF (2003) and Population Division (2003).

10 This grouping includes 24 of the current 30 Organization for Economic Cooperation and Development (OECD) members (omitting Czech Republic, Hungary, Mexico, Poland, Slovak Republic, and Turkey) and five others (Cyprus, Hong Kong, Israel, Singapore, and Taiwan).

theless vast and (at least in nominal terms) rapidly expanding—growing from about \$1.5 billion in 1980 to \$4.6 billion in 2000. DPRK exports to this group, however, remained negligible and stagnant during these decades, even after the loss of Soviet bloc markets would seem to have added some urgency to cultivating new sources of commercial export revenue. In 1980 and 1990, North Korea's reported sales to this grouping totaled roughly \$430 million and roughly \$470 million, respectively. In 2000, the reported aggregate was about \$560 million—but that total may have been inflated somewhat by an unusual and perhaps questionable \$60 million in North Korean imports recorded that year by Spain. Yet even accepting that year's exceptional Spanish data, the real level of North Korean exports to these "capitalist" countries would have been substantially lower in 2000 than it had been two decades earlier (UN Comtrade 2004).¹¹

Pyongyang's remarkably poor long-term performance in the advanced economies' huge markets is no accident. Instead, it is a direct consequence of official DPRK policy and doctrine—most particularly, Pyongyang's concept of ideological and cultural infiltration. Official North Korean pronouncements relentlessly decry the dangers of this phenomenon, which is said to be a technique by which outsiders attempt to undermine the foundations of established Communist states. A recent declamation (FBIS 2003b) will give the flavor of the general argument:

It is the imperialist's old trick to carry out ideological and cultural infiltration prior to their launching of an aggression openly. Their bourgeois ideology and culture are reactionary toxins to paralyze people's ideological consciousness. Through such infiltration, they try to paralyze the independent consciousness of other nations and make them spineless. At the same time, they work to create illusions about capitalism and promote lifestyles among them based on the law of the jungle, in an attempt to induce the collapse of socialist and progressive nations. The ideological and cultural infiltration is their silent, crafty, and villainous method of aggression, intervention and domination. . . .

Through "economic exchange" and personnel interchange programs too, the imperialists are pushing their infiltration. . . . Exchange and cooperation activities in the economic and cultural fields have been on the rise since the beginning of the new century. The imperialists are making use of these activities as an important lever to push the infiltration of bourgeois ideology and culture. . . .

11 Between 1980 and 2000, the U.S. producer price index—the more appropriate deflator for international tradables—rose by 51 percent. With that deflator, North Korea's inflation-adjusted export volume to this grouping of countries would have declined by about 16 percent between 1980 and 2000. Note that the grouping includes South Korea and that inter-Korean trade is included in the data.

The imperialists' ideological and cultural infiltration, if tolerated, will lead to the collapse and degeneration of society, to disorder and chaos, and even to the loss of the gains of the revolution. The collapse of socialism in the 20th Century—and the revival of capitalism in its place—in some countries gave us the serious lesson that social deterioration begins with ideological degeneration, and confusion on the ideological front throws every other front of society into chaos and, consequently, all the gains of the revolution go down the drain eventually.

DPRK party lecture notes published in South Korea late in 2002 (FBIS 2002) put the point more succinctly:

The capitalist's ideological and cultural infiltration will never cease, and the struggle against it will continue, as long as the imperialists continue to exist in the world. . . .

The great leader, Kim Jong Il, pointed out the following: "Today, the imperialists and reactionaries are tenaciously scheming to blow the wind of bourgeois liberalism into us". . . .

Under these circumstances, if we turn away from reality and we regard it as someone else's problem, what will happen?

People will ideologically degenerate and weaken; cracks will develop in our socialist ideological position; and, in the end, our socialism will helplessly collapse. A case in point is the bitter lesson drawn from the miserable situations of the former Soviet Union and Eastern European countries.

"Economic exchange" with the "capitalist" world, in other words, is explicitly and officially regarded by Pyongyang as a process that unleashes powerful, unpredictable, and subversive forces, forces that ultimately erode the authority of socialist states. Viewed from this perspective, North Korea's record of trade performance vis-à-vis the advanced market economies is not a record of failure (failure to integrate into the world economy) but rather a mark of success (effective containment of a potentially lethal security threat).

Moreover, it is worth recalling that the DPRK's public misgivings about "ideological and cultural infiltration" are of long standing, almost precisely paralleling the state's record over the past generation of minimal export outreach to advanced market economies. Although DPRK pronouncements about ideological and cultural infiltration have attracted some attention abroad since the downfall of Soviet bloc socialism, the slogan itself was not a response to that defining event. To the contrary, North Korean leadership had been highlighting the dangers of that tendency for at least a decade before the final collapse of the Soviet Union. At the sixth congress of the Korean Workers' Party in 1980, for example, Kim Il-sung inveighed against the dangers of cultural infiltration. By 1981 (BBC 1981), he was urging North Korea's

"workers and trade union members" to "combat the ideological and cultural infiltration of the imperialists and their subversive moves and sabotage."

It is true that official directives from Pyongyang have from time to time discussed the desirability of significantly increasing the DPRK's volume of international trade. Against such comments, North Korea's extraordinary and continuing weakness in export performance may seem especially curious (insofar as it would be at least in theory so very easy to redress). But Pyongyang's conspicuous neglect of the revenue potential from trade with advanced market economies is not to be explained away as a prolonged fit of absentmindedness. Instead, it speaks to fundamental and abiding calculations in Pyongyang's strategy for state survival.

If staying out of the poisonous embrace of the world economy is viewed as an imperative for state survival by DPRK leadership, a corollary question about state survival inevitably arises: how then to generate sufficient international resources to forestall economic collapse? Pyongyang's answer, to date: through nonmarket transactions. The DPRK has always pursued an aid-seeking international economic strategy, but in the post-Soviet-bloc era the particulars of that approach have perforce mutated. In the *kangsong taeguk* era, North Korea's main tactics for generating international resources are viewed through the prism of the current state campaign for military-first politics (*songun chongchi*).

Like the concept of ideological and cultural infiltration, the theory and recommended practice of military-first politics have received a tremendous amount of airtime in the North Korean media during the past five years. Two recent exegeses may clarify some of the economic implications of this doctrine.

As a long, official analysis in *Nodong Sinmun* on 21 March 2003 instructed, it was a renewed emphasis on military development that enabled North Korea to conclude its arduous march and to step onto the pathway to power and prosperity:

Today, the peoples' struggle for their nations' independent development and prosperity is waged in an environment different from that of the last century.

. . . In building a state in our era, it is essential to beef up the main force of the nation and fortify the revolutionary base, and, in this regard, it is most important to build up powerful military might. In today's world, without powerful military might, no country can . . . achieve development and prosperity.

. . . During . . . "the Arduous March" in our history, great Comrade Kim Jong Il firmly believed that the destiny of the people and the future of the revolution hinged on the barrel of a gun, and that we could break through the difficulties and lead the revolution to victory only by depending on the Army. . . . Through the arduous practice in which the Army was put to

the fore and the unheard-of trials were overcome, the revolutionary philosophy that the barrel of a gun was precisely the revolution and the barrel of a gun was precisely the victory of socialism was originated. . . .

Our theory on the construction of a powerful state . . . is the embodiment of the profound truth that the base of national strength is military might, and the dignity and might of a country hinges on the barrel of a gun. . . . In a powerful state, the defense industry takes a leading and key position in the economy. . . . Today, by firmly adhering to the principle of putting prime effort into the defense industry and, based on this, by developing the overall economy ceaselessly, our party is brilliantly resolving the issue of consolidating the national strength of a powerful state.

And how exactly does military power conduce to prosperity? The answer (emphasis added) was strongly hinted at in a statement in *Nodong Sinmun* on 3 April 2003:

A country's development and the placement of importance on the military are linked as one. . . .

Once we lay the foundations for a powerful *self-sustaining national defense industry*, we will be able to rejuvenate all economic fields, to include light industry and agriculture and enhance the quality of the people's lives.

This is a fascinating and revealing formulation. In most of the world today, a country's defense outlays are regarded as a weight that must be shouldered by the value-adding sectors of the national economy (thus, the phrase "military burden"). In contrast, North Korea's leadership evidently entertains the concept of a self-sustaining defense sector—implying that Pyongyang views its military activities as generating resources, not simply absorbing them. In the enunciated view of North Korea's leadership, the DPRK's military sector is the key not only to unlocking the resources necessary to finance its own considerable needs but to financing the recovery of the rest of the national economy as well.

It does not require a great deal of imagination to spell out the operational details of this approach. While it forswears any appreciable export revenues from legitimate commerce with advanced market economies, North Korean today seems to be banking on the possibility of financing state survival by exporting strategic insecurity to the rest of the world. In part, such dividends are derived from exports of merchandise (for example, missile sales and international transfer of the technology for weapons of mass destruction [WMD]). But these revenues also depend heavily on what might be described as an export of services: in this case, military extortion services (might we better call them "revenue-sensitive threat reduction services"?) that are based on Pyongyang's nuclear development and ballistic missile programs.

The export of strategic insecurity, in its different components, can arguably be said to explain much of the upsurge in North Korea's unexplained surfeit of imports over commercial export revenues since 1998—especially to the extent that Western aid policies in recent years can be described as motivated by appeasement.¹² In an important tactical sense, that approach has enjoyed a success—it has facilitated state survival under imposing constraints. But the territory demarcated by ideological and cultural infiltration on the one side and military-first politics on the other is also, quite clearly, a sort of no-man's-land: an inherently unstable niche in which survival is utterly contingent and sustained development utterly unlikely. North Korea's current strategic policy, in short, may be deferring the question of economic collapse but has not yet answered it.

Avoiding Economic Collapse through Economic Reform Policies?

If the DPRK is currently sustaining its system through aid-seeking stratagems grounded in military menace, as I argue, it would seem to have settled on a particularly meager and highly uncertain mode of state finance. Even today, when this approach is “working,” it is not clear that it generates sufficient funding to maintain (much less improve) the nation's aging and badly decayed industrial and transport infrastructure. Moreover, the stratagem may fail for any number of reasons (donor fatigue, DPRK miscalculation, and an external push for regime change in Pyongyang being but three of these).

Under these circumstances, as many foreign observers have argued, a more secure and ultimately satisfactory path for avoiding economic collapse and preserving the sovereignty of the North Korean state might be a pragmatic reorientation of Pyongyang's policy in the name of promoting sustained growth. In some variants of this argument, it is said that China and Vietnam have already demonstrated that it is feasible for a Marxist-Leninist government in an Asian setting simultaneously to execute a shift to an outward-oriented economic regimen, achieve rapid economic growth, and maintain leadership authority and political stability.

