ACCOUNTANCY FUTURES

Framing the debate: Basel III and SMEs
The capital and liquidity provisions of Basel III are intended to shield the global financial system from a new financial crisis. Yet the extent to which they represent a good tradeoff between financial stability and economic growth is still unclear.

Policymakers still know little about the potential impact of Basel III on lending to SMEs, apart from the fact that it will be disproportionate. With the sector contributing half of the world’s private-sector output, this uncertainty renders all existing impact assessments virtually irrelevant.

In this discussion paper, ACCA considers how an impact assessment can be designed that would be ‘about right’ as opposed to very precisely wrong.

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Executive summary

Lending to small and medium-sized enterprises (SMEs) had little to do with the financial crisis of 2008–9. Yet the credit crunch and economic slowdown that followed it have hit smaller enterprises hard. Although Basel III is often described as a recipe for mitigating and perhaps even avoiding future financial crises, its effects on lending to small businesses are generally expected to be disproportionately negative. How negative remains unknown as there is no study to date of the impact of the new rules on lending to SMEs.

ACCA understands that a precise quantitative estimate is unlikely to emerge from such an exercise. We believe, however, that sufficient insights can be achieved by combining a quantitative baseline scenario with a range of qualitative indicators. The central question to be answered through qualitative means is to what extent different lenders will rely on credit pricing (increased fees and/or interest rate spreads) and rationing (applications dismissed outright and/or discouraged demand) in adjusting to the Basel III provisions. Furthermore, we review the literature on Basel III implementation to produce a range of behavioural and strategic responses that lenders may opt for in response to Basel III and consider their effects, relating them where possible to the overarching framework of pricing vs rationing.

ACCA is seeking the views of stakeholders on this proposed framework; both on the methodology itself and the likely results of an impact assessment conducted as described here. We welcome comments from entrepreneurs and business owners, banks and other finance providers as well as their representative bodies, views from SME advocacy organisations, Government departments and enterprise development agencies, and insights from SMEs’ most trusted advisers: accountants in practice and business.
1. The case for an SME impact assessment

Since the provisions of Basel III first began to take shape, a number of estimates have surfaced of the likely microeconomic impact of the new capital and liquidity requirements on economic output, ranging from the Institute of International Finance estimate of a 3.2% output loss relative to the baseline over five years (IIF 2010) to the FSB/Basel Macroeconomic Assessment Group estimate of a 0.31% loss over four years (MAG 2010). These estimates have, in turn, informed the detail of the regulations and the rate of implementation.

Yet to this day, there has been no high-profile attempt to establish the costs and benefits of these measures for small and medium sized businesses (SMEs). This is despite explicit calls from SME stakeholders (see UEAPME 2010), politicians (eg PJCCFS 2011) and the accounting profession (ACCA SME Committee 2010; Chittenden and Schizas 2010).

An SME impact assessment is not merely a concession to a group of stakeholders; it is essential to the correct design and implementation of capital and liquidity requirements. In assessing the likely impact of Basel III the MAG (2010) readily acknowledge the effect on lending to SMEs as a significant risk to their estimates:

‘Assessments about how tighter regulatory standards for banks may affect the supply of credit to the real economy need to take into account the ability of borrowers to make use of non-bank sources of credit….Bank-dependent small and medium-sized firms may find it disproportionately difficult to obtain financing.’

‘Added to [the estimated effects of capital and liquidity requirements on GDP growth] are the factors…which, as noted, are difficult or impossible to quantify. These include… differences in the impact of a cutback in bank lending across sectors. If tighter regulatory requirements lead to a disproportionately large cutback in lending to a sector, such as small and medium-sized enterprises, that has a relatively large role in supporting growth… this would increase the GDP impact.’

While no effort is made to estimate the specific effect of credit tightening on SMEs, the MAG (2010) do note the worrying experience of the Japanese credit crunch in the 1990s:

‘Prompted by the tightened lending standards, a severe credit crunch precipitated a number of small and medium-sized firms into downsizing and defaults. The total number of defaults in the late 1990s quadrupled compared with the level in the early 1990s.’

