Χρηματοοικονομικές Κρίσεις και Επιπτώσεις: Τα διδάγματα της Ιστορίας

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ΚΕΦΑΛΑΙΟ 3,***Bulls and Bears***

• On **16** October **1929** Yale University economics professor Irving Fisher declared that US stock prices had 'reached what looks like a permanently high plateau.
Eight days later, on 'Black Thursday', the Dow Jones Industrial Average declined by **2** per Cent. *Wall Street crash.*

•In the course of the next three years the US stock market declined a staggering **89** per cent, reaching its nadir in July **1932.** The index did not regain its **1929** peak until November **1954.** This asset price deflation coincided with, if it did not actually cause, *the worst depression in all history*.

- The United States, output collapsed by a third. Unemployment reached a third of the civilian labour force. *It was a global catastrophe*.
- World trade shrank by two thirds. The international financial system fell to pieces in a welter of debt defaults, capital controls and currency depreciations.
- Only the Soviet Union, with its autarkic, planned economy, was unaffected.
- The crash of October **1929** is hard to explain. Historians sometimes see the deadlock over Germany's post-First World War reparations and the increase of American protectionism as triggers of the Depression.

<u>Maybe historians should blame bad weather for the Wall Street crash.</u>

Contemporaries sensed that there was a psychological dimension to the crisis.

❖President Franklin Roosevelt argued that all that Americans had to fear was *'fear itself*.

❖John Maynard Keynes spoke of a 'failure in the immaterial devices of the mind'.

In his General Theory, Keynes likened the stock market to a casino.

During the First World War, non-European agricultural and industrial production had expanded. When European production came back on stream after the return of peace, there was chronic over-capacity, which had driven down prices of primary products long before **1929.**

This had made it even harder for countries with large external war debts (including Germany, saddled with reparations) to earn the hard currency they needed to make interest payments to their foreign creditors.
The war had also increased the power of organized labour, making it harder for employers to cut wages in response to price falls. The United States, which was the epicentre of the crisis, was in many respects in fine economic fettle when the Depression struck .

There was no shortage of productivity-enhancing technological innovation in the inter-war period by companies like DuPont (nylon), Procter **TC** Gamble (soap powder), Revlon (cosmetics), R CA (radio) and IBM (accounting machines).

'A prime reason for expecting future earnings to be greater,' argued Yale's Irving Fisher, 'was that we
in America were applying science and invention to industry as we had never applied them before.

✓*Yet precisely these strengths may have provided the initial displacement that set in motion a classic stock market bubble.*
To observers like Fisher, it really did seem as if the sky was the limit, as more and more American households aspired to equip themselves with automobiles and consumer durables – products which instalment credit put within their reach.

RCA, the tech stock of the **1920s,** rose by a dizzying **939** per cent between **1925** and **1929.**

- *Euphoria* encouraged a rush of new initial public offerings (IPOs); stock worth $6 billion was issued in **1929,** one sixth of it during September. There was a proliferation of new financial institutions known as investment trusts, designed to capitalize on

the stock market boom.eg. Goldman Sachs.

- Many small investors (like Irving Fisher himself) relied on leverage to increase their stock market exposure, using brokers' loans (which were often supplied by corporations rather than banks) to buy stocks on margin, thus paying only a fraction of the purchase price with their own money. in **1929,** there were unscrupulousinsiders, like Charles E. Mitchell of National City Bank or William Crapo Durant of GM, and ingenuous outsiders, like Groucho Marx .

In perhaps the most important work of American economic history ever published, Milton Friedman and Anna Schwartz ***argued that it was the Federal Reserve System that bore the primary responsibility for turning the crisis of 1929 into a Great Depression.***

The New York Fed responded effectively to the October **1929** panic by conducting large-scale (and unauthorized) open market operations (buying bonds from the financial sector) to inject liquidity into the market. However, in October **1928,** the Federal Reserve Board in Washington came to dominate monetary policy, with disastrous results.

