







The « founding fathers » of the analysis of risk and uncertainty

- Frank Knight: 1921 « Risk, Uncertainty and Profit »: Risk stems from outcomes that are unknown but can be tackled with probability distribution....
- Uncertainty stems from a deficit of information, hence randomness of results
 - ▶ J M. Keynes: Treatise on Probability 1921: role of animal spirits in volatility spill-over and herd behavior.
 - Non-linear nature of risks and danger of expecting the future as simple projection of the past

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A glance at modern approaches to risk and uncertainty

- 1. P. Krugman
 - 2.J. Stiglitz
- 3. Hyman Minski
 - 4.N. Taleb
- 5.B. Mandelbrot
- **6.** Didier Sornette
 - 7.T. Piketty

The « Modern » are often Neo-Keynesians

- ▶ For short hand: « Don't buy the assumptions of Chicago Economics regarding market rationality and self-regulation: markets don't get things wrong, but governments do! »
- . We don't know much about the future and we cannot thus predict and price risk accurately (hence markets crash)
- Risk of falling back on conventions: the future replicates the past and probabilities are distributed along a bell-shaped curve without « fat tails »
- 3. No self-correction of markets, hence risk of protracted depression
- Governments must inject extra spending to provide stimulus and shorten level and duration of crisis (multiplier)
- .Markets need regulation to correct unequal income and wealth distribution and to promote sustainable full employment
- Financial intermediation must be regulated to provide long-term financing to the real

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Financial Globalization and Country Risk TWO SCHOOLS OF THOUGHT





► 1- Stiglitz, Sachs, Eichengreen, Krugman, Rodrik...

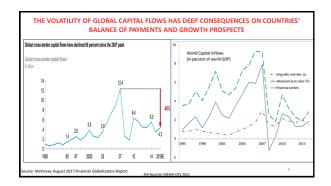
Financial and capital account liberalization = capital flow volatility + financial crises = capital controls + Tobin taxes + pressure to promote finance sustainability (Environmental + social concerns-IFC)

▶ 2. Quinn, Edwards, Edison, Greenspan, Fischer, Summers... Fruitful openness to global capital

flows = higher capital efficiency Better balance S=I

North-South + technology spillover + financial market liberalization + FDI = \wedge GDP

sad-Rogoff IMF-Harvard 2006 and IMF: https://www.imf.org/external/pubs/ft/wp/2002/wp02120.pdf



PAUL KRUGMAN: THE "DARK SIDE" OF GLOBALIZATION



- ► In the 1980s, openness to trade was widely believed to reduce the likelihood of economic and financial crises.
- ► Today, growing global integration <u>does predispose the world economy toward</u> <u>more crises</u> because it creates pressures on governments to relax restrictions: **de-regulation + privatization!**
- Economies are doing better in good times but are far more vulnerable to sudden crises due to volatile capital flight. The ride will continue to be very bumpy for many years to come!
- http://www.nytimes.com/2007/05/14/opinion/14krugman.html?_r=1&ref=paulkrugman

PAUL KRUGMAN: THE "WAY FORWARD"?

- Myth: Globalization and modern technology displace low-qualified jobs to EMCs, while welleducated workers are clear winners (true in the 1980s!)
- Facts: Both high-wage and low-wage employment have grown rapidly, but medium-wage jobs of
 the middle class have lagged behind. The combination of NTIC and growing international trade
 in services will further "hollow out" the OECD job market: white collars and college graduates
 are NOT sheltered!
- Facts: EMCs' low-wage competition is driving down U.S. wages: When the US imports labor-intensive manufactured goods from the third world, the result is reduced demand for less-educated American workers, hence lower wages for these workers. And cheap consumer goods does not compensate for lost jobs!
- The key is not protectionism but labor standards and higher wages in EMCs.

 Global growth is possible only if rising economies can expand into new markets



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Krugman's view on Asia's 1997-98 economic crisis

- IMF's shortsighted approach to the crisis:
- The logic of catastrophe was pretty much the same in Thailand, Malaysia, Indonesia and South Korea. In each case investors—mainly, but not entirely, foreign banks who had made short-term loans—all tried to pull their money out at the same time.

The result was a combined crisis:

- a <u>banking crisis</u> because no bank can convert all its assets into cash on short notice:
- a <u>currency crisis</u> because panicked investors were trying to convert baht or rupiah into dollars.
- a governance crisis
- A growth crisis!

