Trust and the Future of Finance

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2008 Financial Crisis: A Ten-Year Review

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Overview of remarks

- A well-functioning financial system is essential for economic growth and stability---the notion of "dichotomy" is textbook fiction
- Financial innovation is the process by which the financial system is improved. The principal drivers of financial innovation implementation are finance science, technology and economic need.
- The Financial Crisis of 2008 caused an enormous loss of financial service consumers' trust in both providers and regulators and in the process of financial innovation, with ramifications that are impacting us a decade later.
- Financial crisis does not always halt financial innovation and indeed can stimulate it---1970s
- Future financial innovation---Digitalization of financial services, "FinTech", offers enormous global opportunities for new and improved services and substantially lower costs, with disproportional improvements accruing to those who are underserved by current standards.
- While there are some parts of financial services that do not require trust, key areas such as financial advice can only function if there is trust.
- Technology by itself does not create trust and so FinTech cannot succeed without trust.
- What can be done to restore, and indeed enhance trust to realize the full benefits of innovation

Financial Crisis Does Not Always Halt Financial Innovation
Major Financial and Economic Crisis 1970s: Risk Explosion and Stagflation in USA

- Multi-dimensional explosion of volatilities in the western 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
- Double-digit interest rates, highest since Civil War
- No mortgage money: Regulation Q -5% deposit interest cap
- High unemployment ~9%
- “Stagflation” unknown, and still unsolved, economic disease
- Stock market fell 50% in real terms mid 1973 – 1974
- 1973-1975 recession was really a 1970s recession because its effects extended into the 1980s

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1970-80s Risk Explosion Drives an Explosion of Financial Innovation in USA—Later 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 institutional international diversification in stocks 1972
- ERISA 1974 employer-funded pension system creating pension funds
- May Day 1975 negotiated commissions- institutionalization of stock market
- Debt securitization and creation of a national mortgage market
- Interest rate swap eliminated maturity-mismatch risk in banks forever
- Foundation set for globalization of capital markets: derivative markets adopted throughout the world and global diversification
- Finance science: existing and breakthrough quantitative models and data bases were essential for implementing these innovations

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A FinTech Challenge: Trust is Fundamental to Financial Services

- Technology by itself is not sufficient to create trust. Transparency or verification is a substitute for trust.

- FinTech will succeed most easily in areas of financial services involving calculations, processing, payments and record-keeping where performance can be readily tested and verified, and in any activity in which transparency can be adequately substituted for opaqueness. Truly transparent services do not require trust. Services which can be fully verified need not be transparent and do not require trust to be adopted.

- FinTech with technology alone will be challenged in offering services and products that are "inherently opaque [i.e., cannot be made transparent] such as financial advice, solutions and many complex integrated financial products. The only means of providing those services and products is through trust. Technology by itself is not a substitute for trust.

- FinTech requires a model and the data to populate it. The model selected will depend on the objectives of the selector. Models require abstractions from complex reality and the selection of the abstractions involves judgment—the "art of the science". The quality of the data used in the model is critical. These judgments are opaque, extremely difficult to verify, and thus, inherently require trust by users.

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Trust is Essential for FinTech to Succeed and Fintech's Success Will Enhance the Value of Trust

- Trust requires two components: 1. trustworthy 2. competence.
- FinTech increases time efficiency and lowers cost by substituting "black box" technology for human efforts of both advisors and providers but in doing so it also increases "opacity", which in turn makes trust an even more important and valuable asset. FinTech's success will thus drive increasing value for the trusted advisor, provider, consultant and overseer.
- Technological advances will likely leverage providers who have the "trust asset" to enhance their expansion instead of taking business away from them. Technology to succeed will have to partner with entities that can provide the trust asset, since it cannot create trust by itself. The trusted provider must assess the risk of lost of its valuable asset by supporting a Fintech that fails. How will the value jointly created be shared between the technology and the trust assets?
- Consumers of financial services lost trust in their providers and their regulators in the 2008 crisis. Financial advisors and institutions with business strategies based on restoring trust by minimizing conflicts of interest, such as fee-only independent advisors, will disrupt traditional product-based wealth-management models with captive distribution broker and adviser systems. Will established institutions that are trusted and adopt Fintech have an advantage over new FinTech entrants into financial services? Will the industry become more fragmented or more concentrated?

