

Trade Finance: Effects of the Basel Capital Framework and other Regulatory Developments

*Andrew Cornford,
Observatoire de la Finance, Geneva
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The impact of bank regulation on trade finance is an esoteric subject. It merits only small articles in the main organs of the business and financial press, though more detailed coverage in specialist publications. The Basel capital framework for banks has a central role in the international agenda of financial regulatory reform. The framework has been prominent in discussion of the effects of new regulations on trade finance. This reflects widespread belief, evident in recent industry surveys, that the revised framework has contributed to the slowdown of world trade since the beginning of the Global Financial Crisis (GFC).

Although the Basel capital framework has received the lion's share of the discussion of regulation, capital requirements and trade finance, other subjects have also been raised. Three of these subjects are treated here. One – rules directed at money laundering - is long-standing but has recently acquired greater urgency owing to effects on correspondent banking relationships, which play an important role in the trade of many developing countries. Another subject concerns banks' participation in trade financing through arrangements which enable them to avoid committing their own capital. A third subject are the changes – expected but still largely future - in banks' trade-finance operations in response to the challenge posed by global environmental problems.

Basel capital framework

Banking risk and capital requirements

The objective of the Basel capital framework is to control banking risks through capital requirements and prescriptions as to good risk management. The evolution – still not complete - of the Basel capital framework started with the 1988 Basel Capital Accord (Basel I), and has since been followed by substantially revised versions in the form of Basel II and Basel III. These are agreements drafted by the Basel Committee on Banking Supervision (BCBS), a body originally consisting of a small group of advanced countries but currently with an expanded membership of regulators and central bank governors from 27 countries.

There are various classifications of banking risk with categories that unsurprisingly often overlap since such risk covers the likelihood of loss on a financial asset or other exposure within a specified period for many different causes and in many different contexts. There are four key categories under this heading: *credit risk* is that resulting from loss arising from the failure of borrowers or of parties to other obligations to meet payments due to the bank; *market risk* is that of loss arising from changes in market prices and other market rates;

liquidity risk is that due to an entity's inability to meet its obligations as they fall due owing either to insufficient funds on hand or inadequate market liquidity for the sale of assets required for this purpose; *operational risk* is that of loss due to failures of a bank's internal systems and procedures or to external causes such as legal rulings, government actions, natural disasters, or criminal activity. Other categories of banking risk frequently encountered include solvency risk, settlement risk, rating migration risk, and event risk, all of which overlap with one or more of the four key categories above.

A bank's capital serves as a buffer against future unidentified or unexpected losses. Expected losses due to credit risk are covered by a bank's loan-loss reserves or provisions. The capital of banks consists of equity and other financial instruments which have the properties of being available to support an institution in times of crisis through reducing the probability of insolvency, i.e. the condition when a bank's liabilities exceed its assets. Financial instruments classified as capital are usually associated with higher rates of return, and are thus a more costly way of financing banks' assets than other liabilities such as deposits and short-term and longer-term debt instruments. The rate of return on capital is a determinant of a bank's pricing of loans and of other transactions involving its exposure to risk. As such the bank's rate of return is a factor of its competitiveness vis-à-vis other banks.

The Basel capital framework initially addressed primarily credit risk and thus fitted comfortably into this conceptual framework. However, developments in the financial markets and to other aspects of banking operations were to lead to extension of its scope from 1996 onwards – firstly to market risk and then to operational and liquidity risk. This extension led to the inclusion of methods of measurement for the purpose of setting capital requirements which could not so easily depend on the long-standing distinction in banks' financial management between expected and unexpected losses – inclusion of which in the Basel agreements was predictably the subject of lengthy negotiations.

The initial versions of the capital framework had two principal objectives.

-) One was microprudential, namely to help to ensure the strength and soundness of individual banks - and thus of course indirectly of the banking systems of which they are a part.
-) The other was to help to equalise cross-border competition between banks (provide "a level playing field") by eliminating competitive advantages due to differences among countries in their regimes for capital adequacy.

Since the initiation of Basel III, the objectives of the framework now incorporate a macroprudential dimension. This refers to more explicit acknowledgement than hitherto amongst regulators and other policy makers that many of risks to a single bank targeted by regulation in crisis situations can spill over into risks affecting many banks and thus threaten essential functions of the financial system such as payments, lending and deposit taking.

As will become clear, the effects of new regulation on trade finance arise primarily under the headings of credit risk and liquidity risk. However, the availability and terms of trade finance can also be affected by factors other than those classified under credit and liquidity risk but which affect banks' financial standing and thus the terms on which they lend

Basel I

Capital under Basel I was to serve as a buffer against credit risk. Capital was to constitute 8 per cent of banks' risk-weighted assets and - very importantly for trade finance - of their exposures to risk due to counterparties' off-balance-sheet commitments to them.

Measurement of these risk-weighted assets was based on the attribution of weights reflecting the credit risk of different classes of counterparty. Examples of the classes of counterparty in Basel I were sovereign, OECD or non-OECD, other public sector, corporate, etc.

Off-balance-sheet commitments are contracts which are generally excluded from a bank's balance sheet but none the less involve a potential future profit or obligation. Off-balance-sheet positions are described in the notes of a bank's financial reports. From the point of view of this paper the most important items under the heading of off-balance-sheet exposures are contingent liabilities such as financial guarantee contracts, including letters of credit that provide for payments to the beneficiary in specified circumstances such as trade transactions.

In Basel I off-balance-sheet exposures were converted to their on-balance-sheet equivalents by multiplying them by credit conversion factors (CCFs). The resulting figures were then weighted according to the credit risk of the class of the counterparty, and the exposure was then estimated as for on-balance-sheet exposures.

