

Trade finance and regulation:

The risk of unintended
consequences



Llewellyn Consulting
Independent Economics

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Foreword

Trade finance has long been of vital importance to the world economy. It has oiled the wheels of international transactions, and in the process acted as a catalyst for investment, greater consumer choice, and technological advancement. It has therefore been at the core of the process of globalisation.

Demand-driven, trade finance has historically perhaps been rather taken for granted. It has been generally perceived to be liquid and well-functioning. But since the global financial crisis, it has experienced periods of dysfunction that have exacerbated the world's economic woes.

It is now also rapidly evolving in the face of financial innovation and proposed regulatory change. In particular, the efforts to improve the resilience of the financial sector embodied in successive variants of the Basel III regime are having a profound effect on entities involved in cross-border business activities, particularly in emerging markets. Not all of these regulatory changes are being welcomed however. Hence, many companies and financial institutions are having to reconsider how they will approach trade finance in future.

Llewellyn Consulting was approached by Trafigura to provide a comprehensive assessment of the current condition of this central element of the global financial system, and the challenges it is confronted by. In assembling this paper we have, in addition to reviewing the relevant published materials, talked at length to people in the policymaking community, and to the major actors in the sector – both those who use trade finance, and those who supply it.

It is clear that trade finance continues to matter enormously, and that there would be serious risks to a still fragile global economy were its smooth functioning to be interrupted. And a number of the experts in the field consider that there is a risk of this happening, albeit inadvertently.

All of this points to a need for an informed discussion; a constructive approach; and a willingness to be flexible where the evidence points to the need.

John Llewellyn, Preston Llewellyn and Russell Jones

Partners, Llewellyn Consulting

Executive Summary

- Trade finance, long taken for granted, is of central importance to the global economy.
- One form or another of trade finance underpins around 90% of world trade.
- International trade has always been at the core of economic development, particularly since WWII.
- Disruptions to trade finance are infrequent but, when they occur, are highly damaging.
- International trade cannot flourish without support from banks and co-operation between firms.
- Local banks are taking market share from global entities in a dollar-denominated and short-term market.
- New structures and products are being developed, but standardisation and better understanding are needed.
- Default and loss rates on trade finance products and related guarantees are low.
- Until 2008, the supply of trade finance was demand driven, seldom if ever constrained, and hence of little concern to policymakers.
- However, trade finance was a conspicuous casualty of the 2008 global crisis, and exacerbated the collapse in trade volumes.
- Policy initiatives facilitated a rapid recovery: but latterly world trade has failed to match global GDP growth.
- This reflects slower emerging market (EM) – especially BRIC – growth, and long-term structural factors.
- Some pockets of stress aside, finance has not been a major constraint on trade growth since 2009.
- However, there is now growing concern over the possibility of (albeit inadvertent) over-heavy, insufficiently nuanced, regulation.
- Practitioners recognise that trade finance requires a stable and soundly-regulated global financial system.
- But trade finance being of central importance to growth and an inherently low-risk activity, it warrants being handled with care.
- In particular, it is important that separate regulations in the areas of capital, leverage, and liquidity do not add up to more than the sum of their parts.
- Ensuring a wide pool of actual and potential providers would increase the resilience of trade finance in the face of shocks.
- Commodity trading is of central – and not always fully appreciated – importance to economic growth, of developing and developed countries alike.
- Practitioners consider that the risks involved in commodity trading are perceived as greater than in fact they are.
- This misperception risks leading to undue restrictiveness of regulations governing the provision of commodity trade financing.

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Introduction

*Trade finance oils the
wheels of trade*

*Long overlooked,
it has come under
duress of late ...*

*... and following the
financial crisis, the market
is in flux*

As the World Trade Organisation (WTO) succinctly puts it: “Finance is the lubricant of commerce”.¹

That said, historically the underlying mechanics of global trade finance have attracted relatively little attention. Trade finance was generally considered both by those who utilised it, and by those who oversaw it, to be readily available when required and to function satisfactorily. After all, throughout the post-World War II era, and in particular since the 1980s, international trade and the process of globalisation were at the forefront of global economic development.

Over recent periods, however, trade finance has experienced periods of stress and dislocation, not least following the bankruptcy of Lehman Brothers in 2008, and again in 2011, when the euro area sovereign debt crisis precipitated funding strains for European commercial banks.

Global trade finance is also in a state of flux. It is in the throes of significant structural change related to the entrance of new participants and products, and major changes in the regulatory architecture within which it operates.

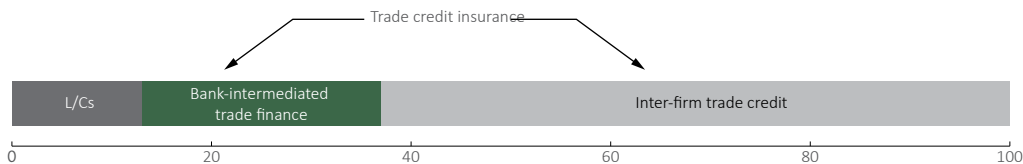
Maintaining the vitality and resilience of trade finance is crucial if the integrity of the system of international trade, with all its proven benefits for economic progress, is to be sustained. ■

1 Auboin. M. ‘Improving the availability of trade finance in developing countries: an assessment of remaining gaps’. WTO Staff Working Paper ERS-D-2015-06. June 2015.

Defining trade finance

Trade finance generally refers to financial products that are explicitly linked to underlying international trade transactions (whether exports or imports), a significant portion of which are provided by banks. These facilities are usually of short maturity: most products have a tenor of six months or less. Anything beyond a year is relatively rare. This is particularly the case for bulk commodities, and intermediate and consumer goods. Some trade in capital goods may require the provision of longer-term credits. Overall, however, shorter-term trade finance dominates the market, accounting for more than 95% of the total.²

Financing global trade - a schematic overview (share of total global trade, %)



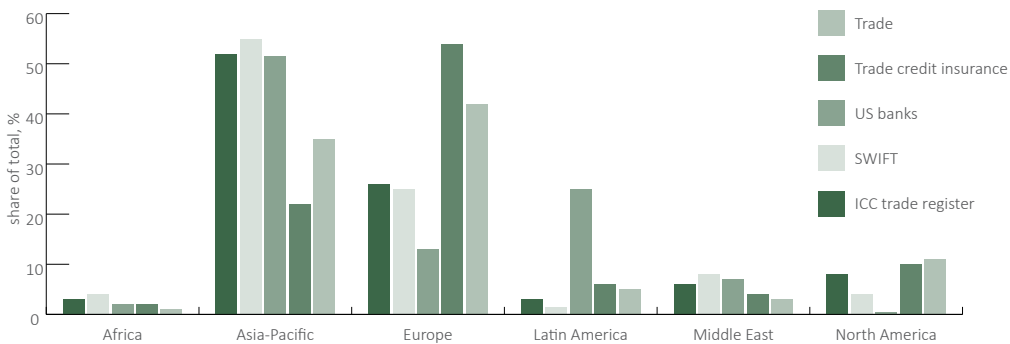
Source: BIS

Notes: Inter-firm credit includes open account transactions, where goods are shipped in advance of payment, and cash-in-advance transactions, where payment is made before shipment.

The most common, and standardised, form of bank-intermediated trade finance is a Letter of Credit (L/C). L/Cs mitigate payment risk by providing a framework within which a bank makes (or guarantees) the payment to an exporter on behalf of an importer, once delivery of goods is confirmed through the presentation of appropriate documentation. Generally speaking, L/Cs are off-balance sheet commitments, although they may on occasion be associated with an extension of credit.

In reality, L/Cs tend to be time-consuming and labour intensive to operate. They still predominate in trade between emerging market (EM) economies, but the number and the complexity of the 'receivables' and 'payables' involved in many modern-day international global supply chains, increasingly militates against their use.

The geographical distribution of trade finance, trade credit insurance and trade (share of total, %)



Source: BIS

Notes: ICC trade register refers to the average from 2008 to 2011. SWIFT is based on the average value of sent and received SWIFT MT700 messages in 2011. US data capture only lending vs. non-residents resulting in a low share of US banks' exposure to North America (average from 2008 to September 2012). Data on trade credit insurance refer to short-term credit insurance from the Berne Union (average for Q4 2011 to Q1 2013). Data for trade refer to merchandise trade (average of imports and exports) from Q1 2008 to Q4 2012.

Trade is heavily dependent on financial support

L/Cs play a key role, especially in EMs ...

² Bank for International Settlements (BIS). Trade finance: developments and issues. CGFS Papers, No. 50. January 2014. This study offers an excellent summary of the key elements of what can be a complex and diffuse subject, and provided a vital source of material for the entire paper.

... but other bank facilities are growing in importance ...

... and individual firms provide credit to each other

Banks may also act to address working capital needs by providing trade finance loans to exporters and importers. In such cases, the loan documentation is linked either to an L/C, or to other financial instruments explicitly related to the underlying trade transaction.

A number of additional innovative trade finance techniques have been developed of late. For example, 'bank payment obligations' offer a similar degree of payment security to an L/C, but without the requirement physically to handle documentation relating to a trade contract. 'Supply chain finance', where banks automate documentary processing across entire supply chains, often providing credit via the discounting of receivables, is another growth area.

Trade finance versus inter-firm trade credit

The major alternative to bank trade finance is inter-firm credit extended between importers and exporters, commonly referred to as 'trade credit'. This includes 'open account transactions', where goods are shipped in advance of payment, and 'cash-in-advance transactions', where payment is made before shipment. Inter-firm credit typically entails lower fees and more flexibility than does trade finance, but leaves firms shouldering more payment risk, and a greater requirement for working capital. As a result, trade credit is most common among firms that have a long-established commercial relationship, or are part of the same multinational corporation, and/or operate in jurisdictions that have sound legal frameworks for the collection of receivables.

A firm's capacity to extend trade credit can be underpinned by the option, where available, to discount receivables, for example via 'factoring', and by access to bank and capital market finance that is not tied directly to trade transactions. Firms can further reduce payment risk by purchasing trade credit insurance. Trade credit insurance is also used by banks to hedge their own payment risks.

