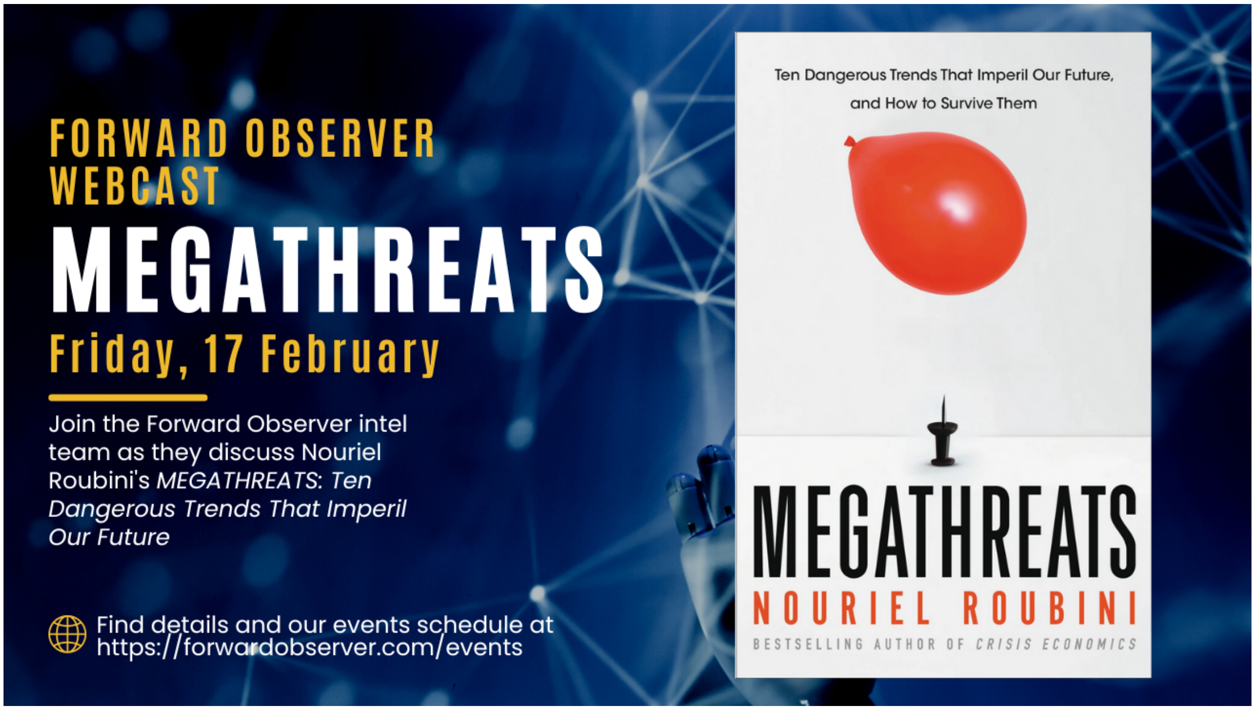

Megathreats Book Summary

This book summary is provided to Forward Observer subscribers free of charge. It's for educational purposes and intended to foster a critical discussion.

If you find value in this book summary, I encourage you to purchase and read *Megathreats: Ten Dangerous Trends That Imperil Our Future, and How to Survive Them* by Nouriel Roubini. - M.S.