For example, collateralised documentary credits received a CCF of 20 per cent. The on-balance-sheet equivalent estimated in this way would then be multiplied by the risk weight of the counterparty to which the collateralised documentary credit was made available.

The attribution of credit risk weights under Basel I (0, 10, 20, 50 and 100 per cent) followed a scheme which favoured governments and certain other entities from OECD countries over those from non-OECD countries, and banks over other commercial borrowers.

Through an amendment in 1996, Basel I was extended to cover market risks in banks' trading books. As mentioned earlier, market risks are those due to the impact on a bank's portfolio of tradable assets of adverse changes in interest and exchange rates and in the prices of stocks and other financial instruments.

The rules for estimating a bank's exposures to market risks are currently being substantially revised, largely in the light of experience during the GFC. Market risks will be mentioned only tangentially in this paper since they are not essential to an understanding of the relation between the Basel capital framework and trade finance.

Basel II's response to Base I's perceived weaknesses

Basel I was originally designed for internationally active banks. However, by the second half of the 1990s it had become a global standard and had been incorporated into the prudential regimes of more than 100 countries. This was a source of problems for both design and implementation since the rules must be appropriate for cross-border banks with constituent

entities in several jurisdictions often subject to regulatory systems reflecting the different histories and different levels of financial sophistication of the countries involved

Basel I became the subject of increasingly widespread dissatisfaction owing to its crude calibration of credit risks and to the growing importance of practices such as securitization as well as of new financial instruments, for which its rules were not well adapted. Thus a decision was taken to initiate what proved to be the much lengthier than anticipated process of drafting a successor agreement. What was intended to be the definitive version of the new accord, Basel II, became available in mid-2004.

Basel II consists of three Pillars in a framework which has been retained in Basel III. Under Pillar 1 minimum regulatory capital requirements for credit risk are calculated according to two alternative approaches, the Standardised and the Internal Ratings-Based.

Under the first of these two approaches – the Standardised - credit is classified on the basis of externally determined indicators.

Under the second – the Internal Ratings-Based - an attempt is made to disaggregate the different determinants of credit risk:

-) the capacity and willingness of the obligor (borrower or other counterparty) to meet its obligations;
-) the external environment as it affects the probability of default, the severity of the loss to a bank due to default, and a bank's exposure at default;
-) the characteristics of the credit instrument or other exposure in question (loan, facility, debt security, guarantee, etc.);
-) the quality and adequacy of so called credit-risk mitigants (described below);
-) the maturity of an exposure, i.e. the length of time during which the exposure exists;
-) and correlations of positions in the bank's portfolio (which can give rise to concentration risk).

Under the Standardised Approach, the measurement of credit risk was based on ratings provided by external credit assessment institutions. Export credit agencies (ECAs) as well as credit rating agencies were indicated for this purpose, though the rating agencies were expected to play the more important role.

Banks and non-financial corporations were differentiated according to their credit ratings (of which the BCBS used those of Standard & Poor's for illustrative purposes) or an analogous measure when there was no rating. For example, according to this measure of credit risk claims on banks and non-financial corporations rated from AAA to AA- received a risk weight of 20 per cent, while those rated below B- for banks and below BB- for non-financial corporations received a weight of 150 per cent.

Under the Internal Ratings-Based approach, a bank's exposures were classified as corporate, sovereign, bank, retail, equity, purchased receivables, and specialised lending. .

For corporate, sovereign, bank, and retail exposures, subject to the satisfaction of certain conditions with respect to banks' internal controls and the availability of relevant data, banks were to use their own rating systems to measure some or all of the determinants of credit risk, classified under four headings: the probability of default, loss given default, exposure at default, and the remaining effective maturity of the exposure.

Under the first – Foundation - version of the Internal Ratings-Based Approach banks were to estimate the determinants of default probability but were to rely on their supervisors for measures of the other three determinants of credit risk. However, this was not to apply to retail exposures for which banks were to provide their own estimates of all the determinants of credit risk.

Under the alternative – Advanced - version of the Internal Ratings-Based Approach banks were to be responsible for estimating all the determinants of credit risk, though the remaining maturity of loans was subject to a floor of one year and a ceiling of five years.

For other exposures consisting of equity or purchased receivables banks were to calculate credit risk weights on the basis of frameworks which also incorporate to varying degrees banks' own estimates of credit risk's determinants. The formulae differ from those for corporate, sovereign, bank, and retail exposures.

The term, specialised lending, covers categories of corporate exposure with special characteristics such as project finance, commodities finance, and certain kinds of real-estate financing. The categories include certain specialised types of trade financing. Under the rules for specialised lending, banks that met the supervisory requirements for the estimation of the determination of default probability could use the formula prescribed for the Internal Ratings-Based Approach for corporate exposures. Banks not meeting these requirements could use a special set of supervisory categories and risk weights for unexpected losses.

Both the Standardized and the Internal Ratings-Based Approaches provide for the possibility of credit risk mitigation. This is the use of instruments and transactions which have the objective of reducing credit risk, and thus the risks-weighted exposures in the denominator of a bank's capital requirements, through a sharing or shifting of the risk. Such mitigation can be achieved by collateral, guarantees, and certain derivatives designed to hedge credit risk. However, there is a lack of clarity concerning the potential of insurance under this heading.

Unlike Basel I, Basel II and the successor agreement, Basel III, contain regulatory capital requirements for operational risk which, as mentioned above, covers losses due to events such as human errors or fraudulent behaviour, computer failures, or disruptions from external events such as earthquakes. This category of risk has become much more important recently owing to the huge fines which banks have incurred for fraud and other forms of misconduct.

Pillars 2 and 3 of Basel II are concerned with supervisory review of capital adequacy and with the achievement of discipline in banks' risk management through disclosure to investors.