Whether reform and outward orientation could be consonant with the preservation of unquestioned power for North Korea's leadership is a question that will not detain us here.¹³ Nor will we be diverted by a discussion of

12 Even ostensibly humanitarian food aid transfers to North Korea are informed by the reality of military extortion. Think in particular of access to the nuclear facility at Kumchang-ri in exchange for U.S. grain, and, more generally, whether the opaque rules under which food relief is administered in the DPRK would be tolerated by the international donor community in any other setting (Eberstadt 1999b).

13 We may note in passing, however, that both Robert Scalapino (1992) and Ezra Vogel (in discussions from 1994 to 2004) have suggested that North Korea might plausibly evolve from today's hermetic *juche* totalitarian system to a more familiar, Park Chung-hee type of authoritarian state—and the judgment of these two leading U.S. authorities on modern Asia should be respectfully weighed in this consideration.

the potential problems and preconditions of any so-called reform worthy of the name under contemporary North Korean conditions. Instead we will briefly address two practical and subsidiary questions. First, how far have North Korea's much-discussed reforms progressed to date? Second, if the DPRK were truly moving in the direction of reform and self-sustaining growth, how would we tell and what would we see?

North Korea's Economic Reforms to Date

Predictions that the DPRK would soon be embracing economic reform come from a family tree that is, if anything, even more prolific and older than the lineage of predictions about imminent or eventual DPRK collapse. Scholars and analysts have been detecting quiet signs of reform and opening in the North Korean system since at least the 1980s.¹⁴ The intensity of these premonitions typically waxed and waned according to the current temperatures in Pyongyang's relations with Washington and/or Seoul.¹⁵ In July 2002, however, Pyongyang enacted a package of macroeconomic policy changes that marked a notable departure from DPRK practices during the previous generation. Moreover, North Korean leadership now sometimes openly describes these measures as "economic reform"¹⁶—a term the DPRK had vigorously rejected on the understanding that no reforms were needed for the real existing DPRK system.

The specifics of the July 2002 measures have been described in detail elsewhere (UN 2002, 127–32). Scholars and analysts have in addition offered some initial assessments of their significance and portent.¹⁷

It may be cheering, of course, to see anything self-described as "reform" emanating from the organs of power in the DPRK. And by comparison with North Korea's economic policy adjustments since, say, the late 1960s, these measures may indeed be described as bold and experimental steps. Yet in a sense this only attests to how impoverished our expectations for DPRK policy have become over the decades. Viewed for what they are—rather than for

14 See, for example, Lee (1988), Oh (1990), and Merrill (1991, 139–53); each of these papers was written and initially presented in the 1980s.

15 The announcement of the Pyongyang North-South summit occasioned an especially vigorous pulsation of such premonitions; for example, Marcus Noland (2000, A21): "The secret visit to Beijing last month by Kim Jong Il supports the argument that this is the real deal and that the North Koreans are serious about opening to the outside world." This, of course, was before the outside world learned the true details of the real deal underpinning that historic summit.

16 The president of the Supreme People's Assembly, Kim Yong-nam, in August 2002 said in a conversation with UN (2002, 127) officials: "We are reactivating the whole field of the national economy. . . . We are reforming the economic system on the principle of profitability." The term "reform" has not yet been embraced by the DPRK media, however, who still treat the concept as anathema: "Even though the imperialists are trying to stifle our economy by inducing it to 'reform' and 'opening', our economic management is being improved without deviating even an inch from socialist principles" (FBIS 2003a).

17 For cautiously optimistic analyses, see Noland (2002) and Frank (2003a and 2003b). For a more cautiously skeptical assessment, see Newcomb (2003, 57–60).

what we might hope they will prefigure—the July 2002 package of economic changes can best be described as rather modest in comparison with either economic reforms undertaken in other troubled economies or with the job that needs doing in the DPRK.

In practical terms, the July 2002 package—consumer price increases, wage hikes, currency devaluation, and ration system devolution—accomplished one important function: it remonetized a limited portion of the DPRK domestic economy. By the late 1980s, the DPRK was already a shockingly demonetized operation: back-of-the-envelope calculations for 1987 suggest that the wage bill in that year would have amounted to less than one-fifth of North Korea's official net material product. During the following decade and a half, the role of the national currency in domestic economic activity was progressively diminished. By the turn of the century, North Korea was perhaps the modern world's most completely demonetized economy—excepting only Khmer Rouge Cambodia, where for a time by decree money was abolished altogether.

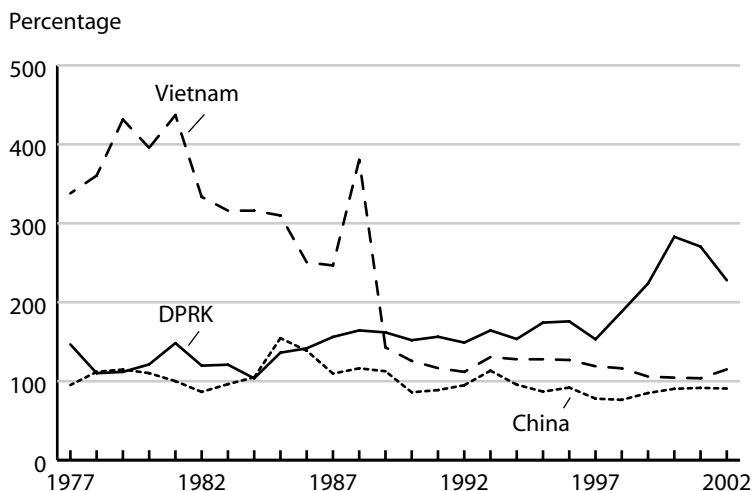
The reemergence of money in North Korean economic life and, with it, the reemergence of a limited measure of open market activity mark an incontestable and important improvement for the DPRK's tiny consumer sector. It is important also to recognize just what this July 2002 package does not signify. To begin, it does not represent an unambiguous move toward market principles in the DPRK economy. To the contrary: remonetization of the domestic economy would likewise be a *sine qua non* for the resurrection of the DPRK's badly broken central planning mechanism ("a planned economy without planning" [Kimura 1994]) that has not managed to launch another multiyear national plan since the last one was concluded in 1993.

Limited remonetization of the domestic economy, furthermore, does not signify transformation of the DPRK's badly distorted production structure. To the contrary; the manifestly limited supply response of the DPRK economy to the July 2002 measures is indicated on the one hand by the subsequent steep drop in the black market exchange rate for the DPRK *won*,¹⁸ and on the other by Pyongyang's hurried introduction, barely 10 months after the July 2002 package, of new "people's life bonds"—worthless, utterly illiquid, and involuntarily assigned—in lieu of wages for workers or payments to enterprises (BBC 2003).

To be sure: the limited reintroduction of money in the DPRK domestic economy may elicit some supply response: a Leibenstein-style increase in X-efficiency (Leibenstein 1966, 392–415), for example. But without the possibility of a reallocation of state resources in accordance with new demand conditions—and that possibility currently does not exist in the DPRK—the

18 The initial July 2002 exchange rate was set at 153 *won* to the U.S. dollar. By October 2003, as reported on 4 October 2003 by Yonhap (Seoul) in "N. Korea Depreciate [sic] Its Currency. Adopts Floating Rates: Asahi," DPRK government foreign exchange booths in Pyongyang were paying 900 *won* per dollar.

Figure 5: Imports as a Percentage of Exports, 1977–2002, calculated with current U.S. dollars

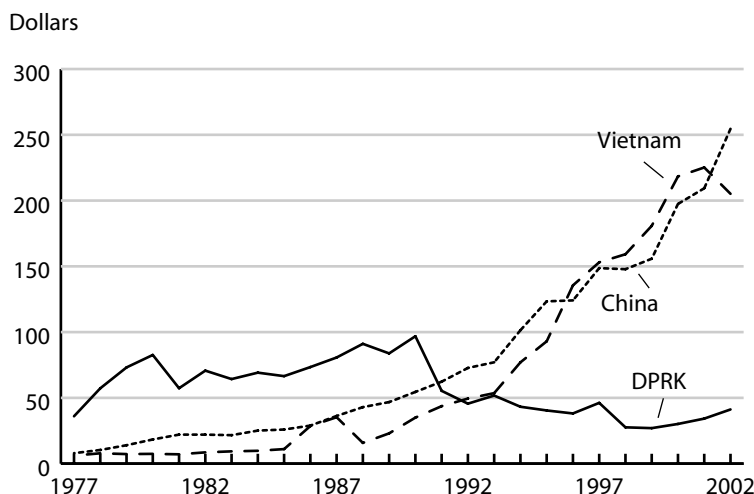


Sources: Eberstadt (2000), KOTRA (various years), MOU (various years), LOC (various years), IMF (2003), World Bank (2003).

supply response must perforce be tepid and superficial. Thus, it should come as no surprise that—heartening signs of newly sprouted “people’s markets” notwithstanding—the World Food Program (WFP) has just warned prospective donors that North Korea faces an imminent return to mass hunger barring an influx of new food aid into the relief pipeline (Kim 2004; McDonald 2004).¹⁹ The contrast is not a contradiction but rather a faithful reflection of the scope and limits of the July 2002 reforms.

The July 2002 reforms, in brief, do not in themselves stave off the specter of DPRK economic collapse. Nor do they have any obvious or direct bearing on the prospects for a shift to China-style or Vietnam-style export-led growth. One need only contrast North Korea’s patterns of trade performance over the past generation with those of China and Vietnam to appreciate this (*Figure 5* and *Figure 6*). Vietnam began its push for export orientation when its Soviet subsidies abruptly ended, whereas North Korea’s export performance markedly worsened and its aid dependence increased after 1991. Although still predominantly agrarian societies, Vietnam and China both manage to export far more merchandise on a per capita basis today than does the ostensibly industrialized DPRK (precisely because of the linkages and supply response mechanisms that the DPRK has assiduously prevented from taking root). At the risk of belaboring the obvious, the DPRK has not even begun to

¹⁹ The WFP’s own institutional interests, to be sure, comport with an alarmist reading of the North Korean food situation, but that does not mean the WFP’s latest warnings are wrong.

Figure 6: Per Capita Exports, 1977–2002, calculated with current U.S. dollars

Sources: Eberstadt (2000), KOTRA (various years), MOU (various years), LOC (various years), Census (various years), IMF (various years), World Bank (various years).

tinker with the macro policies or promote the micro institutions that would permit a China- or Vietnam-style export response.²⁰ Thus, for the time being, economic survival through export orientation is simply not in the cards for North Korea.

What Would Genuine Reform and Opening Look Like?

Instead of sketching out the full contours of a DPRK transition to sustainable export-led growth, it may serve our purposes here to dwell on three essential and inextricably linked features: the outward opening itself, military demobilization, and normalization of relations with the ROK (Eberstadt 2002).

Economic opening. If Pyongyang were to embark upon a genuine move toward an economic opening, what initial signs would outsiders be able to see? Some of these might include:

- Meaningful departure from old “economic” themes and new dialogue about economic issues in DPRK propaganda and guidance organs;
- Doctrinal reorientation regarding the treatment of profit-generating transactions in official DPRK pronouncements and, especially, profits involving transactions with foreign concerns;

²⁰ To date the only appreciable movement in these general areas would seem to be the events that found their denouement in the September–October 2002 Yang Bin fiasco.

