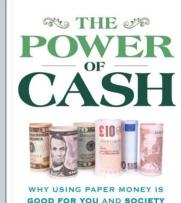
# Is a Cashless Society a National Security Risk?

### BY

PROF. JAY ZAGORSKY
QUESTROM SCHOOL OF BUSINESS
BOSTON UNIVERSITY

ZAGORSKY@BU.EDU

12 MAY 2025



### Overview

Is cashless society a national security risk?

### YES!

- World is becoming more uncertain & riskier.
   Cash is a low-cost method of protecting people, families, businesses and countries.
- What can be done to mitigate risk?
  - o Individuals: Use it at least once a week to ensure it works when needed.
  - Financial organizations: See my suggestions at end.

### Risk

- Risk became clear to me during Hurricane Sandy.
- There are 4 areas where national security risks are increasing, and paper money helps reduce the problems.
  - 1) Natural Disasters
  - 2) Man Made Disasters
  - 3) Chance of War Country Tensions
  - 4) Computer Security Rogue Hackers





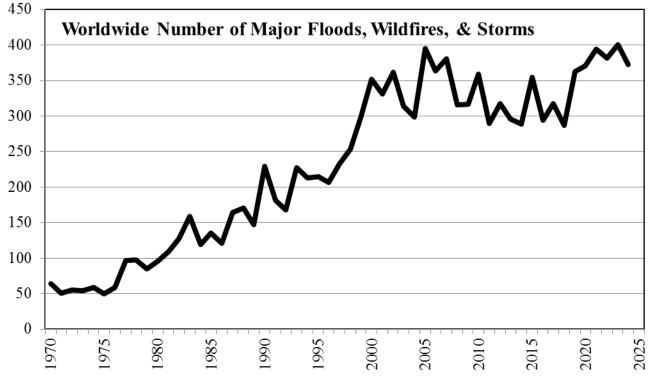


::::

# MONITORING HAZARDS & DISASTERS WORLDWIDE SINCE 1988

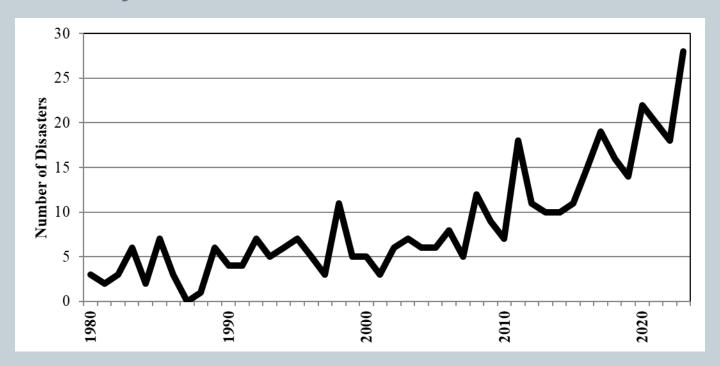
EM-DAT contains data on the occurrence and impacts of over

26,000 mass disasters worldwide from 1900 to the The database is compiled from various sources agencies, non-governmental organizations, recompanies, research institutes, and press agenciator for Research on the Epidemiology of Disast distributes the data in open access for non-companies.



### U.S. Billion Dollar+ Disasters

- US Gov's NOAA track(ed) the number of disasters that cause more than US\$1 billion in damage.
  - Series is adjusted for inflation



### 2: Man Made Disasters Accidents

- Some major power outages in April 2025.
- Electronic payments do not work without electricity!

### Puerto Rico Restores Some Power After Blackout

It will take at least until Friday to fully restore electric service after a series of failures blacked out the whole island on Wednesday, officials said.

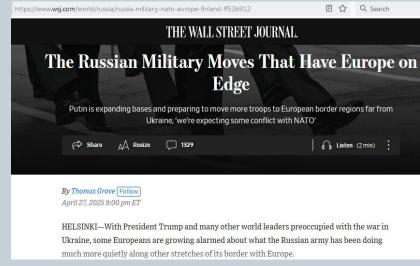


# Widespread Power Outage Hits Spain and Parts of France and Portugal

The blackout hit critical infrastructure like airports and caused transportation disruptions across Spain and Portugal. The cause of the outage was unclear.

