6 Regulatory Capital Management under Basel II

Under the Basel II international capital framework, banks must maintain a minimum level of capital for the risks taken to ensure capital adequacy. Beside the economic risk transferred by hedging loans or bonds with CDS, a key and sometimes primary motivation of banks to engage in such risk mitigation is the resulting capital relief, since the Basel capital framework explicitly recognizes credit risk mitigation (CRM) techniques as an effective risk-management tool which can significantly reduce credit risk. Basel II revised the approach to credit risk mitigation, allowing a wider range of credit risk mitigants that achieve regulatory capital relief compared to Basel I. The tight capital situation of banks has been in particular a concern in the aftermath of the Lehman crisis but was also highlighted by the EBA stress tests, followed by corresponding requests to banks to close the gap between their actual capital base and the requested threshold. To solve this issue, capital management has become a high priority exercise for most banks. Advanced financial institutions view capital management as a holistic, firm-wide function which encourages both regulatory and economic capital discipline and consistency rather than a post-business care where costly and cumbersome capital optimization initiatives seek to restore the capital base. A centralized approach ensures that capital is coherently allocated throughout all business divisions within a common strategical and tactical framework. An improved awareness of the amount of capital deployed, the capital intensity and the costs attached to it are key to capital efficient business operations, not just for the risk-weighted...

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1 See BCBS (2006). The framework is adopted by European law via the Capital Requirements Directive (CRD).
2 See BCBS (2011b). The BCBS noted that certain credit protection transactions exhibit the potential for regulatory capital arbitrage, and thus will be closely scrutinized by the bank’s supervisors. While those concerns relate primarily to high cost credit protection under the securitization framework, it becomes clear that regulators will keep a close eye as to how banks optimize their capital in general.
asset-intense units. Increasing the capital flexibility warrants in-depth insights as to how quickly capital can be reallocated across business functions or redeployed within a unit where capital relief has been achieved. Correct anticipation of related effects from an active capital management on liquidity, revenues and profit and loss is critical to allow senior management to take informed decisions. Even though profitability hurdle rates which explicitly acknowledge capital efficiency – either regulatory or economic or a combination of both – are introduced at most major banks, the development of the capital base may not always conform to the path set out in the risk and business strategy due to a different than expected operating environment. As a consequence, micro level or single name specific adjustments up to high level portfolio or whole business line transactions using risk transfer instruments provide effective tools to maximize the risk–return profile of a portfolio while making optimal use of the capital base.

6.1 Capital optimization – key considerations

A bank has two alternatives to improve its capital ratio: either to increase the numerator which is the core capital or to reduce the denominator which is the risk-weighted assets. Core capital consists, inter alia, of total equity such as common stock, retained earnings and other paid-in capital, less goodwill. Although a number of banks raised their capital by issuing new stocks during the recent years, most look first at optimizing the asset load to avoid dilutive effects from the capital increase to the existing shareholder base, both in terms of share of ownership and share of operating profit. Assuming that the risk weight of assets has been – from the perspective of a regulator – correctly assessed, hence leaving no room for further capital relief from optimization, the balance sheet may be further right sized by transferring risks that are inefficient from a capital perspective while retaining those that are efficient. Figure 6.1 (see below) provides (non exhaustive) key considerations to any RWA optimizing transactions which may also serve as a cooking recipe.

In any case, a bank that wants to reduce the capital consumption from its assets has to weigh the costs attached to it to alternative measures and eventually also to the cost of capital. The return on equity (ROE) will keep constant or improve only if the return on assets selected for reduction is below the weighted average cost of capital (WACC). The efficiency of capital optimization, measured in terms of costs relative to the amount of capital relief achieved, is therefore a key criterion for determining the most appropriate solution. However, even if a transaction for capital relief purposes does not stand out as overly efficient, it may still