1. First, too little was done to counteract the credit contractioncaused by banking failures. This problem had already surfaced several months before the stock market crash, when commercial banks with deposits of more than **$80** million suspended payments. However, it reached critical mass in November and December **1930,** when **608** banks failed, with deposits totalling **$550** million, among them the Bank of United States, which accounted for more than a third of the total deposits lost. The failure of merger talks that might have saved the Bank was a critical moment in the history of the Depression.

2. Secondly, under the pre-**1913** system, before the Fed had been created, a crisis of this sort would have triggered a restriction of convertibility of bank deposits into gold. However, the Fed made matters worse by reducing the amount of credit outstanding (December **1930**-April **1931).** This forced more and more banks to sell assets in a frantic dash for liquidity, driving down bond prices and worsening the general position. The next wave of bank failures, between February and August **1 9 3 1 ,** saw commercial bank deposits fall by **$2.7** billion, **9** per cent of the total.

3. Thirdly,when Britain abandoned the gold standard in September **1931,** precipitating a rush by foreign banks to convert dollar holdings into gold, the Fed raised its discount rate in two steps to **3.5** per cent. This halted the external drain, but drove yet more US banks over the edge: the period August **1 9 3 1** to January **1932** saw **1,860** banks fail with deposits of **$ 1 . 4 5** billion.

4. Fourthly, only in April **1932,** as a result of massive political pressure, did the Fed attempt large-scale open market operations, the first serious step it had taken to counter the liquidity crisis. Even this did not suffice to avert a final wave of bank failures in the last quarter of **1932,** which precipitated the first state-wide 'bank holidays', temporary **BLOWING BUBBLES**
closures of all banks.

5. Fifthly, when rumours that the new Roosevelt administration would devalue the dollar led to a renewed domestic and foreign flight from dollars into gold, the Fed once again raised the discount rate, setting the scene for the nationwide bank holiday proclaimed by Roosevelt on **6** March **1933,** two days after his inauguration - a holiday from which **2,000** banks never returned.

*The Fed's inability to avert a total of around **10,000** bank failures was crucial not just because of the shock to consumers whose deposits were lost or to shareholders whose equity was lost, but because of the broader effect on the money supply and the volume of credit.*

ΚΕΦΑΛΑΙΟ 4, THE RETURN OF RISK

The most basic financial impulse of all is to save for the future, because the future is so unpredictable. The world is a dangerous place. The question is, how do we deal with the risks and uncertainties of the future?

THE BIG UNEASY
KATRINA

- It laid bare the defects of a system of insurance that divided responsibility between private insurance companies, which offered protection against wind damage, and the federal government, which offered protection against flooding, under a scheme that had been introduced after Hurricane Betsy in 1965. In the aftermath of the 2005 disaster, thousands of insurance company assessors fanned out along the Louisiana and Mississippi coastline.
- According to many residents, their job was not to help stricken policy-holders but to avoid paying out to them by asserting that the damage their properties had suffered was due to flooding and not to wind. Dickie' Scruggs first hit the headlines in the **1980s,** when he represented shipyard workers whose lungs had been fatally damaged by exposure to asbestos, winning a **$50** million settlement.

His house was damaged by Katrina. Although his insurance company (wisely) paid out, Scruggs was dismayed to hear of the treatment of other policy-holders. By that time, State Farm had already settled **640** cases brought by Scruggs on behalf of clients whose claims had initially been turned down, paying out **$80** million; and had agreed to review **36,000** other claims.But he tried to bribe a state court judge in a case arising from a dispute over Katrina-related legal fees, Scruggs now faces a prison sentence of up to five years.

