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Going Nuclear with North Korea

At nearly [5,000 nuclear warheads](#), Ukraine had one of the largest nuclear arsenals in the world on its territory. If Ukraine hadn't transferred those weapons to Russia in 1996, it is unlikely that Moscow would have invaded. North Korea believes it is facing a similar threat which is why it has fought to maintain its nuclear program.

In North Korea's first nuclear test in 2006, the bomb generated the equivalent of a 4.7 magnitude earthquake. In its next attempt in 2009, the bomb was four times stronger. The bombs tested in 2016 and 2017 each yielded more power than the atomic bomb dropped on Hiroshima in 1945. In short, North Korea clearly has the ability to develop and produce its own nuclear weapons. The country's ability to deliver a nuclear weapon against the U.S. or any other adversary is less clear, but a flurry of recent tests suggests it is making incremental progress in its missile technology.

This report will focus on North Korea's nuclear program and the implications for the rest of the world if North Korea is capable of striking the U.S. with a nuke. We start with a brief history of the country's nuclear weapons program and discuss how the rest of the world has tried to denuclearize the country. Next, we examine North Korea's current military capabilities and potential threats to the global order. As usual, we conclude with the potential impact on financial markets from these events.

North Korea's Path to Nuclear Autonomy

North Korea's first leader, Kim Il-sung, had wanted a nuclear weapon ever since the atomic bomb ended the 40-year rule over the Korean peninsula at the end of World War II. He viewed the weapon as an insurance policy against larger foes that might try to invade the country. As a result, North Korea began researching nuclear energy in the mid-1950s.

Lacking the expertise or money to develop nuclear weapons on its own, North Korea relied heavily on the Soviet Union to start its nuclear program. In 1956, Kim sent scientists and technicians to the USSR for training. In addition, the Soviets built a nuclear research complex and nuclear research reactors in Yongbyon, North Pyongan Province. Although the Soviet Union played a pivotal role in North Korea's nuclear program, Kim didn't trust Moscow. He feared that the Soviet Union would be unwilling to protect North Korea if it meant a confrontation with the U.S. Subsequently, the [Cuban missile crisis reinforced these suspicions](#). Kim viewed the Soviets' decision not to place nuclear-armed missiles in Cuba as a betrayal of their commitment to protecting their allies. As a result, Kim wanted North Korea to find a way to ensure its own security.

North Korea started developing its nuclear program independent of Moscow in the 1970s. In 1974, the country joined the International Atomic Energy Agency (IAEA) and sent a nuclear scientist to the agency's central office. The scientist stationed at IAEA headquarters stole critical information needed to create a reactor. His insights would pave the way for North

Korea to produce its own weapons-grade plutonium.

The country's nuclear capabilities did not go unnoticed, and at the urging of Moscow, North Korea joined the Nonproliferation Treaty (NPT) in 1985. The treaty allowed North Korea to keep its nuclear technology as long as it didn't use it to make weapons. After years of delay, North Korea finally agreed to disclose and allow inspections of its nuclear holdings in 1992. Once the review began, inspectors found discrepancies between North Korea's declared holdings and the material found on-site. When the inspectors requested to investigate the matter further, the government denied them access. North Korea would eventually pull out of the NPT in 2003, and three years later, the government held its first underground nuclear test.

Efforts to Denuclearize North Korea

A group of five countries and North Korea engaged in what would soon be called the "Six-Party Talks" following North Korea's withdrawal from the NPT. The group included the U.S., China, Russia, Japan, and South Korea. Concerned about the potential for nuclear proliferation, the group, led by the U.S., sought ways to rein in North Korea's nuclear program. After numerous rounds of talks, the countries failed to convince North Korea to give up its program. After detonating a nuclear bomb in 2006, the United Nations Security Council sanctioned North Korea for [violating Article 39 of the United Nations Charter](#), which forbids actions threatening international peace.



The UN sanctions crippled North Korea's economy and made it difficult for the country to obtain the materials needed to keep advancing its program. Talks continued but with mixed results. Deals that led North Korea to suspend its nuclear program and dismantle its plants in exchange for sanctions relief and humanitarian aid eventually collapsed. North Korea claimed that the talks were not moving fast enough. Meanwhile, the U.S. accused North Korea of not honoring its side of the agreement. The lack of progress in negotiations led to more tests by North Korea and more headaches for the rest of the world.

Because of rivalries between members of the six-party group, the risk of an outright attack on North Korea was minimal. China feared that the toppling of Kim's regime could lead to reunification with South Korea and would potentially put a U.S. ally on its border. The U.S., on the other hand, resisted taking military action due to concerns that it could lead to a broader war with China. Moreover, the lack of trust between negotiating members meant that sanctions were likely the worst punishment North Korea would face for maintaining its nuclear program. Given the option, North Korea was willing to accept the economic costs of sanctions if it meant it would eventually not have to rely on another country for its security. Ironically, the sanctions may have backfired

in the sense that the outside pressure gave North Korea's leadership a way to justify the economic hardships needed to develop its weapons.