- An attempt on the part of the DPRK to settle its long-standing international debt default problems;²¹
- A move toward greater economic transparency, demonstrated by publication of economic and social statistics describing the North Korean domestic situation; and
- Serious attempts to promulgate a legal framework for potential foreign investors that might assist in attracting profit-seeking overseas entrepreneurs to North Korean soil.

Although some observers may see glimmers of the first and second conditions, none of these blinker lights is flashing brightly and consistently in North Korea today.

Military demobilization. Military demobilization would represent a critical aspect of a North Korean program or reform and opening insofar as the following:

- A dismantling of Pyongyang's WMD programs would indicate that North Korean leadership was committed to earning its living from activities other than international military extortion; and
- Reallocation of resources from the hypertrophied military to the civilian sectors would permit much more potentially productive economic activity in the DPRK.

To this date, of course, there is little evidence that North Korea has ever, at any point in its more than five decades of existence, voluntarily abjured any new instrument of military force that might possibly lie within its grasp. (Today, indeed, such a renunciation would seem fundamentally inconsistent with the state's established policies of *kangsong taeguk* and military-first politics.) Moreover, North Korea's commitment to developing WMD was implicitly reaffirmed in the exhortation (FBIS 2001a [emphasis added]), "We should hold fast to the military-first politics and *build up our military strength in every possible way.*"

If North Korea were to head on a different road regarding proliferation, the first clear sign of a change in attitude would be a new stance toward outside verification of North Korean WMD activities. For the time being, however, Pyongyang maintains (BBC 2001) that U.S. calls for verification conceal "a dark ulterior motive to thoroughly investigate our national defense and military bases . . . [a plot to] completely dig out our interior organs [sic]" and (FBIS 2001b) that "the issue [of verification] can never be on the agenda for DPRK-U.S. talks."

21 For the past quarter century, the DPRK has been in effective default on roughly \$1 billion in European, Japanese, and Australian loans contracted in the early 1970s (Eberstadt 1995, chap. 1).

Normalization of DPRK-ROK relations. The DPRK cannot execute a successful economic opening unless it demobilizes, and it cannot demobilize unless it comes to terms with the right of the ROK to coexist with it on the Korean peninsula. Consequently, one important and indeed indispensable marker of movement toward reform and opening would be a change in North Korea's official stance concerning the legitimacy of the ROK.

If North Korea were to evidence a new attitude toward the legitimacy of the ROK, the indications of this change would be direct and unmistakable: its highest figures and its official media would simply disclose that they were prepared to accept the existence of the South Korean state, that they recognized the ROK's right to conduct its own foreign policy, and that they respected (while respectfully disagreeing with) Seoul's decision to maintain a military alliance with the United States. Suffice it to say that no such disclosures have been offered to date.

In sum, there is little evidence that North Korea has yet embarked upon a path to reform and opening, with all the transformations in polity that this path would foreshadow. That oft-discussed strategy for economic survival appears to be an option as yet unchosen by the DPRK's own leadership.

How long the DPRK can survive on its current trajectory is anyone's guess—and my personal guesses on this score have admittedly been off the mark, perhaps for reasons indicated above. But if the analysis in this paper is correct, the specter of an economic collapse is a ghost that haunts the DPRK to this very day and one that will not be exorcized unless or until North Korea's leadership agrees to undertake what, in a very different context, they have called "a bold switch-over." Whether Pyongyang accepts such a challenge remains to be seen.

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Table 3: Per Capita Exports: DPRK Rank in World, 1980

Rank	Country	Exports (\$)	Population	Per capita exports (\$)
1	United Arab Emirates	23,086,758,915	1,043,000	22,134.96
2	Kuwait	22,438,280,854	1,375,000	16,318.75
3	Luxembourg	4,983,707,216	364,900	13,657.73
4	Saudi Arabia	110,748,188,896	9,372,000	11,816.92
5	Bahrain	3,813,478,376	334,000	11,417.60
6	Libya	23,522,973,568	3,043,000	7,730.19
7	Belgium	70,139,684,426	9,847,000	7,122.95
8	Norway	27,431,630,370	4,091,000	6,705.36
9	Netherlands	90,860,667,073	14,150,000	6,421.25
10	Switzerland	37,344,809,039	6,319,000	5,909.92
11	Iceland	1,176,682,100	228,000	5,160.89
12	Hong Kong, China	25,603,687,962	5,039,000	5,081.10
13	Sweden	37,739,960,268	8,310,000	4,541.51
14	Bahamas, The	939,800,000	210,000	4,475.24
15	Denmark	22,046,713,753	5,123,000	4,303.48
16	Gabon	2,769,522,007	692,000	4,002.20
17	Austria	28,597,132,359	7,553,000	3,786.20
18	Finland	16,872,584,518	4,780,000	3,529.83
19	Oman	3,748,118,124	1,101,000	3,404.29
20	Canada	74,998,056,819	24,593,000	3,049.57
21	Germany	238,163,774,930	78,303,000	3,041.57
22	Puerto Rico	9,402,099,712	3,206,000	2,932.66
23	Trinidad and Tobago	3,145,833,262	1,082,000	2,907.42
24	Malta	1,032,426,445	364,000	2,836.34
25	Ireland	9,639,236,042	3,401,000	2,834.24
26	France	139,022,229,514	53,880,000	2,580.22
27	United Kingdom	145,237,570,626	56,330,000	2,578.33
28	Israel	9,535,564,912	3,878,000	2,458.89
29	Barbados	603,440,519	249,100	2,422.48
30	New Zealand	6,746,600,888	3,113,000	2,167.23
31	Australia	25,737,712,747	14,692,000	1,751.82
32	Suriname	612,885,166	355,000	1,726.44
33	Italy	96,902,633,790	56,434,000	1,717.10
34	Cyprus	974,787,576	611,000	1,595.40
35	Seychelles	100,141,584	64,400	1,554.99
36	Venezuela, RB	19,965,055,658	15,091,000	1,322.98

Rank	Country	Exports (\$)	Population	Per capita exports (\$)
37	Japan	144,733,545,970	116,782,000	1,239.35
38	United States	279,700,010,000	227,225,000	1,230.94
39	Antigua and Barbuda	74,077,776	61,000	1,214.39
40	Greece	11,526,621,528	9,643,000	1,195.34
41	Malaysia	14,135,948,738	13,763,000	1,027.10
42	South Africa	28,266,759,113	27,576,000	1,025.05
43	Panama	1,933,445,000	1,950,000	991.51
44	Fiji	575,275,520	634,000	907.37
45	Spain	32,740,267,959	37,386,000	875.74
46	Hungary	8,664,422,324	10,707,000	809.23
47	Bulgaria	7,155,711,533	8,862,000	807.46
48	Algeria	14,540,716,612	18,669,170	778.86
49	St. Lucia	89,329,628	115,500	773.42
50	Portugal	7,235,626,562	9,766,000	740.90
51	Belize	107,850,000	146,000	738.70
52	Swaziland	412,961,844	565,000	730.91
53	Jordan	1,579,256,524	2,181,000	724.10
54	St. Kitts and Nevis	32,111,111	44,400	723.22
55	Guyana	490,319,974	761,000	644.31
56	Jamaica	1,368,290,417	2,133,000	641.49
57	Botswana	562,918,168	906,000	621.32
58	Congo, Rep.	1,023,764,785	1,669,000	613.40
59	Chile	6,291,974,407	11,147,000	564.45
60	Costa Rica	1,279,264,964	2,284,000	560.10
61	Mauritius	539,499,795	966,000	558.49
62	Tunisia	3,517,965,181	6,384,000	551.06
63	Korea, Rep.	20,369,193,589	38,124,000	534.29
64	Uruguay	1,523,186,751	2,914,000	522.71
65	Grenada	39,592,592	90,100	439.43
66	Cote d'Ivoire	3,561,287,269	8,194,000	434.62
67	Ecuador	2,951,880,049	7,961,000	370.79
68	Papua New Guinea	1,100,238,663	3,086,000	356.53
69	Solomon Islands	81,585,924	229,000	356.27
70	St. Vincent and the Grenadines	33,137,036	97,800	338.82
71	Vanuatu	37,603,233	115,060	326.81
72	Iran, Islamic Rep.	12,338,107,754	39,124,000	315.36
73	Mexico	20,806,478,261	67,570,000	307.92

Rank	Country	Exports (\$)	Population	Per capita exports (\$)
74	Zambia	1,607,525,450	5,738,000	280.15
75	Syrian Arab Republic	2,433,274,526	8,704,000	279.56
76	Peru	4,627,898,971	17,324,000	267.14
77	El Salvador	1,220,920,013	4,586,000	266.23
78	Nigeria	18,859,387,259	71,148,000	265.07
79	Honduras	930,000,000	3,567,000	260.72
80	Guatemala	1,748,000,000	6,820,000	256.30
81	Togo	580,217,688	2,519,000	230.34
82	Paraguay	700,999,973	3,114,000	225.11
83	Dominican Republic	1,271,000,064	5,695,000	223.18
84	Zimbabwe	1,560,677,337	7,133,000	218.80
85	Cameroon	1,898,232,186	8,724,000	217.59
86	Colombia	5,414,551,747	28,447,000	190.34
87	Indonesia	26,664,131,299	148,303,000	179.79
88	Nicaragua	519,538,168	2,921,000	177.86
89	Dominica	13,000,000	73,350	177.23
90	Brazil	21,276,141,968	121,616,000	174.95
91	Egypt, Arab Rep.	6,991,666,667	40,875,000	171.05
92	Morocco	3,272,621,044	19,382,000	168.85
93	Mauritania	261,091,421	1,551,000	168.34
94	Thailand	7,801,035,704	46,718,000	166.98
95	Tonga	15,665,473	94,000	166.65
96	Gambia, The	103,028,762	641,000	160.73
97	Philippines	7,661,066,650	48,035,000	159.49
98	Senegal	803,194,592	5,538,000	145.03
99	Argentina	3,895,791,461	28,094,000	138.67
100	Bolivia	682,225,017	5,355,000	127.40
101	Kenya	2,030,403,493	16,632,000	122.08
102	Sao Tome and Principe	10,472,768	89,000	117.67
103	Kiribati	6,551,960	58,100	112.77
104	Niger	616,720,072	5,617,000	109.80
105	Sri Lanka	1,296,327,544	14,603,000	88.77
106	Congo, Dem. Rep.	2,371,496,686	26,908,000	88.13
107	Central African Republic	201,028,393	2,313,000	86.91
108	DPRK	1,414,100,000	17,113,626	82.63
109	Turkey	3,660,084,493	44,484,000	82.28
110	Sierra Leone	251,666,984	3,236,000	77.77

Rank	Country	Exports (\$)	Population	Per capita exports (\$)
111	Lesotho	90,648,365	1,362,000	66.56
112	Benin	222,240,333	3,459,000	64.25
113	Madagascar	539,320,046	8,873,000	60.78
114	Haiti	316,099,994	5,353,000	59.05
115	Malawi	307,474,449	6,183,000	49.73
116	Maldives	7,748,344	158,000	49.04
117	Sudan	805,990,470	19,316,000	41.73
118	Mali	262,685,839	6,590,000	39.86
119	Chad	175,041,754	4,477,000	39.10
120	Bhutan	18,491,906	487,880	37.90
121	Pakistan	2,958,199,994	82,730,330	35.76
122	Ghana	376,348,534	10,740,000	35.04
123	Rwanda	167,923,309	5,163,000	32.52
124	Comoros	10,744,088	335,000	32.07
125	Mozambique	383,020,297	12,095,000	31.67
126	Somalia	200,271,012	6,487,000	30.87
127	Burkina Faso	172,600,568	6,962,000	24.79
128	Burundi	81,022,222	4,130,000	19.62
129	Uganda	242,000,000	12,806,900	18.90
130	Guinea-Bissau	14,039,310	763,000	18.40
131	India	11,249,000,000	687,332,000	16.37
132	Nepal	224,583,339	14,559,000	15.43
133	China	14,327,813,120	981,235,000	14.60
134	Bangladesh	995,270,012	85,438,000	11.65

Sources: World Bank (2003), Census (various years), KOTRA (various years), MOU (various years).

