Risk sharing and shared prosperity in Islamic finance

NABIL MAGHREBI AND ABBAS MIRAKHOR
STRUCTURE OF THE STUDY

- FINANCIAL STABILITY AND ECONOMIC PROSPERITY
  - Development and finance
  - Procyclicality of financial systems
  - Financial instability
  - Financial crises and income inequality

- RISK SHARING IN ISLAMIC FINANCE
  - Essence of risk sharing
  - Stability of an Islamic Financial System

- RISK SHARING AND SHARED PROSPERITY
  - Income inequality and wealth redistribution
  - Risk sharing mechanisms for financial inclusion and shared prosperity
THE MAIN ISSUES

1. IS RISK TRANSFER CONDUCIVE TO FINANCIAL INSTABILITY?
   - Risk transfer and the procyclicality of financial systems
   - Financial instability and balance sheet recessions
   - Risk transfer relations and income inequality

2. WHAT IS THE ESSENCE OF RISK SHARING?
   - State-contingent claims and fixed-income securities
   - Asset-based finance and risk sharing
   - Kuala-Lumpur declaration of 2012

3. IS RISK SHARING ESSENTIAL TO PROSPERITY SHARING?
   - Central contradiction of capitalism
   - Risk sharing, economic growth, and prosperity sharing
   - Risk sharing mechanisms for financial inclusion

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1. RISK TRANSFER AND FINANCIAL INSTABILITY

The malaise of unthinkable risks becoming routine

“... low rates are the most remarkable symptom of a broader malaise in the global economy: the economic expansion is unbalanced, debt burdens and financial risks are still too high, productivity growth too low, and the room for manoeuvre in macroeconomic policy too limited. The unthinkable risks becoming routine and being perceived as the new normal. This malaise has proved exceedingly difficult to understand.”

(Bank for International Settlements, Annual Report 2015)
1. RISK TRANSFER AND FINANCIAL INSTABILITY

- Credit cycles, financial instability and balance-sheet recessions
  - Risk transfer relations, credit cycles and the procyclicality of financial systems
    - Credit expansion during economic upturns and credit rationing during downturns.
    - Limited capacity of banks to extend credit during economic downturns and financial crises
  - Financial system instability
  - Balance-sheet recessions
  - Expansionary monetary policy and fiscal stimulus
1. RISK TRANSFER AND FINANCIAL INSTABILITY

- Risk Transfer
- Credit Cycle
- Financial System Procyclicality
- Financial Instability
- Balance-Sheet Recession
- Income Inequality

Increased Risk of Maturity Mismatch
- Moral Hazard (willingness to further reduce policy rates)
- Lower Borrowing Costs (incentive for illiquid balance sheets)

Broader malaise in the global economy (BIS, 2015)
- Unthinkable risks seen as routine
- Unbalanced economic expansion

... and
- Financial exclusion
- Financial repression
- Fiscal sustainability risks

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1. RISK TRANSFER AND FINANCIAL INSTABILITY

- Financial instability and income inequality

  - “Society may subsist, though not in the most comfortable state, without beneficence, but the prevalence of injustice must utterly destroy it.”  
    (Adam Smith, The Theory of Moral Sentiments, 1759)

  - “… the crisis emanated from the center and reached the periphery. Developing countries, and especially the poor in these countries, are among the hardest hit victims of a crisis they had no role in making.”  
    (Joseph Stiglitz, 2010)
1. RISK TRANSFER AND FINANCIAL INSTABILITY

- In order to address the problem of prosperity sharing at the source, a rethink of risk-transfer relations is needed.
  - Failure of financial intermediaries, the very institutions through which financial inclusion is pursued
  - Left to its own devise, the financial sector has no pro-equity bias
- How to reconcile growth (if any) with equity
- Focus on risk sharing as a viable alternative to risk transfer relations regarded as the source of the malaise
2. THE ESSENCE OF RISK SHARING

- Adam Smith’s vision of competitive economy founded on a system of values and morality
- Arrow-Debreu-Hahn models of general equilibrium embody Smith’s vision and provide conditions for optimal allocation of resources
- Arrow securities (payoff conditional on the realization of a particular state of nature, zero otherwise) provide a mechanism for risk sharing and optimal allocation of resources
- Economic uncertainty dictates the terms of risk-return tradeoff
2. THE ESSENCE OF RISK SHARING

- **State-contingent** or **state-independent claims** (risk sharing or risk transfer)?
  - if return on investment is independent from possible states of nature, then it represents a “fixed-income” determined a priori irrespective of investment outcome, which can be known only a posteriori... Possible definition of riba and risk-transfer relations

- Return on investment can be **estimated** based on the timing and amount of future uncertain cashflows, but it **cannot be predetermined** ex ante. It depends on the outcome of investment, known ex post.