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Krugman: CHALLENGING THE IMF'S APPROACH TO CRISIS MANAGEMENT IN ASIA IN 1998

- There vas no « fundamental » reason for Asia's financial calamity
 - Budgets were in balance or surplus
 - Low inflation
 - High private savings rates
 - Economies were poised for export growth
 - The IMF's tough macro-economic conditionality for approving financial support led to recessionary monetary policy, capital flight, domino effect and increased panic

Paul Krugman's view on Asia's crisis and the role of governance

"Was the crisis a punishment for bad economic management?"

Like most *clichés*, the catchphrase "crony capitalism" underlies something real: excessively cozy relationships between government and business lead to bad investments, speculation, corruption, low investment efficiency

The still primitive financial structure of Asian business--too little equity, too much debt and too much of that debt consisting of soft loans from accommodating banks--also made the economies peculiarly vulnerable to a loss of confidence:

Governance is key to promote inclusive growth and sustainable development

MEA CULPA AT THE IME AFTER THE GEC: IS THE **NEOLIBERAL AGENDA** OVERSOLD?

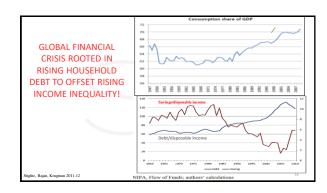
Neoliberal agenda's 4 key features:

- . Increased competition (opening up of domestic markets)
- Deregulation (interest and exchange rates)
- . Capital account liberalization
- 4. Smaller role for the state (privatization and fiscal austerity)

Do austerity, liberalization and competition pay off?

- 1. Trade off between growth and inequality
- Wealth gap lowers growth (hurts domestic demand and increases unemployment)
- Volatility, stop & go, and crisis frequency
- 4. Decreasing debt does not boost growth!

ce: IM Finance & Development, June 2016



JOSEPH STIGLITZ' view of Global Risk



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WHAT IS ASYMMETRY OF INFORMATION?

- It is the difference in information between two economic agents within an economic relation (e.g.: « the worker and his employer, the lender and the borrower, the insurance company and the insured »)
- According to Stiglitz, financial markets cannot regulate themselves because anyone do not have the same information at the same moment. Therefore the aim is to find the best structure to regulate markets (and not to let them work by themselves).
- Deregulation will not promote financial development when information is asymmetric
 and competition inadequate. The economic efficiency is not secured.
 It will spur corruption and create an oligarchic elite that opposes the
 emergence of competitive markets.

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ASYMMETRY OF INFORMATION'S CONSEQUENCES

- Mismatch between national regulation/globalized markets lead to weak multilateral governance in finance
- Weak governance = short-sighted behaviour, self interest, speculation and greed
- Wrong incentive structure for excess risk taking and leverage (credit bubbles)
- The partisans of the « Washington consensus » overlook the importance of economic and corporate governance, underestimate the difficulty of building institutions, and forget that many countries lack the

sophisticated public administrations needed to ensure adequate competition.

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STIGLITZ'S CORE IDEAS

- ► Global crisis challenges not only the capitalist financial and economic system but also the intellectual edifice of Economics thinking (and teaching!)
- ▶ No perfect information nor perfect competition: Markets are not efficient, economic agents are not rational, there is no self-regulation. The « invisible hand » is simply not there!
- ▶ Poverty is an « affront to human dignity ». Globalization does not work well as a wealth distribution engine
- ► G7 governments urge liberalization on developing countries while maintaining trade restrictions and pushing intellectual property protection into the WTO.
- ▶ The IMF's policies, in part based on the outworn presumption that markets, by themselves, lead to efficient outcomes, failed to allow for desirable government interventions in the market which can make everyone better off

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JOSEPH E. STIGLITZ ON THE IMF...

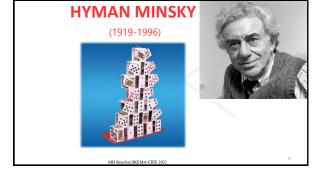
- ► When crises hit, the IMF prescribes outmoded, inappropriate, if standard solutions, without considering the effects they would have on the people in the countries told to follow these policies.
- No discussions of the consequences of alternative policies. Ideology guides policy prescription. IMF structural adjustment policies worsen poverty.
- There is no Wall Street or IMF conspiracy. There is ideology at work and antidemocratic policy-making.