Table 4: Imports as a Percentage of Exports: DPRK Rank in World, 1980

Rank	Country	Imports (\$)	Exports (\$)	Imports as percentage of exports (%)
1	Kuwait	9,822,528,552	22,438,280,854	43.78
2	United Arab Emirates	10,215,784,647	23,086,758,915	44.25
3	Libya	11,166,994,610	23,522,973,568	47.47
4	Gabon	1,353,525,793	2,769,522,007	48.87
5	Indonesia	15,766,759,183	26,664,131,299	59.13
6	Oman	2,252,461,204	3,748,118,124	60.10
7	Nigeria	12,324,265,032	18,859,387,259	65.35

Rank	Country	Imports (\$)	Exports (\$)	Imports as percentage of exports (%)
8	Venezuela, RB	15,142,691,030	19,965,055,658	75.85
9	South Africa	21,837,885,033	28,266,759,113	77.26
10	Trinidad and Tobago	2,430,708,170	3,145,833,262	77.27
11	Norway	23,512,999,569	27,431,630,370	85.71
12	Bulgaria	6,149,883,708	7,155,711,533	85.94
13	Peru	4,011,768,816	4,627,898,971	86.69
14	Algeria	12,846,905,537	14,540,716,612	88.35
15	Bahamas, The	839,600,000	939,800,000	89.34
16	Bolivia	619,875,016	682,225,017	90.86
17	United Kingdom	133,510,736,437	145,237,570,626	91.93
18	Bahrain	3,540,992,306	3,813,478,376	92.85
19	Canada	70,276,949,446	74,998,056,819	93.71
20	Panama	1,842,077,000	1,933,445,000	95.27
21	Malaysia	13,533,271,865	14,135,948,738	95.74
22	Colombia	5,203,045,668	5,414,551,747	96.09
23	Cameroon	1,846,947,983	1,898,232,186	97.30
24	El Salvador	1,188,160,000	1,220,920,013	97.32
25	Congo, Dem. Rep.	2,353,282,237	2,371,496,686	99.23
26	Jamaica	1,367,560,680	1,368,290,417	99.95
27	Congo, Rep.	1,025,658,016	1,023,764,785	100.18
28	Iceland	1,181,205,176	1,176,682,100	100.38
29	Ecuador	2,981,079,941	2,951,880,049	100.99
30	Hong Kong, China	25,872,975,881	25,603,687,962	101.05
31	Barbados	619,897,552	603,440,519	102.73
32	Germany	244,911,978,998	238,163,774,930	102.83
33	Netherlands	93,678,880,027	90,860,667,073	103.10
34	Finland	17,428,091,434	16,872,584,518	103.29
35	China	14,819,450,880	14,327,813,120	103.43
36	Denmark	22,821,562,039	22,046,713,753	103.51
37	New Zealand	7,006,760,042	6,746,600,888	103.86
38	United States	293,799,990,000	279,700,010,000	105.04
39	Sweden	39,801,394,239	37,739,960,268	105.46
40	Hungary	9,142,874,288	8,664,422,324	105.52
41	Luxembourg	5,270,926,204	4,983,707,216	105.76
42	Belgium	74,236,898,364	70,139,684,426	105.84
43	Austria	30,296,804,870	28,597,132,359	105.94
44	Malta	1,094,383,596	1,032,426,445	106.00

Rank	Country	Imports (\$)	Exports (\$)	Imports as percentage of exports (%)
45	Japan	154,520,933,154	144,733,545,970	106.76
46	Suriname	661,064,438	612,885,166	107.86
47	Ghana	406,950,200	376,348,534	108.13
48	Switzerland	40,930,755,780	37,344,809,039	109.60
49	Zambia	1,763,714,043	1,607,525,450	109.72
50	Fiji	634,761,567	575,275,520	110.34
51	Togo	640,321,806	580,217,688	110.36
52	Puerto Rico	10,477,200,384	9,402,099,712	111.43
53	France	155,661,864,184	139,022,229,514	111.97
54	Guatemala	1,963,299,968	1,748,000,000	112.32
55	Australia	29,069,359,837	25,737,712,747	112.94
56	Tunisia	3,986,911,964	3,517,965,181	113.33
57	Zimbabwe	1,771,437,620	1,560,677,337	113.50
58	Italy	110,003,154,342	96,902,633,790	113.52
59	Guyana	564,839,987	490,319,974	115.20
60	Spain	37,942,881,948	32,740,267,959	115.89
61	Seychelles	116,615,430	100,141,584	116.45
62	Greece	13,560,731,209	11,526,621,528	117.65
63	Cote d'Ivoire	4,189,777,567	3,561,287,269	117.65
64	Chile	7,438,435,984	6,291,974,407	118.22
65	Philippines	9,253,067,162	7,661,066,650	120.78
66	Mexico	25,215,695,652	20,806,478,261	121.19
67	DPRK	1,714,400,000	1,414,100,000	121.24
68	Honduras	1,130,499,968	930,000,000	121.56
69	Mauritius	664,753,314	539,499,795	123.22
70	Iran, Islamic Rep.	15,214,810,024	12,338,107,754	123.32
71	Papua New Guinea	1,358,592,035	1,100,238,663	123.48
72	Belize	133,550,000	107,850,000	123.83
73	Korea, Rep.	25,245,953,457	20,369,193,589	123.94
74	Brazil	26,571,483,281	21,276,141,968	124.89
75	Botswana	704,709,213	562,918,168	125.19
76	Thailand	9,825,161,457	7,801,035,704	125.95
77	Vanuatu	47,384,760	37,603,233	126.01
78	Argentina	4,989,979,960	3,895,791,461	128.09
79	Antigua and Barbuda	95,399,998	74,077,776	128.78
80	Ireland	12,575,575,299	9,639,236,042	130.46
81	Uganda	324,000,000	242,000,000	133.88

Rank	Country	Imports (\$)	Exports (\$)	Imports as percentage of exports (%)
82	Israel	12,923,936,759	9,535,564,912	135.53
83	Swaziland	563,807,476	412,961,844	136.53
84	Uruguay	2,090,439,475	1,523,186,751	137.24
85	Costa Rica	1,778,891,549	1,279,264,964	139.06
86	Cyprus	1,358,356,997	974,787,576	139.35
87	Kenya	2,837,389,828	2,030,403,493	139.75
88	Egypt, Arab Rep.	9,821,666,667	6,991,666,667	140.48
89	St. Lucia	125,699,998	89,329,628	140.71
90	Haiti	445,899,981	316,099,994	141.06
91	Solomon Islands	116,052,061	81,585,924	142.25
92	St. Kitts and Nevis	46,629,629	32,111,111	145.21
93	Portugal	10,763,334,908	7,235,626,562	148.75
94	Gambia, The	153,323,678	103,028,762	148.82
95	Dominican Republic	1,919,000,064	1,271,000,064	150.98
96	Niger	956,555,076	616,720,072	155.10
97	Malawi	480,236,424	307,474,449	156.19
98	India	17,821,000,000	11,249,000,000	158.42
99	Morocco	5,246,862,775	3,272,621,044	160.33
100	Senegal	1,301,502,531	803,194,592	162.04
101	Nepal	364,500,011	224,583,339	162.30
102	Central African Republic	327,434,489	201,028,393	162.88
103	Sierra Leone	420,651,553	251,666,984	167.15
104	Grenada	66,370,369	39,592,592	167.63
105	Sri Lanka	2,204,857,719	1,296,327,544	170.08
106	Chad	298,183,918	175,041,754	170.35
107	Nicaragua	927,803,482	519,538,168	178.58
108	Mauritania	472,621,700	261,091,421	181.02
109	Rwanda	306,872,038	167,923,309	182.75
110	Paraguay	1,314,277,799	700,999,973	187.49
111	St. Vincent and the Grenadines	63,407,406	33,137,036	191.35
112	Pakistan	5,709,197,408	2,958,199,994	193.00
113	Syrian Arab Republic	4,719,467,795	2,433,274,526	193.96
114	Mali	520,165,266	262,685,839	198.02
115	Jordan	3,335,403,206	1,579,256,524	211.20
116	Sudan	1,763,104,152	805,990,470	218.75
117	Madagascar	1,202,017,238	539,320,046	222.88

Rank	Country	Imports (\$)	Exports (\$)	Imports as percentage of exports (%)
118	Tonga	35,288,259	15,665,473	225.26
119	Turkey	8,456,573,464	3,660,084,493	231.05
120	Benin	524,418,843	222,240,333	235.97
121	Mozambique	964,768,398	383,020,297	251.88
122	Burundi	214,223,333	81,022,222	264.40
123	Somalia	534,102,359	200,271,012	266.69
124	Bhutan	51,138,894	18,491,906	276.55
125	Maldives	24,569,536	7,748,344	317.09
126	Bangladesh	3,239,432,452	995,270,012	325.48
127	Burkina Faso	563,715,097	172,600,568	326.60
128	Guinea-Bissau	46,299,639	14,039,310	329.79
129	Dominica	54,703,703	13,000,000	420.80
130	Kiribati	30,807,885	6,551,960	470.21
131	Lesotho	475,069,333	90,648,365	524.08
132	Comoros	64,152,139	10,744,088	597.09

Sources: World Bank (2003), KOTRA (various years), MOU (various years).