•Total non-insured damages arising from hurricanes in **2005** arelikely to end up costing the federal government at least **$109** billion in post-disaster assistance and $8 billion in tax relief,nearly three times the estimated insurance losses. ***According to Naomi Klein, this is symptomatic of a dysfunctional 'Disaster Capitalism Complex', which generates private profits for some, but leaves taxpayers to foot the true costs of catastrophe.***

The US Army Corps of Engineers described Hurricane Katrina as a i-in-**396** storm, meaning that there is a **0.25** per cent chance of such a large hurricane striking the United States in any given year.9 A rather different view was taken by the company Risk Management Solutions, which judged a Katrina-sized hurricane to be a once-inforty- years event just a few weeks before the storm struck.These different assessments indicate that, like earthquakes and wars, hurricanes may belong more in the realm of uncertainty than ofrisk properly understood.Saving in advance of probable future adversity remains the fundamental principle of insurance, whether it is against death, the effects of old age, sickness or accident. The trick is knowing how much to save and what to do with those savings to ensure that, unlike in New Orleans after Katrina, there is enough money in the kitty to cover the costs of catastrophe when it strikes. But to do that, you need to be more than usually canny. And that provides an important clue as to just where the history of insurance had its origins.

TAKING COVER

'Bottomry' - the insurance of merchant ships' 'bottoms' (hulls) - was where insurance originated as a branch of commerce. Some say that the first insurance contracts date from early fourteenth century Italy, when payments for *securitas* begin to appear in business documents. But the earliest of these arrangements had the character of conditional loans to merchants (as in ancient Babylon), which could be cancelled in case of a mishap .

It was not until the **13 50s** that true insurance contracts began to appear, with premiums ranging between **15** and **20** per cent of the sum insured, falling below **10** per cent by the fifteenth century.

•A typical contract in the archives of the merchant Francesco Datini (*c.* **1335-1410)** stipulates that the insurers agree to assume the risks 'of God, of the sea, of men of war, of fire, of jettison, of detainment by princes, by cities, or by any other person, of reprisals, of arrest, of whatever loss, peril, misfortune, impediment or sinister that might occur, with the exception of packing and customs' until the insured goods are safely unloaded at their destination. Gradually such contracts became standardized.

•Beginning in the late seventeenth century, something more like a dedicated insurance market began to form in London. Nicholas Barbon established the first fire insurance company. At around the same time, a specialized marine insurance market
began to coalesce in Edward Lloyd's coffee house in London's Tower Street (later in Lombard Street). in **1774** a Society of Lloyd's was formed at the Royal Exchange, initially bringing together seventy- nine life members, each of whom paid a £ 1

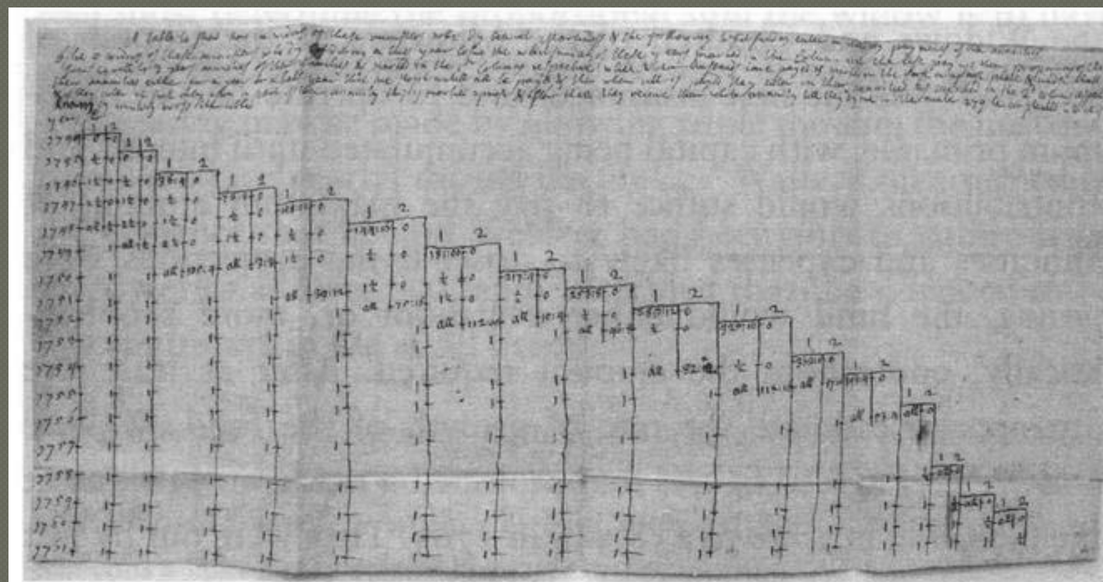
The financial arrangements were what would now be called pay as you go - that is, the aim was to collect sufficient premiums in any given year to cover that year's payments out and leave a margin of profit. Limited liability came to the insurance business with the founding of the Sun Insurance Office (1710), a fire insurance specialist and, ten years later (at the height of the South Sea Bubble), the Royal Exchange Assurance Corporation and the London Assurance Corporation, which focused on life and maritime insurance. all three firms still operated on a pay-as-you-go basis.