Size and structure of the market

Unfortunately, there is no one single comprehensive source for measuring the magnitude, composition, and pricing dynamics of the trade finance market. That said, by drawing on numerous heterogeneous country statistics, IMF and World Bank analysis, survey data from trade associations, not least the International Chamber of Commerce (ICC) and the Society for Worldwide Interbank Financial Telecommunication (SWIFT), and resorting to considerable interpolation and inference, the BIS has estimated that trade finance directly underpins something in the region of one-third of global trade (or between \$6.5trn and \$8trn of transactions), with letters of credit covering about one-sixth of the total (or between \$3.25trn - \$4trn of transactions).³

Most of the remainder is financed by inter-firm trade credit. Both inter-firm and bank credit providers also benefit from trade credit insurance, which covered nearly \$1.7trn of global exports in 2011 and 2012. Overall, up to 90% of world trade is believed to rely on some sort of trade finance.⁴

Data are thin, but the trade finance market is huge ...

... underpinning some 90% of total world trade ...

Bank-intermediated trade finance markets in 2011

COUNTRY	TRADE FINANCE (US\$ BILLIONS)		PERCENTAGE OF MERCHANDISE TRADE ³
	STOCKS ¹	ANNUAL FLOWS ²	
Global estimate	1625-2100	6500-8000	36-40 Adjusted: 30-35 ⁴
International data sources			
L/Cs (SWIFT)		2,782	15
ICC trade register		1,958	11
National data			
Comprehensive domestic coverage			
Brazil	25	57	24
China	218	871	47
Hong Kong SAR	44	131-175	29-38
India	82	164	41
Italy	83	249-332	47-63
Korea	76	304	56
Spain	25	76-101	23-31
Partial coverage			
Australia	9	35	14
France	50	149-199	23-31
Germany ⁵	47	187	53
Mexico	8	8	2
UK	23	92	16
US	69	274	14
Sum national data	736	2,500-2,700	
Average all countries			31-34
Average comprehensive coverage			38-43

Source: BIS

Notes:

- 1 Average quarterly stock for 2011.
- 2 Annual flows for national data are derived by assuming a 90-day maturity of stocks, except in India and Mexico, where maturities are known to be six and 12 months respectively, and in Brazil, where the information on the flow of new loans is used. For countries where trade finance data capture short and longer maturities (France, Hong Kong SAR, Italy, and Spain), a 120-day average maturity is also assumed, giving rise to the range in the table.
- 3 Trade is measured as the average of exports and imports of goods.
- 4 The adjustment accounts for some trade transactions receiving support from more than one trade finance product, if for example an L/C is used as collateral for an export loan or banks refinance underlying exposures to exporters or importers with other banks, which accounts for around 15% of the ICC trade register exposures.
- 5 Both trade finance and trade are only vs. emerging markets and developing economies.

³ Ibid.

⁴ ICC. Rethinking trade and finance 2015.

... with local banks increasingly to the fore ...

However, the nature of trade finance varies widely from country to country and region to region: bank-intermediated products are primarily used to finance trade involving emerging market (EM) economies, especially those in Asia.

The higher usage of trade finance in Asia seems to reflect a range of factors, including distance from trading partners, product types, and the efficiency of local market practices. Academic studies suggest that trade finance is relied upon more heavily for trade covering long distances, newly-formed trade relationships, and trade involving countries with weaker contractual enforcement, less-developed financial systems, and higher political risk. Yet other factors, such as historical preferences, legal frameworks, and regulatory differences also seem to exert an influence.

Global banks provide about one-quarter to one-third of global trade finance, and almost half of their exposure is in emerging Asia. For the EM economies for which data are available, local banks account for the bulk of trade finance. Moreover, the share provided by local banks appears to have increased over recent years.

Global banks: short-term trade finance activities

TYPE OF PRODUCT	SHARE OF ACTIVITY (%) ¹	AVERAGE MATURITY (DAYS)
Letters of credit and guarantees	52	90
Import L/Cs	26	80
Export confirmed L/Cs	7	70
Performance guarantees and standby L/Cs	19	110
Loans	48	105
Loans for import	19	110
Loans for export: bank risk	13	140
Loans for export: corporate risk	16	70

Source: BIS

Notes:

1 Weighted by the dollar value of transactions. Averages for 2008 to 2011.

... although these activities are US dollar-dominated

Trade finance in its totality appears to be even more dollar-denominated than global trade, with 80% of L/Cs, and a high proportion of other trade finance expressed in the US currency. Clearly, the ability of both global and local banks to provide trade finance is at risk if banks' access to dollar funding comes under duress, as was the case at the depths of the 2008/9 global financial crisis.

Over the past decade and a half, the expansion of the market for trade finance has tended to fall short of the growth of nominal trade in many economies. This is most apparent in the use of L/Cs.

Resort to trade finance has however increased strongly in China and Hong Kong, and the growing importance of the EMs in world trade as a whole has clearly provided some support to aggregate trade finance exposure. Global banks no doubt see supply-chain finance, where they manage the collection and funding of receivables within a network of firms, as an important new area of activity, and a focal point of competition.

The average maturity of funded loans, according to ICC data, is about 3½ months, with L/Cs and guarantees having slightly shorter maturities. There are some indications that maturities are somewhat longer in EMs, perhaps because use of trade finance loans as a substitute for working capital loans is more popular there.

The role of L/Cs in trade finance is evolving. ICC data suggest that L/Cs and guarantees now account for around half of the aggregate value of global banks' trade finance exposures. Funded loans, mostly to importers and exporters make up the rest. Some 15% of global banks' trade finance loans are to other banks, which enable the recipient banks to fund trade loans to exporters or importers.

Overall, it is estimated that L/Cs support about 15% of global imports. The global volume of L/Cs amounted to some \$2.8trn in 2011 and 2012. Yet there are clear indications that L/Cs have gradually diminished in importance since 2000.

Trade finance is typically short-term in nature

Beyond the banks

New regulatory demands and the high marginal cost of equity capital are also encouraging banks to develop new structures and products to distribute trade finance exposures to non-bank investors.

The distribution of trade finance risk and exposures from bank balance sheets is not a new phenomenon. Banks have historically engaged in secondary market sales to other banks. However, such actions are becoming less viable against a backdrop of changes in regulation. Hence, there has been a growing willingness to explore the 'originate to distribute' model for trade loans.

Box 1: Distributing trade finance to non-bank investors

Synthetic securitisations have to date proved the most common way to distribute trade finance to non-bank investors. These transactions release capital for reinvestment, but do not provide liquidity relief, as banks continue to provide funding for the loans originated. Essentially, outside investors take a first- or second-loss position against a portion of the bank's trade finance portfolio in exchange for a stream of payments from the bank. The investor guarantee is provided via cash collateral.

The bank's purchase of protection allows it to reduce the risk-weighting of the insured loan, and the amount of capital required to be held against it. In contrast, these deals may not make a difference to non-risk-sensitive measures, such as leverage ratios.

Investors receive an equity-like return against a pool of relatively safe assets. Transaction tenors are typically three to five years.

Outright securitisation provides both liquidity and capital relief to originating banks, but has yet to gain much traction. Programmes could entail a true sale of trade assets to a special purpose vehicle, funded by asset-backed securities and commercial paper.

Direct sales of trade loans also release bank capital and liquidity for redeployment. Large banks are increasingly looking to sell syndicated trade loans to investors.

Direct provision of trade finance by investment funds is generally confined to various boutique operations, and seems to be focussed on customers who face constraints in accessing bank-intermediated trade finance, such as small and medium sized firms in emerging market economies.

The banks have so far experimented with a number of approaches, including: synthetic securitisation; outright securitisation; and/or direct loan sales. In addition, the direct provision of trade finance by non-bank financial institutions has also been on the rise, albeit from a low base (See Box: Distributing trade finance to non-bank investors).

Thus far, the scale of such activity has been limited, although surveys suggest that it will grow as familiarity with these initiatives increases. However, several challenges, including so-called 'agency' issues and information asymmetries, would need to be addressed first. In particular, expanding the role of non-bank investors may well require significant education and marketing efforts with investors and regulators, and greater standardisation of the new product base.

Increased securitisation would allow banks to economise on capital and/or liquidity, and reduce dollar funding needs, while preserving a return on firms' expertise in originating and managing trade finance loans. Distribution to external investors can also free up counter-party space on balance sheets and reduce trade loan concentrations. Direct or indirect investment in trade finance assets could also potentially offer attractive returns relative to risk for the non-bank investor.

Familiarity with trade finance assets beyond those who provide it is however limited. Hence, there is a need to increase the knowledge base of investors, and to standardise trade finance terminology and products. Regulatory treatment will also play an important role. Insurance companies in the US, for example, find themselves much more beholden to a rules-based environment, where more explicit restrictions are placed on certain asset classes, than in Europe.

Regulation is inspiring new products

Securitisation is on the increase ...

... but product standardisation and education are lacking ...

... and rules and narrow spreads can be obstacles

Furthermore, the low risk profile and narrow spreads on trade finance loans leave banks with limited compensation for originating these assets, while also limiting the margin available for external investors to pay for appropriate due diligence and deal structuring of pools of smaller scale trade finance exposures, which can be expensive. The recent global financial crisis demonstrates how easily underwriting standards and assessments of transaction risks can fall short of best practice, not least when credit evaluations are outsourced to the originator. The net result is that riskier than perceived assets are originated with insufficient risk compensation.

Finally, the broadening of the market could lead to shifts in investor demand that in future would introduce greater volatility into the availability of trade finance through the business cycle. The attractiveness of securitisation could deteriorate if margins on trade finance narrow or credit costs rise.

Box 2: Commodity trade finance

Trade finance is especially important in facilitating commodity trading. Many of the world's largest commodity trading firms are headquartered or maintain significant operations in Switzerland, and the Swiss Banking Association has estimated that in 2011 commodity trade finance guaranteed by the global banks amounted to some CHF1,500bn (US\$1.7trn), while the Swiss government has suggested that around 70-80% of the financing of commodity trading is provided by the banks.⁵

Commodity traders purchase and deliver physical commodities across the globe. Their extensive use of trade finance reflects: the typically high value of commodity trades, and the associated need for funding while the goods are in transit; the nature of the collateral, which is easy to pledge, sell, and hedge; and the potential for large price fluctuations, combined with often lengthy transaction chains.

Historically, the market has been dominated by European banks, and particularly those of French and Swiss origin, which reportedly provide some 80%-odd of the financing for commodities globally. However, as some of these entities have had to both rein in their balance sheets and their reliance on US dollar financing in the wake of the crisis, they have scaled back their lending, reducing their share in the commodity trade financing market to around 50%. Their place has been taken by US, Asian, and Middle Eastern Banks.

