

Macroeconomic Statistics and the DPRK

This NCNK Issue Brief gives a snapshot of key economic indicators and trade statistics for the Democratic People's Republic of Korea. Because the DPRK provides insufficient primary data, statics must be generated through "mirror statics." However, not all statistics are created equal: the assumptions, methods and sources used vary from one data provider to another. In 2009, Dr. Mika Marumoto authored a report for the "Democratic People's Republic of Korea Economic Statistics Project," a project of the U.S.-Korea Institute of the School for Advanced International Studies at Johns Hopkins University. The Statics Project Report is intended as a "user's guide;" this NCNK Issue Brief was created with the report's recommendations in mind.

Year	GDP (billion USD)	GDP growth rates (%)	GNI (billion USD)	Per capita GNI (USD)
2000	10.6	1.3	10.6	461
2001	11.0	3.7	11.0	475
2002	10.9	1.2	10.9	467
2003	11.0	1.8	11.0	470
2004	11.1	2.2	11.1	472
2005	13.0	3.8	13.0	548
2006	13.7	-1.1	13.7	577
2007	14.3	-2.3	14.3	600
2008	13.3	3.7	13.3	555

<Source: UN (<http://unstats.un.org/>)>

Marumoto's report suggests that the UN Statistical Division (UNSD) provides more reliable estimate of North Korea's macroeconomic figures in comparison with the Bank of Korea (BOK). The primary source is the same (both use data from the DPRK Central Statistical Bureau) and UNSD uses GDP growth rates calculated by BOK. However, UNSD uses average annual market exchange rates as reported by the IMF to convert estimates expressed in national currency units into US dollars. In contrast, BOK, anticipating a reunified Korea, uses the Korean Won as its benchmark, and assumes that the lowest price for a product in the ROK is equal to the average price of a similar product in the DPRK. Instead, the BOK should be comparing the price of goods in the DPRK with those of countries with similar economies.¹The Congressional Research

¹ Mika Marumoto, *Project Report: DPRK Economic Statistics Project*, March 2009, pp: 43-44

<http://uskoreainstitute.org/research/projects/index#dprkSTATS>

Byung-yun Kim, "북한의 국민소득 추정치와 평가[North Korea GDP: Estimates and Evaluation]," *수은북한경제* 가을호, 2008, pp: 26-27.

Service (CRS) relies on a variety of data sources, including the UN, KOTRA, and the Global Trade Atlas.

Estimated North Korean Trade by Selected Trading Partner, Selected Years, 2000-2008

(\$ in millions)

North Korean Exports									
	2000	2001	2002	2003	2004	2005	2006	2007	2008
World	1,319	1,171	1,291	1,266	1,561	1,568	1,909	2,535	2,801
China	37	167	271	395	586	499	468	584	754
Japan	257	226	235	174	164	132	78	0	0
S. Korea	152	176	272	289	258	340	520	765	930
Russia	8	15	10	3	5	7	20	34	14
India	20	3	5	1	4	8	9	41	116
Thailand	20	24	44	51	91	133	168	36	29
Germany	25	23	29	24	22	45	17	16	21

North Korean Imports									
	2000	2001	2002	2003	2004	2005	2006	2007	2008
World	1,859	3,086	1,973	2,051	2,616	3,388	2,908	3,437	4,127
China	451	573	468	628	799	1,081	1,232	1,393	2,033
Japan	207	1,066	133	92	89	62	44	9	8
S. Korea	273	227	370	435	439	715	830	1,032	888
Russia	38	62	69	111	205	206	190	126	97
India	158	170	145	105	167	38	33	41	40
Thailand	189	106	172	204	239	207	216	184	48
Germany	53	80	139	71	68	63	63	34	31
Balance of Trade	-540	-1,915	-682	-785	-1,055	-1,820	-999	-901	-1,326

<Source: Nanto, Dick K. and Emma Chanlett-Avery. (2009) "The North Korean Economy: Leverage and Policy Analysis." CRS Report for Congress RL32493. Washington, D.C.: Congressional Research Service: The Library of Congress. Updated August 14, 2009>

According to Marumoto, KOTRA and UN Trade figures have different strengths. UN statistics are broader: they include data from all member countries (11 to 128 exporting countries and 115 to 136 importing for the years 1997-2007). KOTRA relies on data from GTIS (Global Trade Atlas) but includes only 50 to 60 countries, since it drops all the GTIS data it finds unreliable. And GTIS does not cover many developing countries, including Middle East countries. This is a significant omission as the North increasingly relies on trade with developing countries as a result of economic sanctions.

