

## IPS Lunch Dialogue: Gaining from Disorder

By Andrew Yeo  
*IPS Research Assistant*

Volatility and disorder are often viewed negatively. But to best-selling author and academic Nassim Nicholas Taleb, shocks and unexpected events — even if they lead to breakdowns in some parts of a system — ultimately make a system stronger, and more “antifragile”. This was the central idea of Professor Taleb’s speech and dialogue with guests at a recent Institute of Policy Studies (IPS) event.

The session was chaired by Dean and Professor in Practice of Public Policy of the Lee Kuan Yew School of Public Policy, Kishore Mahbubani. Close to 50 people, comprising both IPS Corporate Associates and IPS researchers, attended the event.

After discussing his concept of antifragility, Professor Taleb, Distinguished Professor of Risk Engineering at New York University Polytechnic School of Engineering, fielded questions from the audience, and discussed about what gives Singapore an edge as a nation, and the application of antifragility as a means to make the younger generation more resilient.

### ***Like neither Tea Cup nor Anvil***

Professor Taleb began the session by showing his audience a photo of a china teacup, and asked if a fragile teacup can survive an earthquake. And is its figurative opposite an anvil, resilient and uncompromising in the face of a storm? The answer to the first question was an unsurprising “no”, but the same response to the second question seemed to stump those in the audience unfamiliar with his work. Professor Taleb proceeded to explain that there was no word for the exact opposite of the word “fragile” in the languages he had come across; the closest synonyms he could find usually meant “unbreakable”. The term “antifragile” thus served to fill this gap, and referred to things that thrive when exposed to disorder, randomness and chaos.

Professor Taleb told the audience that the central real-world question is whether our economy is like a cat or a washing machine. Referencing a chapter in his book *Antifragile: Things that Gain from Disorder*, Professor Taleb noted that the natural (or biological) is both fragile *and* antifragile. For example, bones gain from stressors, without which they become brittle; inanimate objects such as washing machines on the other hand suffer or break down from the wear and tear of similar stressors.

The biggest mistake in history, in his view, is the lowering of risk and variability in systems. He pointed out that while people were concerned with the incidence of post-traumatic

disorder, little was said about what he called post-traumatic growth, or the positive change that can come about from being exposed to volatility and disorder.

Consequently, the big elephant in the room that needs to be addressed, he said, is the extent to which we allow disorder and risk into systems. To illustrate the balance needed to maintain this equilibrium, Professor Taleb gave a simple example: jumping from 10 metres might kill a man, but jumping from one metre 10 times strengthens him. In other words, when do we know not to introduce risk?

He described his solution as a variant of what is known as the precautionary principle. The precautionary principle states that if an action or policy has a suspected risk of causing severe harm to the public, the action should not be taken unless there is scientific near-certainty about its safety. Under this principle, the onus resides on those proposing the policy — and not those who oppose it — to determine absence of harm. Professor Taleb, however, only proposes invoking the precautionary principle when the risk of such ruin is widespread, and not when the risk for ruin is localised and can be controlled from spreading. The risks involved in using nuclear energy, he said, were comparatively limited and localised, but genetically-modified produce, he said, could lead to widespread global harm.

### ***Becoming Antifragile***

During the question-and-answer session, the audience posed a number of questions regarding his ideas on “antifragilising” Singapore and Singaporeans. A member of the audience noted how successful Singapore had been, and asked whether this left the country susceptible to “black swan” events which are unprecedented and of great significance. Professor Taleb agreed, saying that a country that is too successful would have less exposure to stressors and the incidence of post-traumatic growth, but also noted that Singapore was at an optimal size, which helped maintain stability.

He was asked about the bubble that young Singaporeans were perceived to reside in and the extent to which this was a cause for concern. Young people, the dialogue participant noted, were labelled as being part of the “strawberry generation”. Like the fruit, they seemed easily bruised in difficult work and life situations.

Professor Taleb highlighted how national service served as a useful stressor for young Singaporean men. Military service, he said, served to toughen men, and not necessarily prepare them for war, which he felt would be disastrous for a city-state like Singapore anyway. Without giving details, he advocated allowing for different types of stressors in the system to better “antifragilise” Singapore.

Professor Taleb also responded to questions on global concerns, such as preventing an outbreak of the Ebola virus and tackling climate change. On Ebola, he said that as scientists searched for a cure for the deadly virus, countries should be proactive in safeguarding themselves. The huge advantage Singapore has over countries such as Poland or France is that living on an island-state meant everything could be closed off and isolated more easily, he said. On climate change, he noted that opinions on the realities of climate change remain divided. The concern on both sides of the divide, he added, should not be on gathering

science and evidence — or showing the lack thereof — to prove their point, but on precautionary measures and establishing whether or not there is a risk of ultimate ruin.

*Andrew Yeo is a Research Assistant (Special Projects) at IPS.*

Established in 1992, the IPS Corporate Associates is a network of business leaders who provide insights towards policymaking from a wide range of viewpoints. For more information on becoming an IPS Corporate Associate, visit <http://lkyspp.nus.edu.sg/ips/corporate-associates>.

\*\*\*\*\*

*If you have comments or feedback, please email [ips.eneews@nus.edu.sg](mailto:ips.eneews@nus.edu.sg)*



© Copyright 2014 National University of Singapore. All Rights Reserved.

*You are welcome to reproduce this material for non-commercial purposes and please ensure you cite the source when doing so.*