Chapter 1 - The Mother of All Debt Crises

- Author and economist Nouriel Roubini expects the worst financial crisis of human history.
- He first warned of the Great Financial Crisis at an International Monetary Fund (IMF) conference in 2006, then again at the World Economic Forum (WEF) in 2007. Few took him seriously. Ben Bernanke, who was then the chairman of the Federal Reserve, said there was little risk of a crisis.
- The world faces Argentina's decades-long financial crisis with high levels of public and private – consumer and corporate – debt that cannot be paid back. The country's currency collapse in 1980 meant widespread debt defaults for loans denominated in U.S. dollars. Countries across Latin America faced similar consequences to high interest rates in the United States, resulting in the "lost decade". Oil exporting nations were hit in 1982 when oil prices collapsed.
- While East Asian governments in the 1990s were lauded as fiscally prudent, a private debt bubble ballooned in the background. Excessive debt led to a real estate collapse and a wave of corporate defaults.
- The U.S. faces worse debt conditions than the lead up to the Great Depression and twice the debt-to-GDP ratio following World War II.
- Today's stock trading apps are driving a retail trading frenzy. The U.S. is headed towards a "Minsky moment" where a reversal of extreme bullishness turns into stock market crash.
- Unintended consequences of debt crises include:
    - Stock market crashes
    - Populist movements
    - Sale of sensitive technology to foreign buyers
- China, with a 330% debt-to-GDP ratio, will not escape the next global financial crisis. A worldwide recession or global financial crisis contagion will hurt Chinese exports, which will trigger China's own debt crisis reckoning.
- Debt accumulation has been the answer to every crisis for decades:
    - The 1970s stagflation
    - The 1980s savings and loan crisis
    - The Long-Term Capital Management collapse of the late 1990s
    - The 2001 Dot Com Bubble
    - The housing collapse of 2008
    - The eurozone crisis starting in 2009
    - The COVID pandemic of 2020
- Today's financial conditions are the worst in world history. This crisis could happen within the next decade. Potential triggers include:
    - A stock market crash
    - Spikes of inflation requiring steep interest rate hikes
    - Another pandemic
    - Corporate debt defaults
    - Housing market crash
    - Another geopolitical shock like the Russia-Ukraine war

    - The decoupling of the U.S. and Chinese economies
    - The collapse of a major economy, such as Italy
    - Economic damage from climate change
- Ray Dalio’s “inflationary depression” is one possible result when government revenues decline and they print money to make up the difference, driving up inflation in the backdrop of a major economic contraction.

Chapter 2 - Private and Public Failures

- Bailouts tend to be seen as victimless, but they can cause a great deal of damage. Corporate debt restructuring, for instance, leads to mass layoffs and investor losses.
- Additionally, bailouts alone don't solve underlying problems. Successive bailouts, as in the case of Argentina, have just led to more future debt crises.
- There's now more credit card debt in the U.S. than consumer savings, driven partially by inflation, while loosening credit requirements and low interest rates have encouraged the accumulation of more debt.
- Three "mismatches" have made problems worse:
    - Short term loans may help consumers, corporations, and governments that are illiquid, but they kick the can down the road for those who will never be able to pay back the loans. Borrowers receive a temporary reprieve when they can push maturity dates back. When creditors refuse to refinance existing debt, defaults ensue.
    - Foreign countries dealing in dollar denominated debt can face extreme financial pressure as their home currency declines relative to the dollar. As a result, their debt levels rise in real terms and paying off loans thus becomes difficult or impossible.
    - Debt to equity ratios are the third mismatch. High debt to equity ratios may not matter in good economic times, but they become a liability during economic slowdowns. When considering debt to equity ratios, governments are no different than households or corporations.
- Borrowing can ease the strain of being illiquid, but only exacerbates the problem of insolvency. Roubini expects a wave of debt defaults for zombie companies who financed cash flow through short term debt during good economic times, and will no longer be able to during bad economic times.
- This creates a "doom loop" of insolvency as creditors rack up losses from failed companies, threatening insolvency for themselves. Governments tend to offer bailouts, but the accumulation of public debt only increases the risk of state insolvency.
- Governments' tendency to bail out problem corporations instead of letting them fail leads to "moral hazard," as corporations are willing to take greater risks if they expect to be bailed out.
- Governments can bail themselves out by issuing greater debt, which was the typical response during the COVID pandemic. Quantitative Easing (QE) by central banks is a form of bailout.
- Modern Monetary Theory (MMT), or "helicopter cash," says that governments that print their own currency can issue greater debt to fuel economic growth. While this sounds good in theory, Roubini believes MMT cannot last forever.
- Another form of bailout is "financial repression," where central banks order a country's large banks to bailout businesses and households. That additional debt is guaranteed by a central bank or government – a guarantee that is easy for a government to make, but not so easy to meet.