⁵ BIS. Op.cit.

Box 3: Bank and non-bank intermediated forms of trade finance

Letters of credit are just one form of product used in the broad area of trade finance.

Bank intermediated trade finance

A number of bank-intermediated trade finance products are available to mitigate the risks related to payments between importers and exporters, and offer access to working capital.

Letter of credit (L/C). An import L/C is a commitment by a bank on behalf of an importer that payment will be made to an exporter, provided that the relevant terms and conditions have been verified by presentation of all required documentation. Importers pay banks a fee for this service, while the transacted goods serve as the bank's collateral. Alternatively, an exporter may ask its own bank to provide an export confirmed L/C, guaranteeing payment from the importer's bank. L/Cs are the most common form of bank-intermediated trade finance, typically have short-term tenors (less than 90 days), and may be funded or unfunded depending on the specific point in the trade transaction cycle.

Banks also provide performance guarantees or standby L/Cs, which underwrite the obligations of the exporter or importer in accordance with the contract. These are typically off-balance sheet obligations which are unfunded until the exporter or importer fails to meet its contractual obligations.

A L/C or guarantee is particularly useful where reliable credit information about a foreign importer is lacking, but the exporter or its bank is confident in the creditworthiness of the importer's bank.

Documentary collections. Here, the exporter entrusts the collection of payment to its bank, which in turn sends documents to the importer's bank, along with instructions for payment. Funds are received from the importer and remitted to the exporter through the banks involved. The importer benefits from not having to pay for goods in advance, while the exporter can withhold the documents that allow the importer to take possession of the shipped goods until payment has been made. The banks' liability is limited to the forwarding and release of documents against payment or promise of payment by the importer.

Bank-intermediated trade finance also extends to a wide range of products that provide working capital financing for both exporters and importers specifically tied to underlying international trade transactions (exports or imports). These types of trade finance products typically have short-term tenors (on average 3.5 months), but some transactions, particularly for capital goods, may be supported by longer-term credit. Examples include:

- **Pre-export finance.** Where short-term bank finance is provided to cover exporters' ongoing costs (e.g. supplier payment, production, and transport) before shipment. This is similar to traditional working capital finance, but banks take a security interest in the shipped goods and receive right to payment for these goods from the importer.
- **Supplier credit.** Where banks provide financing to cover an exporter's cash needs when extended or deferred payment terms are offered to the importer.
- **Receivables discounting and forfaiting.** Where a bank purchases the exporter's accounts receivable at a discount and assumes the risk of non-payment. Forfaiting is similar, but typically involves medium-term accounts receivable for exporters of capital goods or commodities with long credit periods.
- **Import and export loans.** Where banks advance cash to the importer or exporter on presentation of appropriate documentation. This type of financing may also be linked to a L/C.
- **Bank payment obligations.** A more recent innovation, where an irrevocable undertaking is made by the Obligor Bank (typically the buyer's bank) to pay an agreed amount on a specified date to the Recipient Bank (usually the seller's bank), under the condition of successful electronic matching of transaction data according to industry-wide rules set by the International Chamber of Commerce (ICC). These arrangements enable flexible financing for both importers and exporters, and provide assurance of payment to the seller similar to that obtained under a confirmed L/C.

- **Supply chain finance (SCF).** A relatively new and growing business for banks, where technology facilitates the processing and financing of payables and receivables within a global supply chain. Supply chains are typically anchored in the global purchases and sales of major retailing or manufacturing firms. Benefits include the possibility of optimising payment and financing terms to suppliers and improving working capital for both suppliers and sellers. Since SCF centres on purchase commitments by the buyer, it offers the possibility of funding rates based on the buyer's, rather than the supplier's, credit worthiness.

Non-bank intermediated trade finance

Various non-bank-intermediated trade finance products to reduce payment risks and provide access to working capital, are also available.

Inter-firm trade credit. Can be either on an open-account basis or on a cash-in-advance basis. In open-account transactions, the exporter extends credit to the importer by shipping and delivering goods before payments are due (usually 30 to 90 days). This option is most beneficial to the importer in terms of cash flow and cost, and thus represents the highest risk for the exporter, who is exposed to non-payment risk. In a cash-in-advance transaction, the importer pays the exporter upfront, and the associated cash flow and settlement risks are reversed. The latter option is less frequently used.

Inter-firm trade credit offers lower fees and more flexibility than bank-intermediated products. It leaves firms bearing more payment risk, however, and implies a potentially greater need for working capital. Inter-firm credit is more likely among firms that have well established commercial relations and/or operate in jurisdictions that have reliable legal frameworks for the collection of receivables. Exporters' ability to extend credit to importers can be enabled by receipt of inter-firm trade credit from their domestic and international suppliers, as well as the option to discount receivables (e.g. via factoring and discounting). The availability of financing from banks and capital markets that is not tied to trade transactions also enables firms to extend trade credit to their clients.

Given the expanding role of global multinational corporations, a growing share of inter-firm trade credit is related to trade between two affiliated companies, where such considerations are less important than the management of the companies' cash flows.

Export credit insurance. Instead of using bank-intermediated trade finance products such as L/Cs, exporters can also mitigate non-payment risk by purchasing export credit insurance from private insurance firms (typically for shorter-term financing) or obtaining guarantees from public export credit agencies (ECAs) (usually for export loans of two years or longer). These instruments typically insure against default by the importing firm and political risk. Banks may also seek ECA guarantees for particular international trade transactions to mitigate risks of non-payment from other banks or customers. Data show that around 9% of global trade has benefited from such support in recent years, with most coming from short-term guarantees. ■

The low risk nature of trade finance

Low loss rates and short maturities, combined with the limited size of trade finance assets relative to overall bank balance sheets, suggest that shortfalls on trade finance are rarely likely to pose a financial stability risk in and of themselves.

Survey data from the ICC certainly indicate that default and loss rates for traditional trade finance products are of limited concern, at least for large banks. The figures available point to a customer default rate of 0.72% for loans (import and export) involving bank and corporate risk. Default rates with export L/Cs are put at a mere 0.04%, and import L/Cs at 0.29%.

Private trade credit insurers also report relatively low loss rates. On average, between 2005 and 2014, the loss rate as calculated by the ratio of claims over exposures was 0.17%, although it almost doubled to 0.3% in 2009. ■

Analysis of short-term trade finance data in the Trade Register, 2007-14

PRODUCT	TRANSACTION DEFAULT RATE	EXPOSURE		MOODY'S RATING FOR COMPARABLE DEFAULT RATE
		WEIGHTED DEFAULT RATE	OBLIGOR DEFAULT RATE	
Export L/C	0.01%	0.02%	0.04%	Aaa - Aa
Import L/C	0.08%	0.07%	0.29%	Baa
Performance Guarantees	0.17%	0.11%	0.43%	Baa - Ba
Loans for Import / Export	0.22%	0.17%	0.72%	Ba

Source: ICC

Trade finance is low risk ...

*... with tiny loss and
default rates*



Trade and economic development

Trade has proved central to economic development

Its role has been particularly influential since WWII...

Economic development and freer trade have generally gone hand-in-hand, and episodes when international trade has for one reason or another been inhibited have usually been economically challenging, if not periods of outright trauma and depression. Similarly, countries that have become isolated from the international trading system have tended to fall behind in the development race, finding themselves beset by industrial inefficiencies and their consumers saddled with outmoded and unattractive products.

Economic analysis offers up robust reasons for this symbiotic relationship between trade and development. In short, all countries, even the poorest, have resources - natural, human, industrial, and financial - that they can employ to produce goods and services for domestic consumption, or to sell overseas, and that all can thereby benefit in welfare terms when this output is traded.

The principle of comparative advantage implies that countries will prosper first by utilising their resource endowments to concentrate on what they can produce best, and then by trading these products for what other countries produce best.

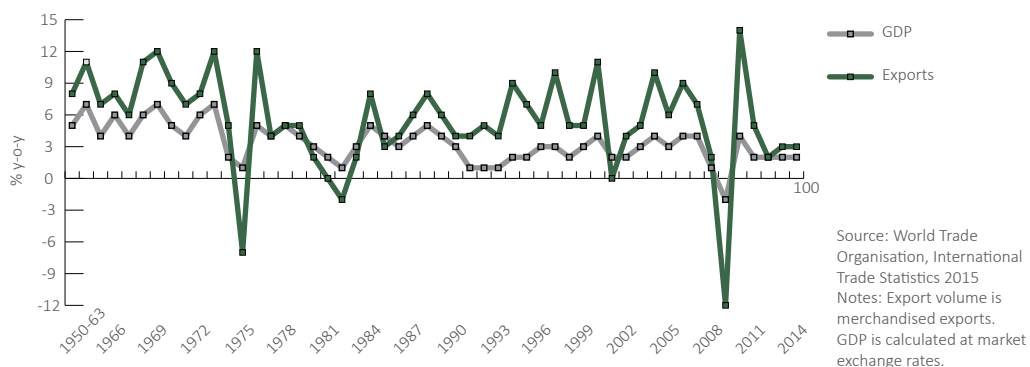
The more that goods and services flow across borders, the greater the benefits not only from specialisation but also from various forms of economies of scale; the more that competition, investment, and technological innovation are enhanced; and the more that economic progress is encouraged.

The post-World War II experience

Encouraged by the sympathetic multilateral institutional architecture provided by the IMF, the World Bank, the OECD, GATT and the WTO, the post-Second World War era has been one of more or less consistent growth, increasing economic openness, and progressively freer international trade. As a rule of thumb, the volume of world trade over much of this period has tended to grow at around twice the pace of global real GDP.

The momentum of a process that is today generally termed 'globalisation' was particularly strong from the late-1980s. Between 1990 and the global financial crisis, global trade volumes grew at a rapid 7% annual rate. In dollar terms, the share of trade in global nominal GDP rose from some 40% to more than 60%.

