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ABOUT DAMINA

DaMina Advisors is a preeminent Africa-Asia focused independent frontier markets political risk research, due diligence, M&A transactions consulting and strategic geopolitical risks advisory firm.

DaMina Advisors is legally registered and has offices in the US, Canada, The UK and Ghana. DaMina is headquartered in Toronto.

North Korea –Major Economic Reforms Ahead After Nuclear Deal

By Lars Henriksson, Advisory Partner - Southeast Asia & Frontier Asian Economies

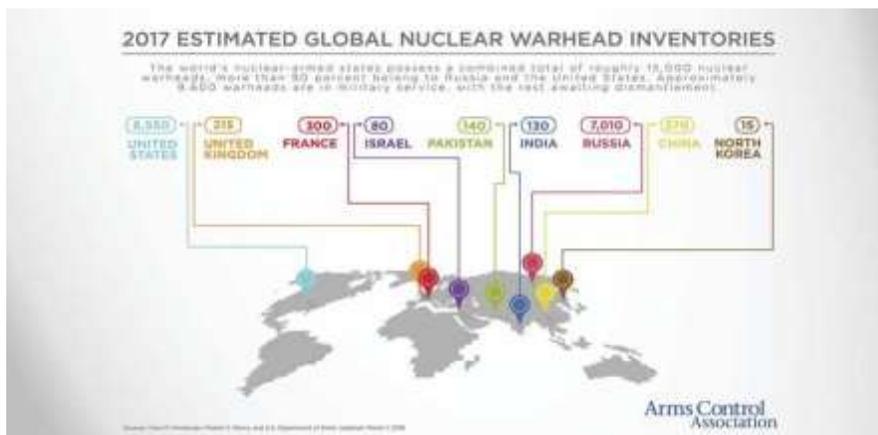
Former NBA star Dennis Rodman claimed that North Korean leader Chairman Kim Jong-Un didn't "understand" US President Donald Trump until he gave him a copy of the president's book "The Art of the Deal" as a birthday present in 2017. He hoped that it would pave the way for a thawing in the fraught relationship between the two countries. Rodman was right. The Art of the Deal is now in play. The on-and-off again, back and forth between Trump and Jong-Un is part of the Art of the Deal to gain pre-summit leverage. Jong-Un and Trump will ultimately make a deal despite the 24 May cancellation of the summit by Trump. A successful summit is still likely as Trump, Jong-Un, China and South Korea have much to lose by walking away. The question of deal is a matter of 'when and how', not 'if.'

In his letter to Jong-Un explaining the rationale behind the cancelling of the meeting, President Mr Trump made a conciliatory gesture and wrote that, "if you change your mind having to do with this most important summit, please do not hesitate to call or write." Mr Jong-Un is unlikely to let that opportunity slip. After the nuclear deal has been signed, North Korea will open up for business.

North Korea has large deposits of coal, copper, gold, graphite, iron ore, lead, limestone, magnesite, salt, tungsten, zinc. It also produces cadmium, cement, coke, refined copper, ferroalloys, refined lead, nitrogen fertilizer materials, pig iron, crude steel, and refined zinc. All these will become available to foreign investors.

A 1990s Eastern Europe 'shock therapy' moment is ahead after the nuclear deal.

Following the collapse of Communist Soviet Union in 1991 several Eastern Europe countries went through a rapid set of economic reforms and political changes, triggering massive asset prices revaluations, state-owned company privatizations and general narrowing of the gap/convergence with the West European peers. A lot of foreign investors made huge profits from participating early. The unification of East and West Germany provided similar opportunities to West German companies in the East. A similar process will likely occur on the Korean peninsula, with major Korean, Russian, Chinese and even western companies entering the North Korean market in a foreign investor feeding frenzy.



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Arms Control Association Quick Take on North Korea Nuclear Capacity

- ✓ Estimated as of January 2018 to have approximately 10-20 warheads and the fissile material for 30-60 nuclear weapons.
- ✓ While there is a high degree of uncertainty surrounding North Korea's fissile material stockpile and production, particularly on the uranium enrichment side, North Korea is estimated to have 20-40 kilograms of plutonium and 250-500 kilograms of highly enriched uranium. The estimated annual production of fissile material is enough for 6-7 weapons.
- ✓ North Korea operates its 5-megawatt heavy-water graphite-moderated reactor used to extract plutonium in the past for nuclear warheads on an intermittent basis since August 2013. There has also been activity at North Korea's reprocessing facility in 2016, indicating that Pyongyang has likely separated plutonium from the reactor's spent fuel.
- ✓ North Korea unveiled a centrifuge facility in 2010, but it is unclear if Pyongyang is using the facility to produce highly-enriched uranium for weapons.
- ✓ By 2020, experts estimate that North Korea could have anywhere between 20-100 nuclear warheads based on the rate of its stockpile growth and technological improvements.