On to Basel III

Overview

Partly on the basis of Quantitative Impact Studies of Basel II on banks' financial position regulators in different countries became concerned that levels of capital under Basel II were not going to be sufficient. This concern was accentuated by the stress on banks resulting from the GFC.

The initial resulting revisions of Basel II, dubbed Basel II.5, concerned the rules for the market risk of exposures in the trading book, and thus will not be covered in the discussion here which is focussed on the treatment of exposures involving trade finance.

Agreement on major changes to the Basel II rules for the banking book followed in September 2010. The revised rules, now called Basel III, incorporate much of Basel II. But they were also extended and changed (Scott and Gelpern, 2012: 586-592).

-) Basel III contains more stringent rules for the categories of financial instrument which are eligible for inclusion in different categories of minimum required regulatory capital. Of total minimum required capital of 10.5 per cent 7 per cent is to consist of equity, the category of capital best suited for absorbing losses.
-) The capital is to include a conservation buffer. This consists of equity and is intended to absorb losses during periods of economic and financial stress. The buffer can be drawn down at such times but may be accompanied by restrictions on the distribution of earnings to shareholders.
-) Additionally national authorities may impose a counter cyclical capital buffer as a way of countering rapid credit growth. This can be relaxed during periods of stress.
-) For global systemically important banks (GSIBs) – as defined by the Financial Stability Board (FSB, the body entrusted by the G20 with the task of coordinating the implementation of the different components of the global agenda for financial reform) – there is an additional capital charge in the range of 1 to 3.5 per cent.
-) The correlation parameter in the formula for risk-weighted assets in the estimates of exposures to credit risk is now to be multiplied by the factor 1.25 (Asset Value Correlation/AVC multiplier) for regulated financial institutions whose total assets are equal to or greater than USD 100 billion and for all unregulated financial institutions whose main business includes lending, factoring, provision of credit enhancements, and securitisation, all of which could be included in trade finance.
-) Basel III now includes rules for the management of banks' liquidity risk. Basel III also includes overall restrictions on the leverage of banks' balance sheets. These are both discussed in more detail in a moment.
-) Basel III specifies higher risk weights than Basel II for selected credit and market risks. For example, higher weights apply to a bank's exposures to securitized assets. Securitized assets are pools of financial assets, which are individually illiquid but after aggregation become marketable securities. Securitized assets, particularly pools consisting of packaged mortgages of often questionable quality, played an important role in the illiquidity and insolvency of major parts of the banking sectors in Europe and United States during the GFC.

The counter cyclical buffer, is set on the basis of national regulatory discretion and is intended to achieve the *macro prudential* goal of protecting the banking sector from periods of excess credit growth which can trigger economy-wide financial crises.

The capital surcharge for GSIBs is also to serve the objective of *macro prudential* stability. Moreover GSIBs are to be subject to additional rules on absorption capacity, another extension of the capital framework to cover *macro prudential* risks. These rules, enunciated by the FSB, specify Total Loss Absorption Capacity (TLAC) in the form of 16-20 per cent of a bank's risk-weighted assets. TLAC will consist of instruments meeting certain conditions as to their capacity for absorbing losses. Such instruments will include some - but not all – of the instruments which count towards Basel III capital minima. The rules are designed to facilitate the resolution of GSIBs during the process following insolvency, minimising the resulting costs to governments and to tax payers.

As part of risk-weighted assets, a bank's exposures to trade finance will contribute to determining the level of liabilities to be covered by TLAC. However, only a limited set of banks will be affected by the TLAC rules- which do not pose new questions of principle concerning the management of risks associated with trade finance. They are not discussed further in this paper.

Liquidity management

As just mentioned, in Basel III the rules for capital requirements for risk-weighted assets are supplemented by rules for the management of the liquidity risk associated with the relationship between a bank's assets and liabilities.

Since the outbreak of the credit crisis in mid-2007 many banks have faced serious difficulties in obtaining through borrowing or the sale of assets liquidity adequate for the ongoing funding of their operations. A bank's critical condition and the threat of its insolvency are frequently first manifested in deterioration of its liquidity position. Difficulties experienced by banks during the GFC led to unprecedented levels of liquidity support from governments and central banks together with other official intervention such as the arrangement of mergers for weakened or failing institutions.

Under its rules for liquidity management Basel III defines two minimum quantitative measures intended "to achieve two separate but complementary objectives": the Liquidity Coverage Ratio and the Net Stable Funding Ratio.

The Liquidity Coverage Ratio "is to promote short-term resilience of a bank's liquidity by ensuring that it has sufficient high-quality liquid assets to survive a significant stress scenario lasting for one month". The Ratio is designed to identify the amount of unencumbered high-quality liquid assets available to offset the net cash outflows which the bank would encounter during short-term stress scenarios specified by its supervisors. Under this standard the ratio of high quality assets to net cash outflows over a 30-day period should be at least 100 per cent. Cumulative cash outflows for this purpose are calculated by multiplying outstanding balances of different categories of liability on the bank's balance sheet by percentages reflecting the expected run-off over a 30-day horizon, and by multiplying off-

balance sheet commitments and contingent liabilities by factors also reflecting expected rates of draw-down.

The bank's off-balance sheet commitments and contingent liabilities include guarantees, letters of credit, and other trade finance instruments. The draw-down factors for such contingent liabilities are to be determined by national supervisors.

The Net Stable Funding Ratio "is to promote resilience over a longer time horizon by creating additional incentives for banks to fund their activities with more stable sources of funding on an ongoing basis". The Ratio is designed to measure the amount of longer-term, stable sources of funding in relation to that required by the liquidity profiles of the assets funded by a bank as well as by the potential for liquidity calls on a bank due to contingent off-balance-sheet obligations over a one-year time horizon under conditions of extended stress. Under the standard, the ratio of available stable funding to required stable funding should be at least 100 per cent.