World real GDP and export volume growth



This dynamism of trade reflected a range of often mutually-reinforcing considerations, including, importantly:

- **Changes in vertical specialisation**, in particular a proliferation of cross-border supply chains as production processes fragmented. Countries that were integrating fastest into global supply chains saw the fastest trade growth.
- **Declines in the costs of shipping**, as new technologies were employed.
- **Integration of a number of large, but hitherto rather isolated, countries** into the international economy. Countries accounting for almost one-third of the world's population joined the WTO between the early 1990s and 2008. In the 1970s, the advanced economies dominated trade flows, accounting for 70% of the total imports. The apposite figure is now only 57%, while import demand from Brazil, China and India alone has risen from less than 3% to around 14%.
- **Easing of trade barriers** following the completion of the so-called 'Uruguay Round' of trade negotiations in 1994.
- **Development of significant trade flows between EMs** – so-called 'South – South' trade.
- **Sharp acceleration in the growth of trade in services**, as services have come to account for a larger and larger proportion of final demand.
- **Spread of international businesses**, as restrictions on external corporate ownership were relaxed.
- **Surging international capital flows**, as foreign direct investment rose to record levels relative to GDP in both stock and flow terms.

There was, moreover, little or no sense that, apart from during one or two periods of acute crisis in certain regions or economies, such as during the Asian Crisis of the late 1990s, issues relating to trade finance acted as a serious constraint on this process. ■

.. as trade barriers declined, production became atomized ...

... and EMs were integrated into the global economy

Trade finance was rarely a constraint

The impact of the global financial crisis

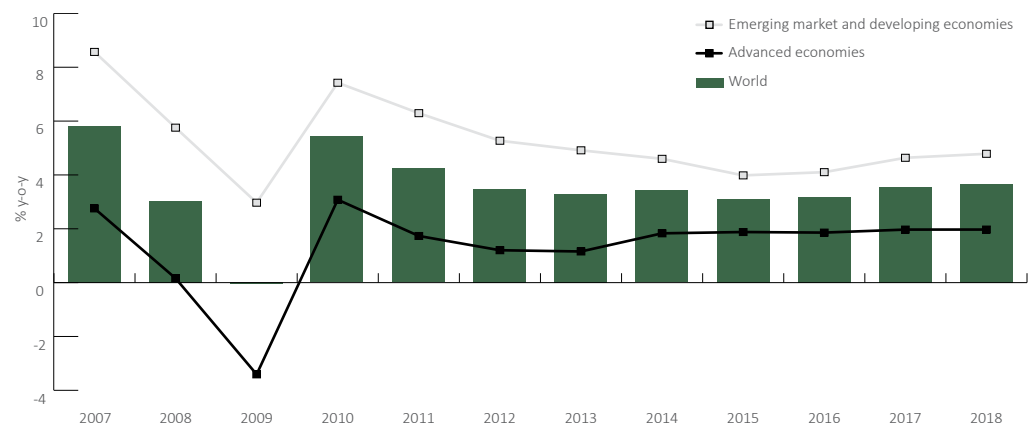
The financial crisis triggered a collapse in trade ...

The impact of the global financial crisis

This exceptional period of dynamism in international trade and development came to a juddering halt following the global financial crisis. While world GDP contracted marginally in 2009, world trade volumes fell much more dramatically: by more than 10%. Advanced-economy imports declined by close to 12%, and those of the emerging world by more than 8%. This represented the largest setback for international trade since the Great Depression, and was quite out of line with any previous post-war cyclical downturn.

No doubt, the temporary collapse in trade and capital flows in late 2008 and 2009 in large part reflected the intensity and synchronised nature of the economic downswing, and the particular weakness of consumer durables and investment outlays. Of the various components of demand, exports and investment tend to have the highest import intensities.⁶

Breakdown of World GDP Growth



Source: IMF WEO April 2016

⁶ Or strongest 'pull' on imports.

However, bank-intermediated trade finance exposures in almost all countries also fell sharply in the period immediately following the Lehman Brothers bankruptcy in September 2008, and often at rates comparable to the value of trade. In the febrile atmosphere of the time, transparency and trust were in short supply, counterparty risks were re-assessed, and there was a significant increase in expected payment defaults. And as usually happens in downturns or crises, it was smaller companies that that were hit hardest.

The volume of L/Cs fell particularly dramatically. In countries for which data are available, the value of L/Cs dropped by some 45% on average. At the same time, prices for L/C or similar instruments increased by anything from 200bps to 300bps, and by up to 500bps in some emerging economies. Nevertheless, there was also evidence of a moderate shift towards bank-intermediated finance, and away from open account transactions. And this went hand-in-hand with a greater demand for credit enhancements, especially export credit insurance.

In short, a range of surveys and academic studies suggest that reduced availability of trade finance had a secondary, but economically significant, role in the contraction of global trade volumes during the crisis, and especially for the EM economies.

Statistical analysis undertaken by the BIS suggests that the reduced availability and higher cost of trade finance may have accounted for up to one-fifth of the decline in global trade volumes at this time.⁷ ■

... and a scarcity of finance was a key limiting factor

Estimated impact of trade finance on changes in trade volumes (%) during crisis



Source: BIS

Notes: Estimated impact of changes in trade finance, GDP and other factors on international trade during the three quarters immediately after the Lehman failure. Advanced economies: Australia, France, Germany, Italy, Spain, and the United States. EMEs: Brazil, Hong Kong SAR, India, Mexico, and Korea.

7 Ibid.

The policy response post-Lehman

The policy response to the collapse in trade was broad

... with MDBs, ECAs, and central banks all involved

Not surprisingly, policymakers around the world responded to the decline in trade volumes and concerns about the functioning of the market for trade finance with a number of urgent policy initiatives, including a pledge in 2009 by the G-20 to guarantee the provision of \$250bn to support trade facilitation over the following two years.

While this response appears to have had some positive impact, the amount of financial support offered fell some way short of the contraction in global trade finance. Average utilisation rates across all policy initiatives were fairly high, at around 70% in the first six months of 2009, but subsequently fell away to around 40% in the second half of the year. This was generally taken to be evidence that the market was normalising.⁸

Support was provided by the multilateral development banks (MDBs), often working in collaboration with commercial bank providers of trade finance. However, the bulk of the assistance came via national export credit agencies (ECAs), albeit with some mixed results. Countries with existing ECA short-term trade finance facilities that broadened or intensified their support, such as the US Ex-Im Bank and the Korean KEXIM Bank, seem to have enjoyed some success.

In Europe, where hitherto, to avoid interfering with private providers, ECAs had not been allowed to provide short-term trade credit insurance, the record of the state aid schemes introduced to support the market was more patchy. Usage in some smaller countries was often limited until the terms applied to the funds available were eased. The scheme introduced in Germany, on the other hand, proved to be a success.⁹

Some central banks, including those of Brazil and South Korea, also took it upon themselves to provide indirect support to bank-intermediated trade finance through the provision of US dollar liquidity. Furthermore, the Brazilian and Korean central banks introduced innovative repo market operations focussed on trade finance assets directly to underpin the markets. ■

⁸ Ibid.
⁹ Ibid.

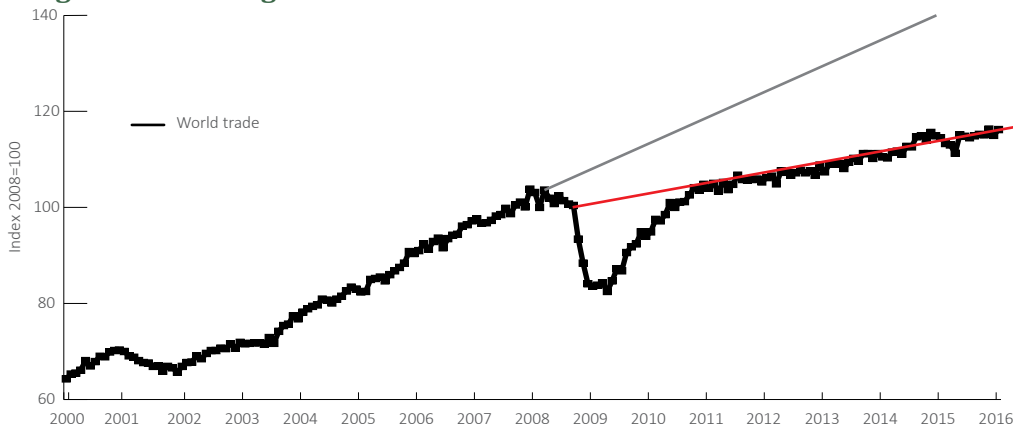
Incomplete recovery



After an initial, seemingly robust, rebound - volumes more than recouped their 2009 losses in 2010 - world trade has again floundered, failing to grow faster than global GDP for the first extended period since the war. And this may continue: the WTO predicts a fifth consecutive year of 3%-odd growth in trade volumes in 2016.¹⁰

Trade recovered quickly, but has since stalled ...

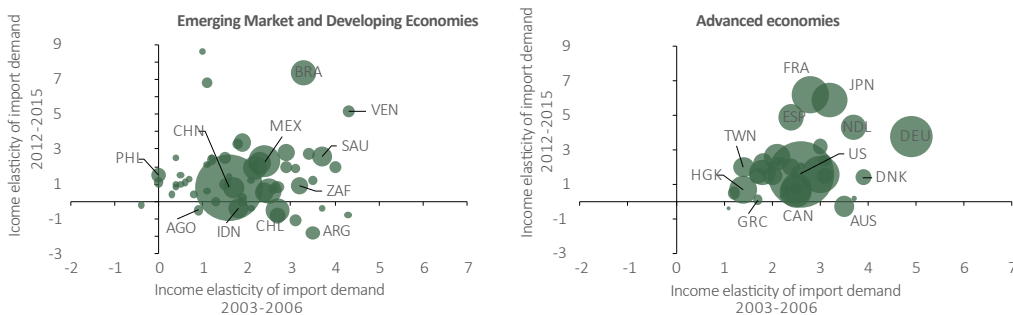
Long-term trend in global trade volumes



Source: CPB World Trade Monitor; ICC 2015
Notes: Grey line = trend between 2005Q1 and 2008Q1; red line = trend since 2011Q1.