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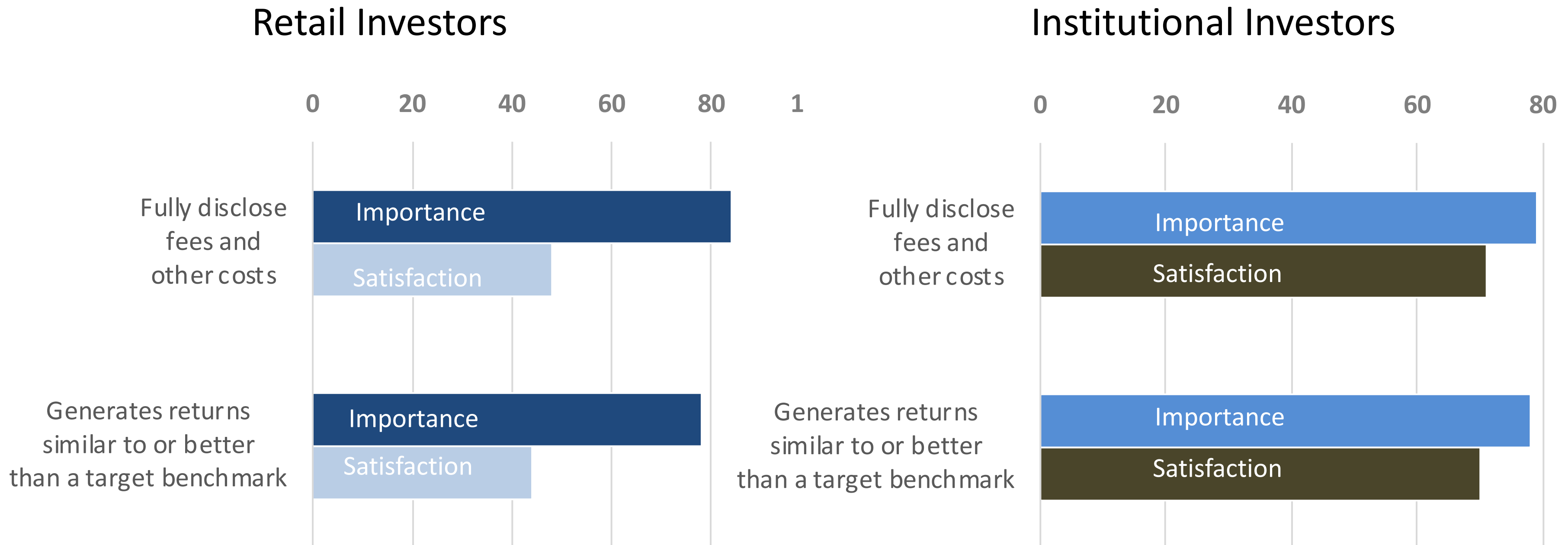
Missing Trust: Retail Investors Register Low Satisfaction with Cost Disclosures and Performance from Active Portfolio Managers

Satisfaction and Importance ratings by investors (%)



Source: CFA Institute
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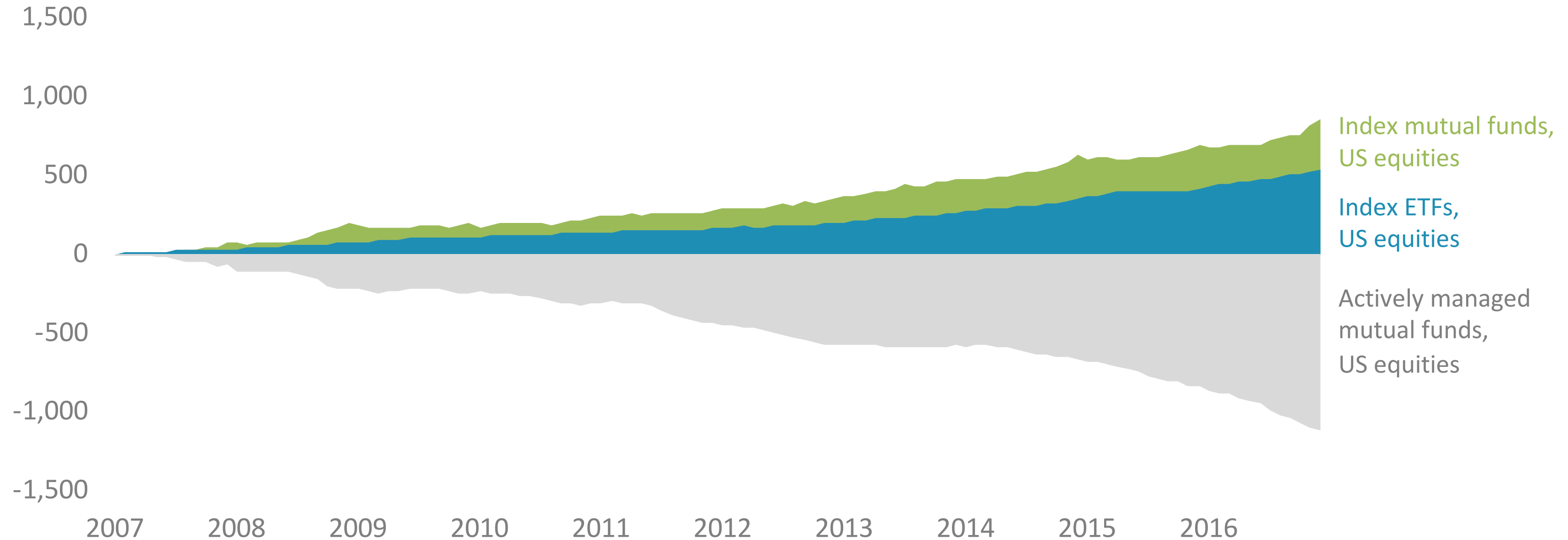
Growth of Index Funds and ETFs vs. Actively Managed Funds Industry Impact of a Loss of Retail Investor Trust 2008-9 and a Continuing Flight to Transparency as a Second-Best Strategy?



