

*On the Consequences for Global Economic Growth From the Responses of Financial Innovation ,  
Regulation and Monetary Policy to the Great Recession : Challenges and Opportunities for the Insurance  
Industry*

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Abstract

- *Well-functioning financial system is essential for sustainable economic growth and development*
  - Financial innovation drives improvement of the financial system
  - Finance science, technology, and economic need drive financial innovation
  
- *Crisis can induce implementation of financial innovation which leads to an improved financial system:* observations from the risk-explosion crisis of the 1970s in US [see detail in appendix]
  - These innovations had a major impact on how and which institutions performed the financial- services functions
  - There were substantial long-term benefits from the financial innovation induced by the crisis
  
- *Crisis induces major regulatory and monetary policy responses:* observations from Great Recession on the unintended consequences of these actions
  - Some actions , perhaps necessary to prevent meltdown, such as nonconventional regulatory and monetary policy intervention had damaging “side effects” for the system, both current and going forward –for example new regulations and regulatory policies, which are likely to limit the financial innovation response, and disrupt the market functions [eg negative swap spread on the 10yr UST]
  - unconventional monetary policy [QE] in which long-duration ,as well as short-duration, interest rates were brought to incredibly low levels for substantial time period  
Since the panel to follow my remarks will discuss in depth QE and its implications, I will simply list a few of the unintended consequences and unexpected outcomes of low-interest policy,
    - Pension plans and life insurance companies were driven \$trillions underwater with the enormous rise in the value of pension and annuity liabilities; net revenue of nonlife companies depends on the earnings of the float collapsed
    - Consumption was supposed to increase due to the wealth effect but that was and still is weak
    - Baby boomer retirees or near-retirees saw the retirement income their savings would generate decline dramatically and so in terms of their measure of economic well-being—income not wealth—they were poorer

- Many other policy outcome puzzles such as why countries that induced negative interest rates got the response that their currencies *appreciated*

*Response to very low interest rates*

- Interest rates in most developed countries have been experiencing very low interest rates, both real and nominal, for many years and despite continuing predictions of large rate rises, these have not been realized. Hence there is great concern that these low rates may persist, even if the QE policies of governments were to be tapered or even eliminated.
- The impact of this low-interest-rate environment has placed stress on insurance companies, pension funds and other investors with guaranteed fixed-rate liabilities that are not hedged against interest rate risk. This has led to a demand for higher yielding assets ...sometimes called “reaching for yield”. To achieve higher expected returns, it is necessary to take more risk.
- It is an entirely rational and expected reaction for investors in general to substitute risky assets for risk-free assets when the real yields on these risk-free assets fall materially. That is, when the price of safety rises, some investors will react by reducing safety and allocating more of their portfolio to risk assets.
- Increased expected return and risk can be achieved by taking a larger equity allocation. For regulatory and institutional familiarity reasons, the substitution however is typically undertaken by remaining within the fixed-income category of assets and either taking currency risk in higher-yielding, highly rated sovereign debt or taking credit risk in investment grade corporate, high-yield corporate and emerging-market bonds.
- *Financial Innovation going forward: Implications for the Insurance industry*
  - Will we see a similar wave of financial innovation as we did in crisis of 1970s?
  - Growth opportunities with many countries having to vastly improve their financial system in response to rising GDP, especially Asia
  - Growth opportunities from aging demographics and revisions of retirement funding systems around the globe... need for vastly improved annuity and reverse-mortgage designs
  - Non-traditional institution/ Silicon Valley entry ---disruptive challenge or opportunity? Will depend on the financial function being performed
    - Challenge will be for sure in process area---e.g., clearing and settling ; title insurance and in any activity in which transparency can be used as a substitute for trust
    - Opportunity will be in activities that are “inherently” opaque” [cannot be made transparent] such as financial-advice and many insurance products , which therefore can only be provided by institutions that are trusted.
    - Trust—trustworthy and competent—will be a key strategic asset, both to defend against competition and to expand into new areas
    - Processing and other technological advances in finance will actually leverage those institutions which have the Trust asset, and not take away their business

# Appendix

## Financial Innovation Response to Crisis

### Major Financial and Economic Crisis 1970s: Risk Explosion and Stagflation in USA

- Multi-dimensional explosion of volatilities in the western economies reflected in financial systems
- Fall of Bretton Woods currency system
- First oil crisis in 1973-4 and a second one in 1979
- Double-digit inflation in the US highest since Civil War
- High unemployment ~9%:
- "Stagflation" unknown, and still unsolved, economic disease
- Stock market fell 50% in real terms mid 1973 – 1974
- Double-digit interest rates , highest since Civil War
- No mortgage money available: Regulation Q
- 1973-1975 recession was really a 1970s recession because its effects extended into the 1980s

### Risk Explosion and Crisis 1970s Drives an Explosion of Extraordinary Financial Innovation in USA, Subsequently Adopted Throughout the World

- Option exchange: financial value insurance
- Financial futures for currencies, interest rates, stocks
- NASDAQ , first electronic stock market
- Money market funds, high-yield and floating rate bonds
- Index funds Stage Coach Fund 1970 & Vanguard 1975
- TIAA-CREF international diversification in stocks 1972
- ERISA 1974 modern employer-funded pension system
- May Day 1975 negotiated commissions & Vanguard created
- Debt securitization and creation of a national mortgage market
- Interest rate swap –eliminates the largest bank risk
- Eliminate destructive regulations: deposit rate ceilings
- Foundation set for globalization of capital markets: global diversification
- Quantitative finance: portfolio theory; asset pricing models ; non-linear derivative/option-pricing models; large-scale stock price data bases