AN ALPHA REAL CAPITAL GROUP COMPANY

PROFESSIONAL ADVISER ACADEMY: MODULE 4

‘ISSUER & COUNTERPARTY DUE DILIGENCE’

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Learning objectives of this Module …

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This Module aims to:

- Explain the role of issuers / counterparties and the importance of professional advisers assessing counterparty financial strength in relation to structured products
- Explain counterparty due diligence metrics and considerations
- Explain what ‘credit ratings’ are, the background to credit rating agencies and the different credit ratings used
- Explain what ‘credit default swaps’ are, how they can provide an independent, market-driven measure of counterparty strength - and how CDS spreads can be used alongside credit ratings
- Explain what is meant by ‘fundamentals’ and how consideration of fundamentals can form part of a rounded approach to counterparty due diligence
- Explain the relevance of ‘Tier 1 Capital’ and ‘Tier 1 Capital Ratios’ and why these are important metrics
- Explain what is meant by a ‘systemically important’ bank and the regulatory capital adequacy requirements that apply to systemically important banks
- Highlight regulatory changes pertinent to improving the capital adequacy and financial strength of the banking sector and individual banks post the 2008 financial crisis

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About Alpha Real Capital / Tempo Structured Products …

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KEY ALPHA STATISTICS:
(as at 30.06.17)

£2.2bn+
AUM and capital commitments

80+
Professional team

10
Platforms

5
International offices

4
Core business areas

Alpha Real Capital LLP is an international co-investing fund management group.

Established in 2005, and headquartered in London, Alpha comprises an international network of offices in the UK, Europe and Asia. An 80 plus strong professional team, combining experience and expertise with research, analysis and market knowledge, operates through 10 platforms, across diversified investment markets, offering listed and unlisted property vehicles, open and closed-ended property vehicles, and UK and international funds, products and wealth management services. Alpha engages with institutional investors, family offices, wealth managers and professional advisers / IFAs, as well as UHNW, HNW and private investors.

TIME Investments is the authorised wealth management and investment services arm of Alpha. TIME specialises in ground rent and other 'long income' property funds (having acquired the real estate asset management business of Close Brothers Group in 2011), Inheritance Tax Services, including Business Property Relief (BPR), and investment services, including Enterprise Investment Schemes (EIS).

Tempo Structured Products is a new Alpha platform, with four areas of focus: i) Retail: focusing on straightforward, lower risk structured products, for distribution through TIME Investments to UK Professional Advisers (IFAs and wealth managers); ii) Institutions / Pension funds: working with institutions / pension fund consultants, to develop 'smart structured products' (fusing structured, passive and smart beta strategies together); iii) HNW / UHNW / Family Offices: working with Alpha contacts to design bespoke structured product solutions for Family Offices, UHNW and HNW Individuals; iv) Strategic Alliances: partnering with other institutions, offering our expertise and issuer relationships as a specialist structured products unit, for the benefit of their clients and customers.

The role and relevance of 'counterparties' in structured products …

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- **Structured products are investments (or deposits) that are issued by institutions, most commonly investment banks, who are generally referred to as the product 'issuer' or 'counterparty'**

- **More specifically, structured products are usually based upon securities - typically debt instruments, such as Medium Term Notes, which are a type of bond - issued by the counterparty**

- **Bonds are issued by companies as a means of raising funds from investors:**
  - structured products are therefore a way of the counterparty bank raising capital (or 'funding'), and an investment in a structured product therefore effectively represents a loan, by the investor, to the counterparty

- **The terms of a structured product are legal obligations upon the issuing counterparty to make any payments due and repay capital at the maturity date, as per the terms of the product:**
  - capital invested in a structured product and any returns that may be generated are usually, therefore, wholly dependent upon the solvency of the counterparty throughout the investment term / at the maturity date

Structured products are one of the ways that counterparty banks raise capital. An investment in a structured product therefore effectively represents a loan, by the investor, to the counterparty

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Capital invested in a structured product and any returns that may be generated usually, therefore, depend upon the solvency of the counterparty throughout the investment term / at the maturity date

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What is counterparty risk / credit risk …

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- **Structured products can remove, reduce or at least define investor exposure to 'market risk'**
  - but, they instead present what is known as '**credit risk**'

- **Credit risk is the risk that a counterparty becomes insolvent, or similar, or defaulting upon its obligations, to make the payments due and to repay capital invested at maturity**
  - in the worst case, credit risk (or a credit 'event') could involve an institution becoming insolvent / bankrupt

- **In the context of structured products, counterparty risk / credit risk refers to the risk of the financial institution - which is likely to be a major investment bank, that is the issuer of the securities backing a product – failing and / or defaulting upon its obligations, during the investment term or at maturity**

Structured products can remove, reduce or at least define an investor's exposure to 'market risk' - but they instead present what is known as 'credit risk'

Any capital invested in a structured product and any returns that may be generated are usually dependent upon the solvency of the counterparty throughout the investment term / at the maturity date

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Credit risk is the risk that the counterparty that issued the product fails and / or defaults upon its obligations to make any payments due and / or to repay capital at maturity

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Counterparty risk is therefore a key consideration for investors in structured products

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Counterparties are typically leading global investment banks …

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- **The issuers / counterparties to structured products are typically global investment banks:**
  - notwithstanding that even global investment banks can fail, as was shown to be the case in the global financial crisis of 2008, they are usually considered to be amongst the strongest financial institutions in the world and generally believed to be - and expected to be (especially post the financial crisis of 2008) - strong enough to be capable of withstanding any and all economic and market scenarios / events

- **Clearly, governments, central banks, regulators, shareholders, employees and depositors - not to mention the banks themselves - do not expect or want banks becoming bankrupt:**
  - and post the 2008 financial crisis much attention has been paid by governments and regulators to ensure that the banking sector and individual banks have identified and mitigated risk and improved, stress-tested and ensured their capital adequacy (details of the regulatory focus on the global banking system, post the financial crisis, such as Basel III, is provided in this Module)

Issuers / counterparties to structured products are typically global investment banks

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Notwithstanding that it is possible for major banks to fail, as was shown in the global financial crisis, investment banks are usually considered to be amongst the strongest financial institutions in the world

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Counterparties are usually leading global investment banks …

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Professional adviser counterparty due diligence …

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- **Given the importance of the counterparty in a structured product, professional advisers should obviously seek to identify structured products that are issued by financially strong counterparties**

- **Professional advisers are not expected to become credit experts (and it is pertinent to point out that credit risk is a performance issue - as is the risk of an active fund underperforming its benchmark, etc.) and the regulator does not regulate performance, per se:**
  - but professional advisers should be aware of and undertake straightforward 'due diligence' pertinent to assessing a counterparty's financial strength / credit risk

- **Three metrics / areas of attention are considered sensible due diligence:**
  - **Credit ratings:** are generally seen as a primary indicator of an institution's financial strength
  - **Credit Default Swaps:** provide a complementary and independent market measure of credit risk
  - **Fundamentals:** refers to consideration of information such as a bank's size and strength, for example its 'Tier 1 capital ratio, assets size, market capitalisation and factors such as the counterparty's ultimate parent, whether the bank is systemically important, its country of domicile, the strength of that country, the likelihood and strength of any government backing, if ever needed, etc.