- The next financial crisis will threaten creditors and debtors alike. This will create another "doom loop" scenario, where banks can't get bailed out by insolvent governments, which means banks can't pay depositors. Creditors today are often institutional investors, such as pension and retirement funds, and 401ks. The next crisis may wipe out debt, but it threatens to wipe everyone else out, as well.
- These wipeouts follow this pattern: a credit crisis leads to bank failures, credit availability plummets and corporations go bankrupt which leads to mass job losses and household financial destruction. This event will not be a debt jubilee as it means financial destruction for everyone.
- The coming financial chaos could lead to authoritarian populist movements who promise solutions and justice.
- In one particular warning, Roubini recounts the collapse of the Habsburg Empire. In 1899, investors considered Habsburg bonds a safe haven asset. In the lead up to World War I, Habsburg bonds were outperforming their European counterparts. But in four short years, the Habsburg Empire collapsed, along with its bonds.
- This will be a financial crisis like no other. Roubini says many are in denial about poor fiscal conditions, as looking at the Mother of All Debt Crises is like looking at an iceberg. The debt is just one number, while unfunded liabilities are difficult to see.

Chapter 3 - The Demographic Time Bomb

- There are important differences between conditions during the Great Depression and the Mother of All Debt Crises. One, the global economy became strained, but did not collapse. And two, the U.S could borrow money during the Great Depression on the promise of repayment due to rising tax revenue.
- One key problem facing the U.S. today, whether through borrowing or printing, is that of unfunded liabilities, which were measured at $211 trillion by researchers in 2012. State pension funds have a $1.2 trillion shortfall.
- The government will be forced to make difficult and unpopular decisions in the years and decades to come.
- Legislation has expanded opportunities to start drawing disability, which has put additional strain on the existing funding gap, which now measures 14x GDP.
- As demographic expansion has reversed – the U.S. birth rate has fallen below the replacement rate of 2.1 – aging populations are expanding faster than younger Americans can enter the workforce. What's worse is that aging populations will reduce investment funds, lowering overall productivity and innovation – the exact things that drive economic growth.
- On the current trajectory, Americans retiring after 2033 will receive just 76% of what they should under Social Security. The increased burdens and reduced benefits for young workers will cause social resentment and unrest.
- Increasing income and payroll taxes, reducing existing benefits, and printing money to make Social Security solvent will cause additional social and economic problems. Confiscatory taxes against billionaires will cause many to flee high tax jurisdictions, resulting in even greater revenue gaps. The only solution for the United States is to take on more debt.
- In addition to additional trillions of dollars in debt, increased immigration is a partial solution. Roubini cites research showing that immigration drives economic growth and immigrants can contribute to tax revenues. This, however, carries its own risks, namely anti-immigration activism and lower wages for native workers. Additionally, immigrations put additional strain on public services and the national culture, which leads to social problems.
- Meanwhile, advances in robotics and artificial intelligence decrease dependency on human workers. The internet also increases opportunities to outsource white collar jobs to English speakers in foreign countries where wages are cheaper. This makes immigration less a factor to solve the country's fiscal gaps.
- Roubini believes these problems will force governments to do what they most often do: throw money at the problem and print money until they face severe inflation, hyperinflation, or collapse altogether.

Chapter 4 - The Easy Money Trap and the Boom-Bust Cycle

- Loose monetary policy causes booms to turn into bubbles. This is exactly what happened coming out of the COVID-19 Pandemic when low interest rates and eased credit requirements pushed consumers and businesses to borrow more money than they could afford to pay back. Eventually, the boom runs out of steam and economic growth stops, followed by an economic bust.
- The collapse of Archegos Capital Management, the seizure of Greensill Capital by regulators, and the eventual pop of the special purpose acquisition company (SPAC) and crypto bubbles are part of the bust phase of the current Boom-Bust cycle. The worst of the Boom-Bust cycle is still ahead.
- The Roaring Twenties fueled the boom that led to the Great Depression. Americans had access to easy credit and purchased vehicles, household appliances, and even stocks on borrowed money.
- The Great Depression bust of 1929 needlessly turned into a depression because the Federal Reserve hadn't learned that it could dial monetary policy to intervene and ease the busts. Following the Black Thursday crash, demand for goods and services collapsed, companies laid off workers or went bankrupt, and an economic depression ensued because Treasury Secretary Andrew Mellon chose austerity – a 'cleansing' of the financial system – instead of intervening to prevent its collapse.
- Regardless of what they decide, policy makers have difficult, painful choices ahead. If central banks don't intervene in the coming debt crash, then countries will have another round of Great Depressions. If they do act by printing money and injecting stimulus, then they will contribute to even more debt accumulation that will drive an even more spectacular crash down the road.
- Roubini says that the only way to avoid another spectacular crash is to end the Boom-Bust Cycle. He calls for "lowflation," which is inflation below the Fed's target rate. He says central banks mistakenly believe low inflation and even deflation are inherently bad. Roubini says there's both good and bad deflation.
- Virtually no one learned the lessons of previous Boom-Bust Cycles when loose monetary policy fueled excess debt until debt and credit expansion collapsed. This happened in the early 1980s, then was refueled through the Reagan years, leading to the savings and loan crisis of the early 1990s, which was then refueled into the Dot Com Crash, which was then refueled into the Great Financial Crisis, which was then refueled into the coming Mother of All Debt Crises.
- The biggest leg of the current Boom-Bust Cycle started in earnest in 2014. Instead of paying down debt during good economic times, corporations racked up massive debt and became overleveraged. By 2019, the Trump administration had done the same thing to the government, passing tax cuts that pushed the federal deficit to over a trillion dollars.
- In 2017, the Fed tried to end QE and started raising interest rates but their moves spooked corporate debt markets. The Fed reversed course in 2018 rather than trigger a financial crisis. This is how the Fed got trapped.