### 3: World Lived Through Period of Peace

- Period of peace looks like it might be ending.
- Conflicts in Ukraine, Israel
- Potential in Taiwan, South Korea, US-China & Others



#### WORLD | THE SATURDAY ESSAY

### Has World War III Already Begun?

An axis of autocracies led by Russia, China, Iran and North Korea is challenging the democratic world order



### Cash is Needed is Key Point For Military

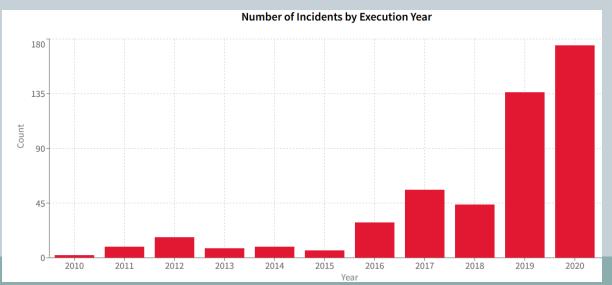
- Enemies can attack many different ways.
- Crippling a country's economy is just as effective as bombing.
  - See Iran Sanctions
- A country that relies 100% on electronic payments is more at risk than one that also uses cash.
- Electronic payments have 3 risk factors
  - Electrical grid
  - Communications network
  - Financial industry's computers

### 4: Computer Security – Rogue Hackers

- Significant Multi-domain Incidents against Critical Infrastructure (SMICI) Data
  - Cyber and physical attacks against critical infrastructure that disrupted operations against power grids, dams, banks, etc.
  - O Data are global. From public sources. Hidden attacks missed.

o Almost 500 incidents over decade; 64 are known state

sponsored



### Rogue Actors: Continued

- Hackers who work for profit or pleasure are dangerous to electronic payments.
  - o UK problems last week. Supermarket Co-op; department stores Marks & Spencer and Harrods attacked early May.



Other Problems are Lurking!



by scammers, and Microsoft pushes the password one step closer to death.

BY BOBBIE JOHNSON THE BIG STORY MAY 1, 2025 3:00 AM

### **North Korea Stole Your Job**

For years, North Korea has been secretly placing young IT workers inside Western companies. With AI, their schemes are now more devious—and effective—than ever.

### Situation is Going to Get Worse

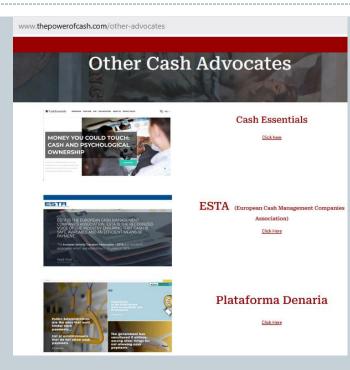
- I doubt these 4 risks are going to be reduced. Instead, my prediction is an increase. Why?
- 1) Warming planet will result in more natural disasters.
- 2) As the world becomes increasingly complex, the chance for more man-made disasters rises.
- 3) Recent large shifts in global alliances will result in more wars as political and military power shifts.
- 4) Artificial Intelligence (AI) will give rogue hackers enhanced abilities. Like being able to better impersonate individuals. Result more successful attacks at a lower cost to perpetrators.

## What Can Be Done?

# FOR INDIVIDUALS: USE CASH AT LEAST ONCE A WEEK TO PROTECT YOURSELF AND YOUR COUNTRY!

### **Advocacy Organizations**

- The world has several cash advocacy organizations.
- They should pick a date for annual world "Cash Day."
  - 1. Get cash from bank or ATM
  - 2. Spend cash at restaurant, shop, transport, etc.
- Like many special days on calendar raising awareness
  - Take "your child to work" day
  - Mother's Day
  - EU's Europe Day May 9





### Australia Did This

- Australia's "Cash Welcome" organization organized day to withdraw cash on April 2, 2024.
  - Unfortunately, does not seen to be repeated annually



### 1.6 million Aussies withdrew \$500 million on Cash Out Day

RBA and ATM networks report surge in cash



### Ideas for Cash Transport & Handling Companies

- Educate the very young They are the future!
  - Kindergarten classrooms get branded cash registers with fake bills and coins
  - o Teachers in elementary classrooms get lesson plans plus fake bills and coins with goal of showing how using cash facilitates basic math skills.
  - Older students compete in competitions similar to Spelling Bees and Scrabble Tournaments.
  - See forthcoming piece at "Cash Essentials."

### Ads Directed to Teens and 20+ Year Olds

- Youth today are very anxious, compared to previous generations.
  - Also worried about big global issues.
- One way to reduce economic anxiety & explain to teens they can help issues like social justice is to show them benefits of using cash.
  - Homeless excluded cashless society
- Do this via advertising.