The MAG (2010) also suggests that, in the case of disproportionately ‘bank-dependent’ sectors, such as SMEs, a longer implementation period might allow for the development of non-bank lending channels, thus ameliorating the impact of the new rules on lending. But other commentators such as Ambler (2011) suggest that banks themselves will use the implementation period afforded to them in order to minimise the impact on their return on equity at the expense of small businesses.

In its preliminary impact assessment for Basel III, the Institute of International Finance (IIF) summarises the core argument for expecting a disproportionate impact on SMEs as follows:

‘High dependency on banks of small and medium-sized businesses, which typically create 70% of new jobs, presents another key issue….A set of regulatory changes that encourages disintermediation from the banking system is… almost certain to bias credit flows away from SMEs to larger companies that enjoy direct access to public securities markets….If the supply curves for either bank capital or long-term debt liabilities were to become inelastic… then the banking system would be faced with a ‘sudden stop’: ie the need to produce a sudden reduction in bank assets very quickly. This is liable to be very damaging to the economy, especially since banks would be forced to cut short-term lending facilities, which typically support working capital. The burden of the adjustment could also fall heavily on households and small and medium-sized enterprises.’ (IIF 2010)
This argument is logically coherent and represents a surprising area of consensus between regulators and the banking industry. It is probably for this reason that it has received less scrutiny than other claims made within the Basel III debate.

Yet as Ambler (2011) points out, aggregating the effect on SMEs into the ‘global’ impact assessment is highly misleading. SMEs, as defined in their respective jurisdictions, account for about 50% of all private sector output and 63% of all private sector employment (ACCA 2010). Entrepreneurial activity is a strong leading indicator of GDP at the global level (Koellinger and Thurik 2011). Furthermore, in most jurisdictions a small but dynamic and credit-hungry part of the SME population accounts for most of the sector’s growth in output and employment terms, as well as most of the sector’s demand for external finance. For instance, ACCA has calculated that 12% of the stock of UK SMEs (selected for maturity, high growth prospects, consistent cash generation and profitability) accounted for 58% of the sector’s total demand for finance in 2007 (ACCA 2009). All of the above suggests that, with no means of assessing the differential impact on SMEs, even the most detailed assessments of the impact of Basel III can be widely off the mark and in fact very nearly meaningless.

The implications of credit rationing on SMEs could be profound. The World Bank has recently estimated global SME loans outstanding at ca. $10tn (Ardic et al. 2011), or about one third of the estimated output of SMEs globally ($29tn) (ACCA 2010). Recent research from CapGemini suggests that small businesses, as defined by different lenders, accounted for 46% of the risk-adjusted assets of global retail banks in 2010, but only 27% of their retail banking income (Capgemini et al. 2010). This provides a clear incentive to lenders to ration small business lending.

Despite this apparent consensus between policymakers and banks, it is reasonable to assume that a range of different possible tradeoffs exists between stability gains for the global financial system and lending to SMEs, depending on the choices made by regulators and – perhaps more importantly – lenders. Appropriately, some SME representative bodies (eg UEAPME 2010) have pointed out that they can tolerate some reduction in lending to their constituents if the measures involved can indeed deliver greater stability – a matter of some debate in the case of Basel III (Méaulle 2011).

The fact that SMEs’ use of finance did not increase in line with the total credit supply prior to the financial crisis and that SME loans have not been seen, even in hindsight, as a major destabilising factor for the global financial system leading up to the crisis of 2008–9, suggests that such tradeoffs need not be particularly steep. But the experience of the credit crunch that immediately followed the crisis in many countries also suggests that they can be. The question then, is how far Basel III might be from an optimal tradeoff and whether it is possible to improve on it; and a proper impact assessment of the costs involved for SMEs would give both policymakers and the banking sector much more scope for assessing this.