- History shows that central banks can use “macro-prudential” policy to guard against financial busts. It involves two actions:
    - The first is building a large cash hedge by ensuring banks are well-capitalized and can weather a financial crisis.
    - The second is cyclical and involves tightening monetary policy to gently deflate bubbles before they become large enough to burst.
- Roubini favors a middle-of-the-road approach to ending the Boom-Bust Cycle. Central banks should be Keynesian in the beginning, jumpstarting economic growth by loosening monetary policy and solving the illiquidity problem before adopting Austrian economic approach by tightening before a bubble can occur.
- Roubini also points out that today’s central bank officials are too swayed by politics and rely instead on short-term policies that have led us into a debt supercycle.

Chapter 5 - The Coming Great Stagflation

- During the period of globalization starting in the 1990s, prices moderated and inflation was kept low through outsourcing, lower labor and production costs, and technological advances that lowered the cost of goods and services.
- This period of "Great Moderation" is reversing.
- The United States is likely to face conditions much worse than the stagflation of the 1970s.
- Worse, policy makers lack the tools used during the 1970s and 1980s, because very high debt levels and overleverage make higher interest rates economically and financially suicidal.
- High unemployment, low growth, and high inflation – textbook stagflation – will put considerable strain on American consumers, financial institutions, and corporations.
- Wealth and income will incrementally evaporate due to persistent inflation, and Americans will lose their jobs as their employers struggle with decreased demand and higher costs.
- Economist Arthur Okun created the Economic Misery Index that measures inflation and unemployment. Roubini believes it will make a big comeback.
- "What a better gauge of our economic misery than the murderous squeeze on us resulting from a simultaneous rise in joblessness and soaring living costs?" - Syndicated columnist Sylvia Porter
- During the 1970s, labor unions facilitated over 5,000 labor strikes and work stoppages.
- To stop inflation, President Nixon twice implemented price freezes, which resulted in worsening shortages.
- "Ranchers stopped shipping their cattle to the market, farmers drowned their chickens, and consumers emptied the shelves of supermarkets." - Authors of *The Commanding Heights*, writing about the period
- Roubini cites economist Milton Friendman, who wrote, "Inflation is just like alcoholism. In both cases, when you start drinking or when you start printing too much money, the good effects come first and the bad effects only come later." Roubini writes the U.S. is going to experience withdrawals from the same conditions.
- A series of oil shocks also contributed to spiking inflation. Roubini sees 11 potential shocks that could have the same effect:
    1. Workers aging out of the workforce and not enough younger workers to replace them will mean higher wages, higher costs, and higher prices.
    2. Decades of migration filled low wage jobs for employers, which was disinflationary. A reversal means wage inflation.
    3. Globalization and outsourced jobs lowered the cost of production. De-globalization will reverse this trend, leading to higher costs and prices.
    4. Reshoring production imposes large capital costs, which lead to higher production costs and higher prices.
    5. The economic war between the United States and China is inflationary. Roubini notes that Chinese 5G networks cost 50% less than Western alternatives.