Trump's surprise 24th May announcement came as a shock to the US stock markets which sold off and to other geopolitical actors.

President Moon Jae-In of South Korea was not informed beforehand about the U-turn and said it was "embarrassing and very regrettable" and called for an emergency meeting with his national security advisors to contemplate next steps. Jae-In has since met unexpectedly with Jong-Un to seek to revive the meeting scheduled for 12 June in Singapore.

Kim Jong-Un and his advisors were also caught by surprise. They had choreographed a demolition of its Punggye-I underground nuclear test site, where all of its six nuclear tests were conducted, earlier in the day. It was witnessed by a group of selected foreign journalists from Britain, China, Russia, South Korea and the US.

North Korean state media responded that the leader was willing to attend a summit "whenever, however". On May 23 the Chinese foreign ministry said the planned US-North Korea summit could proceed smoothly. China has since not made a major declaration on Trump's statement.

What's next?

It's often said that geography is destiny, and North Korea is no exception.

With a population of some 25m people and land area of 120,540 sq. km (half size of the UK), North Korea shares borders with China (1,352km), South Korea (237km) and Russia (18km). On the east coast, through Sea of Japan, North Korea is facing Japan,

The close geographical proximity has manifested itself through China historically held North Korea (including South Korea) as a 'tributary state', which meant regular diplomatic and economic interactions/influence. This was cut short by the Sino-Japan War (1894-94), which resulted in Qing-dynasty giving up Korea as a tributary state.

In 1905 Japan annexed Korea and held it as a colony until 1945 when Russian troops occupied and liberated North Korea.

In 1948 the Democratic People's Republic of Korea was founded, by the Kim Il Sung (grandfather of Jong-Un). Between 1950 and 1953 the Korean peninsula became engulfed in a civil war.

Coinciding with increased hostility from Western countries, the Chinese grip of North Korea has grown to a near total dominance.

Currently more trade dependent economy than Kenya or Bangladesh

China accounts for 86% of North Korea's imports and receiving 96% of North Korea's export in 2016. Trade with China accounts for almost 20% of North Korea's GDP, according to JP Morgan.

After North Korea initiated its nuclear test programme in 2006, the UN Security Council has gradually tightened sanction measures against it.¹ And the impact has been felt in North Korea.

Exports dropped sharply to \$116m in March, from \$262m, in December 2016. The drop was due to UN resolution 2321 (see table below) which put a cap on North Korea's coal exports and ban on mineral products.

Export recovered slightly during the year but fell to \$55m in January 2018 due to resolution 2371 and 2375. Subsequently, North Korea's deficit with China has widened to 9-10% of GDP in 2017, from 3% in 2016, and JP Morgan estimates it will widen to 11% in 2018.

The trade sanctions have a severe macro-economic impact since North Korea is surprisingly a relative open, small economy (GDP worth \$17bn in 2017). The trade dependency ratio (sum of exports and imports of GDP) has risen steadily to about 50% from mere 20% in 2001.

¹ UN's Security Council's Resolutions on North Korea to be removed after Trump nuclear deal

- Resolution 2407 (3/24/2018)
Extends the mandate of the Panel of Experts until 24 April 2019
- Resolution 2397 (12/22/2017)
Strengthened limit on refined petroleum products (0.5 million barrels for a year) and crude oil (4 million barrels for a year) sale to North Korea
- Resolution 2375 (9/11/2017)
Introduced limits on refined petroleum products imports and full ban on textile exports of North Korea
- Resolution 2371 (8/5/2017)
Full exports ban on coal, iron, lead, and seafood products
- Resolution 2321 (11/30/2016)
Capped North Korea's coal exports and banned exports of copper, nickel, zinc, and silver
- Resolution 2270 (3/2/2016)
Banned a supply of aviation fuel and other specified minerals (gold, titanium, rare earth metals) to North Korea
- Resolution 2087 and 2094 (1/22/2013 and 3/7/2013)
Strengthened and expanded existing sanctions put in place by the earlier resolutions
- Resolution 1874 (6/12/2009)
Intensified inspection regime to prevent proliferation to and from North Korea
- Resolution 1695 (7/15/2006)
Prevented missiles and related items, materials, goods and technology from being transferred to North Korea

To put that in perspective other notable frontier markets have dependency ratios of about Pakistan 25%, Ethiopia 36%, Bangladesh 38%, Kenya 38%, Saudi Arabia 61% and Vietnam 185%. Thus in theoretical terms North Korea's economy is more open than Pakistan's Ethiopia's, Bangladesh or Kenya's.

