



## Results of the national Quantitative Impact Study (QIS-CH) of Basel II

30 September 2005 marked the start of the three-month phase of data gathering for the *national* study on the quantitative impact of the new Basel II Capital Accord (QIS-CH). As explained in SFBC Newsletter No. 36<sup>1</sup>, QIS-CH focuses on the standardised approaches for credit and operational risks, and provides the empirical basis for their final calibration. During almost the same period, the Basel Committee on Banking Supervision carried out an *international* study known as Quantitative Impact Study 5 (QIS5). This is intended to provide the empirical basis for calibrating the institution-specific model approaches for credit and operational risks (IRB/AMA). Participation in QIS5 was mandatory for all institutions in Switzerland that are seeking approval for an internal model to determine capital requirements for credit risks (IRB approach) and/or for operational risks (AMA), unless they are owned by a foreign financial group which is subject to consolidated supervision by a foreign supervisory authority. Swiss institutions that were obliged to take part in the *international* QIS5 were not required to take part in the *national* QIS-CH; those exempt included the two major banks and their subsidiaries as well as one further Swiss bank. Foreign banks in Switzerland were still required to participate in QIS-CH even if their parent groups apply an IRB approach and are subject to consolidated supervision by a foreign supervisory authority or if the latter was included in QIS5.

In total, a representative selection of 77 institutions<sup>2</sup> took part in the data gathering for QIS-CH and submitted their survey data to the SFBC. The Banking Commission (SFBC) has now analysed and fully evaluated the data. All calculations were made on the basis of the draft regulatory texts published for consultation at the end of September 2005. The results are essentially in line with expectations and the objective set out in the SFBC's explanatory report<sup>3</sup> on the implementation of Basel II in Switzerland, namely that the Swiss banking system's overall capital level should be maintained.

The new rules under Basel II generally lead to a slight reduction in capital requirements for traditional banks involved in lending business. This is partly due to the use of external ratings and the risk reduction techniques which can be systematically applied, and partly to lower capital requirements for residential mortgages, Lombard loans and retail customers (including small businesses). For institutions predominantly engaged in advisory, asset management and trading activities, by contrast, the new regime for operational risks results in higher capital adequacy requirements. Institutions of this type have relatively minor levels of credit and market risk on their books. As a result, their capital requirements for credit risks, which implicitly included those for operational risks, have until now been small. The new, explicit capital adequacy requirement for operational

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<sup>1</sup> Link (German version): [http://www.ebk.ch/d/publik/mitteil/2005/20050624\\_01\\_d.pdf](http://www.ebk.ch/d/publik/mitteil/2005/20050624_01_d.pdf)

<sup>2</sup> The 77 institutions comprise 70 banks and 7 securities dealers

<sup>3</sup> Link: [http://www.ebk.ch/e/archiv/2005/20050930/050930\\_04\\_e.pdf](http://www.ebk.ch/e/archiv/2005/20050930/050930_04_e.pdf)

risks, which has been separated out from that for credit risks, therefore has a greater net impact on these institutions than on those chiefly involved in lending business. It should be emphasised that the changeover to the Basel II system will not have any negative impact on lending policy.

Figure 1 shows the relative change in capital adequacy requirements for each institution due to the changeover from current regulation to Basel II, using the Swiss standardised approach (SA-CH). Corresponding values for the system as a whole are also shown. Under the new regulatory system, the capital requirement for the system as a whole (excluding the big two) falls by 2.34% (weighted average of the sample). The corresponding unweighted average is +8.24%. The median<sup>4</sup> for the sample is +1.01%. Sensitivity analyses on the various options<sup>5</sup> available within the standardised approaches did not have a material impact on these system values. There is therefore no pressing need for a recalibration of the planned risk weightings.

**Capital adequacy requirements:  
 relative change between Basel I und Basel II SA-CH**

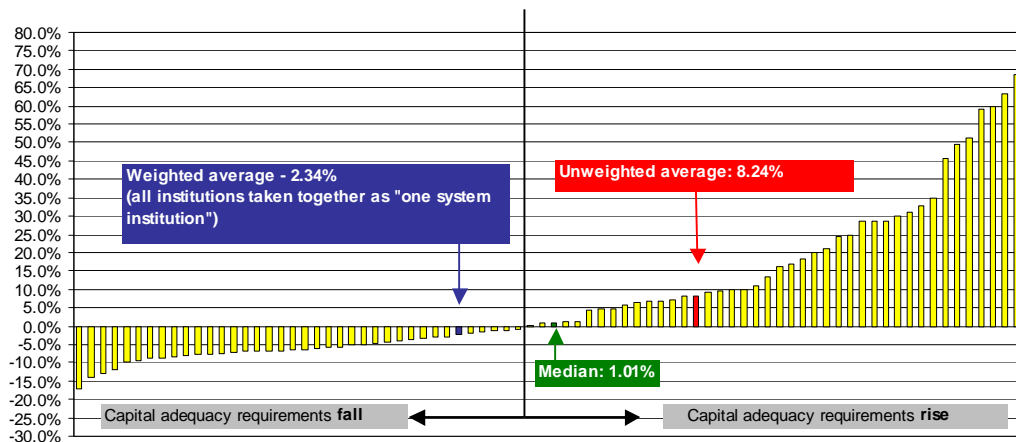


Figure 1

Instead of using SA-CH, institutions also have the option of calculating their capital requirements in accordance with the international standardised approach (SA-BIS)<sup>6</sup>. The two standardised approaches are designed to result in comparable capital requirements. However, as SA-BIS tends to lead to lower capital requirements than SA-CH, and SA-BIS adopts the risk weightings direct from Basel II, meaning that they cannot be

<sup>4</sup> Half of the observed individual deviations are greater than, and half less than, the median.