6. Geopolitical shocks from East-West bifurcation could include an Israel-Iran war or another Korean conflict, both of which would be inflationary.
7. Climate change will cause worsening drought. A decadal shift from fossil fuels to green energy has left oil production underinvested, which will make oil more expensive. Worsening natural disasters will disrupt supply chains.
8. The continued risk, if not likelihood, of global pandemics will again disrupt global trade and supply chains.
9. A wage-price spiral could occur as pro-union organizations try to protect workers but cause worsening inflation.
10. Cyberattacks will continue wreaking havoc on production facilities and supply chains.
11. Threats to the U.S. dollar and global financial system will emerge due to the weaponization of the dollar, which has forced a powerful coterie of nations to begin shifting toward alternatives. Worsening financial and monetary competition will be inflationary.

- “Money is in the end a social convention that can be very fragile under stress.” - Sir Johnathan Stephen Cuncliffe, former Bank of England deputy governor
- Classic stagflationary pressure combined with the popping of the Mother of All Debt Bubbles will be horrific. There are no good solutions for central banks.
- Roubini calls this coming period the “Great Stagflationary Debt Crisis”.

Chapter 6 - Currency Meltdowns and Financial Instability

- A stable world reserve currency and efficient financial systems have led to decades of relative financial stability.
- This relatively stable financial system is under duress due to several conditions.
- The first is “mission creep” of central banks, which have increasingly acted in favor of domestic political and foreign policy goals.
- The Federal Reserve specifically acts outside its charter of price stability and maximum employment when its tools are used in domestic and foreign policy. Social justice and inequality is one form of mission creep. Another includes Fed activities in support of sanctions against Russia and freezing of Russian assets.
- Weaponization of the dollar against Russia is another form of mission creep. Actions undertaken by the Federal Reserve, in coordination with the U.S. Treasury, have pushed a number of nations towards alternatives to the dollar system and bolstered potential competitor currencies.
- The Chinese renminbi (RMB) is one of these potential competitors.
- If China were to open up its capital and credit markets, allow foreign governments to save in RMB, use technology and innovation to spread the digital RMB internationally through payment apps, and continue encouraging foreign countries to price their exports in RMB, then China may be able to replace the U.S.-backed global financial system.
- While the future of the RMB as a world reserve is murky, a series of monetary shocks to the dollar could become a “megathreat”.
- Major policy mistakes by the Fed could trigger one of those megathreat shocks.
- “I feel as anxious today as I’ve ever felt about the financial world. The Fed has been pumping up asset prices in a way that is creating a bit of an illusion. I think the odds are now sort of one in three, very high, that we will look at this as an epic mistake and one of the great financial calamities of all time.” - Former Treasury and Fed official Peter R. Fisher in 2021
- In short, due to high debt, mission creep and the weaponization of the dollar, the United States is headed for catastrophe.
- During the COVID-19 pandemic, the Federal Reserve printed $10 trillion and fueled a massive asset and credit bubble. Popping the bubble is a matter of “when,” not “if”.
- The Fed is facing a classic “debt trap”. It has to keep interest rates relatively low so the Treasury can continue to finance debt and budget deficits, but foreign creditors may stop buying U.S. debt at such low interest rates. Roubini asks what happens when those foreign creditors stop buying. In short, the answer is that the dollar’s future is imperiled.
- Roubini sees a possibility that the USD hangs on as the global reserve, but has a greatly diminished role over the coming decades.
- A global financial and monetary realignment could start with regional trading blocs forming regional reserve currencies.

- Roubini says crypto currencies are another possible alternative. He sees the rise in popularity as a sure sign that consumers are looking for alternatives to traditional finance and the existing financial system. Roubini, however, sees little use and says that such efforts, including decentralized finance, are “premature and misguided”. [*Roubini goes into a long explanation of crypto and then an anti-crypto tirade that I will skip over for the sake of brevity.*]
- Meanwhile, central banks are rolling out Central Bank Digital Currencies, or CBDCs. Roubini sees two major problems. First is depositors will move their money out of commercial banks, which will cause them to fail and then consolidate. Second, this poses a systemic risk where financial panics could trigger bank runs.
- Fiat currencies will not be spared in the financial busts ahead. The U.S. dollar’s current challenges will lead to a “major clash” against competitors and rivals.

Chapter 7 - The End of Globalization?

