At the end of 2019 North Korea was facing increasing economic pressures and disappointment because there had been no progress on the diplomatic discussions following the failure of the negotiations with President Trump in Hanoi in February 2019. Sanctions had been really ratcheted up after 2016 and 2017, when North Korea carried out large nuclear tests, and those increased sanctions, which were imposed by the UN Security Council as well as the US bilaterally, really put a crimp in North Korea's ability to earn foreign exchange and to import essential things not just for the military but for society. Some of the most important sanctions were the limitation on imports of oil and refined petroleum, which are needed, for example, in agriculture for fertilizer production and for transport and machinery usage, as well as for military purposes.

The other major income earners for North Korea were export of coal and other minerals, and also textiles, which was the second largest export in 2016. So, the ratcheting up of sanctions has really put it put a crimp in the North Korean economy. For example, agriculture, which was doing pretty well in 2016, has had three years of declines in production largely because of the impact of the oil sanctions that have limited the ability to provide fertilizer.

And on top of this, we've had the pandemic this year. What impact is that having on North Korea and what can we tell about that impact, because obviously information is limited coming out of there right now?

At the end of 2019 the North Koreans made a very strategic decision to change direction and strategy in the way they were going to deal with their external as well as internal problems: they adopted a self-sufficiency focus, both with respect to their political relations and security interests, but also on the economy, and reducing dependence on imports from China, because the sanctions were really constraining them anyway. Kim Jong Un is very concerned about inefficiencies in domestic economic policy and management, so he was looking for a significant change in the way they're approaching their economic management even before the pandemic hit.

When the pandemic hit at the end of January, North Korea took very strong measures to close the border with China to reduce the risk of importing the virus from the extensive cross border trade, because 90 percent of their trade is with China and most of that is across the border on the northern side of the country. So, to protect themselves they closed the border and introduced very strict disciplinary measures for isolating people and protecting against the risk of the dispersion of the disease inside the country. But the economic impact just added to the earlier problems that they were facing and currently they're very challenged on the economic front because of the almost complete breakdown of trade with China and what it means for their food security, what it means for the markets, what it means for the elites in Pyongyang who have been used to getting luxury goods, which has led to a much more consumer oriented lifestyle in recent years. So, both among the elites and the general population there's a real impact of all of this, and there are efforts being made by the government to deal with these internal problems while they're still facing all of the external challenges that caused the delay in any kind of progress on the diplomatic front of the last couple of years

I guess there's no sort of our data coming out of North Korea though?

No, it's very hard to get any hard information. The UN is working fairly closely with the North Koreans. They are saying publicly that they don't have any identified cases, even though they're taking all these very draconian measures to protect themselves. But the reality is it's a very vulnerable health system with very little capacity and the ability to do testing is probably almost zero. Even though China and some other countries provided them some equipment and testing, their ability to actually manage this is poor. Everything has to go right, you have to have cold chains for the for the regions, and they don't really have the laboratories that can manage this very effectively. Their ability to know the actual impact of the disease is pretty compromised, so while they take a public position that it's not, it's highly likely that it is impacting quite widely in the society.

The Chinese are also very apprehensive about opening the border, both because there's been a spike on the Chinese side of the border recently and also they're just uncertain of the risk of interacting with North Koreans when there's so little information about what's going on there as far as the disease is concerned.

What are the security implications of all this?

I'm not sure how concerning it is from the from the international perspective. Like most countries, the North Koreans are very focused on their domestic challenges just like the United States is right now. They have very severe domestic challenges, both because of the disease and the economic situation, and there's also concern that the food situation this year could be particularly problematic for reasons linked to both the sanctions and the response they took to the disease.

Consequently, I think that they are emphasizing particularly their missile programs and carrying out tests to demonstrate that they have the ability to protect themselves if anybody felt motivated to take advantage of the situation.

On that issue of missile testing, do we know what kind of missiles they're working with? Are we talking about short, medium-range or longer-range?

I'm sure they're taking advantage of the time when there's no meaningful diplomacy at work to continue to improve capacities in their defense system. They've been testing multiple rocket launchers, which are fairly short range, and some short-range missiles. They've not been testing any of the longer-range missiles or carrying out nuclear tests—they haven't really done that since 2017. So, most of the focus, at least publicly, is on is on the shorter-range things. But, they have been expanding their capability to use solid fuel in their missiles and presumably are trying to build that capability for long-range missiles, so there is the potential for continuing to improve delivery capacity and the ability to avoid detection to the last minute, in the way they've been continuing the research.

Do you think amidst this crisis and the pandemic that there is opportunity out there somehow to bring North Korea back into the fold?

I feel that North Korea has to reevaluate their own strategic approach to dealing with the rest of world when the rest of world is changing so dramatically as a result of the pandemic and the economic consequences of that. Their ability to evade sanctions I think will be compromised somewhat because of the economic situation in China and globally. So, their ability to continue to survive the way they have been, using illegal and other means to sort of make up for sanctions, I think is going to impact their willingness to find alternative ways to position themselves for the way the world is changing...

At the same time I think that the fact that there are real vulnerabilities in the society, both in the health system and in food security, creates an opportunity for the rest of the world to look, as it did back in the famine era of the 1990s, at coming forward in a positive way to help protect the basic social security of ordinary people in North Korea from things that are not directly related to the security situation but are really important to the society. Building trust and helping North Korea manage its health and food problems right now, would create a different political context for discussing peacebuilding and a longer-term solution to the outstanding security issues.