This recent slowdown in trade has been widespread. Analysis of trade growth in 174 individual countries reveals that it has weakened in the vast majority. Moreover, this conclusion holds even after weak growth in income and the decline in trade prices are taken into account. Income elasticities of demand for imports have fallen, especially outside the advanced economies, and most conspicuously of all in Asia. For the region, as a whole, export volumes declined slightly in 2015, a highly unusual turn of events given its high income growth and historically vibrant record of trade growth.¹¹

Income elasticities of demand for imports

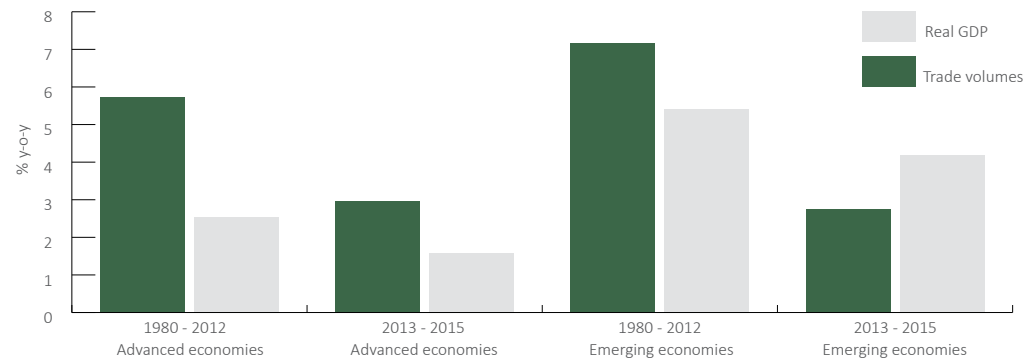


Source: IMF

10 World Bank. Global economic prospects 2016.
11 IMF. World economic outlook. April 2016.

Responding to aggressive macro policy easing, the emerging market economies, and in particular those in Asia, were the major driver of global GDP and trade growth during the initial post-crisis recovery. In 2010, their average growth rate was some 7.5%, with the BRICs, led conspicuously by China, registering closer to 9%. Since that year, however, emerging-market economy growth has slowed more or persistently, to not much over 4%.

Trade and output growth



Source: IMF WEO April 2016

... as the EMs in general have slowed down ...

As the emerging market economies lost momentum, so their import demand followed suit, the growth rate slumping from 14% in 2010, to a mere 0.5% in 2015. And, with the advanced economies growing only modestly at best, overall trade volumes languished. Europe, an area where inter-regional trade linkages are especially strong, was the most conspicuous laggard.

There were some tentative signs of a slowdown in the pace of globalisation even before the crisis, and these considerations have continued to exert a deleterious influence on trade. For example:

- There are now few regions left to integrate into the world economy. India and Africa are the two major remaining areas of relatively low trade intensity, although there remains scope for central and Eastern Europe to expand their trade relative to GDP.
- The expansion of global supply chains began to decelerate in the noughties. For example, the share of parts and components in Chinese exports peaked at some 60% in the mid-1990s, falling progressively thereafter as intermediate inputs were increasingly sourced at home.
- Rising unit labour costs in the EM economies, and in particular in East Asia and Eastern Europe, together with technological advances in manufacturing processes, started to encourage a reversal of the off-shoring that was such a conspicuous feature of the 1990s.
- Consumers have been demanding more and more services, which are inherently less tradable than goods, and often limited to a home market by cultural and linguistic barriers. The share of intermediate goods in sectors such as machinery and transport exceeds 35%, whereas in finance and insurance, for example, it is less than 20%.
- There is also evidence of burgeoning trade protectionism. Both Russia and Brazil have raised import tariffs in recent years, while more than 5,000 different non-tariff barriers to trade have been introduced over this period.¹² The World Bank has suggested, however, that such considerations can account for only 2% of the fall in trade after the 2008 crisis. It would appear that the threat of retaliation, the WTO's dispute resolution mechanism, and the greater importance of global supply chains have acted, so far at least, as powerful counterbalances to large-scale protection.¹³
- However, political attitudes to globalisation and multilateralism are clearly souring. Nowhere is this more obvious, or more troubling, than in the US which for the last 70 years has been the standard bearer of the movement towards freer trade. Both of the candidates for the forthcoming presidential election have resorted to protectionist rhetoric, and Donald Trump has even gone so far as to threaten to withdraw from the WTO and to erect punitive tariff

12 www.globaltradealert.org. See also Evenett, S.J. and Fritz, J. The Tide Turns? Trade, Protectionism and Slowing Global Trade Growth. CEPR, Nov. 2015.

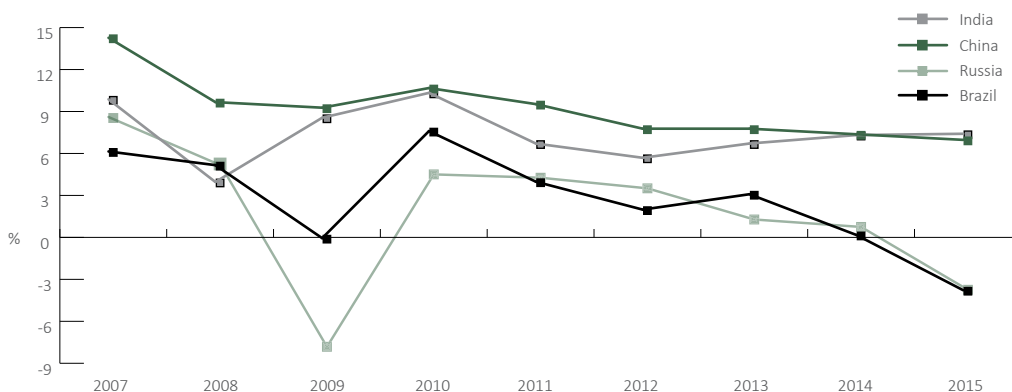
13 World Bank. Op.cit.

barriers if he cannot renegotiate the US's existing trade agreements to his satisfaction. The risk therefore is that the constraints on world trade continue to escalate, along with regionalism and bilateralism.

Much more pertinent to the slowdown in trade, however, seem to be the following, often overlapping, considerations:

- The recent, especially deep, recessions experienced by Brazil and Russia. Import volumes fell by more than 10% in Brazil and 20% in Russia, although Russia's trade was also impacted by the imposition of international sanctions.

Real GDP growth: India, China, Russia, and Brazil



Source: IMF WEO April 2016

- China is in the midst of a major period of structural adjustment from trade-intensive export and investment-led growth towards less-trade-intensive goods and services. The impact is both direct in the form of reduced demand for trading partners' products, and indirect in the form of downward pressure on world prices for the specific goods that China imports, which in turn affects other countries' exchange rates and asset markets.
- China accounts for about 10% of global trade and around 25% of global investment. It is one of the top ten trading partners of more than 100 economies that together account for some 80% of global GDP. Not only is it at the centre of many global and regional supply chains, its role as a source of final demand has also increased markedly over recent decades. China's imports of final capital goods and consumption goods from the advanced economies are now substantial. The IMF has in addition concluded that those countries for which China accounts for the highest share of exports tended to suffer the largest declines in export growth in 2015 relative to 2012-14.¹⁴
- The requirement for primary producers to adjust to sharp falls in oil and other international commodity prices. The associated falls in export revenues and domestic demand have resulted in swingeing cuts in imports.
- Thus far, the currency depreciations experienced by a number of economies have been associated with a decline in imports, but only limited benefits for exports. This may in part reflect changes in global value chains that are reducing the responsiveness of exports to currency movements. ■

... and the BRICs have gone through wrenching adjustments

¹⁴ IMF. Op. cit.

Trade Finance and slowing trade growth post-2011



Trade finance has not been a major constraint

Although there remained some pockets of stress, especially in EMs, and where smaller companies were concerned, trade finance seems to have been much less of a constraining factor on world trade than during the initial downdraft in economic activity following the 2008 crisis.

The available data suggest, for example, that there was no material fall in the overall provision of trade finance in the second half of 2011 during the intensification of the European sovereign risk crisis. That said, there is evidence of a notable decline in bank-intermediated trade finance in some individual countries, including Germany, Spain, and Italy, and this is consistent with anecdotal evidence of a more cautious attitude to this area of business on the part of European banks. Other international and regional banks appear, however, to have stepped into the breach, and made up for any shortfall.

Changes in trade finance and trade 2008-09 and 2011-12¹ (%)

COUNTRY	Q3 2008 - Q1 2009			Q2 2011 - Q2 2012		
	BANK-INTERMEDIATED (STOCKS)	L/CS	TRADE	BANK-INTERMEDIATED (STOCKS)	L/CS	TRADE
Australia	-20		-34	-2		2
Brazil ²	-46		-47	0		-4
China	-29		-41	15		9
France	0		-25	0		-9
Germany	-30		-30	-20		-10
Hong Kong	-29		-33	15		2
India	-13		-34	5		-4
Italy	-12		-26	-13		-15
Korea	-32	-45	-40	0	-12	-3
Mexico	5		-38	32		6
Spain	-32	-35	-34	-19	-19	-11
UK	-7		-36	-15		-2
US	-24		-34	19		4

Source: BIS

Notes:

1 Relative change in the stock of trade exposures from end-Q3 2008 to end-Q1 2009 or from end-Q2 2011 to end-Q2 2012. National data are converted to US dollars at end-quarter exchange rates. Changes are therefore influenced by valuation effect.

2 Changes in the quarterly flow of new trade finance loans.

Overall, shifts in banks' market share, together with the crisis response of the ECB, and in particular the dollar auctions and provision and generosity of so-called Long Term Refinancing Operations (LTROs), seem to have prevented a repeat of the 2009 trade finance crisis at a global level. This is supported by a number of bank lending surveys.

The Institute of International Finance (IIF)'s assessment, for example, was that any deterioration in the terms of trade finance in the EMs around this time was fleeting, and largely confined to Q4 2011. ¹⁵ By early 2012, conditions were again on an improving trend. That said, some MDBs experienced increased utilisation of existing facilities to support trade finance around this time, and also adapted their programmes to address observed market strains. What is more, some central banks judged it necessary to expand the pool of eligible collateral to cover trade finance products.

If there is an enduring hangover from the crisis for trade finance, it seems to be for the smaller company sector, which has been affected most by new compliance requirements. ■

... although there have been some periods of stress

¹⁵ Ibid.

Taking stock



A growing need for trade finance

Without appropriate financing, there can be no expansion of world trade, and constrained trade means constrained economic development and a higher threat of social and political instability.

For the most part, trade finance is demand-driven: the natural tendency is for it to expand if global output and trade expand. Rarely to date have supply constraints intervened to compromise global trade flows: but when they do, their impact can be malign, not least because they can act as a conduit, transmitting stress from the financial sector to the 'real' economy.