Table 5: Per Capita Exports: DPRK Rank in World, 1990

Rank	Country	Exports (\$)	Population	Per capita exports (\$)
1	Luxembourg	12,362,136,670	381,900	32,370.09
2	Singapore	67,490,758,621	3,047,000	22,149.90
3	Hong Kong, China	100,410,145,323	5,704,500	17,601.92
4	Belgium	139,596,575,589	9,967,400	14,005.31
5	Switzerland	82,819,232,945	6,712,000	12,338.98
6	United Arab Emirates	22,331,244,892	1,844,000	12,110.22
7	Norway	46,927,176,773	4,241,500	11,063.82
8	Netherlands	158,975,438,651	14,952,000	10,632.39
9	Bahrain	4,887,765,957	503,000	9,717.23
10	Denmark	47,781,564,820	5,140,000	9,296.02
11	Macao, China	3,149,631,083	370,000	8,512.52
12	Iceland	2,143,598,136	254,800	8,412.87
13	Sweden	71,220,806,469	8,559,000	8,321.16
14	Austria	63,966,260,393	7,725,700	8,279.67
15	Ireland	26,950,944,656	3,505,800	7,687.53
16	Finland	31,123,797,001	4,986,000	6,242.24

Rank	Country	Exports (\$)	Population	Per capita exports (\$)
17	Germany	486,021,890,239	79,433,000	6,118.64
18	Malta	1,971,051,066	360,000	5,475.14
19	Antigua and Barbuda	348,311,111	64,000	5,442.36
20	Canada	149,504,411,733	27,791,000	5,379.60
21	France	258,329,212,002	56,735,000	4,553.26
22	Cyprus	2,880,087,467	681,000	4,229.20
23	United Kingdom	237,735,108,715	57,561,000	4,130.14
24	Israel	18,209,998,320	4,660,000	3,907.72
25	Kuwait	8,281,250,000	2,125,000	3,897.06
26	Italy	217,652,624,643	56,719,000	3,837.38
27	New Zealand	11,785,565,352	3,436,200	3,429.83
28	Oman	5,555,266,580	1,627,000	3,414.42
29	Seychelles	230,302,235	70,000	3,290.03
30	Barbados	839,904,487	258,000	3,255.44
31	Saudi Arabia	48,365,821,095	15,803,000	3,060.55
32	Australia	51,722,133,363	17,065,100	3,030.87
33	Gabon	2,740,354,950	935,000	2,930.86
34	New Caledonia	467,609,332	168,000	2,783.39
35	Libya	11,468,375,887	4,311,000	2,660.26
36	Japan	316,750,515,393	123,537,000	2,564.01
37	Portugal	23,539,775,916	9,896,000	2,378.72
38	United States	557,199,980,000	249,440,000	2,233.80
39	Latvia	5,958,000,133	2,670,700	2,230.88
40	St. Lucia	288,200,000	134,100	2,149.14
41	Spain	83,046,178,502	38,836,000	2,138.38
42	St. Kitts and Nevis	82,385,184	42,030	1,960.15
43	Trinidad and Tobago	2,299,011,765	1,215,000	1,892.19
44	Malaysia	32,816,369,096	18,201,900	1,802.91
45	Korea, Rep.	73,499,499,833	42,869,000	1,714.51
46	Botswana	2,086,912,120	1,276,000	1,635.51
47	Belarus	16,178,861,342	10,189,000	1,587.88
48	Czech Republic	15,768,953,042	10,363,000	1,521.66
49	Greece	15,180,855,017	10,161,000	1,494.03
50	Mauritius	1,529,369,515	1,057,000	1,446.90
51	Belize	257,000,000	189,300	1,357.63
52	Dominica	90,718,517	72,260	1,255.45
53	St. Vincent and the Grenadines	130,462,961	107,050	1,218.71

Rank	Country	Exports (\$)	Population	Per capita exports (\$)
54	Fiji	878,519,819	736,000	1,193.64
55	Moldova	5,166,666,421	4,362,000	1,184.47
56	Grenada	93,796,295	93,600	1,002.10
57	Hungary	10,294,971,788	10,365,000	993.24
58	Venezuela, RB	19,168,442,360	19,502,000	982.90
59	Jamaica	2,207,161,086	2,390,000	923.50
60	Georgia	4,861,788,618	5,460,100	890.42
61	Namibia	1,220,196,875	1,375,000	887.42
62	Swaziland	660,240,637	770,000	857.46
63	Panama	2,041,586,000	2,398,000	851.37
64	Chile	10,498,261,922	13,099,000	801.46
65	Bulgaria	6,864,383,353	8,718,000	787.38
66	Jordan	2,489,182,055	3,170,000	785.23
67	Slovak Republic	4,110,733,756	5,283,000	778.11
68	South Africa	27,326,969,896	35,200,000	776.33
69	Russian Federation	105,168,547,055	148,292,000	709.20
70	Uruguay	2,185,374,032	3,106,000	703.60
71	Congo, Rep.	1,502,218,435	2,230,000	673.64
72	Tunisia	5,353,409,091	8,154,400	656.51
73	Costa Rica	1,976,163,480	3,049,000	648.13
74	Macedonia, FYR	1,157,243,816	1,903,000	608.12
75	Mexico	48,866,100,761	83,226,000	587.15
76	Algeria	14,545,657,513	25,022,000	581.31
77	Thailand	29,129,804,006	55,595,000	523.96
78	Iran, Islamic Rep.	26,476,358,408	54,400,000	486.70
79	Ukraine	25,245,902,628	51,892,000	486.51
80	Vanuatu	70,912,344	147,300	481.41
81	Argentina	14,643,450,361	32,527,000	450.19
82	Poland	16,895,684,389	38,118,800	443.24
83	Paraguay	1,750,341,449	4,150,000	421.77
84	Angola	3,992,499,897	9,570,000	417.19
85	Armenia	1,443,442,651	3,545,000	407.18
86	Tonga	35,927,637	96,000	374.25
87	Turkey	20,014,163,427	56,154,000	356.42
88	Ecuador	3,499,031,587	10,264,000	340.90
89	Guyana	248,474,060	731,000	339.91
90	Dominican Republic	2,392,771,130	7,061,000	338.87

Rank	Country	Exports (\$)	Population	Per capita exports (\$)
91	Papua New Guinea	1,308,586,387	3,980,000	328.79
92	Solomon Islands	98,821,575	319,000	309.79
93	Cote d'Ivoire	3,421,251,745	11,800,000	289.94
94	Syrian Arab Republic	3,488,165,260	12,116,000	287.90
95	Morocco	6,829,988,741	24,043,000	284.07
96	Romania	6,406,250,166	23,207,000	276.05
97	Brazil	38,129,059,013	147,957,000	257.70
98	Maldives	52,627,722	213,000	247.08
99	Colombia	8,282,579,458	34,970,000	236.85
100	Mauritania	465,365,250	1,992,000	233.62
101	Honduras	1,108,317,121	4,870,000	227.58
102	Tajikistan	1,206,321,472	5,303,000	227.48
103	Suriname	89,270,302	402,000	222.07
104	Gambia, The	189,845,237	928,000	204.57
105	Philippines	12,198,148,639	61,040,000	199.84
106	Senegal	1,449,717,182	7,327,000	197.86
107	Zimbabwe	2,008,581,937	10,241,000	196.13
108	Cameroon	2,250,713,650	11,614,000	193.79
109	Peru	4,144,927,491	21,569,000	192.17
110	Guatemala	1,608,631,758	8,749,000	183.86
111	El Salvador	892,094,818	5,112,000	174.51
112	Bolivia	1,108,688,320	6,573,000	168.67
113	Egypt, Arab Rep.	8,646,612,831	52,442,000	164.88
114	Indonesia	28,982,530,241	178,232,000	162.61
115	Togo	545,099,635	3,453,000	157.86
116	Kyrgyz Republic	697,564,375	4,423,000	157.71
117	Zambia	1,179,864,265	7,784,000	151.58
118	Guinea	869,736,444	5,755,000	151.13
119	Sri Lanka	2,345,830,231	16,267,000	144.21
120	Lebanon	511,008,107	3,635,000	140.58
121	Bhutan	80,434,166	600,110	134.03
122	Nigeria	12,365,872,842	96,203,000	128.54
123	Cape Verde	43,051,774	341,400	126.10
124	Equatorial Guinea	42,485,125	352,000	120.70
125	DPRK	1,939,000,000	20,018,546	96.86
126	Albania	312,500,000	3,277,000	95.36
127	Kenya	2,205,890,747	23,354,000	94.45

Rank	Country	Exports (\$)	Population	Per capita exports (\$)
128	Comoros	35,635,055	432,000	82.49
129	Haiti	502,200,000	6,473,000	77.58
130	Central African Republic	219,621,201	2,945,000	74.57
131	Congo, Dem. Rep.	2,757,935,431	36,999,000	74.54
132	Sao Tome and Principe	8,336,908	115,000	72.49
133	Nicaragua	251,842,527	3,824,000	65.86
134	Ghana	993,434,057	15,138,000	65.63
135	Lesotho	103,431,308	1,682,000	61.49
136	Yemen, Rep.	689,312,977	11,876,000	58.04
137	Pakistan	6,216,942,715	107,975,060	57.58
138	Benin	263,655,960	4,710,000	55.98
139	China	62,171,591,024	1,135,185,000	54.77
140	Malawi	447,289,731	8,507,000	52.58
141	Mali	415,218,793	8,460,000	49.08
142	Niger	372,432,639	7,707,000	48.32
143	Kiribati	3,309,634	72,340	45.75
144	Madagascar	511,579,180	11,632,000	43.98
145	Chad	234,368,328	5,746,000	40.79
146	Burkina Faso	352,011,283	8,880,000	39.64
147	Marshall Islands	1,700,000	46,200	36.80
148	Sierra Leone	145,827,714	3,999,000	36.47
149	Vietnam	2,332,325,609	66,200,000	35.23
150	India	23,028,000,000	849,515,000	27.11
151	Guinea-Bissau	24,240,000	946,000	25.62
152	Lao PDR	97,939,606	4,132,000	23.70
153	Tanzania	537,502,051	25,470,000	21.10
154	Nepal	381,890,606	18,142,000	21.05
155	Rwanda	145,102,122	6,943,000	20.90
156	Uganda	311,673,602	16,330,000	19.09
157	Bangladesh	1,881,679,563	110,025,000	17.10
158	Burundi	89,130,244	5,456,000	16.34
159	Mozambique	201,346,835	14,151,000	14.23
160	Somalia	89,748,796	7,163,000	12.53
161	Ethiopia	534,884,615	51,180,000	10.45
162	Cambodia	68,528,864	9,145,000	7.49

Sources: World Bank (2003), Census (various years), KOTRA (various years), MOU (various years).