A bank's available stable funding includes its capital, preferred stock with a maturity of at least one year, other liabilities with effective maturities of at least one year, and the portion of other shorter-term deposits which would be expected to stay with the institution during extended stress scenarios. Each category of stable funding is multiplied by a factor reflecting its degree of stability. Equity capital, for example, is multiplied by 100 per cent and unsecured wholesale funding from entities other than non-financial corporations, sovereigns, central banks and public-sector bodies by 50 per cent.

Required stable funding (RSF) is measured on the basis of supervisory assumptions, reflected in RSF factors, concerning the liquidity risk of the bank's assets, off-balance-sheet exposures and certain other commitments including guarantees, letters of credit and other trade finance instruments. The RSF factors assigned to different categories of asset approximate the amount of the asset which could not be monetised through sale or use as collateral in a secured borrowing during a period of liquidity stress lasting a year. Off-balance-sheet exposures and contingent liabilities generally require little immediate funding but can be associated with significant drains of liquidity during periods of stress.

The requirement of an RSF factor for off-balance-sheet exposures involves the establishment of an allocated reserve. For the contingent liabilities due to trade finance the RSF factors are left to national supervisory discretion.

Thus management of banks' balance sheets in accordance with the new standards for liquidity risk will involve estimates of expected net cash outflows and of required amounts of stable funding due to contingent liabilities linked to trade finance. The impact of such management on trade finance will depend on the changes from a bank's existing practices which are required by introduction of the Liquidity Coverage Ratio and the Net Stable Funding Ratio.

The details of the rules for required stable funding for most of the instruments of trade finance are left to national supervisory discretion. This has the advantage of providing for

flexibility which can take into account variations in national circumstances and in national policy objectives.

Leverage ratio

In addition to capital requirements for credit, market and operational risk and to rules for the management of liquidity risk, Basel III contains an aggregate leverage ratio. Leverage can be measured in various ways intended to indicate a firm's exposure to loss in relation to its capital.

The BCBS itself has provided a succinct description of the rationale of the leverage ratio as follows: "One of the underlying features of the crisis was the build-up of excessive on- and off-balance sheet leverage in the banking system. In many cases, banks built up excessive leverage while still showing strong risk based capital ratios (i.e. capital in relation to risk-weighted assets as estimated in accordance with Basel II or national rules – estimation which could and in practice did provide banks with considerable flexibility in setting their levels of risk-weighted assets and thus the denominator of their regulatory capital ratios). During the most severe part of the crisis, the banking sector was forced by the market to reduce its leverage in a manner that amplified downward pressure on asset prices, further exacerbating the positive feedback loop between losses, declines in bank capital, and contraction in credit availability." (BCBS; 2011: 61).

Thus the BCBS decided to introduce "a simple, transparent, non-risk-based leverage ratio" which would "reinforce the risk based requirements with a simple, non-risk based 'backstop' measure".¹

The leverage ratio is designed to achieve this objective by setting a minimum level for banks' high-quality (so-called Tier 1) capital in relation to on- and off-balance sheet positions (where the latter include derivatives and contingent liabilities).

As explained in a moment, the leverage ratio has been a major bone of contention between the trade-finance industry and the BCBS regarding Basel III. Its measurement in Basel III has already been the subject of revisions which may not yet be complete.

Trade finance in the Basel capital framework

Trade finance and credit risk

Trade finance fits into the Basel framework through the rules for credit and liquidity risk and through the position of trade finance in the denominator of the leverage ratio.

The rules for exposures to credit risk, it will be recalled from the discussion of Basel I, prescribed the use of CCFs for off-balance-sheet exposures multiplied by the capital requirement of the counter party covered by the exposure?

¹ Prior to the Basel capital framework many advanced countries included in their regulatory frameworks gearing and capital/assets ratios. These spanned a range from rules similar to the leverage ratio of Basel III to ratios conceptually closer to the required capital of the post-1988 Basel framework (Dale, 1984: 91-92).

The discussion here can start from the risk weighting for estimating the capital requirements under the Standardised Approach of Basel II and Basel III.

Where trade finance takes the form of bank lending, the rules are subsumed under those for lending generally. Where trade finance takes the form of off-balance-sheet exposures or contingent liabilities, it is covered by the system of credit conversion factors (CCFs) which has just been described.

-) Direct credit substitutes, e.g. general guarantees of indebtedness such as standby letters of credit serving as financial guarantees for loans and securities, and acceptances (including endorsements which entail the same exposure to credit risk as acceptances) are attributed a CCF of 100 per cent, that is to say they are treated in the same way as lending.
-) Certain transaction-related contingent items (such as performance bonds and standby letters of credit related to particular transactions) are attributed a CCF of 50 per cent.
-) Short-term self-liquidating trade letters of credit arising from the cross-border movement of goods (e.g. documentary credits collateralised by the underlying shipment) are attributed a CCF of 20 per cent in the case of both the issuing bank and the confirming bank (the distinction between which will be explained in a moment). Under the 8-per-cent capital ratio of Basel II this would imply a minimum capital requirement of 1.6 per cent, and under the new and higher required capital ratios of Basel III a somewhat higher minimum capital requirement in the range of 2 to 2.5 per cent.

In the light of the revision of the rules concerning exposures to trade finance in October 2011 one feature of the Standardised Approach as originally formulated in Basel II (and retained in Basel III) deserves special attention. Under one of the two options for exposures to banks (Option 2) claims on *unrated* banks carried a risk weight of 50 per cent (corresponding to a capital requirement in Basel II of 4 per cent) or in the case of claims with an original maturity of up to three months a risk weight of 20 per cent (corresponding to a capital requirement of 1.6 per cent).