- Risk sharing differs from risk transfer, risk shifting, and unwarranted risk taking... it is **risk bearing according to individual levels of risk tolerance**
2. THE ESSENCE OF RISK SHARING

- Risk sharing implications for Sharia’h compliance
  - Sharia’h-compliant asset, yet not Sharia’h-compliant transaction
    Asset compliance as necessary but insufficient condition for Shari’ah compliance of transactions
    - Structured finance
    - Tawarruq transactions
    - Wa’ad structures for total return swaps and short-selling
  - Existence of the element of risk sharing in ijarah that makes is permissible, and absence of risk sharing in debt that makes it impermissible.
  - Islamic finance relies on asset-based transactions, but “asset-based finance” with funding based on the value of specific assets may not be necessarily Sharia’h compliant
2. THE ESSENCE OF RISK SHARING

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- loans
- bonds
- other underlying assets
2. THE ESSENCE OF RISK SHARING

- Risk sharing implications for Sharia’h compliance

- Sharia’h-compliant asset is necessary but insufficient condition
- Given the precondition of asset-based finance, risk-sharing element is essential for Sharia’h compliance of transactions
- Kuala-Lumpur declaration of 2012
  - Risk sharing as the fundamental principle of Islamic finance
  - Litmus test of risk sharing is financial inclusion

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3. RISK SHARING AND PROSPERITY SHARING

CENTRAL CONTRADICTION OF CAPITALISM

- “The inequality $r > g$ implies that wealth accumulated in the past grows more rapidly than output and wages. This inequality expresses a fundamental logical contradiction. The entrepreneur inevitably tends to become a rentier, more and more dominant over those who own nothing but their labor. Once constituted, capital reproduces itself faster than output increases. The past devours the future.”
  

- Economic output and financial assets grow at different speeds.

- Global progressive taxation as remedy to the fundamental contradiction
The value of capital goods is expressed as the sum of discounted cashflows generated by the asset in the future. In the case where dividends grow indefinitely at the rate \( g \), this perpetuity can be valued as

\[
p_t = \frac{d}{r - g}
\]

This equation is valid under the crucial condition that \( r > g \) to ensure positive asset prices. Economic output and financial assets grow at different speeds.

This inequality \( r > g \) is consistent with Piketty’s interpretation that “wealth accumulated in the past grows more rapidly than output and wages.”
It may be argued that the principal contradiction of capitalism results from the predetermination of ex ante rates of return on capital as state-independent claim ($r$ is fixed), from investment in money and bond markets when growth rates in income and output are uncertain.

Return on equity, determined ex post as state-contingent claim, is more congruent with the uncertain nature of economic enterprise and future growth rates.

Prosperity in terms of positive growth rate $r > 0$.

Return on equity depends on the observed growth rate $g$ such that $r = f(g)$. This implies that capital is not allowed to increase irrespective of growth rates, and that it is bound to decrease with negative growth. This is the essence of risk sharing.

Positive relation between $r$ and $g$ is ensured in equity markets rather than bond markets and risk transfer relations.
In an Islamic financial system, “the rate of return to capital is neither a purely monetary phenomenon determined in the money market by the demand and supply of money, as in a Keynesian model, nor is it purely determined by the real demand for and supply of real savings, as in the Classical model. Instead, the rate of return to capital is determined by the rate of return to ownership position (equity) related to marginal product of capital as well as to the portfolio balance equilibrium.”

Askari, Krichene and Mirakhor (2014)
3. RISK SHARING AND PROSPERITY SHARING
3. RISK SHARING AND PROSPERITY SHARING

- Risk sharing mechanisms for financial inclusion
  - Revamp the financial system to rely on equity rather than debt relations
  - Role of equity markets in rebalancing economic expansion
  - Incentives for micro-saving schemes and micro-finance based on risk sharing
  - Integration of inalienable endowments waqf-based microfinance into development schemes
Government’s role in promoting risk sharing and financial inclusion
- Institutional, regulatory and administrative structures to facilitate financial intermediation that promotes allocative efficiency and equity
- Awareness and educational programs
- Issuance of GDP-indexed securities with income defined by future economic growth
- Information-sharing systems to provide macroeconomic and firm-specific information and facilitate financial inclusion
3. RISK SHARING AND PROSPERITY SHARING

- Humanizing and democratizing of finance

  - Humanizing finance involves the use of various branches of cognitive science to improve “human-factors financial engineering.”
  - Democratizing finance means the extension of the principles of risk management to benefit all segments of the society (hedging against house prices fluctuations and idiosyncratic risks such as the vicissitudes of earning a living)
  - Process of humanizing and democratizing finance through equity rather than debt-based relations
CONCLUSION

- Financial inclusion is not just about facilitating access to financial services.
- Efforts toward humanizing finance and democratizing finance is important, but financial inclusion is best achieved through equity.
- Role of equity markets and financial inclusion in providing long-term solution to the central contradiction of capitalism.
- Risk-sharing as substitute to risk transfer and risk shifting in promoting financial stability, sustainable growth and equitable share of prosperity.

THE END
THANK YOU

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