Financial Accounting Standards Board
The Technical Director

Fasb - Fair Value Measurements and Disclosures
      File Reference : 1830-100   and an update of 820

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Fair Value Measurements and Disclosure Requirements in USA GAAP and IFRS   1830-100

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Colleagues,

Thank you for the opportunity to critique the Fair Value
Measurements and Disclosures relative to 1830-100 and the update to 820 .
Details follow:

New additions to fair value accounting standards have been proposed by the
Financial Accounting Standards Board (FASB) with the release of Exposure Draft
1830-100, Fair Value Measurements and Disclosures (Topic 820), on June 29, 2010.
If approved, these standards will impact businesses and entities of every kind.

Reporting will be much more transparent for financial statement readers.
Nonetheless, widespread commercialization of the various technologies to
accomplish these disclosures is in an evolving stage of development.
Improving the understandability of the financial statements will be a function
of implementing the technologies designed to process the various algorithms
for sensitivity analysis.
pp. 19, 20, 22, 25, 26, 27, 37 and 38.

The new standards in the exposure draft will help to configure the U.S.
generally accepted accounting principles (GAAP) to international financial
reporting standards (IFRS). The draft has a lot of content with more complex
disclosure requirements. As more experience is gained in artificial
intelligence, cloud computing and complex algorithms, the requirements of
comparative fair value reporting will be easier to implement by the
community of financial and audit users. p. 145-164

One of the most significant disclosure requirements impacting businesses is the
need to develop a sensitivity analysis that attempts to measure the uncertainty in
current fair value measurements categorized as level 3. These items require the
most management judgment about what constitutes value for disclosure purposes
to readers of the financial statements who rely.

Suppose a user changes one or more of the assumptions used in the fair value
formula to a different amount . This change could involve assumptions about
defaults or default rates, discount rates or altering the
payment schedule. p. 42-75   What are the effects on fair value from

implementation of the new assumptions? p. 78-9
A range of price changes may be disclosed. This range may provide readers
of financial statements with alternate balance sheets and financial statements
which reflect alternating valuations.

The valuation of securities used as collateral could pose another challenge to
management with regard to maintaining fair values . These securities may be
subject to intermarket forces, weighted average indices, the 200 day index,
the VIX index and other pointers which emulate real market trends
and conditions.

CDO tranches may be valued, based on a general specification of the loss
distribution, and the expected loss at varying levels of default, for the reference
portfolio. The new approach can describe tranch term-configurations.
The generality with which the basic distributions are specified should allow
nearly perfect calibration for any given set of market prices and underlying
assumptions.

All the tranches together make up what is referred to as the deal's capital
structure or liability mix. They are generally paid sequentially from the most
senior to the most subordinate . Certain tranches with the same security may be
paid as two securities having equal rights to payment. The more senior rated
tranches generally have higher bond credit ratings than the lower rated tranches.
For example, senior tranches may be rated AAA, while a junior, unsecured
tranche may be rated BB.

Ratings can fluctuate after the debt is issued and even senior tranches could
be rated below investment grade (less than BBB). The deal's indenture usually
specifies the payment of the tranches in a section often referred to as moneys
flowing downward .

Tranches with a first lien on the assets of the asset pool are referred to as
"senior tranches" . These may be the safest investments.
Typical investors of these types of securities tend to be insurance companies,
pension funds and other risk averse investors.

Tranches with either a second lien or no lien are often referred to as "junior notes".
These are more risky because they are not secured by specific assets.
The natural buyers of these securities tend to be hedge funds and other
investors seeking higher risk/return profiles.

Market information also suggests that the more junior tranches of
structured products are often bought by specialist credit investors, while
the senior tranches appear to be more attractive for a broader, less specialised
investor community and potentially risk averse market segment.

Sensitivity Analysis encompasses dynamic linear programming ,

sophisticated inventory models, cash flow models, networks and queuing models. p. 82- 91
For inventory, the demand rate may increase triggering increments in the optimal Q or quantity. These changes necessitate a smaller time interval between orders. The result is that ordering occurs more frequently but with what certainty? In addition, algorithms exist to compute the shortest route for network deliveries given constraining factors like costs, spoilage, labor issues, host government actions, adverse weather , natural calamities etc.

Backlog penalty costs may be assessed analogously to inventory holding charges. The stocking of raw materials is a related item with regard to making inventory decisions. And so, the economic considerations enunciated in EOQ models have relevancy for storing raw materials. Dynamic programming models employ production schedule requirements as their input Demand data while minimizing costs utilizing linear programming and stocking the required raw materials algorithmically. In fact, the required stocking of raw materials could employ artificial intelligence , as well as "Advice Giving" systems and processes managed by knowledge engineers.

Conceptually, "Cloud Computing" could become the ultimate suitor because this IT configuration places users with common needs under a single mega datacenter. Common processing of sophisticated algorithms could be done much cheaper and under more uniform data processing protocols within the single mega datacenter. Besides, individual manufacturers may not have the requisite algorithmic, artificial intelligence and numerical analysis programming support to input complex customizations to the standard financial data.

From a data processing perspective, linking these advanced algorithms to production data will provide a considerable challenge with regard to arithmetic compilation, data accuracy, security, data aggregation and independent replication. Another important dimension involves the data center, systems and applications programming requirements at the mega datacenter.

Current fair value amounts could be processed utilizing the standard inventory software packages. More sophisticated inventory simulations could be performed by renting "cloud computing based" algorithms designed to do the sophisticated numerical analysis programming more cheaply and uniformly among a multitude of manufacturing users.

In addition, the new draft contains certain disclosure requirements when an asset is used in a manner that differs from its highest and best use. The highest and best use premise applies to nonfinancial assets, and not financial assets or liabilities. An example of a nonfinancial asset might be in-kind donations such as clothing, food (with varying shelf lives) and furniture to nonprofit charities . Food with varying shelf lives may be subject to decay and unpredictable valuations depending upon

a variety of assumptions like packaging, routing, labor issues, health department circulars etc.