

Why do civilisations collapse? Is our civilisation in danger?

"Now I am become Death, The Destroyer of Worlds", said Lord Krishna in the ancient Hindu spiritual text of Bhagavad Gita as he revealed his divine nature to impress the warrior prince Arjuna on the battlefield of Kurukshetra. J. Robert Oppenheimer, the "Father of the Atomic Bomb", recalled these words while testing the first atomic bomb as he compared the brilliant fireball of the atomic bomb to the fire emanating from Lord Krishna's form. Nuclear energy promised a reliable, high output source that would reduce mankind's dependency on fossil fuels. Yet the single act of US detonating atomic bombs in Nagasaki and Hiroshima with the intent to end World War suffering, opened the doors of scepticism towards nuclear power and introduced a greater, lingering threat to civilisation itself - the urgency in proliferation of nuclear weapons. It is a stark reminder of how civilisation's leap into the future can help the world and fail it at the same time. The question that faces us is: is our civilisation in danger?

"Civilisations are not murdered. They take their own lives." - 1177 B.C. This profound statement suggests that civilisations, symbolic of mankind's evolution, fall not only by external invasions but due to their own failures and internal weaknesses. The Indus Valley Civilisation is said to have collapsed due to natural disasters such as floods or droughts worsened by nomadic Central Asian groups invading. The Khmer regime faced a decline in trade routes, political instability led by internal power struggles and overpopulation that strained resources. In recent times, the Soviet Union's dissolution in 1991 saw the collapse of one of the world's most powerful communist regimes. Prior to its breakdown, the Soviet economy was confronted with shortages, ethnic tensions, Nationalist movements in the Baltic States and social unrest driven by the nation's participation in foreign conflicts such as Afghanistan. Furthered by President Mikhail Gorbachev's policies of openness and

restructuring, the fate of the Soviet Union's geopolitical position was sealed irreversibly by the Berlin Wall's fall in 1989.

History opens our mind to learn from our past so we can better our future. Reviewing previous civilizations, three catalysts can be proposed as key factors that lead to demise of a civilization. The first causal factor is a prolonged environmental change that affects productivity and livelihood. Floods or drought faced by the Indus Valley civilization resulted in community displacement and increased societal cost from the damaged infrastructure. Inevitably, agricultural produce and trade would have been affected. Secondly, over expansion of military causes as seen in the Roman civilisation, drives political instability and drains critical resources. Diverting national budgets towards a large military force and armoury at the cost of societal well-being leads to divided public opinion and diminished faith in the authorities. This third causal factor is rising social unrest that starts questioning a government's policies and ushers in widespread dissent. Lasting economic decline driven by corruption and inequalities gives rise to internal volatility opening the doors to complete dissolution as in the case of the Soviet Union's collapse.

Considering ongoing global trends, there are indications of all three causal factors that lead to a civilisation's fall being present today. Firstly, our environment is at threat due to climate changes from decades of industrialisation, burning of fossil fuels and greenhouse emissions. The United Nations' (UN) report 'Causes and effects of climate action' has confirmed that each decade since 1980 has been warmer than the previous one; almost all land areas are seeing heat waves, water bodies are showing rising temperature and there is reduced snow cover in the Arctic region. The report warns that we are losing species at a rate that is thousand times greater than at any other time and one million species are at risk of impending extinction. The annual economic loss from disruption in weather patterns and extreme events is estimated at \$143 billion by the World Economic Forum. Climate change related events displaced an average of 23.1 million people annually, and many more left vulnerable to poverty in the last decade (2010–2019) as estimated by UN sources. Unless the rate of greenhouse emissions is checked, global temperature by the end of this century will be at least 5 -10.2 degrees Fahrenheit warmer than the 1901-1960 average.

The second causal factor that threatens our world is acceleration in military expenditure and resulting instability. Data by the Stockholm International Peace Research Institute (SIPRI) reports that global military expenditure reached \$2443 billion in 2023, a year-on-year increase of 6.8 per cent, the steepest since 2009. Today's global geopolitical landscape is rife with volatility – be it Russia's invasion of Ukraine, Israel's response to terrorism in the occupied Gaza strip or civil wars in African countries such as Sudan. Alliance commitments and spiral effect on neighbouring countries fuel tensions as seen in Taiwan and Japan that both saw an 11% increase in their 2023 military expenditure motivated by China's acceleration of 6%. 58 per cent of Ukraine's total government spending is allocated to their military force, albeit a third of its population face hunger, a quarter of their population lives in poverty and one in three Ukrainians is displaced as per data published by the UN World Food Programme. The interdependence of our world ensured a far reaching impact of the Ukraine war and disruption of global wheat export, resulting in shortages and inflation, where previously Ukraine and Russia were top contributors.