Three metrics / areas of consideration are generally recognised as part of professional adviser due diligence to assess structured product counterparty strength / credit risk

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Credit Ratings | Credit Default Swaps (CDS) | Fundamentals

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A pragmatic view of and approach to investor understanding …

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- **It is pragmatic to suggest that investors can understand 'credit risk', at least in general terms:**
  - for example, savers / investors generally understand that if they place a deposit with a big / strong bank, that doesn't want or need their money, they may get a low rate of interest; but if they want or need a higher rate of interest they may get more by placing their deposit with a smaller / weaker bank, that wants their funds more:

    … and, fundamentally, that's credit risk: it's not so tricky to understand the principles:

    … smaller / weaker banks, in need of funds, may want / need savers / investor's money more than bigger banks

    … as a result smaller / weaker banks typically offer higher returns than bigger / stronger banks, to attract money

    … but smaller / weaker banks present more risk to savers / investors than bigger / stronger banks

- **Many savers and investors may remember the issues with Icelandic banks, Northern Rock, Bradford and Bingley, Lehman Brothers, etc., or can be reminded of the events and their relevance, with regard to discussing the role / relevance of counterparties within the context of structured products**

- **A balanced approach is required to position the benefits of structured products: their ability to remove or reduce market risk and provide potentially pre-defined returns, that may not require the stock market to rise, with explicit understanding that products depend upon the ongoing solvency of the counterparty**

Retail investors can understand credit risk in structured products, at least in general terms

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As with any investment, any risks and the consequences of any risks must be detailed in a clear, fair and not misleading manner - and client's tolerance for risk be identified and suitable products selected

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An introduction to credit ratings …

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- **Credit ratings provide independent assessments and opinions of the financial strength of an institution (or a specific financial instrument or obligation) and their creditworthiness / credit risk**

- **Credit ratings are provided by firms which are designated and regulated by the US Securities and Exchange Commission (the SEC) as Nationally Registered Statistical Rating Organisations (NRSRO's):**
  - the three leading credit rating agencies are: Standard and Poor's, Moody's and Fitch Ratings

- **Ratings provide investors in debt securities of issuing sovereigns, institutions, etc., often referred to as the obligor, with an assessment and judgement of the financial strength and ability of the obligor to meet its obligations in repaying both the principal capital and any income due, i.e. it's 'creditworthiness**

While ratings are not guarantees and whilst assessing credit risk is not an exact science, credit ratings are widely recognised as a primary indicator of the financial strength / credit risk of an institution

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The three leading credit rating agencies are Standard and Poors, Moody's and Fitch Ratings

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More about credit ratings …

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- **Credit ratings are normally in the form of letter designations, such as AAA, AA, A, BB, C, etc.**
- **The rating denotes the agency's opinion of the institution's capacity to meet its financial commitments:**
  - ratings above 'BBB' are commonly referred to as 'investment grade' / ratings below 'BBB are 'non-investment grade (which is generally considered to be speculative and can also be referred to as 'junk-bond' status)
  - intermediate rankings, such as a 'plus' or 'minus' sign are used to denote whether an institution / debt obligation is at the higher, middle or lower end of the main generic rating category, e.g. AA+, A-, Aa2, etc.
- **Credit rating agencies also tend to provide 'outlook' guidance, indicating possible / anticipated changes to the ratings in the foreseeable future, such as adding 'positive', 'stable / neutral' or 'negative'**
  - a 'positive' outlook indicates that the agency anticipates that a rating may be upgraded
  - a 'negative' outlook indicates that the agency anticipates that a rating may be downgraded
  - a 'stable / neutral' outlook indicates that the agency doesn't currently anticipate a change to the rating
- **Ratings usually distinguish between 'long term' (more than 1 year) or 'short term' (less than 1 year)**

Credit ratings are normally in the form of letter designations, such as AAA, AA, A, BB, C, etc.

In the context of structured products, ratings for the issuing counterparty are usually detailed, but it should be understood that ratings are not implied recommendations of the product

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Standard and Poor's (S&P) …

- Standard & Poor's (S&P) is perhaps the most well known credit rating agency (with its brand also well recognised through the US-based 'S&P 500' index)
- S&P dates back to 1860, when Henry Poor published information about the financial and operational state of U.S. railroad companies
- The company as it is known today was formed in 1941, with the merger of Poor's Publishing and Standard Statistics
- In 1966 S&P was acquired by The McGraw-Hill Companies, which now encompasses the Financial Services division that publishes financial research and analysis on stocks and bonds

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S&P long term investment grade credit rating designations …

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- **S&P issues both short and long-term credit ratings, rating institutions / bonds on a scale from AAA to D**
- **Intermediate ratings are offered at each level, between AA and CCC, i.e., AA+, AA-, A+, BBB+, etc., with '+' indicating the higher end of the rating category and '-' representing the lower end**
- **'Outlook' guidance indicates the possible direction of change for a rating, in the intermediate term (6 moths - two years): 'positive' = likely to be upgraded; 'stable'; or 'negative' = likely to be downgraded**

S&P LONG TERM CREDIT RATING DESIGNATIONS (INVESTMENT GRADE)	
AAA	An obligation rated 'AAA' has the highest rating assigned by S&P. The obligor's capacity to meet its financial commitment on the obligation is extremely strong.
AA	An obligation rated 'AA' differs from the highest-rated obligations only to a small degree. The obligor's capacity to meet its financial commitment on the obligation is very strong.
A	An obligation rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still strong.
BBB	An obligation rated 'BBB' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.

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Moody's Investors Service (Moody's) …

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- **Moody's Corporation is the holding company for Moody's Investors Service, which provides credit ratings and research covering debt instruments and securities**
- **Moody's was founded in 1909, by John Moody who, similar to Henry Poor, offered investors an analysis of securities through publishing a book that analysed the railroads / their outstanding securities**
  - Moody's claims that it was the first to rate public market securities
- **In 1913, Moody expanded his base of analysed companies, launching his evaluation of industrial companies and utilities and "Moody's ratings' become a factor in the bond market**
- **On July 1, 1914, Moody's Investors Service was incorporated**

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Moody’s long term credit rating designations …

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- **Moody's issues both short and long term ratings, rating institutions / bonds, on a scale from Aaa to Caa**
- **Numerical modifiers are offered at each level between Aa and Caa, i.e., Aa3, Baa2, Baal, Caa3, etc., with 1 = the higher end of the rating category; 2 = a mid-range ranking; and 3 = the lower end**

MOODY’S LONG TERM CREDIT RATING DESIGNATIONS (INVESTMENT GRADE)	
Aaa	Judged to be of the highest quality, subject to the lowest level of credit risk.
Aa	Judged to be of high quality and subject to very low credit risk.
A	Judged to be upper-medium grade and subject to low credit risk.
Baa	Judged to be medium-grade and subject to moderate credit risk and as such may possess certain speculative characteristics.