Source: 2017 ICI Factbook. http://www.icifactbook.org/ch2/17_fb_ch2

Cumulative flows to and net share issuance of index mutual funds (US equities) and index ETFs (US equities), billions of dollars; monthly, January 2007–December 2016. Prior to October 2009, index equity Index ETF (US equities) data include a small number of actively managed domestic equity ETFs. Note: Equity mutual fund data include net new cash flow and reinvested dividends. Data exclude funds that invest primarily in other funds. Copyright © 2017 by the Investment Company Institute. All rights reserved. The charts is for illustrative purposes only and are not indicative of any investment.

Improving Regulatory Innovation to Create and Restore Trust

- Cultivate the "Trust Triangle: consumer-provider; consumer-regulator; regulator-provider – FinTech regulation much more important for B-to-C than for B-B
- Fiduciary duty responsibility for financial advisors strengthened to promote creation of trust but with significant clarity on the meaning of "client's best interests", to provide balance to protect the advisor from too much litigation risk.
- Encourage transparency and avoidance of conflict of interests
- Mandated disclosures matched to the user of the information. E.g., disclosures to customers should contain only information deemed "meaningful" to the customer, to avoid inducing frustration or poor decisions
- Risk definitions and measures consistent with the purpose or goal of the product or advice offered. E.g., risk of retirement-income-goal product or portfolio measured in terms of volatility of its retirement income and not the volatility of its value.
- Disclosures of expenses to permit meaningful comparisons among similar alternatives. Expenses disclosed for a product or service could include the total embedded fees of the product [computed like VAT] as well as the marginal contribution to expense from service or product provider.
- Regulations should be routinely reviewed for their "unintended" consequences

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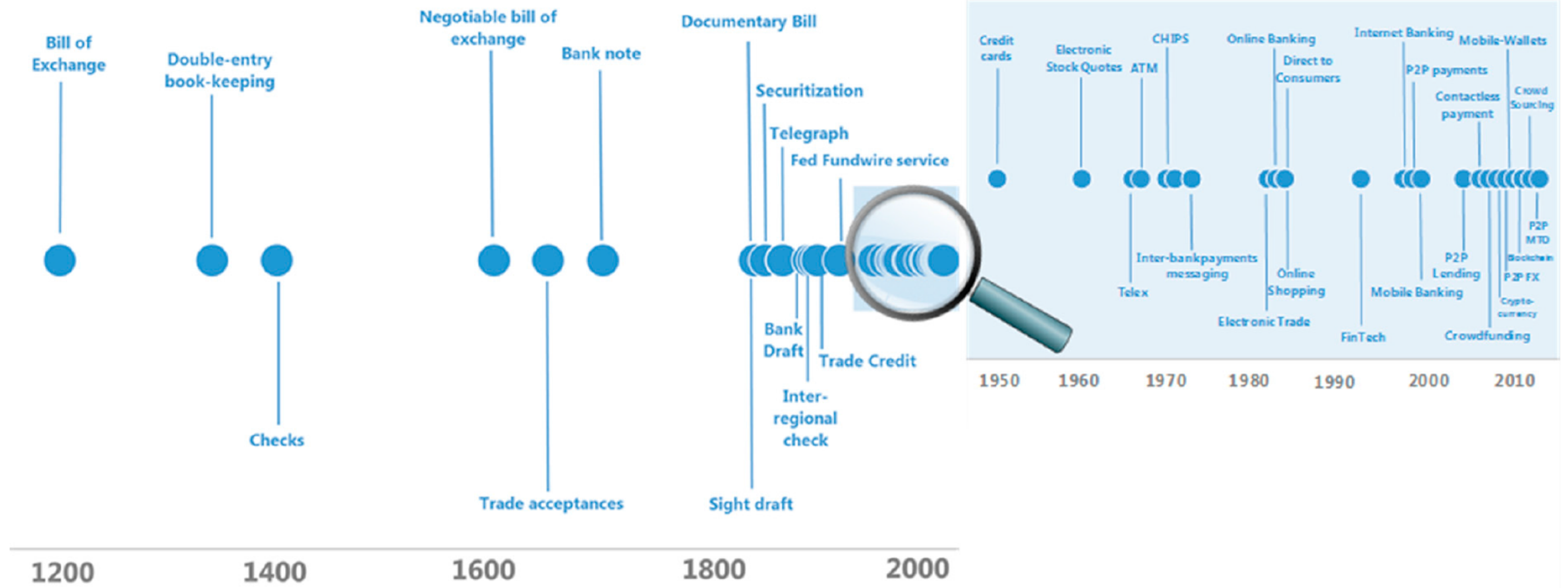
Accelerating Pace of Technological Progress in Financial Services Rational Optimization for the Future of Finance in the Long Term



Sources: Arner, Barberis, and Buckley (forthcoming); Quinn and Roberds (2008); World Economic Forum (2015).