Table 6: Imports as a Percentage of Exports: DPRK Rank in World, 1990

Rank	Country	Imports (\$)	Exports (\$)	Imports as percentage of exports (%)
1	Argentina	6,546,483,926	14,643,450,361	44.71
2	Venezuela, RB	9,808,102,070	19,168,442,360	51.17
3	Angola	2,147,299,976	3,992,499,897	53.78
4	Oman	3,224,967,490	5,555,266,580	58.05
5	United Arab Emirates	13,780,986,107	22,331,244,892	61.71
6	Trinidad and Tobago	1,448,894,118	2,299,011,765	63.02
7	Nigeria	8,202,785,667	12,365,872,842	66.33
8	Gabon	1,836,820,145	2,740,354,950	67.03
9	Macao, China	2,190,763,357	3,149,631,083	69.56
10	Colombia	5,969,031,672	8,282,579,458	72.07
11	Poland	12,684,210,551	16,895,684,389	75.07
12	South Africa	20,885,728,639	27,326,969,896	76.43
13	Uruguay	1,680,566,177	2,185,374,032	76.90
14	Saudi Arabia	37,834,445,928	48,365,821,095	78.23
15	Libya	8,995,656,320	11,468,375,887	78.44
16	China	50,799,130,824	62,171,591,024	81.71
17	Bahrain	4,001,595,745	4,887,765,957	81.87
18	Ecuador	2,924,891,013	3,499,031,587	83.59
19	Norway	39,356,096,125	46,927,176,773	83.87
20	Brazil	32,371,450,313	38,129,059,013	84.90
21	Congo, Rep.	1,281,844,092	1,502,218,435	85.33
22	Cote d'Ivoire	2,926,981,562	3,421,251,745	85.55
23	Cameroon	1,930,732,109	2,250,713,650	85.78
24	Denmark	41,016,985,847	47,781,564,820	85.84
25	Peru	3,637,681,120	4,144,927,491	87.76
26	Panama	1,796,386,000	2,041,586,000	87.99
27	Germany	430,333,743,238	486,021,890,239	88.54
28	Botswana	1,887,395,861	2,086,912,120	90.44
29	Chile	9,506,460,861	10,498,261,922	90.55
30	Japan	287,928,594,368	316,750,515,393	90.90
31	Hungary	9,431,620,225	10,294,971,788	91.61
32	Netherlands	148,876,183,275	158,975,438,651	93.65
33	Hong Kong, China	94,081,126,006	100,410,145,323	93.70
34	Indonesia	27,157,275,972	28,982,530,241	93.70

Rank	Country	Imports (\$)	Exports (\$)	Imports as percentage of exports (%)
35	Czech Republic	14,849,886,545	15,768,953,042	94.17
36	Belarus	15,365,853,234	16,178,861,342	94.97
37	Iceland	2,058,188,437	2,143,598,136	96.02
38	Singapore	64,953,655,172	67,490,758,621	96.24
39	Belize	248,100,000	257,000,000	96.54
40	Austria	62,156,580,823	63,966,260,393	97.17
41	Suriname	86,783,149	89,270,302	97.21
42	Luxembourg	12,027,760,483	12,362,136,670	97.30
43	Belgium	135,883,431,979	139,596,575,589	97.34
44	Antigua and Barbuda	340,559,259	348,311,111	97.77
45	Sweden	69,968,357,890	71,220,806,469	98.24
46	Switzerland	81,642,980,856	82,819,232,945	98.58
47	Syrian Arab Republic	3,440,367,093	3,488,165,260	98.63
48	Russian Federation	103,910,115,893	105,168,547,055	98.80
49	Swaziland	653,126,308	660,240,637	98.92
50	Congo, Dem. Rep.	2,729,963,637	2,757,935,431	98.99
51	New Zealand	11,674,600,272	11,785,565,352	99.06
52	Guinea	863,677,673	869,736,444	99.30
53	Zimbabwe	2,002,043,318	2,008,581,937	99.67
54	Canada	149,145,293,651	149,504,411,733	99.76
55	Italy	217,202,682,246	217,652,624,643	99.79
56	Australia	52,259,971,258	51,722,133,363	101.04
57	Zambia	1,203,064,249	1,179,864,265	101.97
58	Latvia	6,122,000,137	5,958,000,133	102.75
59	Fiji	911,607,806	878,519,819	103.77
60	Ukraine	26,229,509,224	25,245,902,628	103.90
61	Korea, Rep.	76,438,756,422	73,499,499,833	104.00
62	France	270,139,456,047	258,329,212,002	104.57
63	Moldova	5,416,666,409	5,166,666,421	104.84
64	Bolivia	1,164,632,090	1,108,688,320	105.05
65	Barbados	884,751,134	839,904,487	105.34
66	Sierra Leone	154,411,646	145,827,714	105.89
67	Mexico	51,767,986,205	48,866,100,761	105.94
68	Algeria	15,472,203,617	14,545,657,513	106.37
69	Seychelles	246,004,235	230,302,235	106.82
70	Finland	33,412,208,899	31,123,797,001	107.35

Rank	Country	Imports (\$)	Exports (\$)	Imports as percentage of exports (%)
71	Jamaica	2,382,299,679	2,207,161,086	107.94
72	Honduras	1,212,718,817	1,108,317,121	109.42
73	United Kingdom	263,251,055,090	237,735,108,715	110.73
74	Cyprus	3,193,654,425	2,880,087,467	110.89
75	Bulgaria	7,612,328,364	6,864,383,353	110.90
76	Mauritius	1,701,147,705	1,529,369,515	111.23
77	United States	628,600,010,000	557,199,980,000	112.81
78	Haiti	572,400,000	502,200,000	113.98
79	Bhutan	91,916,600	80,434,166	114.28
80	Georgia	5,560,975,610	4,861,788,618	114.38
81	St. Lucia	334,300,000	288,200,000	116.00
82	Malta	2,287,287,707	1,971,051,066	116.04
83	Tunisia	6,219,545,455	5,353,409,091	116.18
84	St. Vincent and the Grenadines	152,266,664	130,462,961	116.71
85	Guatemala	1,900,441,482	1,608,631,758	118.14
86	Paraguay	2,079,153,438	1,750,341,449	118.79
87	Senegal	1,728,127,525	1,449,717,182	119.20
88	Gambia, The	226,861,601	189,845,237	119.50
89	Costa Rica	2,362,835,903	1,976,163,480	119.57
90	Portugal	28,197,186,863	23,539,775,916	119.79
91	Papua New Guinea	1,576,649,215	1,308,586,387	120.48
92	Kenya	2,660,886,776	2,205,890,747	120.63
93	Philippines	14,755,062,729	12,198,148,639	120.96
94	Spain	100,715,749,504	83,046,178,502	121.28
95	Thailand	35,546,453,591	29,129,804,006	122.03
96	Morocco	8,373,834,299	6,829,988,741	122.60
97	Vietnam	2,930,215,427	2,332,325,609	125.63
98	Tajikistan	1,526,559,578	1,206,321,472	126.55
99	Guyana	316,442,091	248,474,060	127.35
100	Dominican Republic	3,090,575,007	2,392,771,130	129.16
101	Namibia	1,584,382,842	1,220,196,875	129.85
102	Sri Lanka	3,053,778,996	2,345,830,231	130.18
103	Turkey	26,464,002,132	20,014,163,427	132.23
104	Armenia	1,910,655,775	1,443,442,651	132.37
105	Mauritania	619,220,700	465,365,250	133.06

Rank	Country	Imports (\$)	Exports (\$)	Imports as percentage of exports (%)
106	Slovak Republic	5,503,258,837	4,110,733,756	133.88
107	Togo	738,254,023	545,099,635	135.43
108	India	31,485,000,000	23,028,000,000	136.72
109	Yemen, Rep.	969,083,969	689,312,977	140.59
110	Niger	544,691,917	372,432,639	146.25
111	Dominica	133,948,146	90,718,517	147.65
112	Grenada	138,799,998	93,796,295	147.98
113	Jordan	3,727,972,374	2,489,182,055	149.77
114	Pakistan	9,350,911,782	6,216,942,715	150.41
115	DPRK	2,945,405,700	1,938,861,818	151.91
116	Ghana	1,521,547,091	993,434,057	153.16
117	Greece	23,434,020,455	15,180,855,017	154.37
118	Solomon Islands	153,748,814	98,821,575	155.58
119	Albania	487,500,000	312,500,000	156.00
120	Romania	10,026,785,816	6,406,250,166	156.52
121	Ethiopia	850,961,538	534,884,615	159.09
122	St. Kitts and Nevis	132,366,664	82,385,184	160.67
123	Egypt, Arab Rep.	14,109,376,402	8,646,612,831	163.18
124	Vanuatu	117,153,596	70,912,344	165.21
125	El Salvador	1,501,185,724	892,094,818	168.28
126	Madagascar	863,630,752	511,579,180	168.82
127	Benin	485,775,428	263,655,960	184.25
128	Nicaragua	467,806,345	251,842,527	185.75
129	Central African Republic	410,926,843	219,621,201	187.11
130	New Caledonia	877,982,022	467,609,332	187.76
131	Tonga	68,866,821	35,927,637	191.68
132	Mali	816,604,472	415,218,793	196.67
133	Nepal	765,387,791	381,890,606	200.42
134	Burkina Faso	708,687,157	352,011,283	201.33
135	Chad	485,190,844	234,368,328	207.02
136	Cambodia	142,458,102	68,528,864	207.88
137	Lao PDR	211,967,256	97,939,606	216.43
138	Equatorial Guinea	91,957,080	42,485,125	216.45
139	Bangladesh	4,108,870,845	1,881,679,563	218.36
140	Rwanda	363,608,848	145,102,122	250.59
141	Comoros	92,878,131	35,635,055	260.64

Rank	Country	Imports (\$)	Exports (\$)	Imports as percentage of exports (%)
142	Maldives	137,709,373	52,627,722	261.67
143	Uganda	833,722,349	311,673,602	267.50
144	Tanzania	1,595,095,769	537,502,051	296.76
145	Cape Verde	148,025,383	43,051,774	343.83
146	Burundi	314,442,790	89,130,244	352.79
147	Guinea-Bissau	90,350,000	24,240,000	372.73
148	Somalia	346,105,365	89,748,796	385.64
149	Mozambique	888,444,767	201,346,835	441.25
150	Sao Tome and Principe	41,706,779	8,336,908	500.27
151	Lesotho	753,435,684	103,431,308	728.44
152	Marshall Islands	56,000,000	1,700,000	3294.12

Sources: World Bank (2003), KOTRA (various years), MOU (various years).