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Fitch Ratings (Fitch) …

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- Fitch Ratings is a part of the Fitch Group
- Fitch was founded on December 24 1913, by John Fitch, in New York City, as the Fitch Publishing Company
- Fitch is the smallest of the 'big three' ratings agencies, covering a smaller share of the market than S&P and Moody's, although it has grown with acquisitions

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Fitch rating designations …

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- **Fitch issues both short and long-term ratings, rating institutions / bonds on a scale from AAA to D**
- **Intermediate ratings are offered at each level between AAA and CCC, i.e., AA+, M-, A+, BBB-, etc., with '+' indicating the higher end of the rating category and '-' representing the lower end**
- **A 'rating outlook' indicates the possible direction of change for a rating, in the foreseeable future: 'positive' = likely to be upgraded; 'stable'; or 'negative' = likely to be downgraded**

FITCH LONG TERM CREDIT RATING DESIGNATIONS (INVESTMENT GRADE)	
AAA	The highest credit quality, denotes the lowest expectation of credit risk. Assigned only in the case of exceptionally strong capacity for payment of financial commitments, highly unlikely to be adversely affected by foreseeable events.
AA	Very high credit quality, denoted expectation of very low credit risk. Indicates very strong capacity for payment of financial commitments, not significantly vulnerable to foreseeable events.
A	High credit quality, denotes expectations of low credit risk. The capacity for payment of financial commitments is considered strong, but may be more vulnerable to changes in circumstances or in economic conditions than for higher ratings.
B	Subject to moderate credit risk, considered medium-grade and as such may possess certain speculative characteristics.

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A summary of the different credit rating designations …

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- **The table below shows the credit rating symbols of the three main rating agencies, for the long term rating scales that they each use for investment grade debt, side-by-side**

- **In addition to noting the differences and / or similarities between the symbols the rating agencies use it is important to understand that different institutions / debt obligations with the same credit rating from the same rating agency do not present absolutely the same / equal credit strength / risk, and vice-versa an institution / debt obligation may have different ratings from each of the agencies**
  - While in a broad sense institutions with the same rating might be alike in their financial position, there are only a limited number of rating designations available, for use in grading thousands of institutions, with all types of business operations and risks, so the symbols cannot reflect all the shadings of risk that actually exist

S&P	Moody's	Fitch
AAA	Aaa	AAA
AA+ | AA | AA-	Aaa1 | Aaa2 | Aaa3	AA+ | AA | AA-
A+ | A | A-	A1 | A2 | A3	A+ | A | A-
BBB+ | BBB | BBB-	Baa1 | Baa2 | Baa3	BBB+ | BBB | BBB-

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Some concluding observations about credit ratings …

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- **It is worth highlighting that ratings agencies and their ratings are not infallible - and, indeed, they were heavily criticised during the 2008 financial crisis, when they also came under regulatory scrutiny**
- **It should be understood that the institutions / counterparties pay the credit rating agencies for the ratings provided**
- **It is also fair to suggest that ratings agencies tend to be longer term focused and can be slow to react to events**
- **However, it is also sensible to recognise that post the financial crisis there have been material changes and improvements in the approach of the agencies:**
  - the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act mandated improvements in regulating credit rating agencies
  - ratings agencies now have to publicly disclose how their ratings have performed
  - ratings agencies may also held liable for ratings that they should have known were inaccurate

While credit ratings are recognised as a primary indicator of the financial strength / credit risk of an institution / counterparty they are not infallible … or implied suitability for a structured product

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Credit ratings should only be part of a professional adviser's counterparty risk due diligence considerations - complemented by other metrics, including credit default swap rates and fundamentals

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An introduction to credit default swaps (CDS) …

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- **In addition to credit ratings, another metric used to assess the financial strength / credit risk of an institution / debt obligation is credit default swaps (‘CDS’: or, more specifically, the CDS ‘spread’ or level)**
- **CDS are credit derivatives. They were introduced in the late 1990’s, in the 'over-the-counter' market, where interested parties trade directly with each other (rather than via recognised exchanges)**
- **Notably, CDS are independent indicators of credit risk, that reflect supply and demand and the market’s aggregate assessment of the credit risk of an institution / debt obligation:**
  - this differs to credit ratings, which are paid for by institutions who want support for their debt / bond issuance
- **Also of note is the fact that CDS spreads tend to be more short term focused and react more swiftly to events than credit ratings**
- **Like credit ratings, CDS have their limitations, particularly in isolation (especially bearing in mind that credit quality is only one factor that can affect the CDS spread): but identifying BOTH credit ratings AND CDS levels is therefore considered to be a good complementary due diligence approach**

CDS ‘spreads’ independently reflect the market’s view of the financial strength / credit risk of an institution, that can be more short-term focused and swift to react to events than credit ratings

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Identifying both prevailing credit ratings and CDS levels is considered to be a good complementary due diligence approach

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More about credit default swaps: at a basic level …

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- **At a basic level, CDS can be thought of as a form of insurance, although they can also be bought by professional investors, such as hedge funds:**
  - the buyer of a CDS might own a bond or other debt obligation of an institution and want protection against the risk of the institution suffering a credit event and defaulting upon its obligations
  - alternatively, investors, such as hedge funds, who may have a negative view on an institution and seek to profit from a credit event affecting it in the future
- **CDS providers include banks, major insurance companies and hedge funds**
- **The buyer of a CDS pays a fee (the spread) to the seller, or writer, of the CDS. In exchange for the fee, the buyer of the CDS will be compensated by the seller if a credit event impacts upon the reference obligation**
  - potential credit events include bankruptcy, default to meet obligations, debt restructuring, etc.
  - if a credit events occur, the seller of the CDS will receive the reference obligation (now in distress) and the buyer will receive cash to compensate for the credit loss

Credit default swaps (CDS) can be thought of as a form of insurance (or speculation) that can be used to protect the holder against a credit event affecting the reference institution / bond

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CDS providers include banks, insurance companies and hedge funds

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Explaining credit default swaps: at a more detailed level …

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- **At a more detailed level, a CDS is a 'swap agreement' between two parties, in relation to bond or other debt instruments - often called the reference obligation - issued by an institution**

- **Credit default swaps are quoted in the form of an annualised spread, over LIBOR, known as the CDS spread:**
  - for example, the CDS spread for XYZ company or a specific bond issued by XYZ company might be 100bps
  - if the CDS buyer wants to protect US$10 million investment in XYZ company or a bond issued by them, then the buyer has to pay the CDS seller an annual fee of US$100,000 (which is typically paid quarterly)