Many in Gen Z are fearful about the economy, Seemiller says. They are worried about climate change, human rights and social justice. They are scared that older adults are making decisions that are knowingly moving society backwards. They don't have the time or money to take chances since their failure threshold, both internally and externally, is lower. Taken together, this contributes to Gen Z being riskaverse.

### Business Working in Cash Do Little Advertising

 Other organizations use their trucks and TV screens to provide key messages



VS





VS



### Central Bankers

- My experience with Central Bankers is that relatively few are positive about cash.
- Most are neutral. They don't care what methods of payments are used.
- A few especially those working in areas like instant payments, money laundering and CBDC (central bank digital currency) are hostile to cash.
- In my mind Central Banks should be the strongest advocates for cash. Why?

### Why Do Central Banks Exist?

- "Maintaining financial stability has been a cornerstone responsibility for central banks for as long as they have been in existence. Why so? Because financial stability is a public good and central banks occupy a unique position at the heart of the financial system"
  - From speech by Brad Jones Assistant Governor Reserve Bank of Australia 2023

### Financial Stability

- If goal of central banks is to keep financial plumbing working ALL THE TIME, then it is clear central banks and society need a low-cost method that works when electronic payment systems fail like when natural or man-made disasters stop them from working!
  - Cash is low cost, storable for long periods of time and works in crisis.
- Key point is that central banks cannot simply keep racks of cash in vaults. Cash must be kept in use so that when a crisis happens:
  - o Cash is already in people's hands AND
  - Shops, restaurants, transport and health care providers all know how to handle it, store it and recirculate it.

### Central Banks

- Central banks true clients are society, not banks which depend on them. Central bankers are public servants, there to serve the public's interests.
- Central banks exist to protect society, not to ensure banks are profitable. Some ideas:
  - Top central bankers should periodically make speeches encouraging use, not just holding, of cash.
  - Cash office doesn't have to cover its costs. Can be crosssubsidized by electronic payments networks.
  - o Incentives should be provided to ensure cash stays in use. Governments around the world subsidize critical industries like steel, shipping, health care, solar, EVs, etc. Why not cash?

### **European Union**

- EU very proud of their Emergency Response Coordination Centre.
  - Stockpiles of food, medicine & supplies
  - Centre is called into action frequently
  - Restoring cash usage means people can help themselves during crisis, instead of waiting for outside help
  - Cash is automatic stabilizer in times of crisis.



### Banks and Financial Institutions

- I have taught a lot of bankers, brokers and fintech workers. Most are focused on boosting profits and most don't like cash.
  - Electronic payments are cheap to handle and bring in profits.
  - o Cash is more expensive to handle and is viewed as a cost.
- Banks and financial providers are important to society! But they periodically make massive mistakes, with either collective or individual lapses in judgement.

### Mistakes

- Niall Ferguson book "The Ascent of Money: A Financial History of the World"
  - o "a probability of financial disaster of around 3.6 per cent per year." Page 342.
  - This means world-wide financial disasters every 25+ years.
  - o Disaster is where people wonder if system will survive.
- Data from European Central Bank shows Europe has roughly 1 crisis a year.

The crises dataset covers all EU Member States and Norway for the period 1970-2016 and consists of the following.

 A core set of 50 systemic crises. The list of systemic crises (the core part of the dataset) contains (i) systemic crises which were identified by a financial stress index and afterwards reviewed by NAs and (ii) other crises episodes

### Given Financial Institutions Make

- Financial institutions make mistakes. Society since World War II has bailed out almost all these institutions.
- Given society is on the hook for financial institution's mistakes, society should be paid back.
  - o US banks required to lend to poor neighborhoods to fix redlining.
- One way of acknowledging the debt is to keep cash in circulation and encourage customers to use cash even though it is not the most profitable method for banks.
  - o Keeping smaller branches open.
  - Not yanking ATMs when they don't cover their costs.
  - Not charging customers high fees to count and deposit money
  - Restore ability to count moderate to large number of bills and coins in branches, instead of sending cash to central location.



### Conclusion



- Cash is a vital resource to maintain resilience in an increasingly fragile world.
- Cash cannot be simply stored for those moments when a crisis arises. It needs to be used frequently.
- Cash advocacy organizations, cash handling businesses, central bankers and financial institutions all need to convince public (and themselves) that cash is a vital resource.

Questions?

Email me (zagorsky@bu.edu) or Connect on LinkedIn