# Do macroprudential tools require micro-data?

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## Overview

As they stand, macroprudential tools for the Financial Policy Committee (FPC) imply significant data requirements. The Draft Policy Paper published in January highlights ways in which data need to marry an economic and financial system level perspective with a level of detail not currently collected under any single reporting regime.

Particularly demanding tool is the Sectoral Capital Requirement (SCR). The policy makers must be able to identify the sector of financial activity where systemic threats are emerging. A sector can be a broad category of banking products and/or counterparties, and sectoral data are to some extent available through traditional micro-prudential or statistical collections. However, when required, the FPC seeks to take a more targeted approach, adjusting capital requirements to target only on exposures to those subsectors that contribute to the systemic threat.

It appears that unprecedented flexibility from the available data dimensions will be required. It may be proven that only micro-data can provide sufficient basis for the analysis and impact assessment by the FPC.

## Macroprudential tools

The macroprudential tools build on the existing microprudential regime, under which capital requirements depend on an estimate of the riskiness of each exposure. Both the Countercyclical Capital Buffer (CCB) and SCR provide the FPC with a means to change the capital requirement when threats to financial stability are emerging.

The CCB allows the FPC to change capital requirements above normal microprudential standards for all UK loans and exposures. A potential issue is that an apparently profitable boom in one part of the economy or financial system can be left relatively untouched while lending in another may be significantly reduced.

The SCR tool is an important complement or alternative to the CCB. The SCR allows the FPC to change the capital requirements above microprudential standards on exposures to specific sectors that pose a risk to the system as a whole.

The SCR is therefore more targeted than the CCB while both tackle the same issue. In terms of data requirements, the CCB is generally highly aggregated while the SCR may require the same measures to be broken down by various dimensions.

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Various slices and dices may be needed which are not in the current data. The FPC will be able to adjust the SCRs for banks' exposures to three broad sectors:

– residential property;

– commercial property;

– other parts of the financial sector.

Sometimes the systemic threat can stem from subsectoral level. For instance in residential property exposures it may become necessary for the tool to target only high LTV or high LTI loans.

For intra-financial exposures, the FPC needs the capacity to differentiate at least between secured and unsecured loans, and derivative and bond exposures to financial sector entities. Such entities can be banks, building societies, investment firms, insurers, various types of funds and a range of other regulated and unregulated financial institutions.

When risks are particularly concentrated, it may be desirable to apply SCRs to certain financial sector exposures only. This could be done in two main ways:

– By adjusting the SCRs for exposures to specific types of financial institution. For example, prior to the current crisis that could have been monoline insurers, special purpose vehicles, or non-bank lenders.

– By adjusting SCRs for specific types of intra-financial system activity, or by instrument. Prior to the current crisis these could have been repurchase agreements using low-quality collateral.

In addition to the dimensions needed for identification of the appropriate sectors, there are also further requirements for the data provided.

Firstly, and consistently with the microprudential framework, the tools can be applied at both solo and consolidated level. Whilst regulatory returns generally provide the split, current statistical reports do not provide anything on the latter.

The SCRs can be applied whether exposures are held in banks' trading or banking book. That requirement may limit the usefulness of micro-prudential data which do not always treat banking and trading book exposures symmetrically.

A "look-through" approach will be taken in classifying the sectors. For instance, an increase in the SCR for banks' commercial property exposures will also apply to exposures to securitisations backed by commercial real estate loans. This level of detail generally is not collected on the existing forms.

Consistent with the microprudential framework, the tool will apply to undrawn credit lines and other such contingent obligations as well as loaned amounts. This requirement limits the usefulness of existing statistical collections.

In contrast to the microprudential framework, capital requirements may be applied to only one of the stock of exposures or the flow of new exposures. Again, microprudential reporting is generally not concerned with flows, which limits the use of current data in this respect.

The SCRs can be applied irrespective of the ultimate borrower's domicile; or their exposures to various countries. Currently, there is only limited and high-level data available about banks' international exposures.

## Why might we need micro-data for the SCR?

Firstly, micro-data provides the flexibility required to determine the appropriate subsectors. In uncertain times, it is a general theme for users to require additional data to help answer a wider range of questions. A traditional form is generally a 2-dimensional cross-tabulation. Certain COREP forms are 3 dimensional as the same form must be reported several times for example in different currencies. And sometimes the forms have an extra dimension nested within the two or three main ones. For the SCR, it appears, even this amount of dimensionality in the input data is not enough. Singling out a relevant subsector may easily require five or more dimensions and it is very difficult to foresee which combinations will be needed.

Secondly, micro-data would enable pre-assessment of the impact. Before adjusting a capital requirement, the FPC must attain whether the chosen subsector is the appropriate one – *i.e.* whether it really is the one booming, or if in fact there is another subsector within that sector which should be the actual target. In addition to these first round effects, micro-data are likely to be required to model any second round effects.

Thirdly, the principle of 'look-through' requires very detailed data of the composition of different exposures. The FPC should be provided with means to monitor banks' exposures to a certain sector or subsector, regardless of the type of the instrument they are holding. An exposure to over 90% LTV residential property should be treated similarly, whether it is a direct loan or a part of securitisation.

Moreover, micro data allow for collecting and constructing the solo level and the different consolidation scopes (*e.g.* CRD, IFRS) from the same underlying data, and discussing differences between them. It also helps in shedding some light on the shadow banking sector as all firms' direct counterparties are recognised.

Individual counterparty-level reporting would also enable some important structural macroprudential analysis, such as financial network analysis. While the cyclical tools take the firms' RWAs as given, challenging the RWAs has been an important topic for the interim FPC. Collecting this in micro-data could allow for informed and therefore more effective challenge.

## References

Bank of England (2013). "The Financial Policy Committee's powers to supplement capital requirements. A Draft Policy Statement."