The global financial crisis is the most recent case. The financial shock that followed the Lehman Brothers bankruptcy was extensive in every sense, and significant numbers of banks either elected, or were obliged, to draw on their trade-finance liquidity pool. In addition, trade finance was further compromised by enhanced perceptions of counterparty risk in inter-bank markets.

The trauma in the trade finance markets, at least in the aggregate, did not endure, however. Once the broader shock to the financial system began to be brought under control, trade finance quickly recovered. Dysfunction in trade finance has apparently not been a principal factor in the most recent slowdown in world trade growth.

What matters particularly now is that this natural, demand-driven, responsiveness of trade finance continues as the recovery from the crisis matures and economic conditions around the globe assume at least a semblance of normality. Indeed the need for enhancing trade finance as part of the strategy for growth to help address the global trade slowdown was explicitly referred to in the G20 trade ministers' meeting in Shanghai on July 10 2016.¹⁶

Vulnerability to shocks

Industry surveys and anecdotal evidence point towards major uncertainties, trials, and risks ahead. The global recovery remains hesitant, uneven, and fragile. Some important financial sectors have yet fully to heal, and there are growing signs that the emerging world is increasingly beset by many of the fault-lines seen in the advanced economies prior to 2007, not least the excessive accumulation of private sector debt and asset market excesses.

Should, for whatever reason, there be another major international shock, and trade finance flows again be disrupted, timely action to address dislocations would be vital, lest trade suffer and thereby compound the initial downturn.

- First and foremost, such action would need to extend to general crisis management initiatives, such as the provision of additional domestic and foreign currency liquidity (and particularly US-dollar liquidity), and efforts rapidly to remove compromised assets from bank balance sheets. This would reduce the requirement for banks to scale back their trade finance portfolios, and help to ameliorate counterparty credit and funding risk concerns.
- Second, given the predominantly short-term maturity of trade finance assets, there would be a need for measures that could more directly support trade finance, including the provision of trade credit insurance by both domestic public sector entities and multinational development banks.

In 2014, bodies including the EBRD, IFC, IADB, and ADB facilitated some \$70bn of trade finance transactions, and the MDBs and ECAs are still even now having to intervene to keep many supply chains open. The existing gaps in the global trade finance network could prove a significant problem in the face of a new shock – especially were a bank to withdraw from what is already a highly concentrated field.

Disruptions to trade finance are rare but damaging

As economic and financial conditions 'normalise'...

... trade finance provision need to expand in harmony

Interruptions need to be addressed rapidly ...

... and vulnerabilities dealt with

¹⁶ See paragraph 7 on page 2, and paragraph 4 on page 2 of Annex II, of the G20 Trade Ministers Meeting Statement, 9-10 July, 2016. https://www.wto.org/english/news_e/news16_e/dgra_09jul16_e.pdf

Disproportionate importance for SMEs and emerging markets

SMEs account for some 95% of all firms and around 60% of all jobs. They are also a key component of today's fragmented supply chains. Yet, while they account for almost half of trade finance applications, even at present, according to the ICC, more than 50% of these applications are turned down: perceived risks around their businesses remain high. In the event of another financial shock, trade financing for SMEs would almost certainly be a major victim.

The emerging markets now account for around half of global GDP, and are central to global growth prospects now and in the future. International trade is the major part of many emerging economies, not least in Asia, with many companies largely dependent on banks for finance. The risks from an unduly constrained market for (especially dollar-denominated) trade finance would likely be felt acutely in the emerging markets. ■

Issues ahead

Beyond the general issue of the macroeconomic environment and the risk of another shock or shocks, there is one matter above all that is preoccupying the minds of many participants in the area of trade finance, and that is the possible effects of current and future bank regulation.

Clearly, the shortcomings in the areas of risk management and control that the regulatory authorities have sought to address over recent decades, and especially since the global financial crisis, are real and cannot be ignored. Indeed, trade finance itself is dependent upon there being a stable global financial system – trade finance benefits from the stability of other segments of the financial system, and it is vulnerable to contagion. Appropriate regulations that span the three pillars – capital, leverage, and liquidity – are therefore clearly essential to control incentives to accumulate high-risk, highly-leveraged financial assets.

Equally, however, balance is necessary. The specific treatment of trade finance assets under the evolving regulatory regime will have clear implications for the availability and pricing of trade finance, and thereby the sector's stability and resilience.

The regulatory framework for finance, in Europe, the US, and beyond, is not yet fully settled. It is important, as this architecture continues to evolve iteratively across numerous dimensions, and navigates new challenges (from, for example, technological innovation, new business models etc.) that the issue of finance supply be given its due priority, including importantly a dependable, robust, and cost effective mechanism for trade.

There is widespread recognition across the financial sector and beyond that low-risk, highly-collateralised trade finance assets, such as L/Cs and other self-liquidating commitments with a very small loss record, do not warrant being primary targets of regulation; and that the profitability of trade finance ought not to be undermined by (any unintended consequences of) the new regulatory framework.

Nevertheless, notwithstanding this basic and apparently widely-shared acknowledgement, there is apprehension, both amongst bankers and commodity traders, that new bank regulation may, perhaps unintentionally, unwarrantedly constrain the natural demand-side responsiveness of trade finance – that tighter regulation of the banks and in the financial sector more generally may make it increasingly difficult for potential suppliers to deliver the requisite trade financing to the companies that depend upon it, and at a cost that is competitive. ■

... while the global financial system is stabilised

An 'appropriate' balance is key

It is vital that regulation remains supportive

The main area of concern: Regulation

*The Basel architecture is
under fire ...*

*... and a number of issues
have been raised*

*... ranging from overall
regulatory uncertainty ...*

A range of concerns have been spelled out by respondents – in the banking sector, in the commodity trading sector, and in the financial services world more generally – whom we have interviewed in recent weeks.

There are three principal areas of regulation within the evolving Basel regulatory architecture, and trade finance stands to be impacted by each:

- **Capital:** particularly funded and contingent trade finance assets under the capital regime;
- **Leverage:** particularly contingent claims under the leverage ratio, on- and off-balance sheet; and
- **Liquidity:** particularly trade finance assets and associated funding liabilities under the liquidity coverage ratio.

The most fundamental concerns of those interviewed were threefold:

First, even were each area individually to be treated sympathetically, there is a perceived risk that the restrictiveness of the reforms taken together may be greater than might have been intended, i.e. that the regulations in the three areas of capital, leverage, and liquidity together add up to more than the sum of their parts.

Second, while significant adjustments have been made in these areas (for more detail, see the Annex) anxieties are re-emerging in the context of the next round of regulation, which is commonly referred to as ‘Basel IV’.

Third, a particular source of disquiet relates to the Standardized Approach (SA) to credit risk; and to how this methodology squares with the Internal Risk-Based (IRB) approach. The trade finance community views a more flexible and nuanced attitude to credit risk across the Basel framework as preferable, and likely to produce better outcomes.

Beneath these are a number of somewhat more specific concerns, all of which cut across trade finance.

Regulatory uncertainty. A major challenge globally, and especially in Europe, this is widely considered to inhibit investment and the provision of finance. When uncertainty is pervasive, planning and development become a major challenge.

Expected future changes to the Net Stable Funding Ratio, for example, are reckoned to be having widespread impacts on business models. And the banks, which must plan for worst-case scenarios, report that implementation imposes costs on businesses or customers that may lead some of them – who are key players – to step away from the trade finance market.

Current and future regulation not being commensurate with the (limited) risk inherent in trade finance activity, as evidenced by low historical loss rates. While there have been some recent, high-profile, cases of trade finance transaction failure – for example OW Bunker (OWB) and Petroplus – these have in fact concluded with high recovery rates, and such cases are reckoned to have reaffirmed the validity of receivables financing.

Differential treatment across trade finance products. This may fail to reflect the fundamental differences in risk characteristics of these products. Non-standard forms of trade finance are reportedly being disproportionately impacted. More generally, the characteristics of commodity trade finance are, some assert, not being sufficiently well understood.

Divergence in regulations across jurisdictions. This creates an uneven playing field for global trade finance providers. Trade finance risks getting caught up in the divergent approaches of the US and EU with respect to standardised and internal risk-based models.

In particular, (1) the use of standardised models is seen as threatening a return to old models ‘not considered fit for purpose’. (2) Capping regulatory capital relief available to banks will, it is claimed, restrict their ability to optimise their capital structure by maximising collateralised lending. (3) Minimum floors on internal models are expected to raise capital requirements and the cost of funding, constraining trade finance. And European regulations becoming yet more stringent is a major concern. For example, harmonisation of trade-finance-related regulation (such as in CRD IV or in future regulation) converging at what practitioners consider is an unduly conservative level.

Costs of compliance continuing to rise. This risks leading, in the limit, to trade-financing becoming unattractive to providers. ‘Knowing Your Client’ understandably is now, in the wake of the global financial crisis, being given greater weight by regulators, not least due to the perceived link between money laundering and trade finance products. However, differences in products or services, and particularly issues relating to specialised products, are reckoned not to be properly appreciated by the regulators. A number of market participants point out that they have invested heavily in new infrastructure on the basis of existing legislation.

Deleveraging happening unduly fast. Trade finance is vulnerable, given its short-term nature, and solid, unspectacular yield, to short-term decision-making by banks that are under regulatory pressure, and need to make rapid adjustments to balance sheets. Reportedly, a number of banks are seeking, for largely ‘optical’ reasons, to meet guidelines early, and an ‘easy option’ from their standpoint (but an undesirable one from the standpoint of the provision of trade finance) would be to elect to cut back on trade finance.

In addition to the above concerns, a range of particularly detailed concerns were raised in the course of the interviews, a number of which also help to give additional colour to the specific concerns above. These have been grouped into three main headings and are presented below.