As a result unrated banks issuing letters of credit in low-income countries might become eligible for the lower risk weights - and thus lower regulatory capital charges - in the exposures of confirming banks. The latter are typically chosen for the role of confirming - i.e. guaranteeing payment on - letters of credit owing to their location in higher-income countries which are viewed as offering a surer prospect of payments being made under letters of credit.

However, application of these low risk weights was subject to a *sovereign floor* under which no claim on an unrated bank could receive a risk weight lower than that which applied to the sovereign claims on the country in which it was incorporated. This could have the consequence of nullifying the benefits of the lower risk weights for trade-financing transactions involving claims on unrated banks in low-income, developing countries.

As already explained, under the alternative Internal Ratings-Based approach of Basel II and Basel III for the major categories of exposure to credit risk banks use their own rating systems to measure some or all of the four determinants, the probability of default, loss given default,

exposure at default, and the remaining effective maturity of the exposure. The Internal Ratings-Based Approach provides only a framework of rules for estimating one or more of these determinants. Otherwise the actual levels of these estimates are the responsibility of banks themselves.

The following rules for the CCFs for off-balance sheet exposures for trade finance apply in the Internal Ratings-Based Approach of both Basel II and Basel III:

-) In the Foundation version the CCFs used to estimate the exposures to instruments of trade finance follow those of the Standardised Approach.
-) In the Advanced version banks make their own estimates of applicable CCFs subject to floors applicable in certain cases.
-) Before the October 2011 revision of the rules by the BCBS, in the case of both the Foundation and the Advanced versions of the Internal Ratings-Based Approach the remaining effective maturity for trade-finance exposures was generally subject to a one-year floor. However, in the case of the Advanced version exceptions to this floor could be accorded to banks at supervisors' discretion in cases which specifically included short-term self-liquidating trade transactions such as "import and export letters of credit and similar transactions". These "could be accounted for at their remaining maturity".

Leverage ratio and trade finance

As noted earlier, in Basel III the rules for capital requirements for risk-weighted assets are to be supplemented by an aggregate leverage ratio. In the version fleshed out in the blueprint for Basel III of June 2011 the ratio sets a minimum level of 3 per cent for banks' high-quality (so-called Tier 1) capital in relation to on- and off-balance sheet positions (where the latter include derivatives and contingent liabilities).

The items in the ratio's denominator, i.e. a bank's on- and off-balance sheet exposures and contingent liabilities, including those associated with trade finance, were to have a CCF of 100 per cent, and not the lower CCFs allowed in the estimation of risk-weighted exposures for the minimum regulatory capital requirements for credit risk of Basel II and Basel III (described above). The only exception admitted to the CCF of 100 per cent was "commitments that are unconditionally cancellable by the bank without prior notice". These received a CCF of 10 per cent.

Industry representations and the risks of trade finance

At a general level the target of the trade-finance industry's representations has been the emphasis of Basel II and Basel III on counter party rather than product or performance risk. In the industry's view this emphasis leads to the attribution of insufficient importance to the risk-mitigating factors of trade-finance instruments such as the self-liquidating character of many short-term trade-finance instruments, their collateralisation, and the short maturity of a large part of such financing.

Attention has also been drawn by the industry critics of Basel II and Basel III to the procyclicality of risk weights such as those of the Internal Ratings-Based Approach, which are determined by the probability of default and by loss given default, both of which increase

during downturns such as the current one, again without proper account being taken of the mitigating factors inherent in the instruments of trade finance.

Failure to take account of the risk-mitigating features of trade financing is held by the industry to be likely to raise capital requirements for all but highly rated borrowers – from developed as well as developing countries. Representations of this kind were initially made by the trade-finance industry early in the process of drafting Basel II. However, only more recently has the industry supported its position with statistical data. Of these the most important are batches of data assembled under the International Chamber of Commerce (ICC)-Asian Development Bank Trade Finance Default Register and under the International Chamber of Commerce Trade Finance Register. These were the outcome of an initiative of the International Chamber of Commerce and the Asian Development Bank to extend available information on trade finance. The batches of data have provided support for the expectations of the industry as to the relatively low risks associated with trade finance.

In one of the first batches of data covering 11,414,240 transactions of 14 international banks during 2005-2010, the average maturity of the transactions was only 147 days; fewer than 3,000 defaults were observed for the total sample; and fewer than 500 losses out of more than 7.5 million transactions were observed during the crisis period of 2008-2010 (ICC, 2011: section 2).

More recently, the ICC Trade Finance Register has been extended, with a larger sample of banks. Results now cover both short-term transactions (with a maturity typically of less than a year) and medium to long-term trade finance products (defined as loans backed by official ECAs in high-income OECD countries with protection for commercial or political risk or both). Definitions of the Register have been refined to bring data into closer alignment with those of the Basel framework². Published data for 13 million transaction from 23 banks now cover the period 2007-2014, with a separate classification in the case of short-term transactions for export letters of credit, import letters of credit, performance guarantees, and loans for import/export³. (International Chamber of Commerce, 2015).

For short-term financial products the transaction default rate varied between 0.01 per cent for export letters of credit and 0.22 per cent for loans for import/export. The customer default rate (total number of customer defaults divided by the total number of customers) varied between 0.04 per cent for export letters of credit and 0.72 per cent for import/export financing. These figures compare favourably with the figures for comparable expected default rates of the credit rating agency, Moody's. Most of the products covered other than performance guarantees had a maturity of less than 170 days.

Transaction and customer defaults in the case of medium- and long-term transactions backed by ECAs are also low compared to normal corporate lending. However, ECA backing in the

² For example, the definition of default for the ICC Trade Register is now designed to reflect that of the Basel capital framework.