In the past North Korea has found ways to circumvent trade sanctions varying from cybercrime, joint ventures and smuggling/illicit trading with China and other neighboring countries. However the newly added sanctions (and prospects of further, if needed) and Chinese compliance makes it hard to see how North Korea could economically survive much longer.

While statements by US Vice President Michael Pence and US National Security Advisor John Bolton comparing North Korea to Libya have been badly received by Pyongyang, there are better examples which could have been used to make the analogy.

States who successfully abandoned nuclear weapons programs

- Belarus, Kazakhstan, and Ukraine inherited nuclear weapons following the Soviet Union's 1991 collapse, but returned them to Russia and joined the NPT as non-nuclear-weapon states.
- South Africa secretly developed but subsequently dismantled its small number of nuclear warheads and also joined the NPT in 1991.
- Iraq had an active nuclear weapons program prior to the 1991 Persian Gulf War, but was forced to verifiably dismantle it under the supervision of UN inspectors. The U.S.-led March 2003 invasion of Iraq and subsequent capture of Iraqi leader Saddam Hussein definitively ended his regime's pursuit of nuclear weapons.
- Libya voluntarily renounced its secret nuclear weapons efforts in December 2003.
- Argentina, Brazil, South Korea, and Taiwan also shelved nuclear weapons programs

Following a nuclear deal and a denuclearization of the Korean peninsula there is a strong possibility that North Korea indeed becomes a final frontier destination for global firms. North Korea is geographically located near East Asian economic power houses which are vying to dominate the global economy over the next decades. It would be foolish to bet that North Korea wouldn't be able to capitalize following political détente to become an economic reformer itself.

NORTH KOREA: ESTIMATED PRODUCTION OF MINERAL COMMODITIES^{1,2}

(Metric tons unless otherwise specified)

Commodity ^{3,4}	2010	2011	2012	2013	2014
METALS					
Cadmium metal, smelter	200	200	200	200	200
Copper:					
Mine output, Cu content	4,600 [†]	7,000 [†]	6,700 [†]	6,200 [†]	14,400
Metal, primary and secondary:					
Smelter	15,000	15,000	15,000	15,000	15,000
Refinery	12,000	12,000	12,000	12,000	12,000
Gold, mine output, Au content kilograms	2,000	2,000	2,000	2,000	2,000
Iron and steel:					
Iron ore and concentrate:					
Gross weight thousand metric tons	5,000 [†]	5,000 [†]	5,000 [†]	5,000 [†]	6,000
Fe content do.	2,500 [†]	2,500 [†]	2,500 [†]	2,500 [†]	2,800
Metal:					
Pig iron do.	250	250	250	250	250
Ferroalloys, unspecified do.	22	21	25	28	30
Steel, crude do.	1,200 [†]	1,300 [†]	1,200 [†]	1,200 [†]	1,200
Lead:					
Mine output, Pb content	26,000	32,000	38,000	59,000	53,100
Metal, primary and secondary:					
Smelter	9,000	9,000	9,000	9,000	9,000
Refinery	4,000	3,000	3,000	3,000	3,000
Silver, mine output, Ag content	50	50	50	50	50
Tungsten, mine output, W content	110	110	100	65	70
Zinc:					
Mine output, Zn content	29,000 [†]	38,000 [†]	34,000 [†]	35,000 [†]	36,000
Metal, primary and secondary	26,000 [†]	36,000 [†]	30,000 [†]	31,000 [†]	32,000
INDUSTRIAL MINERALS					
Cement, hydraulic thousand metric tons	6,100 [†]	6,300 [†]	6,400	6,400	6,600
Graphite	10,000	10,000	10,000	10,000	10,000
Magnesia	250,000	250,000	178,000	180,000	180,000
Nitrogen, N content of ammonia thousand metric tons	200 [†]	200 [†]	200 [†]	200 [†]	200
Phosphorous content of fertilizer	90,000	90,000	90,000	95,000	95,000
MINERAL FUELS AND RELATED MATERIALS					
Coal thousand metric tons	41,000	41,000	41,500 [†]	42,000	41,000
Coke do.	2,000	2,000	2,000	2,000	2,000

Source: USGS

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To schedule in-depth Q&A on North Korean potential future investment opportunities

DaMina Advisors is a preeminent Africa-Asia focused independent frontier markets political risk research, due diligence, M&A transactions consulting and strategic geopolitical risks advisory firm. DaMina Advisors is legally registered and has offices in the US, Canada, The UK and Ghana. DaMina is headquartered in Toronto.

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