On the other hand, KOTRA gathers data directly from Customs Offices of the countries it covers, which may result in greater accuracy. And only KOTRA contains Inter-Korea trade data, which is described as domestic trade by the South Korean government and is therefore not broken down when it is reported to other countries. Precise information about inter-Korean trade provides the ROK with the ability to discern errors made when countries lump together statistics from the two Koreas. For example, KOTRA made its single largest reduction in 2007, when it reduced GTIS's figure total trade with India from \$833 million figure down to \$126 million. The US

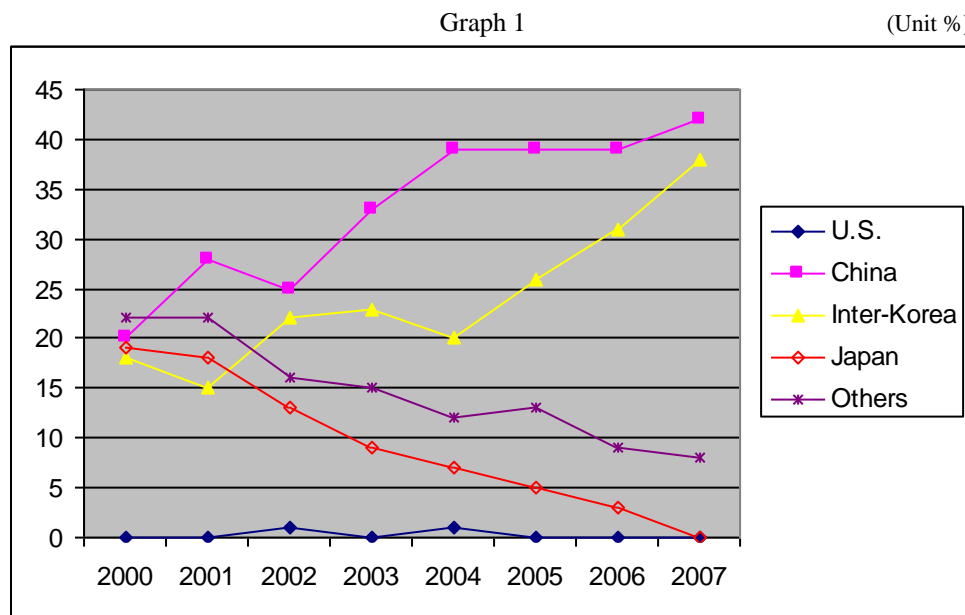
Congressional Research Service corrects GTIS DPRK-India trade figures through reviewing China’s trading patterns with the two Koreas, making the assumption that India’s trading patterns are similar. CRS reduced the figures for India’s imports from North Korea from \$475 million to \$9 million in 2006, and \$173 million to \$41 million in 2007.²

Comparison of two sources: KOTRA and CRS

The two graphs below demonstrate the significance of trade with “other countries” in relation to over-all DPRK trade. For the purposes of these graphs, total trade volumes were reduced by the amounts for trade with key countries (U.S., China, Inter-Korea, and Japan) as well as Russia, India, Thailand, and Germany, and converted into percentages.

According to data from KOTRA, trade with “other countries” declined from approximately 22% in 2000 to 7% in 2007. The second graph, based on CRS data, also shows the diminishing share of trade with “other countries” from about 40% in 2000 to 27% in 2007. However, the CRS graph also indicates that despite the over-all drop from 2000-2007, there was a sharp increase in trade with “other countries” in 2007.

Changes of market share rates of major trading countries in North Korea

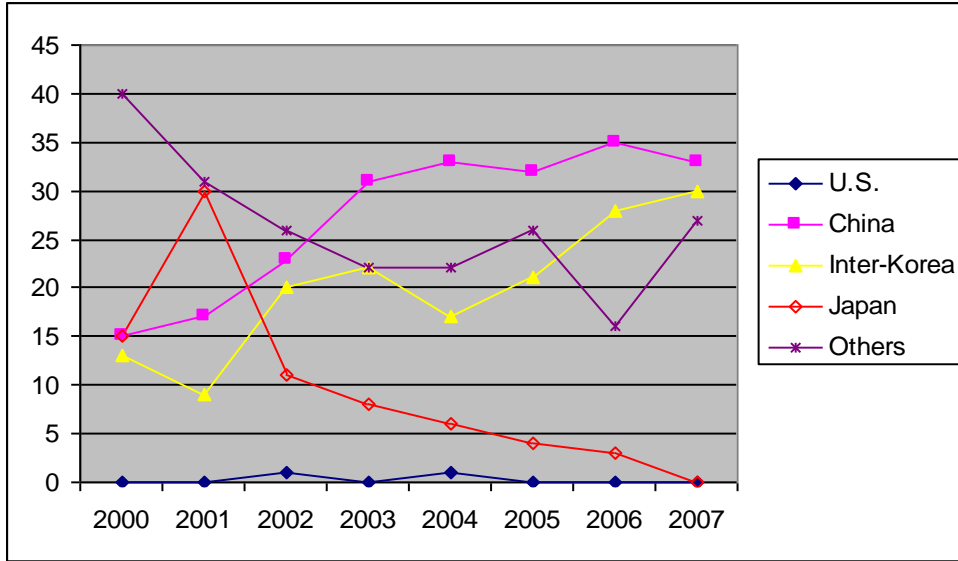


<Source: KOTRA>

²Nanto, Dick K. and Emma Chanlett-Avery. (2008) “The North Korean Economy: Leverage and Policy Analysis.” CRS Report for Congress RL32493. Washington, D.C.: Congressional Research Service: The Library of Congress. Updated August 26, 2008, p. 34.

Graph 2

(Unit: %)



<Source: CRS Report for Congress RL32493>

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Last Updated December 21, 2009