THE CORONAVIRUS OUTBREAK IS A 'DIFFERENT KIND OF CRISIS" (STIGLITZ MARCH 2020)

- This is a different kind of crisis than normal crises. It's just not a problem of aggregate
- The spread of the coronavirus disease, formally known as COVID-19, has disrupted the global economy and supply chains as countries implement strict border controls, massive city-wide lockdowns and guarantines in order to contain the virus.
- Aggressive policy action by the Federal Reserve is "obviously not" enough to help the U.S. avert a downturn caused by the coronavirus outbreak.

 Given the nature of the uncertainties, given the nature of the collapsing incomes of so many
- people, it can help stabilize financial markets at best and it's clear that it didn't do that! Stiglitz advocated for targeted assistance to help people and sectors weather the public health emergency: "It is clearly a case where targeted fiscal policy is what is needed. It's been true for a long while that monetary policies has had only have limited efficacy."



MINSKY AND THE RECURRING FRAGILITY OF FINANCIAL STRUCTURES

- ► Economic stability brings about speculation, which creates a rift between asset prices and output prices. That breeds economic volatility, credit contraction and the need for central bank intervention.
- Crisis cycles: economic stability itself encourages excessive credit creation, leading to financial instability and speculative euphoria, then credit restraint and contraction and, finally, economic contraction and volatility!

ttps://www.ucm.es/data/cont/media/www/pag-41460/Minsky%20theory%20of%20financial%20crisis.pdf

MINSKY: WEALTH EFFECT AND DEBT CRISIS in 2020?

▶ Prolonged economic stability encourages deregulation + financial innovation + debt accumulation = higher leverage, leading to liquidity and solvency crisis Over-indebtedness + Corona crisis= Debt crisis!

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MINSKY'S THREE STAGES OF A FINANCIAL CRISIS

- Hedge finance = debt is typically a small proportion of liabilities and readily renewable because of the adequacy of cash flows in relation to contractual payments.
- 2. Speculative finance = future cash flows < payment commitments, but the present value of expected cash receipts is greater than that of payment commitments. Need to keep issuing new debt to finance maturing debt commitments.
- 3. Ponzi finance = Ongoing need to raise ever greater amounts of debt to finance all commitments and to repay principal or even debt service. Asset values will collapse with serious deflationary consequences and damaging implications for the economy.

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BENOIT MANDELBROT (1924-2010)



- ► World of winner take-all : extreme wealth concentration.
- ▶ The economic world is driven primarily by random jumps. Yet the common tools of finance were designed for random walks in which the market always moves in small steps.
- Despite increasing empirical evidence that concentration and volatility better characterize market reality, the reliance on the bell-shaped curve still prevails.
 The alpha in parket represents her became an enhancer to the properties of the properties.
- ▶ The global market economy has become an echo chamber leading to contamination and spill-over effect: volatility breeds volatility
- ▶ 1970s-80s: Fractal geometry: a new analytical tool for predicting and managing crisis

Mandelbrot & Hudson: (Mis)Benavior of Markets https://www.forbes.com/2009/09/28/mandelbrot-madoff-math-intelligent-investing-cycles.html

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THOMAS PIKETTY: INCOME INEQUALITY AND WEALTH DISTRIBUTION IN XXI° CENTURY CAPITALISM

- Marx: capital accumulation leads to wealth concentration
- Kuznets: growth, competition, and technological progress lead to reduced inequality and greater social harmony
- ▶ Piketty: rate of return on capital (r) > overall growth rate of output (g), hence rising ratio of capital/income, reflecting the rising size of countries' total weath stock relative to the income generated (K= 5x Y)

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CONCLUSION: COUNTRY RISK IN 2020-25?

- ► Country Risk has had a spectacular increase since the emergence of the globalized market economy in the 1980s. This is due to crisis contamination and volatility contagion.
- ▶ Globalization makes considerably more complex country risk analysis given the interplay between a country's economic and socio-political system and the regional and global environment.
- Abrupt increases in financial and geopolitical volatility can destabilize countries and lead to spill-over effects!
- ➤ A global virus makes difference between developed countries and emerging market countries?!

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