Table 7: Per Capita Exports: DPRK Rank in World, 2000

Rank	Country	Exports (\$)	Population	Per capita exports (\$)
1	Luxembourg	29,383,610,297	438,000	67,085.87
2	Singapore	165,812,183,176	4,018,000	41,267.34
3	Hong Kong, China	244,032,761,716	6,665,000	36,614.07
4	Ireland	90,440,955,002	3,794,000	23,837.89
5	Belgium	197,417,360,036	10,252,000	19,256.47
6	Norway	75,393,539,513	4,491,000	16,787.70
7	Netherlands	248,430,008,817	15,919,000	15,605.88
8	Switzerland	110,987,818,287	7,180,000	15,457.91
9	Macao, China	5,819,733,612	438,000	13,287.06
10	Denmark	70,193,357,431	5,340,000	13,144.82
11	Sweden	108,061,847,252	8,869,000	12,184.22
12	Puerto Rico	45,921,200,000	3,815,900	12,034.17
13	Austria	94,610,102,626	8,110,240	11,665.51
14	Kuwait	21,300,733,496	1,984,400	10,734.09
15	Canada	325,049,996,297	30,769,700	10,563.96
16	Iceland	2,947,200,970	280,000	10,525.72
17	Bahrain	6,546,184,739	648,322	10,097.11
18	Finland	51,884,049,305	5,172,000	10,031.72
19	Malta	3,668,190,128	390,000	9,405.62

Rank	Country	Exports (\$)	Population	Per capita exports (\$)
20	Germany	629,509,287,351	82,210,000	7,657.33
21	Israel	44,146,861,894	6,233,210	7,082.52
22	United Kingdom	401,819,685,180	58,720,000	6,842.98
23	Antigua and Barbuda	448,444,444	68,000	6,594.77
24	France	372,625,407,568	58,893,000	6,327.16
25	Seychelles	458,889,006	81,230	5,649.26
26	Slovenia	10,718,818,509	1,989,000	5,389.05
27	Italy	304,345,757,927	57,690,000	5,275.54
28	Barbados	1,317,058,562	267,000	4,932.80
29	New Zealand	18,656,619,793	3,830,800	4,870.16
30	Malaysia	112,369,211,936	23,270,000	4,828.93
31	Australia	88,780,498,637	19,182,000	4,628.32
32	Korea, Rep.	206,719,689,467	47,008,000	4,397.54
33	Spain	168,203,263,126	40,499,790	4,153.19
34	Japan	512,742,009,270	126,870,000	4,041.48
35	Saudi Arabia	82,368,491,322	20,723,150	3,974.71
36	United States	1,103,100,000,000	282,224,000	3,908.60
37	Trinidad and Tobago	4,841,800,000	1,301,000	3,721.60
38	Estonia	4,819,015,370	1,369,500	3,518.81
39	Czech Republic	35,799,429,904	10,273,300	3,484.71
40	Portugal	33,814,509,108	10,008,000	3,378.75
41	St. Kitts and Nevis	142,333,331	44,000	3,234.85
42	Hungary	28,541,126,231	10,122,000	2,819.71
43	Greece	27,966,531,264	10,560,000	2,648.35
44	Slovak Republic	14,171,825,785	5,401,000	2,623.93
45	St. Lucia	376,435,407	155,300	2,423.92
46	Grenada	235,840,737	99,000	2,382.23
47	Mauritius	2,801,433,106	1,187,000	2,360.10
48	Libya	12,139,647,153	5,290,000	2,294.83
49	Maldives	562,786,724	274,000	2,053.97
50	Dominica	147,240,738	72,000	2,045.01
51	Costa Rica	7,649,024,543	3,810,000	2,007.62
52	Croatia	8,565,394,318	4,380,000	1,955.57
53	Belize	448,250,000	240,000	1,867.71
54	Botswana	3,119,408,836	1,675,000	1,862.33
55	Mexico	180,189,466,559	97,966,000	1,839.31
56	St. Vincent and the Grenadines	178,148,145	115,000	1,549.11

Rank	Country	Exports (\$)	Population	Per capita exports (\$)
57	Gabon	1,825,332,148	1,230,000	1,484.01
58	Chile	22,468,158,814	15,211,300	1,477.07
59	Lithuania	5,109,125,000	3,506,000	1,457.25
60	Suriname	606,294,896	417,000	1,453.94
61	Venezuela, RB	34,497,624,860	24,170,000	1,427.29
62	Fiji	1,131,571,616	811,900	1,393.73
63	Latvia	3,273,206,271	2,372,000	1,379.94
64	Thailand	80,940,752,405	60,728,000	1,332.84
65	Jamaica	3,422,936,231	2,573,000	1,330.33
66	Uruguay	4,142,365,700	3,337,000	1,241.34
67	Poland	46,245,444,506	38,648,000	1,196.58
68	Panama	3,390,582,000	2,854,000	1,188.01
69	Namibia	1,633,106,146	1,757,000	929.49
70	Guyana	684,547,498	761,000	899.54
71	Tunisia	8,565,842,270	9,563,500	895.68
72	Belarus	8,782,787,255	10,005,000	877.84
73	Bulgaria	7,022,427,995	8,125,000	864.30
74	Congo, Rep.	2,585,746,791	3,018,000	856.77
75	Macedonia, FYR	1,732,960,081	2,026,000	855.36
76	South Africa	36,572,077,414	42,800,990	854.47
77	Swaziland	889,298,475	1,045,000	851.00
78	Argentina	30,936,900,000	37,032,000	835.41
79	French Polynesia	192,401,162	235,000	818.73
80	Russian Federation	115,540,000,000	145,555,000	793.79
81	Algeria	22,715,918,150	30,385,000	747.60
82	Turkey	50,119,000,000	67,420,000	743.38
83	Jordan	3,535,966,192	4,886,810	723.57
84	Kazakhstan	10,760,236,403	15,059,170	714.53
85	Dominican Republic	5,447,142,405	8,373,000	650.56
86	Angola	8,176,127,384	13,134,000	622.52
87	Palau	11,500,000	19,100	602.09
88	El Salvador	3,588,849,229	6,276,000	571.84
89	Romania	12,607,872,935	22,435,000	561.97
90	Philippines	42,076,416,556	76,626,500	549.11
91	Turkmenistan	2,649,500,000	5,285,000	501.32
92	Lebanon	2,140,930,000	4,328,000	494.67
93	Ecuador	5,774,044,126	12,646,000	456.59

Rank	Country	Exports (\$)	Population	Per capita exports (\$)
94	Samoa	77,149,509	172,000	448.54
95	Syrian Arab Republic	6,845,000,000	16,189,000	422.82
96	Iran, Islamic Rep.	25,243,916,656	63,663,942	396.52
97	Ukraine	19,522,000,384	49,501,000	394.38
98	Colombia	16,571,137,670	42,299,300	391.76
99	Djibouti	246,514,073	632,000	390.05
100	Honduras	2,496,900,000	6,417,000	389.11
101	Brazil	64,160,048,783	170,100,000	377.19
102	Morocco	10,409,377,694	28,705,000	362.63
103	Sri Lanka	6,474,569,483	18,467,000	350.60
104	Guatemala	3,881,472,709	11,385,300	340.92
105	Peru	8,546,053,460	25,939,000	329.47
106	Indonesia	64,474,628,630	206,265,000	312.58
107	Paraguay	1,621,650,049	5,270,000	307.71
108	Cape Verde	130,517,532	434,810	300.17
109	Bosnia and Herzegovina	1,192,000,036	3,977,000	299.72
110	Mongolia	634,796,363	2,398,000	264.72
111	Cote d'Ivoire	4,214,208,377	16,013,000	263.17
112	Azerbaijan	2,118,121,102	8,049,000	263.15
113	Egypt, Arab Rep.	16,174,959,636	63,976,000	252.83
114	Yugoslavia, Fed. Rep.	2,547,084,219	10,637,000	239.46
115	Yemen, Rep.	4,008,397,414	17,507,160	228.96
116	Albania	708,864,277	3,134,000	226.19
117	China	279,561,121,426	1,262,460,000	221.44
118	Vietnam	17,144,000,000	78,522,700	218.33
119	West Bank and Gaza	603,791,679	2,966,000	203.57
120	Cameroon	2,721,361,288	14,876,000	182.94
121	Bhutan	144,200,000	805,000	179.13
122	Bolivia	1,483,613,599	8,328,700	178.13
123	Nigeria	21,499,464,094	126,910,000	169.41
124	Zimbabwe	2,118,004,768	12,627,000	167.74
125	Gambia, The	201,830,095	1,303,000	154.90
126	Moldova	644,430,000	4,278,000	150.64
127	Armenia	446,834,956	3,112,000	143.58
128	Mauritania	377,613,520	2,665,000	141.69
129	Cambodia	1,697,302,624	12,021,230	141.19
130	Senegal	1,338,800,000	9,530,000	140.48

Rank	Country	Exports (\$)	Population	Per capita exports (\$)
131	Uzbekistan	3,383,400,000	24,746,000	136.73
132	Georgia	703,050,125	5,262,000	133.61
133	Tajikistan	819,000,000	6,193,000	132.25
134	Ghana	2,448,369,037	19,306,000	126.82
135	Kyrgyz Republic	573,184,841	4,915,000	116.62
136	Sao Tome and Principe	16,499,586	148,000	111.48
137	Lesotho	226,049,911	2,035,000	111.08
138	Guinea	734,564,329	7,415,000	99.06
139	Kenya	2,743,864,209	30,092,000	91.18
140	Togo	397,904,436	4,527,000	87.90
141	Madagascar	1,187,439,970	15,523,000	76.50
142	Pakistan	9,930,289,575	138,080,000	71.92
143	Zambia	681,818,182	10,089,000	67.58
144	Haiti	501,946,403	7,959,000	63.07
145	India	63,764,000,000	1,015,923,000	62.76
146	Sudan	1,927,504,667	31,095,000	61.99
147	Mali	628,846,316	10,840,000	58.01
148	Guinea-Bissau	68,442,934	1,199,000	57.08
149	Nepal	1,275,956,679	23,043,000	55.37
150	Comoros	30,679,636	558,000	54.98
151	Benin	333,603,366	6,272,000	53.19
152	Bangladesh	6,611,000,000	131,050,000	50.45
153	Malawi	450,840,100	10,311,000	43.72
154	Tanzania	1,329,795,016	33,696,000	39.46
155	Timor-Leste	25,000,000	737,000	33.92
156	Central African Republic	125,250,709	3,717,000	33.70
157	Chad	233,152,617	7,694,000	30.30
158	DPRK	653,100,000	21,647,682	30.17
159	Niger	320,655,075	10,832,000	29.60
160	Uganda	656,000,000	22,210,000	29.54
161	Mozambique	469,194,516	17,691,000	26.52
162	Eritrea	97,489,583	4,097,000	23.80
163	Sierra Leone	110,005,233	5,031,000	21.87
164	Burkina Faso	236,804,405	11,274,000	21.00
165	Rwanda	149,602,258	7,709,000	19.41
166	Congo, Dem. Rep.	963,872,464	50,948,000	18.92
167	Ethiopia	984,250,978	64,298,000	15.31

Rank	Country	Exports (\$)	Population	Per capita exports (\$)
168	Burundi	62,164,375	6,807,000	9.13

Sources: World Bank (2003), Census (various years), KOTRA (various years), MOU (various years).