A full assessment, however, should not overlook the fact that the benefits of financial stability are also likely to be greater for SMEs than other businesses or even private households. BCBS (2010) estimates the benefits of stronger capital and liquidity requirements at 0.6% of GDP for each one percentage point by which the probability of a crisis is reduced. SMEs, however, are less able to hedge operationally or financially against financial crises than large businesses and cannot rely on the extensive government safety net available to households; thus their prosperity may well be more dependent on economic stability. For instance, a global review by Ayyagari et al. (2003) found significant correlations between SMEs’ share of economic output and dimensions of macroeconomic stability such as low inflation and stable exchange rates. First-order outcomes of macroeconomic stability, including highly developed financial intermediaries, high levels of government expenditure, educational attainment and quality of public infrastructure, are also positively correlated with SME share of output, as are policy outcomes, such as labour market flexibility, which are less likely to be pursued during times of economic turbulence.

1. The original estimates of SMEs’ contribution to output and employment (ACCA 2010) have since been updated to include additional countries for which data are now available; direct evidence exists for countries representing 91% of global output and 81% of the global workforce.
Impact assessments for banking regulations are extremely quantitative affairs, focusing on extracting robust forecasts out of vast volumes of backward-looking data and some forecasting assumptions. Assessing the impact of Basel III is a difficult enough task without demanding a detailed discussion of SMEs. However, there are particular reasons for which producing a precise quantitative estimate of the cost to SMEs might be even more problematic.

LACK OF ROBUST DATA

Although some data on borrowing by SMEs are available, data on SME output that can be readily correlated with credit supply are much harder to come by (ACCA 2010). In fact, beyond a relatively small number of SMEs on company registers, which are always a small minority of the SME population in any case, smaller and informal businesses are invisible to policymakers and regulators in most countries.

NEW REGULATORY TOOLS

Countercyclical buffers and liquidity requirements are two features which Basel III does not share with its predecessors, hence data on the lenders’ behavior with regard to these are not available. This behaviour must be modeled instead using analogous but naturally occurring trends. This is easier to do in the case of countercyclical buffers, which simply involve lenders holding additional capital, but much harder in the case of liquidity requirements. It is possible that credit crunches resulting from an abrupt rise in interbank lending costs might offer some clues into lenders’ responses to the need for extra liquidity, although disaggregating these from the effects of the economic slowdowns or recessions that usually accompany credit crunches can be difficult.

LENDERS’ DISCRETION

The MAG (2010) acknowledges that the behaviour and choices of lenders are crucial determinants of the impact of Basel III. Because small businesses represent, to most lenders, a distinct business segment complete with its own lending structures (see CapGemini et al. 2010), changes to lenders’ business models can imply dramatic changes in individual institutions’ supply of finance to SMEs as a whole which are however extremely hard to model.

For all the above reasons, a precise quantitative estimate of the impact of Basel III on SMEs is unlikely to materialize even after all proposed measures have been implemented in full.

Nonetheless, given a baseline quantitative model and a range of key state variables on which to build meaningful scenarios, it should be possible to consider the effects of the new regulations in more detail and with more clarity than has been attempted to date.

2. Towards a more accurate estimate of the impact on SMEs
ACCA believes that in order to account for the above an SME impact assessment for Basel III should incorporate the following four stages:

1. **Modeling, ceteris paribus, the incremental cost of Basel III for lenders to SMEs.** This is the simplest stage of the impact assessment and consists of applying the Basel III provisions to a model of the SME lending sector and establishing the incremental cost of capital on the assumption that current levels of SME lending are maintained.

2. **Modeling the contributions of credit rationing and credit pricing respectively in lenders’ adjustment.** It is understood that stronger capital requirements will shift the supply function for SME credit. However, the direction of this shift is not easy to anticipate. Although MAG (2010) assumes that all the impact of Basel III will be transmitted to borrowers through interest rate spreads, this is only really true if capital markets are assumed to be complete, which in the case of SMEs they are certainly not. Lenders may in fact react to the new requirements by increasing the cost of borrowing (pricing), curtailing their lending to SMEs regardless of price (rationing), or some combination of the two. Without an appreciation of the extent to which lenders will rely on each of these two options, it is impossible to deduce changes to loan spreads and lending volumes for SME loans from the rising cost of capital alone.