³ Loans for import/export include loans classified by reporting banks as "trade", including clean import loans, pre-export and pre-import finance.

form of insurance or guarantees can reasonably be considered credit-risk mitigation. This could be seen as blurring the usefulness of this category of defaults as indicators of the intrinsic riskiness of medium- and long-term trade finance.

The ICC data on default strongly suggest that the risk actually observed in the case of trade-finance transactions is low and remained so during the GFC. However, other available information suggests that the terms of trade finance none the less became widely more restrictive in the early part of the GFC. This, for example, was the conclusion of surveys of commercial banks between December 2008 and early 2010 conducted by the IMF, the Bankers' Association for Finance and Trade (BAFT), and by BAFT-IFSA (the organisation formed by the merger of BAFT with the International Financial Services Association, IFSA), cited in a working paper of the IMF (Asmundson et al., 2011). The less drastic slowdown in global trade 2011-2012 was also accompanied by similar downward movements in trade finance for many countries. But throughout the GFC there has been considerable variation in the experience of banks in different regions, and declines in trade finance have been far from universal (Committee on the Global Financial System, 2014: 16-24).

The unfavourable impact of Basel II and Basel III has been a continuing preoccupation of banks throughout the period since the outbreak of the GFC. According to the description of a recent survey in a brief of the Asian Development Bank 77 per cent cited Basel III as an impediment to trade finance and as an impediment whose importance actually increased in 2015 (Di Caprio, Beck, Yao and Khan, 2016).

Data on reduced availability since the outbreak of the GFC and those in the Trade Registers are not measuring the same dimension of trade finance. The latter indicate no evidence of greater intrinsic riskiness of trade finance as measured by actual defaults during this period. None the less, as just mentioned, trade finance has not escaped the impact of the GFC much of the time and in many countries. Here one can speculate that reduced availability may have reflected to some degree the procyclicality of risk weights under the Internal Ratings-Based Approach of Basel II and III mentioned in the industry's representations which was mentioned earlier.

The 2011 changes announced by the BCBS

Changes in the rules for trade finance in Basel III were announced by the BCBS in October 2011 (BCBS; 2011). The changes involved two waivers:

-) firstly, a waiver of the one-year floor for the maturity of issued and confirmed letters of credit for banks estimating risk weights on the basis of the Advanced version of the Internal Ratings-Based Approach. (As I mentioned earlier, this waiver could already be accorded to banks at its supervisor's discretion in the case of letters of credit and similar transactions.)
-) and, secondly, a waiver of the sovereign floor under which no claim on an unrated bank can receive a risk weight lower than that of the claims on the country in which it was incorporated. As explained earlier, this waiver could reduce the capital requirement for the trade finance of low-income countries.

2014 revision of the leverage ratio

In a new document on the leverage ratio of January 2014 the BCBS shifted its position on risk-weighting of trade-finance items in the denominator of the leverage ratio, which had been the subject of representations of the trade-finance industry that it failed to take account of their low risk. (BCBS, 2014).

Short-term self-liquidating letters of credit associated with the movement of goods in international trade (commitments by the bank to pay which are collateralised by the underlying shipments) now receive a CCF of 20 per cent in the case of both the issuing bank and the confirming bank in estimating their contributions to the leverage ratio's denominator. (The confirming bank, it will be recalled, provides a guarantee of payment under letters of credit additional to that of the issuing bank and is usually located in the country of the issuer.) Moreover certain transaction-related contingent items (such as performance bonds, bid bonds, and standby letters of credit, which are vehicles for guaranteeing performance related to particular transactions) now have a CCF of 50 per cent.

CCFs of less than 100 per cent facilitate for a bank the achievement of the target level of 3 per cent for the ratio since the size of the ratio's denominator is reduced.

Further changes in the regulatory framework

Basel III still not complete

One might have expected that the definitive version of Basel III was now ready for agreement but this would have proved overoptimistic. National officials appear still undecided as to the effectiveness of some of the framework's rules. Moreover there has been no let-up in lobbying by the banking sector concerning levels and methods of estimating regulatory capital. Not least the arrival of the Trump administration in the United States is associated with uncertainty as to its plans for financial regulation which is further delaying final agreement on Basel III. As of the time of writing revised rules for market risk, credit risk and the leverage ratio are still at the consultative stage.

Revision of the rules for market risk reflect a view amongst regulators that the GFC indicated that banks' trading activities were still under capitalised. Moreover many banks are seen as having gamed the distinctions in the rules of the Basel framework through shifts in exposures between the banking and trading books in order to reduce their capital levels and thus increase their returns to equity. It is conceivable, but not especially likely, that more stringent rules for the dividing line between credit and market risk may have an impact on the rules for trade finance.

Subjects likely to be covered by the revisions of the rules for credit risk are enhanced rules to be met for recourse to the ratings of credit rating agencies in estimating risk weights; rules for the risk weights of exposures to real estate with overriding criteria for borrowers' capacity to pay and for cash flows generated by the property securing the exposure; and a "broader and more holistic" approach to sovereign-related risks. Revisions under the first and last of these headings may have implications for trade finance via their effects on risk weights.

Further revisions of the leverage ratio under consideration include the method for measuring derivative exposures, the accounting framework for the recognition of unsettled purchases

and sales of financial assets, the treatment of provisions in relation to total exposures in the denominator of the ratio, alignment of the CCFs for off-balance sheet exposures in the denominator of the leverage ratio with those in the rules for the risk weights for credit risk elsewhere in the capital framework, and a higher leverage ratio for GSIBs. Revisions of factors determining the CCFs may lead to changes for the CCFs for off-balance-sheet trade–finance exposures. As one scrutinises proposals under these headings, it is difficult not to wonder how they contribute to achievement of the objective of “a simple, transparent, non-risk-based leverage ratio” designed to serve as a backstop to capital requirements based on risk-weighted exposures.