Table 8: Imports as a Percentage of Exports: DPRK Rank in World, 2000

Rank	Country	Imports (\$)	Exports (\$)	Imports as a percentage of exports (%)
1	Libya	5,278,960,692	12,139,647,153	43.49
2	Algeria	11,371,246,346	22,715,918,150	50.06
3	Kuwait	11,370,823,146	21,300,733,496	53.38
4	Iran, Islamic Rep.	13,543,278,076	25,243,916,656	53.65
5	Russian Federation	62,466,000,000	115,540,000,000	54.06
6	Congo, Rep.	1,404,252,928	2,585,746,791	54.31
7	Saudi Arabia	46,987,983,979	82,368,491,322	57.05
8	Venezuela, RB	19,786,888,935	34,497,624,860	57.36
9	Botswana	1,936,345,996	3,119,408,836	62.07
10	Macao, China	3,642,719,197	5,819,733,612	62.59
11	Norway	49,253,100,064	75,393,539,513	65.33
12	Angola	5,724,733,748	8,176,127,384	70.02
13	Ecuador	4,190,657,594	5,774,044,126	72.58
14	Indonesia	48,331,284,154	64,474,628,630	74.96
15	Trinidad and Tobago	3,720,700,000	4,841,800,000	76.85
16	Bahrain	5,056,783,425	6,546,184,739	77.25
17	Finland	40,570,257,444	51,884,049,305	78.19
18	Nigeria	16,884,470,535	21,499,464,094	78.53
19	Syrian Arab Republic	5,391,000,000	6,845,000,000	78.76
20	Yemen, Rep.	3,294,044,411	4,008,397,414	82.18
21	Cote d'Ivoire	3,504,699,647	4,214,208,377	83.16
22	Kazakhstan	9,026,834,588	10,760,236,403	83.89
23	Malaysia	94,349,738,026	112,369,211,936	83.96
24	Ireland	76,915,352,022	90,440,955,002	85.04
25	Denmark	60,795,031,963	70,193,357,431	86.61
26	Japan	444,858,512,233	512,742,009,270	86.76
27	Thailand	70,424,673,375	80,940,752,405	87.01
28	Cameroon	2,376,025,524	2,721,361,288	87.31
29	Uzbekistan	2,961,900,000	3,383,400,000	87.54
30	Turkmenistan	2,336,700,000	2,649,500,000	88.19

Rank	Country	Imports (\$)	Exports (\$)	Imports as a percentage of exports (%)
31	Canada	288,190,773,747	325,049,996,297	88.66
32	Sweden	95,829,800,993	108,061,847,252	88.68
33	Philippines	37,492,737,483	42,076,416,556	89.11
34	China	250,687,631,994	279,561,121,426	89.67
35	Switzerland	99,548,039,693	110,987,818,287	89.69
36	South Africa	32,842,158,958	36,572,077,414	89.80
37	Singapore	149,173,377,851	165,812,183,176	89.97
38	Fiji	1,034,910,891	1,131,571,616	91.46
39	Zimbabwe	1,956,004,404	2,118,004,768	92.35
40	Netherlands	230,436,041,610	248,430,008,817	92.76
41	Ukraine	18,115,999,552	19,522,000,384	92.80
42	Korea, Rep.	192,619,279,196	206,719,689,467	93.18
43	Congo, Dem. Rep.	905,602,899	963,872,464	93.95
44	Gabon	1,717,521,111	1,825,332,148	94.09
45	Costa Rica	7,283,154,647	7,649,024,543	95.22
46	France	355,593,002,033	372,625,407,568	95.43
47	New Zealand	17,812,969,953	18,656,619,793	95.48
48	Azerbaijan	2,023,533,388	2,118,121,102	95.53
49	Belgium	190,013,653,940	197,417,360,036	96.25
50	Italy	293,859,587,378	304,345,757,927	96.55
51	Chile	21,718,172,820	22,468,158,814	96.66
52	Hong Kong, China	236,267,557,864	244,032,761,716	96.82
53	Sudan	1,870,332,918	1,927,504,667	97.03
54	Colombia	16,300,873,731	16,571,137,670	98.37
55	Germany	622,166,351,422	629,509,287,351	98.83
56	Australia	88,370,602,480	88,780,498,637	99.54
57	Austria	96,414,597,001	94,610,102,626	101.91
58	Mauritius	2,888,333,584	2,801,433,106	103.10
59	Slovak Republic	14,651,895,297	14,171,825,785	103.39
60	Estonia	5,029,191,449	4,819,015,370	104.36
61	Vietnam	17,911,678,193	17,144,000,000	104.48
62	Belarus	9,187,280,919	8,782,787,255	104.61
63	Uruguay	4,337,141,256	4,142,365,700	104.70
64	Czech Republic	37,517,491,578	35,799,429,904	104.80
65	Tajikistan	861,000,000	819,000,000	105.13
66	Seychelles	484,966,222	458,889,006	105.68
67	Argentina	32,738,200,000	30,936,900,000	105.82

Rank	Country	Imports (\$)	Exports (\$)	Imports as a percentage of exports (%)
68	Slovenia	11,363,086,253	10,718,818,509	106.01
69	United Kingdom	426,397,114,094	401,819,685,180	106.12
70	Mexico	191,497,667,308	180,189,466,559	106.28
71	Hungary	30,415,206,606	28,541,126,231	106.57
72	Spain	180,790,325,419	168,203,263,126	107.48
73	Tunisia	9,256,584,227	8,565,842,270	108.06
74	Bulgaria	7,697,244,590	7,022,427,995	109.61
75	Pakistan	10,912,027,027	9,930,289,575	109.89
76	Barbados	1,456,272,000	1,317,058,562	110.57
77	Malta	4,059,186,472	3,668,190,128	110.66
78	Peru	9,546,638,260	8,546,053,460	111.71
79	Croatia	9,635,041,611	8,565,394,318	112.49
80	Kyrgyz Republic	651,739,255	573,184,841	113.70
81	St. Vincent and the Grenadines	202,592,589	178,148,145	113.72
82	Lithuania	5,832,800,000	5,109,125,000	114.16
83	Antigua and Barbuda	512,962,963	448,444,444	114.39
84	Panama	3,888,600,000	3,390,582,000	114.69
85	Brazil	73,737,994,101	64,160,048,783	114.93
86	Romania	14,767,398,048	12,607,872,935	117.13
87	Suriname	715,546,314	606,294,896	118.02
88	Cambodia	2,005,311,368	1,697,302,624	118.15
89	India	75,656,000,000	63,764,000,000	118.65
90	Morocco	12,458,901,299	10,409,377,694	119.69
91	Iceland	3,544,280,555	2,947,200,970	120.26
92	Central African Republic	154,469,227	125,250,709	123.33
93	Poland	57,138,620,468	46,245,444,506	123.56
94	Madagascar	1,470,853,343	1,187,439,970	123.87
95	Turkey	62,193,000,000	50,119,000,000	124.09
96	Dominica	182,718,515	147,240,738	124.10
97	Swaziland	1,103,622,159	889,298,475	124.10
98	Namibia	2,033,044,012	1,633,106,146	124.49
99	Mongolia	793,927,822	634,796,363	125.07
100	Jamaica	4,328,128,147	3,422,936,231	126.44
101	Sri Lanka	8,234,452,462	6,474,569,483	127.18
102	Macedonia, FYR	2,237,937,022	1,732,960,081	129.14
103	Senegal	1,734,200,000	1,338,800,000	129.53

Rank	Country	Imports (\$)	Exports (\$)	Imports as a percentage of exports (%)
104	St. Lucia	489,091,259	376,435,407	129.93
105	Gambia, The	262,253,459	201,830,095	129.94
106	Puerto Rico	59,836,200,000	45,921,200,000	130.30
107	Greece	36,862,780,668	27,966,531,264	131.81
108	Honduras	3,312,700,000	2,496,900,000	132.67
109	United States	1,466,900,000,000	1,103,100,000,000	132.98
110	Dominican Republic	7,317,525,140	5,447,142,405	134.34
111	Belize	604,050,000	448,250,000	134.76
112	Mauritania	509,863,010	377,613,520	135.02
113	Portugal	45,922,291,393	33,814,509,108	135.81
114	Bangladesh	9,060,000,000	6,611,000,000	137.04
115	Kenya	3,770,497,558	2,743,864,209	137.42
116	Nepal	1,776,967,509	1,275,956,679	139.27
117	Egypt, Arab Rep.	22,779,979,451	16,174,959,636	140.83
118	Djibouti	347,224,752	246,514,073	140.85
119	Ghana	3,463,756,586	2,448,369,037	141.47
120	Niger	455,490,323	320,655,075	142.05
121	Mali	917,142,335	628,846,316	145.85
122	Zambia	1,017,616,047	681,818,182	149.25
123	Bolivia	2,235,014,010	1,483,613,599	150.65
124	Moldova	971,180,000	644,430,000	150.70
125	Togo	602,545,015	397,904,436	151.43
126	El Salvador	5,575,713,878	3,588,849,229	155.36
127	Yugoslavia, Fed. Rep.	4,003,829,661	2,547,084,219	157.19
128	Tanzania	2,096,692,141	1,329,795,016	157.67
129	Paraguay	2,623,634,441	1,621,650,049	161.79
130	Jordan	5,796,191,890	3,535,966,192	163.92
131	Georgia	1,212,806,558	703,050,125	172.51
132	Guinea-Bissau	125,481,053	68,442,934	183.34
133	Benin	627,397,224	333,603,366	188.07
134	Sierra Leone	212,271,973	110,005,233	192.97
135	Chad	450,855,361	233,152,617	193.37
136	Comoros	60,254,722	30,679,636	196.40
137	Ethiopia	1,960,696,479	984,250,978	199.21
138	Bhutan	291,500,000	144,200,000	202.15
139	St. Kitts and Nevis	295,333,328	142,333,331	207.49
140	Bosnia and Herzegovina	2,542,999,912	1,192,000,036	213.34

Rank	Country	Imports (\$)	Exports (\$)	Imports as a percentage of exports (%)
141	Albania	1,515,580,821	708,864,277	213.80
142	Uganda	1,413,600,000	656,000,000	215.49
143	Armenia	966,174,535	446,834,956	216.23
144	Sao Tome and Principe	38,382,244	16,499,586	232.63
145	Samoa	193,254,369	77,149,509	250.49
146	Burundi	162,210,166	62,164,375	260.94
147	Haiti	1,321,141,442	501,946,403	263.20
148	Cape Verde	344,211,362	130,517,532	263.73
149	Burkina Faso	657,602,742	236,804,405	277.70
150	DPRK	1,847,800,000	653,100,000	282.93
151	Rwanda	441,108,545	149,602,258	294.85
152	Mozambique	1,526,308,504	469,194,516	325.30
153	Lesotho	762,704,061	226,049,911	337.41
154	French Polynesia	952,020,780	192,401,162	494.81
155	West Bank and Gaza	3,085,316,244	603,791,679	510.99
156	Eritrea	498,593,750	97,489,583	511.43
157	Timor-Leste	160,000,000	25,000,000	640.00
158	Palau	127,100,000	11,500,000	1105.22

Sources: World Bank (2003), KOTRA (various years), MOU (various years).

Preconditions and Rationale for International Economic Support for North Korea



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