The third factor endangering our civilisation is social unrest leading to grievance in society. The World Inequality report 2022 highlights that 76% of current global wealth is owned by the richest 10% of the population, whereas the poorest half possesses only 2%. Global inequalities at such scale and failure of political representation has seen several anti-government demonstrations. The study of protests between 2006 and 2020 by Friedrich Ebert Stiftung has highlighted that the number of protests per year has tripled since 2006. Protest sizes are also growing especially in large democracies; 200 million people participated in two-day labour protests in India in 2022. Hong Kong's protests in 2019-20

against China's proposed extradition bill threatening judicial independence for residents led to worldwide reaction and the 'Black Lives Matter' movement in US triggered by racism sparked off nation-wide protests. The size and frequency of recent protests eclipse historical examples of eras of mass protest, such as the late-1960s, late-1980s, and early-1990s.

In summary, several causal factors that contributed towards the downfall of previous civilisations can steer us to evaluate the health of our civilisation – indeed, progress for humanity has come at a steep price. Global warming is making far reaching alterations to our environment and endangering all forms of life. The persistent threat of civil war, terrorism, cyber warfare, and the race for nuclear weapons has led to an unprecedented rise in military spending, diverting precious funds reserved for a nation's economic growth. Every additional dollar spent by regimes in building the military, rehabilitation from climate change related events or to pay for inflation increases takes away critical investments that can be alternately placed in health, education and infrastructure to meet its population's needs. Growing economic disparity impedes equitable development and aggravates disease and crime, further propagating resentment in people against their government.

Hence on all the three causal fronts that may lead to our civilisation's collapse, factors that in reality are not isolated but interwoven, we are not doing well...

Not all is lost. There is a key variance today from that of previous civilizations that collapsed - awareness and response to changing circumstances that threaten our world. This ability to adapt and respond proactively holds promise, however it comes with a responsibility. Our civilisation has moved far ahead from man's harness of fire to artificial intelligence and exploring space travel. The key to reversal of climate change lies in driving technology solutions for clean energy and decarbonization of the economy. There is a pressing need for governments to spur sustainable development and combat discrimination through prudent investment of national resources on education and skill development. It is imperative for stakeholders in developed nations to include the voice of developing nations in the global strategy and decision process. This ideology and blueprint to ensure continued prosperity of our planet and its people is captured in 'The 2030 Agenda for Sustainable Development' and the 17 Sustainable Development Goals (SDGs) adopted by all United Nations Member States. While governments, policymakers and corporations play a critical role in following this guidance to uphold hope for our civilisation, individuals like you and me are equally accountable for its well-being – now and for future generations.

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Challenges like these threaten our very existence on Planet Earth. The English historian Edward Gibbon (1737-1794) who researched and published his six-volume work *History of the Decline and Fall of the Roman Empire* quoted "The story of its ruin is simple and obvious, and instead of inquiring why the Roman empire was destroyed, we should rather be surprised that it had had subsisted so long." Gibbon studied the conditions that led to the Roman civilization's phenomenal rise - free market economics, civic militarism, constitutional government and how these concepts were abandoned, leading to the empire's eventual fall to the mostly Christian barbarians. Despite achieving success in evolution, several civilisations have imploded due a myriad of internal and external reasons. The question that faces us is: is our civilisation in danger?

The earliest civilisations developed between 4000 and 3000 B.C.E. in Mesopotamia and later in Egypt, the Indus Valley, China and in Central America. These independent civilisations with their distinct characteristics shared common developmental aspects such as urbanisation, cultural expression, social and technological advancement. Hunting as a predominant source of food gave way to agriculture. This involved domestication of plants and animals – a turning point in our evolution that promoted structured settlements with groups of people specialising in professions, expediting complex societal hierarchies and judicial systems with technological progress enabling higher productivity.

"Civilisations are not murdered. They take their own lives." - 1177 B.C. This profound statement suggests that civilisations fall not only by external invasions but due to their own failures and internal weaknesses. The Indus Valley Civilisation is said to have collapsed due to natural disasters such as floods or droughts worsened by nomadic Central Asian groups invading. The Khmer regime faced a decline in trade routes, political instability led by internal power struggles and overpopulation that strained resources. In recent times, the Soviet Union's dissolution in 1991 saw the collapse of one of the world's most powerful communist regimes. Prior to breakdown, the Soviet economy was confronted with shortages, low productivity and ethnic tensions, Nationalist movements in Eastern Europe and the Baltic States and the nation's participation in foreign conflicts such as Afghanistan led to social unrest. Furthered by President Mikhail Gorbachev's policies of openness and restructuring, the fate of the Soviet Union's geopolitical position was sealed irreversibly by the Berlin Wall's fall in 1989.