Further detailed concerns:

Interactions between the Standardised Approach and the Internal Ratings-Based approach

Particular concerns have been raised about proposed Basel Committee revisions to the Standardised Approach (SA) to credit risk, and how these sit with the Internal Ratings-Based approach:¹⁷

1. **The Standardised Approach superseding the IRB approach** in important areas.
2. **The lack of complementarity between the Standardised Approach** and the IRB approach, which remains the best option in terms of risk sensitivity for banks for which their use is approved, limitations to the IRB approach notwithstanding.
 - 2.1. The need for a holistic review of the Basel agenda is particularly apparent when considering the interaction of credit portfolio risk between the SA, and the introduction of capital floors, and the IRB approach.
3. **A potentially unduly simplistic standard such as a ‘capital floor’** may reduce risk sensitivity overall, and targeted solutions should be explored to preserve the many benefits of internal models while addressing undesired shortcomings.
4. **The difficulty in assessing the proposed SA,** and particularly Risk Weighted Asset (RWA) levels, without any certainty about the future relationship between RWA under the SA and the IRB, and in the final context of other reform proposals.

Specialized Lending: major concerns have been raised about the regulatory capital treatment of Specialized Lending (SL) exposures, for example project, product, and commodities finance.¹⁸

5. **Specialised lending exhibits low risk on average,** due to the bespoke, structured, and collateralised nature of these products.
 - 5.1. Structures are put in place so that the lender controls the cash flows generated from the underlying asset(s) and/or benefits from the security of the asset itself. This leads, on average, to low loss rates.

... to the costs of compliance

Specialised lending is also treated heavy-handedly ...

¹⁷ For more see <http://www.afme.eu/WorkArea/DownloadAsset.aspx?id=13953>

¹⁸ For more see <http://www.afme.eu/WorkArea/DownloadAsset.aspx?id=13953>

... while underlying collateral is under-appreciated ...

... and treatment of credit conversion factors queried

6. **Current proposals do not appropriately reflect the underlying characteristics** of such exposures. They are based on misconceptions about risk and losses compared with other types of corporate exposures, and are inconsistent with industry experience and data.
7. Issue-specific ratings are almost non-existent for SL exposures. Thus flat risk weights, which are particularly punitive, are set to become the default approach to risk weighting specialized lending exposures.
 - 7.1. The SL business is “risk sensitive”; in other words, it is by definition a non-standardized business, not suited to flat risk weights.
8. **Banks’ decision-making may favour higher risk transactions** with higher rates of return for the same amount of regulatory capital, if the same risk weights apply to transactions of different risk levels.
 - 8.1. In such a case, the quality of banks’ portfolios would deteriorate over time, and activity increasingly shift into the unregulated, or ‘shadow banking’, sector.
9. **Greater recognition of the underlying collateral in SL transactions** is needed. Proposals seem inconsistent with the principle that a collateralised exposure should not receive a higher risk weight than an otherwise equivalent unsecured exposure.
10. Industry data show that historical loss rates are in the range of 0.1% - 0.4%, depending on the type of SL product.
 - 10.1. Project finance: average Probability of Default (PD) 1.5% and Loss Given Default (LGD) 23% equates to a 0.35% loss rate¹⁹
 - 10.2. Aircraft finance: average PD 1.96% and LGD 16% equates to a 0.31% loss rate
 - 10.3. Shipping finance: average PD 3.13% and LGD 13% equates to a 0.41% loss rate
 - 10.4. Commodities finance: average PD 0.89% and LGD 13% equates to a 0.12% loss rate (For more commodities on finance, see later)
11. While issues such as downturn calibration need to be factored in, on the basis of historical data, RW levels are two to four times higher than actual default and loss experience suggest would be appropriate.

Off-balance sheet exposures: concerns have been raised about credit conversion factors (CCFs) that apply to off-balance-sheet instruments that are key financing tools for consumers and businesses e.g. in project, trade, and commodities finance.

1. **CCF levels proposed are unduly conservative**, based on available industry data and experience, and may have adverse impacts on banks’ lending activities, negatively impacting clients that rely on the associated products.
2. **The impacts of the SA proposal would also be amplified were SA CCFs to become binding constraints on IRB banks:** they would therefore be appropriate neither for use as the basis for an output floor for IRB firms, nor as an alternative to internal modelling of CCFs.
3. **The treatment of CCFs should be further broken down** according to the following risk drivers to determine the appropriate segmentation:
 - 3.1. The type of commitment, e.g. cash commitments vis-à-vis contingent facilities;
 - 3.2. Whether the facility is unconditionally cancellable;
 - 3.3. The type of counterparty to which the facility is granted; and
 - 3.4. The residual maturity of the underlying facility.
4. **All cases where commitments are truly unconditionally cancellable should receive a 0% CCF.** If they were not, banks would no longer have any incentive to issue unconditionally cancellable commitments, typically favourably priced, for the benefit of clients.
5. **Industry data** showing the difference in drawdown rates, and hence implied CCFs, between revolving (54%), term loan (42%), and other facilities for corporate clients (30%) should be taken into account.

Impact on commodity finance and markets

There is a perceived risk amongst respondents that commodity trade in particular could (albeit inadvertently) be harmed by regulatory and other changes in the market for trade finance. Various respondents assess the potential seriousness of this against what they see as a lack of awareness of the central importance of trade in commodities for global growth and development. Against this general background, the following particular concerns were voiced.

1. **Lack of awareness about how commodity finance serves the real economy**, where banks facilitate physical commodity supply chains that fuel industry, feed manufacturing, and nourish populations.
2. **Inadequate understanding of the business models** of the various companies that operate in the commodities space.
 - 2.1. This is seen as particularly important in the context of risks that are perceived – often incorrectly – as flowing from the current broad-based weakness in commodity prices.
 - 2.2. Differences between ‘upstream’ – and ‘downstream’ – focussed activity, or between exploration and production companies and trading houses not being fully appreciated.
 - The criticism is often levelled at trading houses that they are ‘hedge funds’ for commodities, even though this is not the case: trading houses do not bet on spot prices, but rather base their business model on moving commodities from place to place and exploiting opportunities for arbitrage.
 - 2.3. Regulators being driven by unsubstantiated concerns about systemic risk.
3. **Banks being increasingly worried about the risks involved in commodities trading** in an environment of weak commodity prices – not least because of heightened counterparty risk in some emerging market countries.
 - 3.1. Regulations inadvertently disincentivising banks in advanced economies from looking at emerging markets, with reduced exposure to Asia, and particularly to China.
4. **Regulators’ knowledge of commodity finance structures being inadequate**, with many of the basics insufficiently understood.
 - 4.1. There are big differences across jurisdictions however; for example in Hong Kong regulators appear more in tune than in Europe, and particularly the ECB, where there appears to be confusion about the nature and risks of commodity transactions.
5. No attempt being made to distinguish between different types of commodity finance in the proposed regulation:
 - 5.1. Highly liquid and perceived low-risk commodities, such as Brent and WTI oil, are assumed to have the same credit risk as less liquid, higher-risk commodities, such as coffee, cotton, speciality chemicals.
 - 5.2. Quality issues, collateral constraints, terminal market availability, regularity of quotes/prices and (il)liquidity are other key distinguishing risk features that should be taken into account.
 - 5.3. Where credit risk is fundamentally different, for example between transactions involving crude oil and those involving speciality commodities, different risk categories are needed.
6. **Commodity finance not being accorded a capital treatment that is representative of the low default and low loss outcomes** experienced historically, particularly where lending is subject to tightly managed, self-liquidating, and/or secured structures under tight monitoring and control.
 - 6.1. Based on data since 2008, implied Loss Given Default (LGD) has consistently been below 20% on average, much lower than generally observed corporate LGD. In addition, implied RWAs now range between 33% and 52%, depending on assumptions.
 - 6.2. The proposed 120% risk weight for commodity finance under the Basel Committee’s second proposal for revised Standardised Approach is much higher than implied weights based on aggregated historical data.

Commodity trade is especially vulnerable

It is poorly understood on many levels

European regulators in particular seem ill-informed

Its capital treatment seems unsympathetic

*Recent case studies
have not been given
enough weight*

7. **The disallowing of the use of IRB modelling** for commodity finance (e.g. due to presumed lack of historical data) resulting in reduced levels of financing, and at higher prices.
8. **Risk of dismantling of dedicated risk management infrastructures in banks**, given that capital requirements do not reflect the true underlying level of risk, and thereby reduce the profitability of financing commodity trade.
9. **Capital requirements not being sufficiently risk sensitive**, so that firms' current infrastructure and risk management frameworks may not be maintained and the return towards more risky financing promoted.
10. **Banks having to pass higher costs on to the real economy**; scale back activity; or exit the industry. Commodity prices could increase as a result, or clients might have to go to other sources, including the shadow banking sector, where the requisite expertise and oversight may be lacking.
11. **Specialised forms of commodity finance being penalised** by measures which result in a withdrawal of liquidity from the many borrowers who rely on it, and a greater financing burden being placed on financing fewer "conglomerate-style" providers on a less transparent basis.
12. **Recent commodity finance case studies illustrating the benefits, resilience, and resolution** experience not being appropriately considered. These illustrate:
 - 12.1. The benefits of transparent and robustly-managed transactional financings compared with general corporate (balance sheet-driven) lending.
 - 12.2. The resilience of a hands-on approach to commodity finance where 'incidents' do not necessarily lead to defaults.
 - 12.3. The resolution experience among lenders, where mutual interest leads to a collective response to incidents or defaults, leading to low impairment.

Rise of alternative sources of lending

To the extent that bank finance might start to dry up, it could be expected that other forms of financing – whether by specialist non-bank institutions, or perhaps involving longer-term investors, such as pension funds or insurers, would fill the ‘hole’.

Ensuring that this actually does happen may require changes in institutional and/or legal arrangements. It would also be important that the evolving regulatory regime not inadvertently stultify what could well be an intrinsically desirable process. Against this general background, the following particular concerns were voiced.

1. **Disintermediation** – i.e. banks being replaced by alternative providers – bringing new challenges and risks, including importantly for regulators and for practitioners.
 - 1.1. Non-bank, alternative finance providers not having requisite ‘liquidity’ at all times over the cycle, and proving to be ‘fair-weather friends’ when the going gets tough.
 - 1.2. Provision potentially being done at lower cost than in the regulated banking sector, but by more risky providers who go unchecked/unregulated.
 - 1.3. Non-bank regulations constraining new, alternative forms of funding.
2. **Long-term investors**, such as pension funds, insurers, and SWFs, being unwilling or unable to play more of a role in the market, for a range of reasons:
 - 2.1. Opening up, or deepening, direct channels of intermediation between long-term investors and borrowers proving difficult to effect.
 - 2.2. Developing additional indirect channels – for example the use of simple securitisations or more complex financial instruments – proving similarly problematic.
 - 2.3. Provision of long-term funding for (commodities) trading companies proving difficult due to an insufficient understanding of the role of trading companies, risk, volatility, reputation etc.
 - 2.4. Constraints intensifying due to lack of expertise, small scale, insufficient data, and/or lack of standardisation of products.
3. **Achieving an appropriate regulatory framework for securitisation.**
 - 3.1. Further expanding securitisation could help to increase resilience to shocks, broaden the capital base, and improve the stability of funding;
 - 3.2. But achieving this would require that appropriate underwriting standards and concentration of exposures on individual balance sheets be maintained. ■

Non-banks could offer a substitute for bank finance ...