North Korea's Current Military

National defense is a source of pride for North Korea. In 2020, North Korea's military spending [accounted for almost one-quarter of the country's economy](#). Despite its small size, North Korea, on paper, has a formidable military. In terms of troop numbers, it has the world's fourth-largest military, with nearly [1.3 million active-duty armed forces](#) and an estimated 600,000 reservists. There are 1.1 million troops in the army, 60,000 in the navy, and 110,000 in its air force. Additionally, the country has over 3,500 tanks, 545 aircraft, and 73 submarines.

While North Korea has a sizable military, it is unclear whether it could fight effectively in a conventional war. Much of its artillery is outdated Soviet-era equipment. Although the country has upheld maintenance of its military apparatus, it isn't clear whether these weapons are effective against more modern technology. Military sustainability is also an issue. Special forces [training focuses on fighting short, intensive wars](#). As a result, the army could fold if it doesn't have immediate success in combat.

The lack of quality weapons and operational resilience suggest that North Korea expects its domestically developed nuclear missiles to be its primary deterrent. Analysts speculate that North Korea has at least eight intercontinental missiles, none of which has demonstrated the ability to carry multiple warheads. Supposedly, the Hwasong-17 holds numerous warheads, [but its latest missile test was unsuccessful](#). That being said, North Korea has demonstrated advancements in its rocket technology. For

example, the Hwasong-15 missile has shown the potential to strike targets in the U.S.

What missiles does North Korea have?
Estimated upper ranges in km



Note: Shorter range missiles not shown
Source: CSIS Missile Defense Project

BBC

Potential Threat of a Nuclear North Korea

North Korean leaders believe that if the country could demonstrate a clear capability to strike the U.S. with a nuke, the rest of the world would more likely accept it as a legitimate global power. Such a designation would mean that the current regime cannot be forcibly removed from power. This new status could be helpful in a possible war to reunify the Korean peninsula. Additionally, it would pave the way for other authoritarian nations to develop their own weapons. As a result, a nuclear North Korea could alter how other countries behave.

Despite signing the armistice that ended the Korean War in 1953, North Korea and South Korea technically remain at war. The armistice agreement specifically stated that it was not a peace treaty. Although both sides are interested in reunifying the country, current North Korean leader Kim Jong-un and his team would like to remain in power. Hence, North Korea could use

nuclear weapons to guarantee that its officials have influence in a future unified government. In this event, North Korea could threaten to invade South Korea if its conditions are not met and nuke any country that may try to intervene.

Besides threatening conflict on the Korean peninsula, North Korea's stance is also raising the likelihood of greater global instability. A sufficient number of nuclear weapons guarantees mutually assured destruction unless a superior military intervenes in another country's war. We have seen this situation play out in Ukraine. At the start of the invasion, Putin threatened [nuclear war if NATO intervened](#). Other authoritarian governments may make similar threats if they develop nuclear capabilities.

The End Game

We started this report by explaining that North Korea's ultimate goal is to develop a nuclear weapon to ensure its security. Next, we examined how rivalries between countries looking to denuclearize North Korea shielded the country from military action and allowed it to continue its program at a high cost to its economy. Now, we will discuss what North Korea's most recent display of its missile capabilities could mean for the rest of the world.

Due to sanctions, North Korea will likely not be able to develop enough weapons to bully South Korea into reunification. [It is estimated that North Korea has 25-50 nuclear warheads, which would have the ability to completely destroy Los Angeles.](#)¹ Such an arsenal could certainly inflict severe damage on the U.S., so it may be enough to deter the U.S. from intervening in a Korean

conflict. On the other hand, any likely North Korean nuclear attack wouldn't be so devastating as to prevent the U.S. from launching a massive retaliatory strike against North Korea. The North Korean leadership simply can't be sure that its nuclear arsenal will deter the U.S. from intervening and helping defend South Korea. As mentioned earlier in this report, the North Korean military is unprepared for a long war. Therefore, South Korea could still win in a direct conflict. As a result, we think the chances of a North Korean invasion are relatively low.

Nevertheless, we believe that a nuclear North Korea would encourage other countries within the Indo-Pacific region to expand their conventional defenses. South Korea and Japan will likely view North Korea's nukes as a threat to their respective national security. The U.S. will be reluctant to take military action against North Korea but could help Indo-Pacific allied countries by selling U.S.-made military equipment. Therefore, a nuclear North Korea may benefit U.S. defense companies.

Consequently, we believe that nuclear weapons will be used for deterrent purposes rather than for offensive attacks. As such, a nuclear North Korea could motivate authoritarian governments to pursue atomic weapons. Areas with frozen conflicts, such as countries in the Middle East and Africa, could be prone to nuclearization. Thus, we suspect that a nuclear North Korea could lead to more political instability in other parts of the world. Instability tends to be bullish for commodities and safe-haven assets.

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¹ Assuming that eight nuclear warheads with a yield of [125 kiloton can destroy 160 square miles](#).

This report was prepared by Thomas Wash of Confluence Investment Management LLC and reflects the current opinion of the author. It is based upon sources and data believed to be accurate and reliable. Opinions and forward-looking statements expressed are subject to change without notice. This information does not constitute a solicitation or an offer to buy or sell any security.

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