

# Black Swan Event

The black swan idea, also known as the notion of black swan occurrences, is a metaphor for an unexpected event that has a significant impact but is frequently incorrectly explained in retrospect with the advantage of hindsight. The phrase is based on an old proverb that assumed black swans didn't exist; nevertheless, after the first Europeans encountered them, the proverb was reinterpreted to convey a different message.

The topic has a very high chance of being asked as a UPSC Prelims Economics Question or as a Current Affairs Question as it has been in the news recently.

# **About Black Swan Event**

Nassim Nicholas Taleb came up with the concept beginning in 2001 to explain:

- 1. The overpowering influence of notable, unpredictable, and infrequent events that go against conventional wisdom in history, science, business, and technology.
- 2. The inability of scientific tools to calculate the likelihood of significant uncommon events (owing to the very nature of small probabilities).
- 3. Psychological biases that prevent individuals from seeing uncertainty and the important significance that a rare occurrence played in history, both individually and collectively.

Taleb's "black swan hypothesis" focuses solely on unanticipated events with significant historical ramifications. These unusual occurrences, which are regarded as severe outliers, contribute significantly more to society as a whole. Technically speaking, Taleb describes the black swan dilemma as "arising from the application of degenerate metaprobability" in his scholarly monograph "Silent Risk."

## Background

The term "black swan" is a translation of a Latin idiom that first appears in the second century. The black swan was thought to not exist at the time the phrase was first used. The metaphor's similarity to the brittleness of any philosophical framework makes it significant. Any fundamental assumption that is refuted renders a collection of conclusions potentially invalid. The logic of any system of thought in this situation, as well as all reasoning that flowed from it, would be destroyed by the witnessing of a single black swan. In the 16th century, Londoners frequently used Juvenal's phrase as a declaration of impossibility. The Old World assumption that all swans must be white stems from the fact that all historical accounts of swans mention that they have white feathers, giving rise to the London idiom. A black swan was either impossible or nonexistent in such a situation. The very first Europeans to discover black swans were, however, Dutch explorers under the command of Willem de Vlamingh in Western Australia in 1697. Later, the phrase changed to signify the prospect of later disproving a seeming impossibility. Taleb points out that John Stuart Mill coined the term "black swan logical fallacy" to describe falsification in the 19th century.

In his 2001 work "Fooled By Randomness", which was about financial incidents, Nassim Nicholas Taleb talked about black swan events. The metaphor was expanded to include events beyond the financial markets in his 2007 work "The Black Swan". Nearly all significant historical developments, scientific breakthroughs, and creative achievements are viewed by Taleb as "black swans"— unintended and unpredictable. As instances of black swan events, he cites the invention of the personal computer, World War I, the fall of the Soviet Union, and the September 11 attacks.

#### Taleb claims:



An incident with the two characteristics listed below is what we refer to as a black swan:

- 1. It is an outlier in the sense that it deviates from customary expectations as nothing in the past has provided evidence that it might be possible. Second, it has a significant "effect." Third, despite being an anomaly, human nature compels us to create justifications for why it happened after the fact, making it foreseeable and explicable.
- 2. I pause to restate the triplet: rarity, extremely high "impact," and retroactive predictability (but not future predictability). The success of ideologies and faiths, the intricacies of historical events, as well as some aspects of our own personal lives, can all be explained by a tiny number of black swan events.

## **Characteristics and Identification**

Using the author's standards:

- 1. The event is unexpected (to the observer).
- 2. The incident had a major impact.
- 3. It is rationalised by hindsight once the first occurrence of the incident is documented, as though it might have been anticipated; that is, the pertinent facts were present but unaccounted for in risk mitigation programmes. The same is true of how each person sees the world.

The COVID-19 pandemic is not really a black swan, but rather is seen as a white swan by Taleb because it was anticipated with high confidence that a global pandemic will ultimately occur; such an event has a significant impact but is consistent with statistical features.

## **Solutions for Black Swan Events**

The practical goal of Taleb's book is to create resilience against negative events whilst also taking advantage of positive events, not to try and forecast unpredictable events. According to Taleb, banks and trading companies are extremely susceptible to risky black swan incidents and are subject to unforeseeable losses. Taleb calls the extensive use of the normal distribution model used in financial engineering a Great Intellectual Fraud when discussing business, and specifically quantitative finance. A black swan event, according to Taleb, depends on the spectator. For instance, what could be a "black swan shock" to a hen might not be a "black swan shock" to its butcher, therefore the goal should be to "avoid being the hen" by spotting areas of vulnerabilities in order to "make the Black Swans white".

# **Related News**

According to a Reserve Bank of India (RBI) analysis, in the event of a significant global risk situation or a "black swan" occurrence, India may see capital outflows of up to \$100 billion (about Rs 7,80,000 crore).