<sup>5</sup> Options are available in areas such as risk reduction techniques and the use of external ratings.

<sup>6</sup> Cf. the Swiss Federal Banking Commission's submissions for consultation with public and federal bodies regarding implementation of the new Basel Capital Accord (Basel II) in Switzerland, September 2005



adjusted, a simple system of three multipliers has been created to cancel out this effect. Comprehensive evaluations have identified an urgent need for a recalibration of the SA-BIS multipliers. The new values are 1.1 for credit risks (value under the draft regulatory text: 1.2), 3.0 for risks not involving a counterparty (5.5), and 2.5 for equity securities (2.5).

The key factor in ongoing supervision is not the level of capital required, but rather the level of capital coverage, which is calculated as the ratio of eligible capital to required capital. Under the Banking Ordinance, institutions must at all times hold eligible capital at least equivalent to their required capital. If both values are the same, the capital coverage is 100% and the capital surplus is 0%. In practice, the SFBC applies a stricter supervisory regime, essentially requiring institutions to hold additional capital to take account of risks not covered by the minimum requirements and to ensure that those minimum requirements are met even under unfavourable circumstances. If an institution's capital surplus falls below a defined threshold (in SFBC practice, 20%), the institution concerned is placed under closer supervision by the Banking Commission. Such shortfalls are often temporary and attributable to specific individual transactions.

Figure 2 shows the changes in capital surpluses for all 77 institutions<sup>7</sup>. An arrow pointing upwards indicates that the capital surplus will rise under Basel II. It is evident that all the institutions in the sample meet the legal capital requirements under both the current system (Basel I) and Basel II. In addition, the majority of the institutions demonstrate a clear capital surplus in both cases. It is clear, however, that under the current system two institutions do not meet the capital surplus threshold of 20% required under current Banking Commission practice, and that under the new system, this number rises to four. This figure is normal, however. In general, therefore, Basel II will not have a negative impact on capital surpluses. The institutions that face a higher capital requirement under Basel II are primarily those which have a very large capital buffer. Basel II will merely reduce their capital surplus somewhat. Moreover, as is always the case when a change of regulation is introduced, the necessary adjustments will be covered by transitional regulation and, in special individual cases, by an extended deadline for implementation.

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<sup>7</sup> For the purposes of illustration, capital surpluses have been capped to 300%.



### Capital surplus: Comparison Basel I vs. Basel II SA-CH

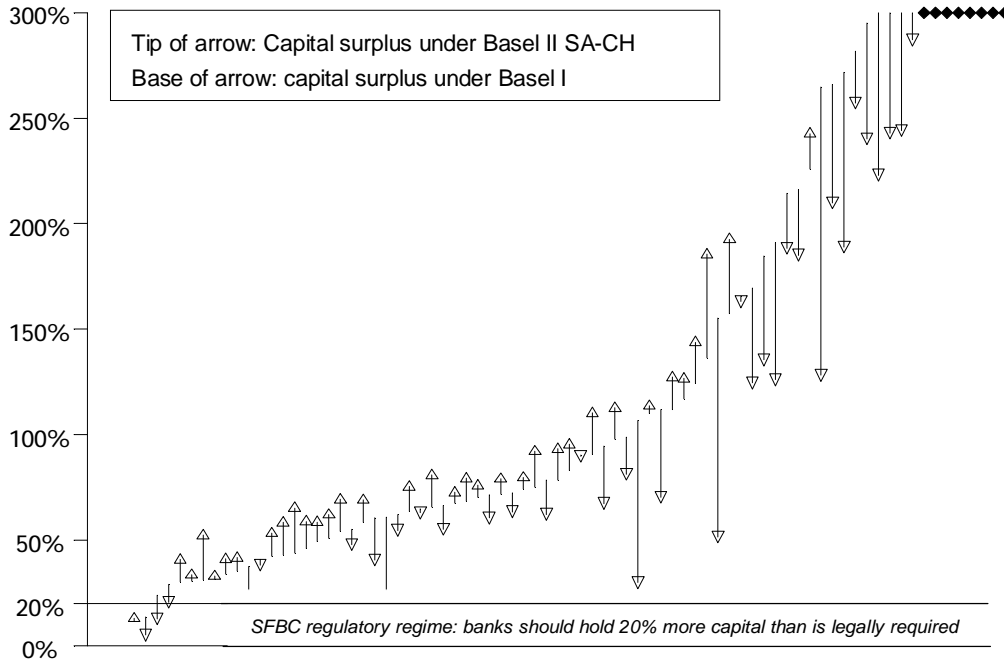


Figure 2