- **As a CDS provides protection against a credit event impacting upon an institution or a specific debt instrument, if the CDS provider / credit derivatives market perceives that the credit strength of the institution / quality of the debt instrument will deteriorate the CDS spread will widen, i.e. increase, meaning that the cost of the CDS and the protection it provides will be greater (which makes sense):**
  - conversely, if the CDS provider / credit derivatives market perceives that the credit strength of the issuer / quality of the debt instrument will improve the CDS spread will narrow, i.e. decrease (i.e. protection will cost less)

Credit default swaps are quoted in the form of an annualised spread, known as the CDS spread

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If the credit derivatives market perceives that the credit strength of the reference institution / quality of the debt instrument will deteriorate the CDS spread will widen, i.e. increase … and vice versa

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Some examples of credit default swaps …

- **The following table provides some examples of CDS spreads / costs:**

INSTITUTION	1 YEAR CDS SPREAD	5 YEAR CDS SPREAD
HSBC Bank	29.98	75.40
Barclays Bank	44.00	93.21
Deutsche Bank	168.38	219.38

[SOURCE: Bloomberg 25.11.16]

- **As already explained, using CDS spreads / levels in isolation has limitations – but they can be used as a complementary indicator of counterparty strength / credit risk, in conjunction with credit ratings**

- **For example, the above CDS spread can be viewed against the credit ratings for each institution, to check if the CDS market (via spreads) reflects the credit ratings agencies views of the institutions:**

INSTITUTION	1-YR CDS	5-YR CDS	S&P RATING	SANITY CHECK
HSBC Bank	29.98	75.40	AA-	YES
Barclays Bank	44.00	93.21	A-	YES
Deutsche Bank	168.38	219.38	BBB+	YES

- **In this example, the CDS levels reflect the credit ratings as expected. Had a discrepancy been identified it might serve as a red flag to provoke some caution and trigger deeper due diligence**

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An introduction to fundamentals …

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- **Having identified how credit ratings and CDS spreads can be used, an additional aspect of counterparty due diligence widely considered sensible is ‘fundamentals’**
- **Fundamentals involves identifying and thinking about information such as:**
  - the size and strength of the counterparty bank, including the quality and scale of its assets, such as its ‘Tier 1 capital’ (both ratio and size), assets per se, its market capitalisation, recent / prevailing share price performance, analyst’s views, etc.

    (all of the above can be assessed for a counterparty in isolation but also with comparison to the sector and comparable institutions)
  - the counterparty’s ultimate parent and relevant (subsidiary and / or parent) country of domicile
  - whether the counterparty / bank is considered systemically important, either formally (as there is a list of banks that are designated systemically important) or generally
  - the likelihood and strength of any government backing, if ever needed
  - the counterparty bank’s internal investor / credit department’s views

Having identified how credit ratings and CDS spreads can be used, a remaining aspect of generally recognised sensible counterparty due diligence is ‘fundamentals’

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More about fundamentals …

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- **Credit ratings are conceptually straightforward and generally well understood. Credit default swaps are equally straightforward, conceptually, and are becoming more widely understood**

- **Cross referencing prevailing credit ratings and CDS spread levels, and taking into account recent history for both, and considering levels relative to the sector / comparable banks, is a sensible approach to straightforward counterparty due diligence:**
  - adding fundamentals extends and deepens the due diligence being performed

- **Much of the information that might be considered part of 'fundamentals' is also straightforward to understand, with relatively obvious relevance to counterparty strength / credit risk due diligence:**
  - and good structured product plan managers / promoters will proactively include this level of detail, in a user friendly format, as part of best practice support for professional advisers researching and using their products

- **Metrics such as Tier 1 capital ratios and whether a bank is (or might be) considered systemically important may be less familiar for some professional advisers - but are also straightforward factors:**
  - the following pages overview Tier 1 capital / Tier 1 capital ratios, the formal answer to whether a bank is considered systemically important; and briefly highlights details pertinent to the regulation of banks and their capital adequacy / financial strength, particularly post the 2008 global financial crisis

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A simple introduction to Tier 1 capital and Tier 1 capital ratios …

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- **Tier 1 capital and Tier 1 capital ratios are a measure of a bank's financial strength / capital adequacy**

- **A bank's core capital consists of equity capital and disclosed reserves. Tier 1 capital (or core equity capital) is a subset of core capital, and is a measure of the 'best of the best' of the bank's capital:**
  - simply put, Tier 1 capital is the 'top-notch' capital (the money that a bank has to support its activities and the risks that it is taking, in its lending, trading, investing, etc.) that a bank has

- **Tier 1 capital ratios measure the ratio of a bank's Tier 1 capital / core equity capital to its Risk-Weighted Assets (RWA: which grades and weights all of the bank's assets according to credit risk)**

- **There are two Tier 1 capital ratios:**
  - the **'Tier 1 total capital ratio':** which includes all of a bank's core capital

  and/or

  - the **'Tier 1 common capital ratio' (also known as the common equity Tier 1 ratio, or CET1 ratio):** which excludes preferred shares / non-controlling interests (so is always less than or equal to the total capital ratio)

Tier 1 capital and Tier 1 capital ratios are the main regulatory measures of a bank's financial strength / capital adequacy

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The amount of Tier 1 capital a bank holds is important - it represents a bank's capacity to withstand financial stress before becoming insolvent

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More about Tier 1 capital ratios …

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- **The Basel Committee on Banking Supervision's (BCBS) Basel III rules form the basis for global bank regulation**

- **Under Basel III, the Tier 1 capital ratio is used to grade a firm's capital adequacy as either: well-capitalised, adequately capitalised, undercapitalised, significantly undercapitalised or critically undercapitalised:**
  - a bank must have a Tier 1 capital ratio of at least 6%, with at least 4.5% CET1, and must not pay any dividends or distributions that would affect its capital, to be classified as well-capitalised;
  - and banks graded as undercapitalised or below are prohibited from paying any dividends or management fees and in addition must file capital restoration plans

- **When Basel III requirements are fully implemented, in 2019, banks will have to hold a mandatory 'capital conservation buffer' equal to 2.5% of the bank's risk-weighted assets, in addition to the minimum CET1:**
  - this equates to 7% (4.5% + 2.5%), compared to Basel 1 requirement of 4%, highlighting the significant moves to tighten regulation of the banking sector and the focus on capital adequacy and financial strength, in response to the 2008 global financial crisis
  - in addition, regulators can require an additional capital buffer of up to 2.5% of risk-weighted capital, which must be met with CET1 capital, during periods of high credit growth

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How Tier 1 capital ratios are calculated …

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- **The Tier 1 capital ratio measures a bank's core equity capital compared to its total risk-weighted assets:**
  - a bank's core equity capital is known as its Tier 1 capital and is the sum of its equity capital and disclosed reserves (and sometimes non-redeemable, non-cumulative preferred stock)
  - a bank's risk-weighted assets include all the assets that the firm holds, graded / weighted for credit risk (so, for example, cash of government bonds may be weighted as 0% credit risk, whereas mortgage loans may be 50%)

- The following examples highlight how the Tier 1 capital ratio is calculated:

- **Example 1:** As a simplified example, let's say that a bank has $10,000 in core / Tier 1 capital and $200,000 in loans, which have been ascribed a risk weighting of 80%, so the Risk-Weighted Assets are $160,000 ($200,000 x 80%). The Tier 1 capital ratio for the bank would be calculated as:

$10,000 (in Tier 1 capital) divided by $160,000 (in Risk-Weighted Assets) x 100 = 6.25%

> The Tier 1 capital ratio for the bank is 6.25%

- **Example 2:** Imagine that a bank has $1 billion in common stock and $200 million in retained earnings: adding these together, the bank has $1.2 billion in core / Tier 1 capital. After weighing its assets according to risk, the bank has $12 billion in Risk-Weighted Asset. The Tier 1 capital ratio for the bank would be calculated as:

$1.2 billion (in Tier 1 capital) divided by $12 billion (in Risk-Weighted Assets) x 100 = 10%

> The Tier 1 capital ratio for the bank is 10%

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An example of Tier 1 capital ratios …

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- The following information is from Bank of America's second-quarter 2016 earnings presentation:

BASEL III TRANSITION (USD BILLIONS)	Q2'16	Q1'16	Q2'15
Common equity Tier 1 capital	166.2	162.7	158.3
Risk-weighted assets	1,563	1,587	1,408
CET1 ratio	10.6%	10.3%	11.2%
BASEL III FULLY PHASED-IN			
Common equity Tier 1 capital	161.8	157.5	148.3
Standardised approach			
Risk-weighted assets	1,416	1,426	1,433
CET1 ratio	11.4%	11%	10.3%

- As can be seen / tested, dividing the capital by the risk-weighted assets leads to the CET1 ratio
- The 'fully phased-in' shows the metrics assuming Basel III requirements, which will be completely implemented in 2019. This example shows BoA to be well above the minimum requirement.

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About the Basel Committee on Banking Supervision (BCBS) …

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- **The Basel Committee on Banking Supervision (BCBS) is the primary global standard setter for the prudential regulation of banks and a forum for cooperation on banking supervisory matters**

- **The BCBS was established by the central bank governors of the G10 countries in 1974, to provide a forum for cooperation on banking supervisory matters. The Committee's members now come from:**
  - Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States

- **The BCBS is located at the Bank for International Settlements (BIS) in Basel, Switzerland** (although the BIS and the Basel Committee are distinct entities)

- **The BCBS does not issue binding regulation: instead, it functions as a forum in which policy and standards are developed, to encourage convergence toward common approaches and standards**

- **The Committee formulates broad supervisory standards and guidelines / best practice in banking supervision (for example, 'Basel III'), in the expectation that member nation authorities and other non-member nations' authorities will take steps to implement them through their own national systems**

The BCBS's mandate is to strengthen the regulation, supervision and practices of banks worldwide, with the purpose of enhancing financial stability

--

Its guidelines and standards include the international standards on capital adequacy

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About Basel III: the international regulatory framework for banks …

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- **The Basel III Accord ('Basel III') is a set of measures developed by the BCSB, in 2010-11, to strengthen the regulation, supervision and risk management of the banking sector, in response to the global financial crisis of 2008. Basel III aims to:**
  - improve the banking sector's ability to absorb shocks arising from financial and economic stress
  - improve risk management and governance
  - strengthen banks' transparency and disclosures
- **The Basel III reforms focus on:**
  - capital adequacy, stress testing and market liquidity risk
  - strengthening bank capital requirements by increasing bank liquidity and decreasing bank leverage
- **The reforms target a two-fold approach: 1) micro-prudential, bank-level regulation** (to help raise the resilience of individual banking institutions to periods of stress); **AND 2) macro-prudential, system wide risks** (that can build up across the banking sector, as well as the pro-cyclical amplification of these risks over time)

  … the two-fold approach is complementary, as greater resilience at individual bank level reduces the risk of system-wide issues
- **Basel III was originally scheduled to be implemented between 2013-15; however this was extended to March 2018 and again to March 2019**

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About the Financial Stability Board (FSB) …

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- **The Financial Stability Board (FSB) is an international body that was established in April 2009, as the successor to the Financial Stability Forum (FSF), to monitor and make recommendations about the global financial system, with a broadened mandate to promote financial stability**
- **The FSF was founded in 1999, in Washington, by the G7 countries, to bring together national authorities responsible for financial stability in significant international financial centres**
- **The evolution of the FSF into the FSB followed the global financial crisis, with the G20 countries calling for a larger membership of the FSF to strengthen its ability / effectiveness to address vulnerabilities and to develop and implement strong regulatory, supervisory and other policies for financial stability**
- **The FSB brings together policy makers from government, central banks, supervisory and regulatory authorities, for the G20 countries, plus Hong Kong, Singapore, Spain and Switzerland:**
  - in addition, it includes international bodies, including standard-setters and regional bodies such as the European Central Bank and European Commission
  - there are also six regional consultative groups (RCGs), which reach out to authorities in 70 other countries and jurisdictions, including a wide range of emerging market and developing economies (EMDEs). As with the FSB itself, central banks, supervisors, securities regulators and ministries of finance are members.

The FSB's reach extends globally, incorporating all parties who set financial stability policies across the financial system

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The process and approach of the FSB …

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- **The FSB operates through a three-stage process:**

  1. Vulnerabilities Assessment - *the identification of systemic risk in the financial sector*

  The FSB monitors and assesses vulnerabilities affecting the global financial system and proposes actions needed to address them. In addition, it monitors and advises on market and systemic developments, and their implications for regulatory policy.

  2. **Policy Development and Coordination - *framing the financial sector policy actions that can address these risks***

  The FSB coordinates the work of national financial authorities and international standard setting bodies and develops and promotes the implementation of effective regulatory, supervisory and other financial sector policies.

  3. **Implementation Monitoring - *and overseeing implementation of policy responses***

  The FSB monitors the implementation of agreed financial reforms and reporting to the G20, with an agreed framework for monitoring and reporting on implementation to strengthen the coordination and effectiveness.