3. **Modeling behavioural, strategic and other qualitative aspects of lenders’ adjustment.** While regulators can mandate the levels of capital and liquidity banks are meant to achieve in order to comply with Basel III, and the fundamentals of the SME credit industry might dictate the relative contributions of pricing and rationing, neither of these forces can determine conclusively how compliance will be achieved at the firm level. Hence the MAG (2010) caveated their estimates by noting that ‘Banks are likely to change their behaviour in a number of other ways in response to the requirements that are not captured by the macroeconomic models.’ Indeed, McKinsey and Co. (Härle et al. 2010) argue that banks will need to adapt to Basel III in qualitative as well as quantitative terms by changing their business models. In the case of SME lending, changes to the behaviour and business models of banks are likely to prove much more significant than the increase in overall lending spreads. Importantly, behavioural and strategic effects should be considered in terms of the pricing vs rationing spectrum in order to make the analysis more consistent and straightforward.

4. **Assessing the second-order effects from a reduction in output on SME access to finance:** In 2009, the European Commission published a study (Ruis et al. 2009) into the cyclicality of lending to European SMEs, which found that each percentage point of GDP lost to the business cycle is associated with a 2% reduction in lending to small businesses and a 3% reduction in lending to medium-sized businesses. It is also associated with a 7% reduction in factoring and 4.6% drop in leasing. The data employed spans the period between 1996 and 2007, during which Europe as a whole did experience one substantial economic slowdown but no full-blown banking crisis. These findings may be equally applicable to estimates of the benefits rather than the costs of Basel III to SMEs, as they demonstrate the cyclical fluctuations of lending to SMEs, which capital and liquidity requirements are meant to mitigate.
3. Credit pricing or credit rationing?

We discussed earlier how the responses of lenders to increases in the cost of capital for SME lending will tend to fall into two categories: credit pricing and credit rationing. Generally speaking, rationing tends to be portrayed as the worst of the two; yet, if the objective is to protect lenders from episodes of sector-wide irrational exuberance, then a certain level of credit rationing will be necessary. This view is implicit in the arguments of stakeholders, such as UEAPME (2010), who point to the relative resilience of more fragmented banking sectors, with more decision making powers devolved to local managers. Such sectors were more likely to practice rationing in the run-up to the financial crisis. (Carbo-Valverde et al. 2005; Cerqueiro 2008; Park 2008; Canales and Nanda 2010).

In ‘normal’ economic conditions, however, those lenders that respond to capital requirements primarily through pricing are likely to provide more loans to SMEs, and thus the effect of price-based responses on SME output and employment is likely to be less pronounced. Should the threat of a new financial crisis become more muted, policymakers may opt to encourage price-based responses.

The following variables are likely to influence the allocation of impacts between credit pricing and rationing.

MARKET CONCENTRATION AND PROCESS CENTRALIZATION

The ability of banks to roll additional financing costs over onto their SME clients depends to some extent on the competitive pressures they face. In some ACCA markets, most notably the UK, small business banking is on average less competitive than corporate banking, while in others it is more so. Empirical evidence suggests that in more concentrated banking sectors, credit rationing for SMEs is less likely and lower-quality borrowers are more likely to apply and receive funding, even though both rejection rates and the cost of financing might be higher (Carbo-Valverde et al. 2005; Cerqueiro 2008; Park 2008). Similar findings have been reported in the case of banks, regardless of market share, where decision-making is more centralised (Canales and Nanda 2010). The extent of competition and centralization could determine the extent to which banks resort to rationing as opposed to interest rates in response to increased capital costs.

ALTERNATIVE LENDING MODELS

A great deal of lending to small businesses around the world takes place through very different models to those assumed by Basel III (see e.g. UEAPME 2010). From community based lenders to mutuals and microfinance intermediaries, these credit providers carry different types of capital on their books, with different levels of ability to absorb losses; they are also likely to carry proportionately larger albeit less diversified SME loan portfolios. The extent to which Basel III disproportionately favours or penalises such business models will have implications for SME lending, at least in those markets where alternative models are prevalent.

