We have studied these Principles with great interest and are broadly supportive of the aims and approaches.

A. Individual bank data, where appropriate, data at sector level and aggregate trend data collected by supervisors should be incorporated into the deliberations of authorities relevant for financial stability purposes... to assist in identification and analysis of systemic risk. (20. Page 6)

We agree. It would also be desirable to consider applying what we call the **Equivalence Principle of Systemic Information** - namely for every piece of systemic information provided by a bank to a regulator, the regulator should return a related piece of data to the bank.

Specifically the regulator should indicate how systemic capital would vary for small changes in each disclosed parameter - the partial derivative. These can be seen as **Systemic Risk Weight Adjustments** depending on the state of the system as a whole.

This reciprocal exchange has the potential to enhance the relationship between banks and regulators. It also gives a greater assurance that the information has been understood and used.

B. **Successive revisions** to standards and guidance issued by the Committee will be designed to strengthen the regulatory regime. (18. Page 5)

*Effective banking supervisory practices are not static. They evolve over time* as lessons are learned and banking business continues to develop and expand... As supervisory practices evolve, it is expected that upon each revision of the Core Principles, a number of additional criteria will migrate to become essential criteria as expectations on baseline standards change. (32. Page 8)

We strongly agree. The **co-evolution of financial and regulatory systems** is a topic we are studying urgently. The regulatory system, like the financial system, is never static. It needs to evolve over time with old measures dropping out as new rules are implemented. It is important that incoming regulation retains sufficient flexibility to adapt as new information is gathered and new threats emerge.

C. **Principle 9 – Supervisory techniques and tools**: The supervisor uses an appropriate range of techniques and tools to implement the supervisory approach and deploys supervisory resources on a proportionate basis, taking into account the risk profile and systemic importance of banks. (Page 30)

We agree. In general **multi-model approaches are preferred for such complex systems**. Any individual model can be gamed (especially if based on market data) and is also subject to model risk. It is a general scientific result from the study of complex networked stochastic systems that they are best controlled with a multi-model approach. Regulators can then combine judgement/indicator based approaches with suitable models which capture different drivers of systemic risk. As confidence in the models develops the weights they carry can be increased.

D. **Principle 16 – Capital adequacy**: The supervisor sets prudent and appropriate capital adequacy requirements for banks that reflect the risks undertaken by, and presented by, a bank in the context of the markets and macroeconomic conditions in which it operates. (Page 44)
We strongly agree with this risk-based approach. We would also advocate consideration of supervisory mechanisms such as Sciteb’s Efficient Systemic Capital (ESC). This is the allocation of capital between the banks in a system which achieves a desired systemic cost for the lowest total amount of capital. Each bank’s ESC is a function of their risks, their herding and their interconnection. Banks can reduce their ESC for a given size of Risk Weighted Assets by adopting more distinctive strategies and reducing dangerous interconnectedness. Thus ESC can provide the right external and internal incentives for a safer system.

Efficient Systemic Capital addresses two serious problems: adequate incentives against excessive herding and interconnectedness and the fact that capital is a scarce resource. These ideas could lead to a more resilient global financial system significantly less capital than currently proposed regulations.

Regarding the proposed G-SIB capital surcharge:

I. **Step functions in regulation are dangerous.** They tend to create herding on the ‘edge’ of the step. The problem with regulating only through constraints is that banks push against them. By contrast, if the CET1 requirement varies continuously in an essentially predictable way then Chief Risk Officers can use these capital implications to encourage decisions which reduce risk. But if there are simply risk buckets then each practical business decision may tend to increase risk within the constraints of the bucket. Although in the interests of transparency and implementation step functions may be a reasonable first iteration, progressive refinement is necessary to avoid another systemic global financial crisis.

II. **Systemic incentives are needed to encourage banks to take decisions which lead to a more resilient system.** We are concerned that the prospect of moving up or down a tier in the capital surcharges will not provide sufficient incentive for banks to adjust their risk profiles to make the system safer. Changes in risk exposure are in practice the sum of a large number of (relatively) small decisions. Banks must know how their overall capital requirements will change as a function of these decisions for the incentive to exist. A suitably calibrated dynamic mechanism, possibly using ‘systemic risk weighted exposures’ would differentiate firms and equip the regulator with a tool to steer the banks into a safer configuration.

E. **Principle 19 – Concentration risk and large exposure limits:** The supervisors determine that banks have adequate policies and processes to identify, measure, evaluate, monitor, report and control or mitigate concentrations of risk on a timely basis. Supervisors set prudential limits to restrict bank exposures to single counterparties or groups of connected counterparties. (Page 49)

We strongly agree. **Interconnection** between the banks is significantly more dangerous than has been hitherto understood; partly because interconnections can result in multiple failures – as a single failure has negative impact on counterparties. The existence of interconnections between banks can also create ambiguities in the overall state of the system.

We also believe that **variable risk weights on asset classes** (like the Reserve Bank of India put on real estate loans in 05/06) have to potential to moderate bubbles and discourage herding behaviour.

We hope these responses prove useful and are of course happy to provide more detail if desired.