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FSB identification of 'systemically important' banks …

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- **As part of the regulatory response to the global financial crisis, and the 'too big to fail' (TBTF) risks and moral hazards that were identified in the crisis, in 2009 the FSB identified a list of Global Systemically Important Banks (G-SIBs), for whom stricter regulatory capital adequacy requirements would apply**

  - **The G-SIB list of 30 banks was agreed in November 2011 (and is updated each year, in November)**

  - **In addition, national lists of Domestic Systemically Important Banks (D-SIBs) exist**

  (these banks may also be known as Systemically Important Financial Institutions (SIFIs) or Other Systemically Important Institutions (OSIIs))

- **The D-SIBs lists include banks not big enough for G-SIB status, but that are deemed sufficiently domestically important for D-SIB status and to be subject to more stringent regulatory requirements**

- **Basel III requires G-SIBs to operate with minimum Tier 1 capital ratios, by March 2018:**
  - the higher requirements range between 8.0% / 8.5% / 9.0% / 9.5% and 10.5% CET1 ratios
  - further requirements relating to 'Additional Tier 1' and 'Tier 2' capital, are also imposed on the G-SIBs
  - in the EU, all European G-SIBs (with headquarters in one of the EEA member states), face even higher capital adequacy ratio requirements than those required by the FSB, after phase-in during 2015–18
  - similarly, the EU is also applying some more stringent requirements than just the FSB requirements on D-SIBs

- **In addition to the Basel III capital adequacy requirements, in 2014 the FSB started a process to define requirements for Total Loss Absorbency Capacity ('TLAC'), to be applied to G-SIBs**

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The UK's Independent Commission on Banking / Vickers Report …

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- **In addition to the actions of the Basel Committee on Banking Supervision (BCBS), particularly Basel III, and the Financial Stability Board (FSB), in the UK, in June 2010, the government established the 'Independent Commission on Banking', to look at structural reforms to the banking sector to promote financial stability (and competition).**

- **The inquiry, led by John Vickers, included 5 commissioners and a body of officials drawn from the Financial Services Authority, Bank of England, HM Treasury, etc.**

- **The Commission presented its recommendations (known as 'the Vickers Report') to the UK government in September 2011:**
  - the basic / headline recommendation was that British banks should 'ring-fence' their core retail banking from their investment banking / capital markets activities (steps also being undertaken in Europe)
  - in addition, a number of recommendations were made regarding bank capital requirements

- **The recommendations led to the UK's Financial Services (Banking Reforms) Act 2013:**
  - secondary legislation was also passed in July 2014, to add to the level of detail of the Act

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Details of G-SIBs and fundamentals for leading banking groups …

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- **The tables on the following pages provide:**
  - details of the banks identified as Globally Systemically Important Banks (G-SIBs)
  - 'fundamental' information - including global rankings - for the leading banking groups

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FSB / BCSB List of G-SIBs …

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FSB 2016 LIST OF GLOBALLY SYSTEMICALLY IMPORTANT BANKS (G-SIBSs)					
1	JP Morgan Chase	2.5%	16	Credit Suisse	1%
2	Bank of America	2%	17	Groupe Credit Agricole	1%
3	Citigroup	2%	18	ING Bank	1%
4	Deutsche Bank	2%	19	Mizuho FG	1%
5	HSBC	2%	20	Morgan Stanley	1%
6	Bank of China	1.5%	21	Nordea	1%
7	Barclays	1.5%	22	Royal Bank of Canada	1%
8	BNP Paribas	1.5%	23	Royal Bank of Scotland	1%
9	China Construction Bank	1.5%	24	Santander	1%
10	Goldman Sachs	1.5%	25	Societe Generale	1%
11	Industrial / Commercial Bank of China	1.5%	26	Standard Chartered	1%
12	Mitsubishi	1.5%	27	State Street	1%
13	Wells Fargo	1%	28	Sumitomo Mitsui FG	1%
14	Agricultural Bank of China	1%	29	UBS	1%
15	Bank of New York Mellon	1%	30	Unicredit Group	1%

[SOURCE: Financial Stability Board 2017 List of G-SIBs. November 2017, ranked alphabetically within the ‘buckets’ of required level of additional common equity loss absorbency as a percentage of risk-weighted assets that each G-SIB will be required to hold in 2018]

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Top 50 banks globally, ranked by Tier 1 capital ($billion) …

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RANK	INSTITUTION	TIER 1 CAPITAL
1	ICBC	281
2	China Construction Bank	226
3	JP Morgan Chase & Co	208
4	Bank of China	199
5	Bank of America	190
6	Agricultural Bank of China	189
7	Citigroup	178
8	Wells Fargo & Co	171
9	HSBC Holdings	138
10	Mitsubishi UFJ Financial Group	136
11	Bank of Communications	90
12	Sumitomo Mitsui Financial Group	89
13	Credit Agricole	88
14	BNP Paribas	86
15	Goldman Sachs	82
16	Banco Santander	78
17	Mizuho Financial Group	73
18	Barclays	70
19	Morgan Stanley	68
20	Groupe BPCE	60
21	Deutsche Bank	58
22	Norinchukin Bank	58
23	China Merchants Bank	56
24	Societe Generale	55
25	China Citic Bank	55

RANK	INSTITUTION	TIER 1 CAPITAL
26	BBVA	53
27	Shanghai Pudong Development Bank	52
28	Industrial Bank	50
29	China Minsheng Bank	50
30	RBS	50
31	Postal Savings Bank of China	50
32	Credit Suisse Group	48
33	ING	47
34	Credit Mutuel	46
35	Lloyds Banking Group	45
36	Sberbank	45
37	UBS	44
38	Standard Chartered	42
39	Intesa Sanpaolo	42
40	Royal Bank of Canada	41
41	US Bancorp	39
42	Rabobank Group	39
43	Toronto Dominion Bank	37
44	ANZ Banking Group	37
45	UniCredit	37
46	National Australia Bank	36
47	PNC Financial Services Group	36
48	Commonwealth Bank Group	36
49	China Everbright Bank	36
50	Itau Unibanco Holding	36

[SOURCE: The Banker Database April 2018]

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Top 50 banks globally, ranked by total assets ($billion) …

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RANK	INSTITUTION	ASSETS
1	ICBC	3,473
2	China Construction Bank	3,016
3	Agricultural Bank of China	2,816
4	Mitsubishi UFJ Financial Group	2,707
5	Bank of China	2,611
6	JP Morgan Chase & Co	2,491
7	HSBC Holdings	2,375
8	Bank of America	2,189
9	BNP Paribas	2,186
10	Wells Fargo & Co	1,930
11	Credit Agricole	1,814
12	Citigroup	1,792
13	Mizuho Financial Group	1,789
14	Sumitomo Mitsui Financial Group	1,765
15	Deutsche Bank	1,674
16	Barclays	1,498
17	Societe Generale	1,455
18	Banco Santander	1,410
19	Groupe BPCE	1,300
20	Bank of Communications	1,209
21	Postal Savings Bank of China	1,189
22	Lloyds Banking Group	1,010
23	RBS	986
24	Norinchukin Bank	955
25	UBS	917

RANK	INSTITUTION	ASSETS
26	UniCredit	905
27	ING	888
28	Royal Bank of Canada	881
29	Toronto Dominion Bank	878
30	Industrial Bank	876
31	Goldman Sachs	860
32	China Merchants Bank	855
33	China Citic Bank	853
34	China Minsheng Bank	848
35	Shanghai Pudong Development Bank	843
36	Credit Mutuel	835
37	Morgan Stanley	815
38	Credit Suisse Group	804
39	BBVA	770
40	Intesa Sanpaolo	763
41	ANZ Banking Group	698
42	Rabobank Group	697
43	Commonwealth Bank Group	691
44	Scotiabank	669
45	Nordea Group	648
46	Standard Chartered	647
47	Westpac Banking Corporation	641
48	National Australia Bank	594
49	Sumitomo Mitsui Trust Bank	584
50	China Everbright Bank	578