Additional issues targeted by trade financiers

As part of the Trade Register project the ICC has submitted further recommendations regarding the Standardised Approach of Basel III to credit risk. Owing to the interdependence of certain rules concerning off-balance sheet exposures in the Standardised Approach and the Foundation version of the Internal Ratings-Based Approach these recommendations also affect the latter (ICC, 2015: 28-29).

The recommendations include the following: differentiated treatment of claims on banks less than 90 days old and rolled over by lenders, and trade finance exposures to corporate counterparties; reductions in the CCF for various categories of commitments and guarantees; specific or lower risk weights for Commodity Trade Finance when supported by strong structures and liquid collateral; greater consistency and clearer guidance concerning the applications of CCFs; clarification of the risk of exposures covered by insurance contracts meeting the eligibility requirements of the collateral mitigation framework.

The industry has also argued that there should not be a special AVC multiplier of 1.25 for large and unregulated financial institutions for trade finance-related exposures owing to the fact that size and regulatory status have no effect on the low risk of such transactions (Committee on the Global Financial System, 2014: 48).

AML, KYC and correspondent banking

Threats to correspondent banking

In a 2016 survey of banks by the Asian Development Bank 90 per cent cited Know Your Customer (KYC) and Anti-Money-Laundering (AML) regulations as impediments to expanding their provision of trade finance (Di Caprio, Beck, Yao and Khan, 2016). Much of the attention under these headings has focussed on the effects of these regulations on correspondent banking relationships, especially those between banks in emerging-market and other developing countries, on the one hand, and advanced countries, on the other.

Correspondent banking involves the provision by one bank (the correspondent) to another (the respondent) of account and other services. These include payments and transfers, trade finance, liquidity management, and short-term borrowing and investment in different currencies. Correspondent banking may involve agreements under which the correspondent bank executes payments on behalf of the respondent bank and its customers. It may also involve “nested” correspondent banking where one correspondent banking relationship is also used by banks other than of the initial respondent.

In a survey for the ICC's 2014 review of trends in trade finance, almost 40 per cent of banks covered reported closing correspondent account relationships owing to the increasing cost and complexity of KYC and AML regulations (International Chamber of Commerce, 2014:39)⁴. Research carried out by the Commonwealth Secretariat found that in 23 countries covered, 17 had experienced a decline in correspondent banking relationships since 2012, and that more than 70 per cent of these closures had taken place since 2015 (King, 2017). Surveys by the World Bank, the IMF and regional associations of banking supervisors indicate the precariousness of many correspondent banking relationships in the present business and political climate. Pressures due to AML and KYC need to be viewed in the context of broader prudential regulation more generally. The categories of institution and counter party most affected have been small and medium-sized banks and exporters, especially in smaller countries (IMF, 2016: 9-10).

Banks' withdrawal from correspondent relationships is often justified as "derisking". This is a response not only to AML and KYC rules, but also to risks due to armed conflicts and the incidence of economic and trade sanctions, and to tougher enforcement of regulation more generally, which, *inter alia*, have led to large penalties for some banks. Even when banks do not actually withdraw from relationships with certain categories of customer, "derisking" may lead to substantial increases of their fees of 30-50 per cent.

The reduced availability of correspondent banking for smaller developing countries can have, at least in the short run, drastic effects on banking services, and has also handicapped the provision of humanitarian assistance. In May 2016, for example, the correspondent lines of the Capital Security Bank, the only private bank in the Cook Islands (an offshore centre in the Pacific), were cut with the result that for several days the bank was unable to pay out any money (Caplen, 2017). An example of the frustration by "derisking" of a humanitarian initiative involved a plan by an aid organisation to deliver assistance to victims of the Syrian civil war. This ran foul of the unwillingness of the aid organisation's bank to transfer funds to a neighbouring jurisdiction from which the money would be transferred across the border by informal "hawala" payments networks (King, 2017: 48)⁵. This illustrates a dilemma facing such initiatives. Moreover, steps leading to dependence on hawala rather than banking channels can actually handicap regulators and law enforcement agencies since they become less able to track many money flows which are routed through such informal networks.

Owing to the focus in this paper on the disruptive impact of AML and KYC rules on correspondent banking and thus also on trade finance, the discussion concerns principally the situation face by emerging market and other developing countries, i.e. those most seriously

⁴ Money Laundering can be defined as "washing" financial proceeds to disguise their source which can be legal as well as illegal activities. Amongst the latter are activities linked to terrorism. Money Laundering can involve moving money, reducing its volume, and changing its character, while sheltering it from detection and taxation. Knowing Your Customer requires a financial institution to be aware of unusual practices which are not consistent with a customer's business. A new customer's identity and the true ownership of accounts must be verified. Internal controls must be maintained to ensure compliance and detection. (Manning, 2000: 293 and 318).

⁵ Hawala is a payment method which operates through a network of agents in different countries who maintain running balances with each other that are settled periodically.

affected, rather than the participation of institutions in major OECD countries in activities such as money laundering and tax avoidance. The financial sectors of the latter are actually well suited to the establishment of shell companies for these purposes owing to the depth and sophistication of their markets as well as to the anonymity which they can provide (Persaud, 2014). Various evidence points to extensive exploitation in some of these countries of the opportunities which these advantages provide⁶.

