emitting the use of internal models for market risk capital determina-
tion was a brave and commendable move by the BIS from the tradi-
tional regulatory approach (Risk March 2000, page 62). In making this step, regulators recog-
ised that demanding a rigid one-size-fits-all method entailed many shortcomings. It severely
restricted the level of sophistication to a lowest common denominator acceptable across a wide
range of institutions. In doing so, it excluded the type of advanced analysis commonly used by
large banks with active capital markets units.

Perhaps the biggest flaw of the traditional approach was to discourage development and
deployment of improved internal control sys-
tems. A single mandated capital calculation was
too easily interpreted as the “the method for
risk analysis approved by the regulators”.
Senior executives at a few institutions viewed
risk management as an essential core compet-
tency. Based on this view, they were willing to
commit considerable resources to develop and
deploy improved risk information systems.

Lack of any regulatory capital benefit from such
efforts, however, was a persistent disincentive.

The tendency to confuse mandated capital
calculations with “the approved approach to
risk analysis” is bad enough in itself. It is par-
ticularly destructive when combined with fail-
ture to distinguish between what constitutes
acceptable analysis at the aggregate versus the
detailed level. In few places are the conse-
quences of this confusion more obvious than in
counterparty credit risk analysis.

Risk regulators first took formal notice of coun-
terparty credit risk in the 1988 Accord. Then, such risk was a fairly minor sideshow to the
larger issue, namely mandating minimum regu-
larly capital for credit exposure in the tradi-
tional banking book. Also, few banks had any
kind of sophisticated process for internal esti-
mates of counterparty exposure. (Many banks
did not even track and approve such exposures,
although this changed rapidly after the Accord
became official.) Finally, the specific goal in the
1988 Accord was to impose a reasonable
increase in total regulatory capital to cover
aggregate counterparty credit risk. The resulting
approach was the now-familiar method of for-
mula-based add-ons to current exposure. In light
of the limited significance of the issue, the state
of internal systems and the aggregate nature of
the objective, this was reasonable at the time.

Clearly the add-on method of calculating “loan equivalent amounts” was designed for
aggregate exposure estimation purposes. As such, the mandated parameters reflected rea-
sonable assumptions about the average degree of
diversification of the trades within the port-
folio. The add-on method was never put for-
ward as an acceptable approach for measuring
exposure on individual trades or to individual
counterparties. Nevertheless, that is how it was
used in all too many institutions (Risk October
2000, page 55). The method is seriously inade-
quate when applied at a detailed level. This is
because the amount of diversification varies
widely across individual counterparty portfolios.
As a result, counterparty-specific exposure esti-
mates derived using add-on methods are inher-
ently inconsistent.

In the early 1990s, a few banks, notably
Citibank, Bank of America and Morgan
Guaranty Trust, took the lead in developing
sophisticated counterparty exposure measure-
ment systems. (I was involved in implementing
such a system that went live in late 1993.) These
systems involve Monte Carlo simulation of the
distribution of exposure at many future dates
throughout the life of each portfolio of interest.
They require:
□ generation of statistically consistent sets of
future market conditions;
□ corresponding valuation of each transaction
(or at least each nettable pool of transactions)
within each market scenario;
□ recognition of netting where deemed legally
enforceable; and
□ calculation and display of both the expected
value and a high-confidence point (usually the
95th, 97.5th or 99th percentile) of the exposure
distribution at each simulation point.

Such systems can also supply supplemental
information such as sensitivity of exposure to
specific market events and realistic aggregation
across counterparties.

Despite the obvious advantages of consistent
counterparty exposure measurement, a surpris-
ing number of major banks continue to settle for
a simple add-on approach. To some degree this
is undoubtedly based on concern about the cost
and complexity of a more sophisticated system.
I feel sure, however, that it is partly the result of
a view that “if it’s good enough for Basel, it’s
good enough for us”.

In light of this history, it is little short of aston-
ishing that the proposed revision to the Capital
Accord to become effective in 2004 states that:
“Measures of exposure for [foreign exchange,
interest rate, equity and commodity derivatives]
under the IRB [internal ratings-based] approach
will be calculated as per the rules for the calcu-
lation of credit equivalent amounts under the
1988 Accord - ie, based on the same methodol-
ogy [replacement cost plus potential future expo-
sure] and matrix of add-ons across the different
product types and maturity bands as set out in
annex 3 of the 1988 Accord.”

Summary

Regulation of financial institutions has made a
commendable shift from rigid and inflexible
methods for risk estimation and calculation of
capital requirements. On counterparty credit
exposure, however, regulators appear inexplica-

bly frozen in the past. What was a reasonable
stop-gap measure in the 1988 Accord is being
proposed, without change, as the exclusive one-
size-fits-all method allowed under a major revi-
sion to take effect 16 years later! This is in con-
fl ict with the constructive trend towards allowing,
even encouraging, the use of internal risk assess-
ment methodologies in other areas. It ignores the
progress made by many institutions over the past
five to 10 years. It will also perpetuate obsolete
and inconsistent counterparty exposure measure-
ment techniques where they are still being used.

I hope others will join me in recommending that
the Basel Committee reconsiders this decision
and formulates criteria for an alternate internal
model-based approach in this area. ■