[SOURCE: The Banker Database April 2018]

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Top 50 banks globally, ranked by total deposits ($billion) …

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RANK	INSTITUTION	DEPOSITS
1	ICBC	2,821
2	China Construction Bank	2,448
3	Agricultural Bank of China	2,330
4	Bank of China	2,066
5	Mitsubishi UFJ Financial Group	1,524
6	JP Morgan Chase & Co	1,375
7	HSBC Holdings	1,332
8	Wells Fargo & Co	1,306
9	Bank of America	1,262
10	Postal Savings Bank of China	1,089
11	Mizuho Financial Group	1,071
12	Sumitomo Mitsui Financial Group	1,052
13	Citigroup	932
14	BNP Paribas	878
15	Bank of Communications	861
16	Banco Santander	782
17	Credit Agricole	782
18	Industrial Bank	692
19	China Citic Bank	665
20	China Minsheng Bank	632
21	China Merchants Bank	627
22	Shanghai Pudong Development Bank	625
23	ING	593
24	Groupe BPCE	586
25	Barclays	582

RANK	INSTITUTION	DEPOSITS
26	Deutsche Bank	579
27	Toronto Dominion Bank	577
28	Royal Bank of Canada	565
29	Norinchukin Bank	552
30	UniCredit	547
31	Lloyds Banking Group	524
32	Societe Generale	500
33	RBS	478
34	Scotiabank	457
35	ANZ Banking Group	447
36	BBVA	445
37	Commonwealth Bank Group	444
38	Credit Mutuel	436
39	UBS	426
40	China Everbright Bank	425
41	Standard Chartered	408
42	State Bank of India	401
43	Westpac Banking Corporation	392
44	Rabobank Group	389
45	Credit Suisse Group	371
46	Resona Holdings	363
47	National Australia Bank	361
48	Bank of Montreal	353
49	US Bancorp	335
50	Intesa Sanpaolo	333

[SOURCE: The Banker Database April 2018]

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Top 50 banks globally, ranked by market capitalisation ($billion) …

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RANK	INSTITUTION	MKT CAP
1	JP Morgan Chase & Co	391
2	ICBC	345
3	Bank of America	325
4	Wells Fargo	308
5	China Construction Bank	257
6	HSBC	219
7	Agricultural Bank of China	203
8	Citigroup	203
9	Bank of China	181
10	China Merchants Bank	123
11	Royal Bank of Canada	123
12	Banco Santander	116
13	Commonwealth Bank of Australia	112
14	Mitsubishi UFJ Financial Group	112
15	Toronto-Dominion Bank	108
16	BNP Paribas	103
17	Goldman Sachs Group	101
18	Sberbank of Russia	100
19	Morgan Stanley	100
20	US Bancorp	95
21	HDFC Bank	88
22	Itau Unibanco	86
23	Westpac Banking Corporation	85
24	Bank of Nova Scotia	79
25	ING Group	79

RANK	INSTITUTION	MKT CAP
26	UBS Group AG	75
27	Charles Schwab	74
28	PNC Financial Services	72
29	Lloyds Banking Group	71
30	Sumitomo Mitsui	67
31	Bank of Communications	67
32	Australia & New Zealand Banking	66
33	Banco Bradesco	65
34	National Australia Bank	64
35	Intesa Sanpaolo	62
36	BBVA	61
37	Japan Post Bank	61
38	Bank of New York Mellon	60
39	Shanghai Pudong Development Bank	59
40	Industrial Bank Co	57
41	BOC Hong Kong	55
42	Bank of Montreal	53
43	Credit Agricole	52
44	DBS Group Holdings	51
45	Nordea Bank	51
46	Capital One Financial	51
47	Royal Bank of Scotland	50
48	Mizuho Financial Group	50
49	Credit Suisse	48
50	Postal Savings Bank of China	48

[SOURCE: Relbanks January.2018]

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Some concluding points re the banking sector …

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- **The collapse of Lehman Brothers, in 2008, highlights that banks can fail: BUT it is sensible to also recognise (and evident) that there is a 'pre-financial crisis' world and a 'post financial crisis' world …**

  … it is also illuminating to understand that the recovery rate for Lehman Brothers creditors, including structured products investors, has steadily increased: in some instances to 80-90% of money invested

- **The response to the financial crisis has been comprehensive and a national, regional and globally collaborative effort, involving governments, central banks, regulators and various international organisations:**
  - for example, the G20 led Financial Stability Board (FSB), the Basel Select Committee on Banking (BSCB), the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD)

- **Macro, micro and structural reforms have been implemented internationally, focusing on the activities, risks, financial strength, capital adequacy and stability of banks, the banking sector and the global financial system. Steps taken have included:**
  - the limitation / outright prohibition of some activities (such as proprietary trading, hedge fund activity, etc.)
  - separation and ring-fencing within banks
  - a fundamentally different approach to risk and the culture within and approach of banks

- **Capital adequacy / the financial strength of banks per se, and the sector overall, has prescriptively / regulatorily been fundamentally improved**

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A reminder of the regulatory position re counterparty risk …

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- **It is important to understand that in the context of structured products, from a professional adviser's perspective, counterparty risk is a performance issue - and the FCA does not regulate performance**

- **The obligation of the issuing bank / counterparty for a structured product is to issue the securities / investments, to make any payments due and to repay capital at maturity:**
  - but the possibility of default is inherent in the investments / securities
  - in the same way that that the possibility of a fall in the value / price of an equity and actively managed equity fund is inherent in equity investments and mutual funds

- **But the risks and consequences of any / all risks in a structured product, including counterparty risk must be detailed, by providers and advisers, in a clear, fair and not misleading manner:**
  - and client's tolerances for risk must be identified and suitable investments selected

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FSCS protection: when it may apply and when it may not …

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- **During the offer period for a structured product, investor's funds are usually held by the Plan Manager's appointed administrator, in accordance with Client Money Regulations, in an appropriate bank account, until the strike date (i.e. the start date) of the investment term of the product:**
  - Financial Services Compensation Scheme (FSCS) cover would normally apply in the event of the insolvency / failure of the Plan Manager, the Administrator and / or the bank where monies are held prior to the strike date, for eligible investors

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FSCS protection: when it may apply and when it may not …

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- **At the strike date of a structured product, investor funds pass from the Plan Manager / Administrator to the issuing bank / counterparty, to purchase the securities being issued by the bank / counterparty:**
  - the securities are held in the name of the Plan Manager's custodian, for the beneficial ownership of investors
  - investors do not have a direct legal interest in the securities issued by the counterparty or direct rights against the counterparty in the event of their default
- **It is important to understand that recourse to the FSCS in the event of the failure and default of an issuing / counterparty bank is NOT usually possible for this reason alone:**
  - unless another factor (such as mis-selling) is involved
- **However, distinction is required between structured products and structured deposits:**
  - the default of a licensed UK deposit taker, affecting a structured deposit, WOULD usually be covered by FSCS protection, for eligible investors

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FSCS protection: when it may apply and when it may not …

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- **At the end of the investment term, following the maturity of a structured product, investor funds pass back from the counterparty bank to the Plan Manager's appointed Administrator:**
  - as with the offer period, FSCS cover would normally apply in the event of the insolvency / failure of the Plan Manager, the Administrator and / or the bank where monies are held after the maturity date, for eligible investors

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Regulatory expectations incumbent upon professional advisers …

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- **Professional advisers are expected to undertake robust issuer / counterparty due diligence**
- **The regulatory expectations incumbent upon professional advisers are explicit - the following extracts are taken from the FCA Retail Product Development and Governance: Structured Product Review, 2012 Thematic Review:**

  "Firms should carry out sufficient due diligence into the counterparty and not rely solely on credit rating agencies …"

  "We expect firms to look more broadly than just the credit rating, such as the rating, outlook, credit default swap (CDS) spreads and other market information, as well as 'fundamentals' on the issuer's balance sheet."