... as long as the regulatory regime makes it possible ...

... not least where securitization is concerned

Conclusions

*But getting trade finance
regulation right is vital*

- Commodity trading is of central importance to economic growth – of developing and developed countries alike.
- Practitioners – both providers and users of trade finance – are expressing concern at what they see as a growing possibility of the latest round of Basel regulations becoming over-heavy, insufficiently nuanced, and thereby constricting the future flow of trade finance.
- While practitioners recognise that trade finance requires a stable and soundly-regulated global financial system, they emphasize that trade finance is an inherently low-risk activity, and warrants being treated as such.
- In particular, they consider it important that separate regulations in the areas of capital, leverage, and liquidity do not inadvertently add up to more than the sum of their parts. ■

Annex: Trade Finance and regulation

Overview

- Under the Basel I (1988) and Basel II (2004) regulatory frameworks, short-term, structured trade finance received preferential treatment on the grounds that it is typically one of the safest, most collateralised, and self-liquidating forms of finance; with a low default probability, and an absence of leverage.
- Basel III, as initially proposed in 2010, introduced potential constraints on trade finance provision.
 - Its influence cuts across rules relating to the three pillars of capital, leverage, and liquidity.
- Significant revisions have since been made concerning the risk-weighted capital requirements, the leverage ratio, and aspects of the liquidity rules with respect to (traditional forms of) trade finance.
- These changes have brought regulation more in line with the risk-return characteristics inherent in trade finance products.

Basel I (1988) regulations

- Basel I produced a harmonised set of capital adequacy requirements.
 - These obligations were simple and overseen within the informal setting of the Basel Committee.
 - No explicit expectations/requirements were made with respect to national implementation.
- For trade credit, they included a 20% Credit Conversion Factor (CCF) for the capitalisation of self-liquidating letters of credit (L/Cs), bank acceptances, and other short term collateralised commitments.
 - At 20%, the CCF was one fifth of that for normal on-balance sheet loans (on-balance sheet loans are capitalised at 100% of their face value, i.e. at a 100% CCF).
 - Essentially, this reduced capital requirements by 80% as compared with positions subject to a 100% CCF.

Basel II (2004) regulations

- Basel II produced a revised set of harmonised capital adequacy and supervisory requirements.
 - Requirements were more detailed and complex than Basel I.
 - There was a greater emphasis on an internal-rating-based and risk-weighted asset framework.
 - There were more explicit expectations/requirements with respect to national implementation.
- For trade credit, the 20% CCF was maintained for short-term self-liquidating L/Cs and the like under standardised and internal-ratings-based (FIRB) risk-based measures.
 - A one-year maturity floor was introduced: Basel II required that, unless permitted otherwise by local regulators, banks should capitalise L/Cs and the like for a full year, even though the maturity of such instruments is usually much shorter.
 - If the average tenor was 90 days, this would ostensibly mean holding considerably more capital than arguably necessary.
- As the Basel II recommendations were phased in, individual banks were to move from standardised requirements to more specific requirements developed internally for each risk category.
- One upside for banks that developed their own bespoke risk measurement systems was that they could potentially lower their risk capital requirements.
- In this context, off-balance sheet commitments increased enormously.
- The global financial crisis laid bare banks' excess of leverage and, in particular, the concentration of toxic assets that were off balance sheet, often aggregated in "special purpose vehicles".

Basel III (2010 onwards) post-GFC (re)regulation

- Basel III resulted in new guidelines on capital, leverage, and liquidity requirements aimed at reducing the incentives for building up high-risk, highly-leveraged, bank balance sheets.
 - A greater focus was placed on systemic risk and systemically-important financial institutions.
 - Guidelines were set for: higher and better-quality capital, better risk coverage, the introduction of a leverage ratio as a backstop to the risk-based requirement, measures to promote the build-up of capital that could be drawn down in periods of stress, the introduction of two global liquidity standards, extra 'surcharges' for systemically-important institutions; and a countercyclical capital buffer.

Some of the main elements

- Risk-weighted capital requirements of at least 8%, with two approaches to measure risk-weighted assets: a standardised approach and an (advanced) internal ratings-based approach.
- Leverage ratio requirements of at least 3% of total assets and off-balance sheet positions.
- Liquidity Coverage Ratio (LCR) and minimum Net Stable Funding Ratio thresholds of 100%.
- However, the specifics of trade finance cut across rules relating to the three pillars of capital, leverage, and liquidity.
- Hence, the new, more intrusive, regulatory framework seemed ill-suited to the low-risk, highly-collateralised assets that traditional forms of trade finance, such as L/Cs and other self-liquidating commitments, represented.
- For capital-constrained banks, shrinking the size of their balance sheets by divesting short-term commitments such as trade finance is one of the easiest ways to downsize.
- Policymakers became increasingly mindful of the need to reduce the unintended consequences on trade finance of the new framework.

Capital rules and trade finance

- Standardised approach: for short-term self-liquidating L/Cs, a 20% CCF was retained as per Basel I and II.
 - Based on the 8% minimum requirement, the capital charge would be 1.6%.
- Risk weights were based on the external ratings of bank counterparties, with claims on unrated banks subject to a weighting of 50%, or 20% for short-term claims.
 - Risk weighting applied to bank exposure could not be lower than the risk weighting of the sovereign in which the issuing bank was incorporated
 - For developing countries this was often 100%, (the so-called sovereign floor)
- Internal ratings-based approach: initially (2010), a one-year maturity floor (minimum) for the capitalisation of trade finance under the internal-ratings-based approach was maintained (as per Basel II).
 - In principle, the longer the maturity, the higher the risk, and thus the higher the capital requirement.

Changes in 2011

- October 2011: one-year maturity floor for issued and confirmed short-term L/Cs under the advanced internal-ratings-based approach (AIRB) for credit risk waived.
 - Other trade finance transactions which are not L/C-based could be exempted from the one-year floor, on national discretion.
- October 2011: so-called 'sovereign floor' for the risk-weighting of certain trade-finance-related claims on banks under the standardised approach for credit risk waived.
 - Risk weights could now be classified at a lower level than sovereign risk weights.

Leverage rules and trade finance

- The creation of a leverage ratio in respect of off-balance sheet commitments is at the core of the new Basel III framework.
- The calculation of the leverage ratio was intentionally designed to be simple and not based on any differential risk weighting: to serve as a credible complement to the risk-based requirement; and with the important aim of preventing the build-up of leverage and risky assets off-balance-sheet.
- Off-balance-sheet trade finance, along with other off-balance-sheet items, were to be incorporated into the calculations of the leverage ratio, and thus were assigned a 100% credit conversion factor from a threshold of 3% of capital.
 - Direct credit substitutes, performance-related contingencies, commitments, short-term self-liquidating L/Cs are components of off-balance sheet items.
- Concerns were expressed over potential impact of the leverage ratio on the supply of L/Cs and other short-term, self-liquidating instruments.

Changes since 2011

- October 2011: decision made that the leverage ratio would remain subject to a flat 100% CCF, with one exception – commitments that are unconditionally cancellable by a bank without prior notice.
- This exemption did not include trade finance products, such as L/Cs, which are irrevocable binding commitments for the bank and cannot be cancelled without prior agreement of the beneficiary.
- EU (2012-13): the EU, in implementing Basel III guidelines, decided to reduce the leverage 'tax' on such trade finance products, recognising the importance of trade finance for growth.
- The EU, under the CRD IV regulation, set the CCF for the calculation of the leverage ratio at rates of 20% and 50% for contingent trade finance instruments, i.e. lower than the planned (100%) by the Basel Committee.
- The US authorities, by contrast, not only decided to apply the 100% CCF for the leverage ratio, but also to add a supplementary measure of leverage for systemically important banks.
- As other members of the Basel Committee favoured the approach of the EU, the Basel Committee, in January 2014, reconsidered its guidelines on leverage for trade assets.
 - Instead of using a uniform 100% CCF, which converts an off-balance-sheet exposure to an on-balance-sheet equivalent, the leverage ratio would now use the same CCFs used in the Basel framework's Standardised Approach for credit risk under the risk-based requirements, subject to a floor of 10%.
 - Short-term self-liquidating trade L/Cs arising from the movement of goods (e.g. documentary credits collateralised by the underlying shipment), now received a CCF of 20 per cent for both issuing bank and confirming bank.
 - Such changes meant that banks needed to hold only one fifth of the capital for these trade instruments than they had originally envisaged.

Liquidity rules and trade finance

- New rules were designed to ensure that banks could survive a short-term funding crisis by holding sufficient liquid assets.
 - In the new Liquidity Coverage Ratio (LCR), this is defined as 100% coverage between a bank's unencumbered, high-quality, liquid assets and its estimated 30-day net cash-outflow under a 'liquidity stress' scenario
- Trade finance instruments potentially faced an unduly high liquidity cost within the LCR due to assumed levels of outflows or drawdowns on lending facilities – the run-off rate – in a liquidity-stress scenario.
- The rules proposed a 50% haircut when calculating the inflows of principal payments due from customers.
- The assumed run-off rate for conventional lending to non-financial corporates was 30%.
- The initial assumption for trade finance was the same.

Changes made since 2013

- January 2013: national authorities could, in the case of contingent-funding obligations stemming from certain trade-finance instruments, discretionally apply a relatively low run-off rate (for example, 5% or less).
 - Lending commitments, such as direct import or export financing for non-financial corporates, were excluded.
 - Direct corporate lending not using trade-finance structures with underlying physical receivables would therefore be subject to a higher run-off rate, even if the loan was intended to finance trade.
- In January 2014 the Committee issued a revised standard that was recalibrated to focus on the riskier types of funding profile employed by banks while improving alignment with the LCR. ■

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