History opens our mind to learn from our past so we can better our future. Looking back, it is evident that there are three catalysts that led to the fall of civilisations in the past. The first causal factor is a prolonged change in the environment that affects productivity and livelihood. As the case of the Indus Valley civilisation, conditions such as floods or drought resulted in community displacement, health, and increased societal cost from the damaged infrastructure. Inevitably, agricultural produce and trade would be affected leading to a gradual downfall in the population's lifestyle. Secondly, over expansion of military causes as seen in the Roman civilisation, drives political instability and drains critical resources much needed in the home country. Diverting national budgets to maintain armoury and a large military force inevitably skews the investments available at home for societal well-being leading to divided public opinion and diminished faith in the authorities. This third causal factor is rising social unrest that starts questioning a government's policies and ushers in widespread dissent that shakes the regime. Lasting economic decline driven by corruption, social divide and inequalities gives rise to internal volatility opening the doors to complete dissolution as in the case of the Soviet Union's collapse.

Considering ongoing global trends, it is hard to walk away from indications of all three causal factors that lead to a civilisation's fall being present today. Firstly, our environment is at threat due to climate changes from decades of industrialisation, burning of fossil fuels and greenhouse emissions. The United Nations' (UN) report 'Causes and effects of climate action' has confirmed that each decade since 1980 has been warmer than the previous one;

almost all land areas are seeing heat waves, water bodies are showing rising temperature and there is reduced snow cover in the Arctic region. The report further warns that we are losing species at a rate that is thousand times greater than at any other time and one million species stand the risk of extinction within the next few decades. Other related threats are increasing diseases, disruptive events such as forest fires, floods and global hunger owing to rising acidity in oceans and declining crop yields in grasslands. The annual economic loss from disruption in weather patterns and consequent extreme events has been estimated at \$143 billion by the World Economic Forum. Climate change related events displaced an average of 23.1 million people annually, and many more left vulnerable to poverty in the last decade (2010–2019) as estimated by UN sources. Unless the rate of greenhouse emissions is checked, it is predicted that by the end of this century global temperature will be at least 5 -10.2 degrees Fahrenheit warmer than the 1901-1960 average.

The second causal factor is the acceleration in military expenditure and resulting instability that threatens our world. Data by the Stockholm International Peace Research Institute (SIPRI) reports that global military expenditure reached \$2443 billion in 2023, a year-on-year increase of 6.8 per cent, the steepest since 2009. This signals deterioration in global peace and security with governments placing higher emphasis on building military strength. Today's global geopolitical landscape is rife with volatility – be it Russia's invasion of Ukraine, Israel's response to terrorism in the occupied Gaza strip or civil wars in African countries such as Sudan. Alliance commitments and spiral effect on neighbouring countries fuel tensions as seen in Taiwan and Japan that both saw an 11% increase in their 2023 military expenditure motivated by an acceleration of 6% by China, the world's second largest military spender. 58 per cent of Ukraine's total government spending is allocated to their military force, albeit a third of its population face hunger, a quarter of their population lives in poverty and more than one in three Ukrainians is displaced as per data published by the United Nations World Food Programme. The interdependence of our world has ensured a greater worldwide impact of the Ukraine war as is evident in the disruption of global wheat export, resulting in shortages and inflation, where previously Ukraine and Russia were top contributors.

The third factor endangering our civilisation is social unrest leading to grievance in society. The World Inequality report 2022 highlights that 76% of current global wealth is owned by the richest 10% of the population, whereas the poorest half possesses only 2% of the total._Global inequalities at such scale, austerity and failure of political representation has seen several anti-government demonstrations in both developed and developing countries. The study of protests between 2006 and 2020 by Friedrich Ebert Stiftung, the Institute for Policy Dialogue, and Global Social Justice has highlighted that the number of protests per year has tripled since 2006. Protest sizes are also growing especially in large democracies; 200 million people participated in two-day labour protests in India in 2022. Hong Kong's protests in 2019-20 against China's proposed extradition bill threatening judicial independence for residents led to worldwide reaction and the 'Black Lives Matter' movement in the USA triggered by racism sparked off nation-wide protests. The 'Arab Spring' series of anti-government uprisings were not an isolated phenomenon, rather it was a rising global trend across Tunisia, Libya, Yemen, Syria, Bahrain leading to civil wars and deposing of rulers. The size and frequency of recent protests eclipse historical examples of eras of mass protest, such as the late-1960s, late-1980s, and early-1990s.

In summary, several causal factors that contributed towards the downfall of previous civilisations can steer us to evaluate the health of our civilisation – indeed, progress for humanity has come at a steep price. Global warming is making far reaching alterations to our environment and endangering all forms of life. The persistent threat of civil war, terrorism, cyber warfare, and the race for nuclear weapons has led to an unprecedented rise in military spending, diverting precious funds reserved for a nation's economic growth. Every additional dollar spent by regimes in building the military, rehabilitation from climate change related events or to pay for inflation increases takes away critical investments that can be

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