- Globalization is going in reverse. The greatest risk is de-globalization and a fracturing of the world economy. A lesser risk is “slowbalization,” or a slowing of globalization that doesn’t lead to global fractures.
- Roubini warns that the protectionism and trade tariffs favored today are economically destructive to both sides of the trade. He argues that tariffs impact middle- and low-income consumers the worst.
- Roubini says that globalization has both net positives and negatives. Globalization has benefited Chinese manufacturers, the financial class, and emerging markets the greatest, at the cost of middle- and low-skill workers in advanced economies.
- Roubini argues in the defense of globalization while proposing an expanded social safety net for blue collar workers most affected. Overall, globalization has led to lower prices, which has been beneficial for the middle class.
- Roubini cites research from McKinsey Global Institute (MGI), which finds that globalization is responsible for about 20% of the lost jobs in the United States. Technological progress is by far the greatest driver of job loss, Roubini says.
- More dangerous than globalization is U.S.-China economic, financial, and monetary competition and decoupling. Roubini expects this trend to accelerate into balkanization of the global economy.
- Most of global trade isn’t tangible goods, but services. Roubini asks at what point will countries become protectionist about outsourcing white collar jobs out of the United States to China or India. For example, an accountant in India can perform the same job as an American accountant at a fraction of the cost.
- Further, virtually all appliances will eventually have 5G chips in them. Concerns over backdoors and spying may find their way into strict trade restrictions, as governments try to keep out foreign-made appliances. The implication is that these approved appliances will need to be made by a domestic manufacturer or in a friendly economy. This will almost certainly lead to further U.S.-China decoupling.
- Roubini cites economist Richard Baldwin who warns that eventually humans will be replaced in a “globotics” [globalized robots.] revolution. Baldwin sees this ending in violence as man fights against machines.
- Slowbalization is the preferred outcome because de-globalization will lead to an economic depression.

Chapter 8 - The AI Threat

- Roubini sees a significant risk that advancements in Artificial Intelligence (AI) will lead to elites ruling over the unemployed masses.
- While plenty of skeptics continue to deny that AI will ever surpass human thought and ability, advances in technology incrementally close the gap.
- Another risk is that homo sapiens are replaced by man-machine hybrids, just as the Neanderthals were replaced by homo sapiens.
- A very real risk is that AI will replace architects while a 3D printer replaces the construction company.
- Already, AI is surpassing human thinking by solving problems in biology that humans so far hadn't. AI scans also uncovered another painting that Pablo Picasso had painted over, which is something that humans hadn't discovered. AI today can identify illnesses as well as human doctors can. AI also handily beat legendary *Jeopardy!* contestant Ken Jennings. "All I know is how it felt to be the guy put out of work and it was freaking demoralizing," Jennings said of the experience.
- Researchers at Oxford University found that up to 47% of American jobs could be replaced by AI.
- Even though advancements in AI pose threats and considerable risks, there's still a lot of development required to solve the safety issue for humans, several of whom have been killed by robots just doing their jobs.
- Roubini also highlights the counterargument that tech advances will create new jobs even as it destroys them. Roubini doesn't believe that AI will lead to new categories of jobs as previous technological advances have. He calls this future "terminal".
- DeepMind cofounder Demis Hassabis predicts computers will reach singularity in 20 years, and be able to learn on their own, unlocking limitless technology and potential.
- Elon Musk remains worried that artificial general intelligence is very dangerous. "It's fine if you've got Marcus Aurelius as the emperor, but not so good if you have Caligula."
- Roubini concludes that the owners and operators of AI will benefit the most, while they eventually leave the large majority of white collar workers jobless.
- This poses a large problem for the consumption-based U.S. economy. As workers lose their jobs – technological unemployment – they will spend and consume less, lowering economic growth. Governments will lose the ability to tax workers, and then turn to taxing the owners of the machines.
- Dystopia may await as humans without jobs, skills, or futures – "superfluous humans," as Yuval Harari describes them – live brutal lives before dying "deaths of despair."
- Whoever controls AI will likely control the world.