Life insurance, too, existed in medieval times. The Florentine merchant Bernardo Cambi's account books contain references to insurance on the life of the pope (Nicholas v)
There did not yet exist an adequate theoretical basis for evaluating the risks that were being covered. Then, in a remarkable rush of intellectual innovation, beginning in around 1660, that theoretical basis was created. In essence, there were six crucial breakthroughs:

- Probability
- Life expectancy
- Certainty, law of large numbers
- Normal distribution (m,s^2)
- Utility
- Inference

In short, it was not merchants but mathematicians who were the true progenitors of modern insurance.
Robert Wallace, and his friend Alexander Webster, who was minister of Tolbooth. Along with Colin Maclaurin, Professor of Mathematics at Edinburgh, it was their achievement to create the first modern insurance fund, based on correct actuarial and financial principles, rather than mercantile gambling.
In Scotland Average life expectancy at birth is unlikely to have been better than it was in England, where it was just 37 until the 1800s. It may even have been as bad as in London, where it was 23 in the late eighteenth century - perhaps even worse, given the Scottish.

- The spirit of insurance: Alexander Webster preaching in Edinburgh capital's notoriously bad hygiene Webster and Wallace plan: Rather than merely having ministers pay an annual premium, which could be used to take care of widows and orphans as and when ministers died, they argued that the premiums should be used to create a fund that could then be profitably invested. Widows and orphans would be paid out of the returns on the investment, not just the premiums themselves.
- The 'Fund for a Provision for the Widows and Children of the Ministers of the Church of Scotland' was the first insurance fund to operate on the maximum principle, with capital being accumulated until interest and contributions would suffice to pay the maximum amount of annuities and expenses likely to arise.



- The Scottish Ministers' Widows' Fund was the first such fund, and its foundation was truly a milestone in financial history. Even before the fund was fully operational, the universities of Edinburgh, Glasgow and St Andrews had applied to join. Within the next twenty years similar funds sprang up on the same model all over the English-speaking world,
By 1 8 1 5 the principle of insurance was so widespread that it was adopted even for those men who lost their lives fighting against Napoleon. A soldier's odds of being killed at Waterloo were roughly 1 in 4. But if he was insured, he had the consolation of knowing, even as he expired on the field of battle, that his wife and children would not be thrown out onto the streets (giving a whole new meaning to the phrase '**take cover**').

When, after the Second World War, insurance companies were allowed to start investing in the stock market, they quickly snapped up huge chunks of the British economy, owning around a third of major UK companies by the mid 1950s. Today Scottish Widows alone has over £ 1 0 0 billion under management.

Insurance premiums have risen steadily as a proportion of gross domestic product in developed economies, from around 2 per cent on the eve of the First World War to just under 1 0 per cent today.

Why, then, do the British take out so much insurance?

The answer lies in the rise and fall of an alternative form of protection against risk: the welfare state.

FROM WARFARE TO WELFARE

Many Private Funds (like Scottish Widows)

However

- There were always going to be people beyond the reach of insurance (too poor or too feckless)
- These kind of people were depending on private charity or on the austere regime of the workhouse.

Workhouses

- Prison-like regime
- Hard work
- Not the best circumstances

By the later nineteenth century a new approach to the problem of risk arises.

- State systems of insurance (exploiting economies of scale by covering every citizen from death to bearth)
- Such system was first introduced in Germany (state health insurancy and old age pensions) by Otto von Bismarck (social insurance legislation 1880)
- In 1908 Britain, with Lloyd George , followed the Bismark's example.