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Some pragmatic points to consider …

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- **No investment is perfect - all investments carry risk. It is identifying and understanding those risks, when they may apply and the consequences of the risks, and considering whether an investment is suitable for individual circumstances, that is important for prospective investors. As this module should have made clear, understanding counterparty risk is critically important within structured products:**
  - but there is nothing wrong with credit risk - it is just a type of risk, along with many other types of risk, that is a normal investment consideration for professional advisers and investors
  - and like other risks, counterparty risk can just as readily be clearly and sensibly understood

    … particularly following the changes in regulations following the financial crisis and the collapse of Lehman Brothers, which resulted in important changes, including the identity of the counterparty now being disclosed during the offer period (this was previously prevented by prospectus disclosure rules, pre the financial crisis), along with improved information and guidance that is now part of investor-facing product literature and support for professional advisers

- **Further, for many investors, the benefits of structured products provide many benefits and advantages, and real value, as alternatives and / or complements to cash and active and passive mutual funds, including:**
  - removing, reducing or at least pre-defining exposure to market downside risk
  - pre-defining the parameters and conditions of returns, including offering fixed and non-conditional returns, and positive returns even if markets don't rise (or even if they fall) and increasing returns in rising markets
  - doing everything 'by contract', legally obligating the issuer / counterparty to deliver precisely what was detailed at the outset

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Concluding points …

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- **Professional advisers should be aware of the basic metrics for assessing the financial strength of a counterparty - and should seek to identify structured products that are backed by strong counterparties:**
- **Counterparty due diligence is not challenging - and good structured product providers will make the metrics and inputs readily available to professional advisers, as part of their support and service**
- **A rounded approach to due-diligence includes identifying and taking into account credit ratings, credit default swap levels and fundamentals:**
  - in isolation for the individual counterparty and also relatively / within the wider context of the banking sector
- **FLIGHT TO QUALITY: Professional advisers and investors should seek structured product providers and structured products that are backed by evidentially / demonstrably strong counterparty banks, based on various factors:**
  - and they should understand that higher headline rates on structured products can usually be achieved by providers who use or are linked to weaker rated banks / counterparties
- **DIVERSIFICATION: Professional advisers and investors should seek to diversify the structured products they utilise and their overall portfolios**

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Some useful links …

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- **Standard & Poor's:** www.standardandpoors.com
- **S&P ratings definitions:** https://www.standardandpoors.com/en_US/web/guest/article/-/view/sourceId/504352
- **Moody's Investors Service:** www.moodys.com
- **Moody's rating designations and definitions:** https://www.moodys.com/sites/products/AboutMoodysRatingsAttachments/MoodysRatingSymbolsandDefinitions.pdf
- **Fitch Ratings:** www.fitchratings.com
- **Fitch ratings definitions:** file:///C:/Users/CHRIS/AppData/Local/Temp/Rating%20Definitions%20-%20March%2017%202017.pdf
- **U.S. SEC Office of Credit Ratings:** http://www.sec.gov/ocr
- **U.S. SEC 'ABC's of Credit Ratings:** http://www.sec.gov/investor/alerts/ib_creditratings.pdf
- **Financial Stability Board:** www.fsb.org
- **Basel Committee on Banking Supervision:** http://www.bis.org/bcbs/
- **Federal Reserve Regulation of Large Financial Institutions:** https://www.federalreserve.gov/supervisionreg/large-financial-institutions.htm
- **Bank of England/UK Banks Stress Testing:** http://www.bankofengland.co.uk/financialstability/Pages/fpc/stresstest.aspx
- **Bank of England Financial Stability Report 2016:** http://www.bankofengland.co.uk/publications/Pages/fsr/2016/nov
- **BoE Prudential Regulation Authority:** http://www.bankofengland.co.uk/pra/Pages/default.aspx
- **UK Parliament Independent Commission on Banking:** http://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN06171#fullreport
- **European Banking Authority:** http://www.eba.europa.eu/about-us
- **The Banker Database:** https://www.thebankerdatabase.com/

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Learning objectives of this Module …

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Following completion of Module 4, you should now:

- Have considered the role of counterparties and the importance of professional advisers assessing counterparty financial strength in relation to structured products
- Understand counterparty due diligence metrics and considerations
- Understand what 'credit ratings' are, the background to credit rating agencies and the different credit ratings
- Understand what 'credit default swaps' are, how they can provide an independent, market-driven measure of counterparty strength - and how CDS spreads can be used alongside credit ratings
- Understand what is meant by 'fundamentals' and how consideration of fundamentals can form part of a rounded approach to counterparty due diligence
- Understand the relevance of 'Tier 1 Capital' and 'Tier 1 Capital Ratios' and why these are important metrics
- Understand what is meant by a 'systemically important' bank and the regulatory capital adequacy requirements that apply to systemically important banks
- Have some knowledge of regulatory changes pertinent to improving the capital adequacy and financial strength of the banking sector and individual banks post the 2008 financial crisis

If you would like to test your knowledge, please access the online Module test …

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- **It should always be understood that:**
  - structured products are not suitable for everyone
  - past performance is not a reliable indicator of or guide to future performance and should not be relied upon, particularly in isolation
  - the value of investments and the income from them can go down as well as up
  - the value of structured products may be affected by the price of their underlying investments
  - capital is at risk and investors could lose some or all of their capital
- **The 'Important risks' section of our website highlight the key and other risks of structured products, in addition to explaining important information for Professional Advisers who wish to access the current products area of our website and who may use our structured product plans with their clients:**
  - www.tempo-sp.com/important-risks
- **Professional Advisers should access and read the relevant plan documents relating to any structured product plan of interest, in particular: the plan brochure; plan application pack, including, the terms and conditions of the plan; and the issuer's securities prospectus, final terms sheet and key information document (KID), before making a recommendation to their clients**.
- **Professional advisers should not invest in, or advise their clients to invest in, any investment product unless they and their clients understand them, in particular the relevant risks**

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