Chapter 9 - The New Cold War

- Roubini writes about the Thucydides Trap, described by Graham Allison's book *Destined for War*. According to Allison's research, throughout recorded history, twelve out of sixteen scenarios where a revisionist power challenged a status quo power ended in war.
- In 2015, Chinese President Xi Jinping said in a speech that the U.S. and China can coexist without fighting a war or succumbing to the Thucydides Trap. Roubini was not convinced.
- U.S. policymakers for decades were dead wrong that China would adopt democracy as they gained wealth. Instead, China developed while becoming more autocratic.
- Graham Allison recounts that repairing a small bridge in his hometown took four years, including multiple delays and numerous cost overruns, while the Chinese modernized a much larger bridge in just 43 hours.
- Chinese officials cite the "century of humiliation" that included the Opium Wars in 1839, the Boxer Rebellion (in which China was defeated by eight nations, including the United States), followed by a Japanese invasion during World War II, finally ending with the end of the Chinese Revolution in 1949. This century drives Chinese desire to be military strong, not just economically strong.
- Roubini says that China is "moving away" from the West culturally and financially, as evidenced by changes in common attitudes towards English and meeting with Westerners.
- China is dissuaded by war because its economy is dependent on open trade lanes, and war would be too disruptive.
- "Made in China 2025" is a strategy to reduce dependency on foreign trade by transitioning into a "self-reliant," consumption-based economy, like the United States.
- This new cold war will lead to greater economic disruption and deeper competition. Unlike the first Cold War with the Soviet Union, China is a world leader in many industrial and technology sectors.
- "The era of Western domination was a 200-year aberration. It's coming to an end." - Singapore diplomat Kishore Mahbubani
- Although prominent, independent analysis says that decoupling favors the West more so than China, more of the country's developing world may end up siding with the Chinese side.
- "[W]e have no competing fighting chance against China in 15 to 20 years. Right now, it's already a done deal' it is already over in my opinion." - Nicholas Chaillan, former Pentagon chief software officer
- Chinese leaders believe the United States is in terminal decline.
- Despite mixed feelings from experts on whether China will go to war with the U.S., or vice versa, Taiwan and the South China Sea remain a potential flashpoint for a much larger and destructive war.
- The United States' global leadership may be at risk if the U.S. backs down from a war with China. Meanwhile, China risks making mistakes in its semi-paranoid national security controls and centrally-controlled economy that imperil its global dominance.

- Roubini doesn’t believe in China’s “hard landing” future and advises the U.S. to find ways to coexist with China while being economically overtaken.

Chapter 10 - An Uninhabitable Planet?

- Roubini is a proponent of global warming science, and advocates for risk management as climates change in the future.
- About 10% of the world's population lives within 10 meters of sea level, and will be threatened by rising sea levels and increased flooding, says Roubini. About 1.5 million Florida residents will be displaced by 2060.
- Some 130 million Chinese residents could be displaced, while its remaining fresh water will shrink due to encroaching sea water.
- Saltwater intrusion will be especially harmful due to the loss of arable land and decreased agricultural output. In other cases, island nations will be threatened with total loss.
- Roubini says that research shows natural disasters will get increasingly worse due to climate change as hurricanes and typhoons get stronger and drought leads to worsening wildfires.
- Roubini says that in 50 years, much of the U.S. population may relocate to the Midwest or Canada, one of the few remaining regions that will be economically viable. Fifty years is a best case scenario, as collapsing ice sheets could accelerate the timeline.
- Drought conditions and water access are partially driving the Arab-Israeli conflict, while a drought that sapped food production led to the Syrian Civil War. Following that logic, sub-Saharan Africa is next.
- Europe will bear the brunt of migration as Africa grows to two billion inhabitants and becomes further threatened by climate change.
- Pandemics will also worsen due to climate change due to the destruction of habitats that push animals closer to humans. Further, melting ice will free pre-historic pathogens that could fuel new pandemics.
- Adaptation to climate change, rising sea levels, and worsening natural disasters are far too expensive. Adaptation costs could reach $100-150 trillion over the next 30 years, according to U.S. Treasury Secretary Janet Yellen.
- While politically unpopular, carbon taxes might be enough to curb carbon and greenhouse gas emissions.
- Like the AI singularity, Roubini points out a "point of no return" on climate change.

The remainder of this book is about how to avert these disasters.

This concludes the summary of *Megathreats: Ten Dangerous Trends That Imperil Our Future, and How to Survive Them*.

If you're interested in Roubini's proposed solutions, I recommend you purchase and read the book. - M.S.