The welfare state grew to maturity in war.

- In the first World War German submarines destroyed tons of merchant shipping – need of private marine insurers.
- with the coming of peace politicians in britain also hastened to cushion the effect of demobilization on the labour market by introducing an Unemployment Insurance Scheme in 1920.
- The British version of social insurance was radically expanded under the terms of the 1942 ‘’Report of the Inter-Departmental Committee on Social Insurance and Allied Services’’ chaired by the economist William Beveridge.

Arguments for state insurance:

- State insurance could step in where private insurers feared to tread.
- Compulsory membership removed the need for expensive advertising.
- Exploiting economies of scale.

However

- The world's first welfare superpower, was not Britain but Japan.
- Between 1879 and 1914 their insurance industry had grown from nothing into a vibrant sector of the economy, offering cover against loss at sea, death, fire and more.
- 1923 : huge earthquake devastated Tokyo and Yokohama. Thousands of houses had been collapsed, burned and swept away by the sea. But the Japanese were insured.
- In December 1941 Japan went to war with United States. Japan paid the ultimate price in Hirosima and Nagasaki.
- By the end of 1945 the value of Japan's capital stock seemed to have been reduced to zero by American bombers.
- **lesson** : the world was too dangerous a place for private insurance markets to cope with.
- 1949: universal system of welfare (Kondo-Advisory Council for Social Security) – from now on the welfare state would cover people against all vagaries pf modern life.
- But the real reason for Japanese was that they need able-bodied soldiers and workers. They offered social security for military sacrifice.

1937: introduction of a system of universal health insurance.

- aim: healthier populace would ensure healthier recruits to the Emperor's armed forces.

The Japanese welfare state seemed to be a miracle of efectiveness.

- Great life expectacy
- Most people had been educated
- Largest state pension fund in the world.
- Japan was a miracle of parsimony.

The Japanese and British had different cultures but their welfare system might seem similar:

- State pensions financed out of taxation on the old pay-as-you-go model
- Standardized retirement ages
- Universal health insurance
- Unemployment benefits
- Subsidies to farmers
- Heavily restricted labour markets.

But these institutions worked in quite different ways in the two counties.

Japan

- Firms and families continued to play substantial supporting roles in the welfare system.
- Employers offered supplementary benefits and were reluctant to fire workers.

Britain

- Employers did not hesitate to slash payrolls in hard times, while people were more likely to leave elderly parents to the tender mercies of the National Health Service.
- Increased expenditure on UK welfare had been accompanied by low growth and inflation significantly above the developed world average.
- Slow productivity growth (2.8 per cent between 1960 and 1979 compared with 8.1 per cent in Japan).
- **Result: stagflation- stagnant growth plus high inflation**

The Big Chill

What had gone wrong with the welfare state?

In March 1975, Milton Friedman flew from Chicago to Chile to answer it.

Chile

- In September 1973 – coup in Chile. The Marxist President Salvador Allende shot himself. – New President: General Pinochet.
- With output collapsing and inflation rampant, Chile's system of universal benefits and state pensions was essentially bankrupt.
- Friedman advised Pinochet to reduce the Government deficit that he had identified as the main cause of the country's sky-high inflation. (900 per cent annualy)
- Pinochet anounced new regime, cutting government spending by 27 per cent and set fire to bundles of banknotes.
- In a letter to Pinochet after Friedman's return to Chicago, he argued that the problem of inflation arose from trends toward socialism that started 40 years ago and reached their terrible climax in the Allende regime.
- After all, Friedman was acting as a consultant to the military dictator.

Chicago role

- Since the 1950s, there had been a regular stream of bright young Chilean economists studying at Chicago with an exchange programme. They went back convinced of the need to balance the budget, tighten the money supply and liberalize trade.
- Chicago boys: Jorge Cauas , Sergio de Castro, Miguel Kast and at least 8 others.