BORROWING FOR LIQUIDITY V CAPITAL NEEDS

The effects of a slowdown in lending to SMEs depend substantially on how different types of lending are affected. Small businesses are as likely to borrow for liquidity purposes as they are to borrow growth capital, and the effect of regulation on employment and growth is likely to be larger if short-term lending is disproportionately affected. This is particularly true of liquidity requirements, a relatively new form of bank regulation whose effects are therefore hard to model. It may be possible, however, to draw some conclusions from the forced recapitalisation that followed the financial crisis of 2008–9, and which suggests that lenders are happier to lend for capital than liquidity purposes (Forbes Insights 2010) and more likely to apply rationing to the latter than to the former.
INFORMAL FINANCE AND TRADE CREDIT

While it is often asserted that SMEs depend on banks for financing (MAG 2010; IIF 2010), this is not entirely true. The typical small business draws more liquidity from suppliers (via trade credit on agreed terms and late payment) than it does from the banking system, while the most creditworthy SMEs will tend to act as intermediaries, borrowing cheaply from the banking sector in order to provide credit to their customers (Demirguc-Kunt and Maksimovic 2001). As suppliers are not subject to regulatory capital requirements and cannot invest in elaborate risk-management functions, they are more likely to be effectively undercapitalised and thus their supply of credit should be at least as volatile than that of the banking system. Indeed evidence from the UK and the Eurozone suggests that suppliers have been at least as proactive in tightening credit during the Great Recession as banks themselves (ACCA and CBI 2010; ECB 2011). Perhaps more importantly, suppliers can rarely apply credit pricing policies and must therefore rely on credit rationing.

DISCOURAGED DEMAND

A great deal of the literature on lending to small businesses during the crisis has focused on the behavioural effects of a decrease in credit supply on subsequent credit demand. ‘Discouraged demand’ is said to occur when would-be borrowers fail to apply for formal credit because they believe they will be turned down. Evidence from the US suggests that discouraged demand is largely an efficient rationing mechanism and is more likely in less concentrated banking sectors (Han et al. 2008). While the envisaged implementation periods for Basel III are not short enough to cause a strong behavioural reaction, an abrupt early adjustment on behalf of lenders could have the same effect. It is also likely that discouraged demand, especially with regards to liquidity, will be redirected towards other types of credit, including credit from suppliers, directors, or non-bank lenders (ACCA and CBI 2010). It is important to note that, taken together, the findings of Han et al. (2008); Carbo-Valverde et al. 2005; Cerqueiro 2008; and Park 2008 suggest that discouraged demand is more of a reaction to the anticipated rationing rather than to the anticipating pricing of credit.

CREDIT GUARANTEES

In many countries, governments maintain credit guarantee schemes which seek to provide a state guarantee in lieu of collateral in order to compensate for information asymmetries in the case of small or young businesses. The European Commission, for instance, claims that 1.8m European SMEs (ca. 9% of the total stock of businesses in the EU-25) benefitted from guarantees in 2009 (EC 2010). Such schemes can provide substantial leverage and achieve additionality at a low cost while also keeping default rates low. (Graham Bannock and Partners 1997) More centralised schemes with a small number of lenders focusing on broad coverage and high volumes can be very successful, provided that procedures and responsibilities are clearly defined and proper co-operative relations are developed between lenders, guarantors and borrowers (Levitsky 1997). Although as a form of collateral, guarantees are likely to become more valuable to lenders under Basel III, the credit risk premia government agencies will need to charge are likely to rise; the agencies themselves will also need to submit to credit scoring, with its attendant costs and adjustment needs (Cardone-Riportella et al. 2011). Even so, the presence of guarantee schemes will tend to shift the effect of capital requirements away from rationing and towards pricing.
4. Anticipating lender behaviour

Although the typology of pricing vs rationing is useful for modeling purposes, the actual responses of lenders to enhanced capital and liquidity requirements are likely to be far more diverse, with some making fundamental changes to the business models of their SME banking activities. Table 1 presents a compilation of possible responses with a significant impact on SMEs, as discussed in the Basel III impact literature to date.

