BANK FOR INTERNATIONAL SETTLEMENTS

"Risk in financial reporting: status, challenges and suggested directions"

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The issue

- Developments in risk measurement have far-reaching implications
  - reshaping financial activity
  - reshaping the prudential framework
  - have the potential to reshape financial reporting
- Risk measurement holds the key to convergence of perspectives on financial reporting

Background: previous work

- How to reconcile perspectives of accounting standard setters and prudential regulators?

- Three principles:
  - **decoupling** of objectives: unbiased portrayal vs prudence
  - **parallel**/coordinated process
  - **joint** development and implementation of richer information set
    - first-moment
    - risk
    - measurement error

Objective of the current paper

- Highlight the role of Risk Measurement & Management (RMM)
- Two issues:
  - Risk and meaning of "unbiased portrayal"
    - risk premia
  - Tension between RMM and the current approach to financial reporting
    - eg. hedging and "artificial volatility"

Bottom line

- In a world of costly and imperfect information, valuations are not uniquely and objectively defined
  - general equilibrium effects are important
  - definition of "unbiased" is conditional on measurement system (valuation principles; eg FVA vs. historical cost)

- Risk measurement plays a key role in measuring value
  - forward-looking elements and risk attitudes

- Measures of valuation should be verifiable

  - one criterion for choice of valuation principles

Bottom line (cont'd)

- Measures of valuation should be transparent
  - basis for verification
  - basis for adjustments
- There is scope to narrow the wedge between accounting valuations and underlying economic values
  - sound risk management is a useful guide

$\Rightarrow$ why a bridge?

- core component of enhanced information set
- core role in measuring, verifying and validating valuations
- potential focal point in the design of accounting standards

Outline

I. The ideal information set
  - how far are we?

II. Meaning of unbiased valuations
  - role of verifiability and transparency

III. Gap between accounting and underlying economic valuations
  - - eg, artificial volatility

I - The ideal information set: a taxonomy

- Point estimates (“first-moment information”) of value, income, cash flows
  - income, cash flow and balance-sheet statements
- Estimates of the risk profile (“risk information”)
  - potential future variation in first-moment information
  - Eg, VaR
- Estimates of uncertainty surrounding first-moment and risk information (“measurement error”)
  - due to “model error” or intentional misreporting (“reporting bias error”)
    - eg: sensitivity analysis
    - comparison of outcomes with original estimates

I - The ideal information set for financial reporting

Financial characteristic	Illustrations	Availability
First-moment	*Point estimates of profitability, balance sheet valuations and cash flows*	
	- income statement - balance-sheet statement - cash flow statement	Very high
Risk	*Point estimates of measures of statistical variation in first-moment information*	
	- earnings-at-risk and value-at-risk - portfolio stress tests	Medium
Measurement error	*Measures of uncertainty surrounding first-moment and risk information*	
	- sensitivity analysis to parameter values - comparison of outcomes with previous estimates	Low

I - The ideal information set: future directions

- Actual set falls short of ideal, despite recent welcome steps

- Desirable and feasible to make further progress
  - improvements in risk measurement technology
  - proprietary concerns overdone
  - risk and measurement error information are key to calculating and reporting first-moment information
    - calculating unbiased valuations and verifiability

II - What is meant by “unbiased valuations”?

- Away from archetype of complete markets, valuations are not unique
  - In a world of costly and imperfect information valuations depend on agents involved in transactions
- Only world in which financial reporting has a role to play…
- …but also one where market prices can fail to provide right signals (reflect “fundamentals”)…
- …and the act of measurement affects valuations (“Heisenberg uncertainty principle”)
  - significant general equilibrium effects

$\Longrightarrow$ unbiasedness is a relative notion

II - Unbiasedness: an operational definition?

- Need to abstract from general equilibrium effects
  - condition on chosen valuation principle
- Three desirable characteristics:
  - approximate realisable value (cash)
  - sufficiently verifiable
    - permit assessment of measurement error
  - transparent
    - permit verifiability and adjustments by users

II - Measuring unbiased valuations

- Market prices for deep and liquid markets
  - but they are not very transparent!
- Measurement error is otherwise a key consideration
  - top-down approaches: direct mappings
  - bottom-up: discounted present values (workhorse of finance and risk measurement)
    - risk premia are key
- We do not take a stand on which valuation principles are best
  - will depend on circumstances
- Measures should be **sufficiently verifiable**
  - validation: mixture of inputs, processes and outputs
  - "use-test" to limit incentive to misreport

III - Narrowing the gap: sources and implications

- Three sources of mismatch between accounting and underlying economic valuations:
  - definition of assets/liabilities
    - eg: “control”
  - their recognition
    - eg: internally generated intangibles
  - their measurement
    - eg: mixed-attribute accounting
- Why?
  - verification issues
  - binary nature of accounting
- Concern?
  - accounting signals may distort behaviour
    - eg hedging decisions

III - Narrowing the gap: demand deposits

	Accounting	Risk management
unit of analysis	individual basis	portfolio basis
future changes in balance	excluded	included (statistical basis)
maturity	very short	long (behavioural)
impact of a rise in market rates on valuations[1]	zero (face value)	fall (profit)

[1] Assuming that deposit rates are "sticky" relative to market rates.

Conclusions

- Accounting has a significant influence on behaviour
  - should be its purpose in the first place!
- There is a need to narrow the gap between accounting and underlying economic “realities”
  - progress made but more needed
- RMM holds important keys to further progress
  - core component of enhanced information set
  - core to measuring, verifying and validating valuations
  - potential focal point in the design of standards