A boy from Harvard

- The most radical measures would come from a Catholic University student who had opted to study at Harvard. – Jose Pinera
- The key as he saw it was not just to reduce inflation but also to foster the link between property rights and political rights – North American capitalist democracy (successful experiment)
- Radically overhaul the welfare state beginning with the pay-as-you-go system of funding state pensions and other benefits.
- Between 1979-1981 as minister of labour Pinera created a radically new pension system offering every worket the chance to opt out of the state pension system.

- Instead of paying a payroll tax, they would put an equivalent amount into an individual Personal Retirement Account, to be managed by private and competiting companies. So, on reaching retirement age, a participant would withdraw his money and use it to buy an annuity.
- By 1990, more than 70 per cent of workers had made the switch to the private system.
- It was clear that the reform was success: welfare reform was responsible for fully half the declineof total government expenditure from 34% GDP to 22%.
- A cap was imposed to prevent investing more than 6% of the new pension funds outside Chile. That was to ensure that Chile's new source of savings was channelled into the country's own economic development.

Drawbacks of the system

I. Administrative and fiscal costs of the system often extremely high,.
II. Since not everyone in the economy has a regular full time job, not everyone ends up participating to the system. That leaves a substancial proportion of the population with no pension coverage at all.

But the poverty rate declined to just 15% compared with 40% of Latin America.

Hurricane Katrina

It laid bare some realities about the American system that many people had been doing their best to ignore.

The US has a unique welfare system. American healthcare however, is almost entirely provided by the private sector. → very expensive.

In US the life expectacy in likely to increase. So, Social Security, Medicare, and Medicaid already consume a large proportion of federal tax revenues.

In Japan, life expectacy had become the longest in the world by 1970s. Japan welfare budget is now equal to three quarters of tax revenues.debt-> 170 per cent of GDP.

The Hedged and the Unbedged

- ✓ **International terrorism with nuclear bombs**
- ✓ **Global warming**
- ✓ **Increase in intense of tropical cyclone activity in North America**
- ✓ **Rising sea levels which can incrase the flood damage caused by storms like Katrina**

The insurance looses arising from 9/11 atacks were 30-58 billion dollars close to insurance losses due to Katrina.

Just as happened during the world wars, the welfare state steps in when the insurers are overwhelmed.

Insurance and welfare are not the only way of bying protection.
The smart way to do it is by being hedged.

HEDGING

- The origins of hedging are agricultural.
- A future contract allow a farmer to protect himself by committing a merchant to buy his crop when it comes to market at a price agreed when the seed are being planted. If the market price on the day of delivery is lower than expected, the farmer is protected. The merchant hopes the price will be higher to leave him a profit.
- The earliest forms of protection for farmers were known as forward contracts, which were simply bilateral agreements between seller and buyer.
- Birthplace of future contracts: Chicago.
- 1874: Chicago Product Exchange the ancestor of today's Chicago Mercandile Exchange → created a home for 'hedging' in the US commodity markets.
- 1982: future contracts on the stock market became possible.

Closely related, though distinct to futures are the financial contracts known as ***options***.

Options

- **Call option**

The buyer of a call option has the right, but not the obligation to buy an agreed quantity of a commodity or financial asset from the seller of the option at a certain time (expiration date) for a certain price (strike price). The buyer of a call option expects the price of the commodity or underlying instrument to rise in the future. When the price passes the agreed strike price the option is ‘in the money’ and so is the ‘smart guy’ who bought it.

- **Put option**

the buyer has the right but not the obligation to sell an agreed quantity of something to the seller of the option

Swaps

It is a bet between two parties on, for example the future path of interest rates.

A final kind of derivatives is **weather derivatives**

e.g. natural catastrophe bonds. Weather derivatives allow insurance companies and others to offset the effects of extreme temperatures or natural disasters by selling the so-called tail risk to hedge funds like Fermat Capital.

The financial revolution has divided the world in two: those who are hedged (or can be) and those who are not (or cannot be). The most big corporations can afford be hedged against unexpected increases in interest rates, exchange rates or commodity prices. On the other hand, most ordinary households cannot afford to hedge at all and would not know how to even they could.

So, there always exist the older and simpler strategy: ''save for that rainy day''.