Table 1: Lender behaviour in response to Basel III and its likely effects on SME lending

<table>
<thead>
<tr>
<th>Type of response</th>
<th>Likely impact on lending</th>
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<tr>
<td><strong>Information</strong></td>
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<tr>
<td>Lenders improve risk models, data quality and internal reporting systems (Härle et al. 2010).</td>
<td>Asymmetry of information is greater for SMEs hence improved modelling is likely to reduce perceived risk further in the case of smaller borrowers. However, where credit scoring is already in place or not an option, this effect is moderated by the resources allocated to small borrowers in each business model. Banks typically devote fewer resources to smaller borrowers (Capgemini et al. 2010) or borrowers that are less receptive to cross-selling. Reliance on information is likely to lead to pricing-based rather than rationing-based responses.</td>
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<tr>
<td><strong>Collateral</strong></td>
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<td>Lenders demand additional security, or demand security in cases where they previously would not. Unsecured lending to businesses is substantially reduced (Härle et al. 2010). Lenders’ emphasis on collateral and guarantees increased in the aftermath of the crisis (The Banker and IFAC 2009).</td>
<td>Smaller and younger businesses, as well as businesses owned by less wealthy individuals, are less likely to be able to provide collateral and guarantees. Increased reliance on collateral without an equal emphasis on information will mean fewer marginal borrowers have access to loans. This will tend to force lenders towards rationing.</td>
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<td><strong>Risk-taking</strong></td>
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<tr>
<td>Lenders shift the composition of their assets away from trading (MAG 2010).</td>
<td>All other things being equal, more funds become available for lending to businesses, including SMEs; this should function as a form of reverse rationing.</td>
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<tr>
<td>Lenders change the composition of their assets away from riskier borrowers. (MAG 2010).</td>
<td>Lenders consider SMEs to be riskier borrowers as a segment. This is likely to lead to rationing</td>
</tr>
<tr>
<td>Lenders boost loan-loss provisions based on improved models (Härle et al. 2010).</td>
<td>Asymmetry of information is greater for SMEs hence improved modelling is actually likely to reduce rationing and increase the amount lent to smaller borrowers.</td>
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<tr>
<td>Lenders make a point of attracting SME deposits as a more stable source of funding (Härle et al. 2010).</td>
<td>Competition for SME deposits could intensify competition in the lending market and force banks to rely on measures other than interest rate hikes to recoup the increased cost of capital. The effect will be equivalent to an increased emphasis on rationing.</td>
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<td>Lenders shift their business to primarily fee-based sectors rather than increase margins. (MAG 2010)</td>
<td>Up-front fees and cross-selling are unpopular among SMEs; large retail banks make less than a third of their small business income from sources other than credit and deposits (Capgemini et al. 2010). The effect should be equivalent to rationing.</td>
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<tr>
<td>Banks standardise small business loans for securitisation (Härle et al. 2010).</td>
<td>Small business loan securitisation increases the amount that can effectively be lent to SMEs against the same amount of capital, but if standardisation extends to the actual issuance of loans, it could lead to loss of information. The effect of this could vary but is more likely to resemble rationing.</td>
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<tr>
<td><strong>Control</strong></td>
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<td>Lenders reduce risk through increased use of covenants (MAG 2010) or reduce risk and funding costs through reduced maturities (MAG 2010; Härle et al. 2010). In small business lending, this is already an established means of dealing with information asymmetry (Ortiz-Molina and Penas 2004).</td>
<td>Owner-managers may be less likely to accept covenants (Niskanen and Niskanen 2004), effectively giving rise to an effect equivalent to rationing. Moreover, longer periods of negotiation for small business loans are likely to push some businesses to the informal credit market (Datta 2010).</td>
</tr>
</tbody>
</table>
References


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