Protecting correspondent banking relationships

The policy response to pressures on correspondent banking has predictably emphasised efforts by banks themselves in the form of more rigorous internal controls and compliance as well as better exchange of information amongst institutions through, for example, promotion of the use of the Legal Entity Identifier (LEI). The IMF has particularly endorsed the LEI owing to its potential through the unambiguous identification of banks and customers for enhancing screening and implementation of customer due diligence requirements amongst banks participating in correspondent banking (IMF, 2016: 33).⁷

The effectiveness of measures of this kind are not necessarily simple. In large diversified financial firms, multiple layers of authority can handicap internal controls regardless of the intentions of top management, and information exchange amongst institutions – including sometimes the branches and subsidiaries of the same firm - can be hampered by privacy requirements and data-protection rules.

The work under the auspices of the FSB has so far emphasised fact-finding surveys designed to identify more clearly the causes, effects, and other dimensions of problems caused by the decline in correspondent banking (FSB, 2016). The aim of this work is to provide guidance to national regulators on actions within their jurisdictions and on cross-border cooperation. Results will take time since action on both national and international fronts will have to deal with thorny problems. National regulators are painfully aware of the shortcomings of their existing systems of identifying money-laundering transactions in vast quantities of transactional data. Cross-border cooperation will prove difficult partly for the usual reasons hampering such cooperation but also because of the complexity and sensitivity of the frameworks of rules within which the cooperation must take place.

Thinking on correspondent banking relationships in the United States is of special interest here because of the country's role as the principal classifier of countries, organisations and individuals as involved in terrorism and as targets of other AML regulations. A major banking regulator, the Federal Deposit Insurance Corporation, has none the less emphasised the importance for banks to take a case-by-case approach to customers rather than to cut services to whole categories.

⁶ Activities in the United Kingdom and the United States analogous to those in more frequently cited offshore centres are described in McCann, 2006: chapters 17 and 18.

⁷ The Legal Identity Identifier is a code used to provide unique identification to legally distinct entities that engage in financial transactions. It is issued by Local Operating Units of the Global Legal Entity System (IMF, 2016: 30).

Moreover other private and official initiatives to mitigate the impact of stricter enforcement of KYC and AML regulations have already been taken or are under consideration. Proposals have been put forward by some banks for an agreed form of certification which would give United States banks greater confidence in compliance systems of local banks in other countries. Alternatively there could be an intermediate body which would serve as a clearing house between United States and, say, Latin American banks. Under an already existing arrangement along these lines, the Federal Reserve Bank of Atlanta enables financial institutions to transfer funds through the Fed Global Automated Clearing House to both unbanked and banked receivers in several countries in accordance with procedures compliant with requirements designed to prevent money laundering and terrorism (IMF, 2016: 35).

The eventual impact of such initiatives on correspondent banking relationships will depend on how widely similar steps are also taken by different countries. One can anticipate facilitation of transfers for trade finance and remittances under normal conditions. But success may not extend to financial transfers and banking operations for countries in or close to conflict zones.

New issues

Among developments affecting trade finance which can already be observed and are likely to become more important from both business and regulatory points of view, two will be mentioned here, though they will not be the subject of extended discussion. One involves transactional shifts, and the other the influence of environmental considerations on banking operations.

Under the first heading, the banks have been increasing their participation in trade financing through primarily or exclusively fee-earning activity which does not absorb capital to cover exposure to trade-finance risk. This shift reflects at least partly efforts to economise on capital in response to Basel II and Basel III.

For example, banks' role in supply-chain trade finance can take the form of techniques which avoid commitment of their own capital. Here corporations themselves use their own (currently large) cash balances to finance their supply-chain operations. The role of the bank in such cases is to provide the framework and infrastructure for such financing but not to commit its own funds. Moreover there has also been some, still limited recourse by banks to securitisation in trade finance. Here the process consists of selling to non-bank investors, securities backed by short-term trade-finance assets originated by banks (Committee on the Global Financial System, 2014: 27).

A second issue follows from the growing attention of both policy makers and the public to environmental issues. This is reflected in data assembled from banks and discussed in the ICC's 2016 Global Survey of Trade Finance (Voysey, Verhagen, and Slater, 2016). The findings of this survey of banks included the following:

-) 75 per cent tracked developments and market demands/expectations related to sustainable trade and sustainable trade finance;

- J 65 per cent were implementing (or considering implementing) more stringent environmental and social criteria in respect of trade finance transactions;
- J 55 per cent had rejected trade finance transactions due to internal or external environmental policies;

The relationship of banks' practice so far to statements of increased awareness of the new context of their operations is difficult to gauge. This acknowledged by the ICC: "The direction of travel is clear; factoring sustainability into the strategy and operations of banks' trade finance activities is only going to be more important with time. The evolution of sustainable trade finance practice, however, is still in its early stages" (ICC, 2016: 138). None the less, the ICC accepts that the agreement to a commitment on restricting the global rise in temperatures at the 2015 Paris Summit "is nothing short of an economy-wide industrial revolution".

Some initial steps have been taken in response to this "revolution". A group of international banks convened under the Banking Environment Initiative (BEI) has developed a Sustainable Letter of Credit designed for trade finance for palm oil⁸. The bank is responsible for checking whether the documentation of the letter of credit includes the "Certified Sustainable Palm Oil" stamp. Banks are eligible for a reduced cost of capital if they book such transactions with the International Finance Corporation under its Global Trade Finance Programme.

The ICC has identified three areas where banks can – and presumably should – take action: client engagement which involves integrating sustainability risk considerations into due-diligence processes and other aspects of relationships with clients; risk screening of trade transactions from a sustainability point of view; and pricing with banks adjusting their pricing practices to reward better sustainability practices.

A classification of this kind is a useful starting-point. But its practical content will depend on the extent and character of the changes in trade relations as countries respond – or fail to respond – to the challenges posed by environmental and sustainability issues.

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⁸ The BEI was convened by the University of Cambridge Institute for Sustainability Leadership (CISL) with the mission of leading the banking industry in collectively directing capital towards socially and environmentally sustainable development

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