TAFS MUN 2016

Rerum. Reform. Rebuild.

The Air Force School,
Subroto Park

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Venue: The Air Force School, Subroto Park

Global Economic Meeting of BIS - Background Guide

Letter from the Executive Board

Greetings Delegates,

Firstly, it is indeed an honor & a privilege to welcome to this simulation of General Economy of the Bank of International Settlements, hosted by The Air Force School Model United Nations 2016. We look forward to working with you, with the aim that this simulation proves to be an intellectually enriching experience for all of you.

This simulation of the GEM shall be discussing <u>two</u> agendas:

1. *Discussing the reforms in the use of Macroprudential instruments for ensuring financial market resilience with special emphasis on Basel III; and*
2. *Promotion of Global Electronic Assets Trading.*

In the recent financial history of our world, these two agendas hold immense importance and topical value: While a lack of proper macro-prudential regulatory framework resulted in the world being unable to quickly respond to the global financial crisis in 2007-08, Electronic assets trading is a phenomenon which is gaining ground fast, various aspects like the security of such trading are in question and must be discussed in detail.

With regard to the second agenda item, it is important to discuss the implications of more widespread use of electronic trading and risks arising from the same. It's further important to deliberate on challenges faced in transitions and factors resisting the said transition. Having said that, we hope that you understand the purview of the agenda; it aims to provide recommendations (from the Bank of International Settlements) to the member states with regard to promotion of Global Electronic Assets Trading. Therefore, you must stress upon the questions to consider as well as research beyond the scope of the background guide. Please also note that assets trading becomes a little complex based on the assets we are dealing with, therefore for the scope of this agenda, we shall limit it to financial securities such as stocks, bonds, derivatives etc. and <u>not</u> real assets such as real estate, cars, gold etc. Therefore, it is important that you read about the types and characteristics of financial securities. We - as the Executive Board - can't explain the same with the aid of this background guide for the simple reason that there often exist fundamental differences between the structures and characteristics of securities in different countries (such as the European options & American options). We therefore recommend the use of Investopedia for understanding the same.

We look forward to a very spirited and above anything else, a well-informed debate on these very topical issues at TAFS MUN '17. We have tried to be as specific as possible in this background regarding all possible details of these agendas, however, this background should not be considered exhaustive, and delegates must go beyond the

foundational matter in this document to embrace the larger details which shall help them to formulate their own opinions on these agendas, which in actuality, is the aim of and Model UN Conference.

In case you have any queries, or wish to seek any clarifications with respect to the business of this committee, please feel free to contact the undersigned via email.

Happy researching.

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Bank of International Settlements: An Introduction

Established on 17 May 1930, the Bank for International Settlements (BIS) is the world's oldest international financial organisation. The BIS has 60 member central banks, representing countries from around the world that together make up about 95% of world GDP.

The head office is in Basel, Switzerland and there are two representative offices: in the Hong Kong Special Administrative Region of the People's Republic of China and in Mexico City.

The mission of the BIS is to serve central banks in their pursuit of monetary and financial stability, to foster international cooperation in those areas and to act as a bank for central banks.

In broad outline, the BIS pursues its mission by:

1. fostering discussion and facilitating collaboration among central banks; supporting dialogue with other authorities that are responsible for promoting financial stability;
2. carrying out research and policy analysis on issues of relevance for monetary and financial stability;
3. acting as a prime counterparty for central banks in their financial transactions; and
4. serving as an agent or trustee in connection with international financial operations.

Monetary and financial stability is a precondition for sustained economic growth and prosperity. Reflecting the public good character of this goal, the BIS also makes part of its work available free of charge to the wider public, including:

1. its own analyses of monetary and financial stability issues;
2. international banking and financial statistics that underpin policy-making, academic research and public debate.

With regard to its banking activities, the customers of the BIS are central banks and international organisations. As a bank, the BIS does not accept deposits from, or provide financial services to, private individuals or corporate entities.

Governance of the BIS

The governance of the Bank is determined by its Statutes, which were last revised in June 2005 following a review. The governance and management of the Bank are conducted at three principal levels:

1. General Meeting of BIS member central banks;
2. BIS Board of Directors; and
3. BIS Management.

At each of these levels, governance is exercised and management decisions are taken on the BIS's cooperative activities, the policy analysis in support of monetary and financial stability, banking operations and the internal allocation of resources throughout the BIS.

Governance of the BIS-hosted committees

The BIS hosts nine committees and groups, which are all part of the Basel Process. The Global Economy Meeting (GEM) provides guidance to three central bank committees:

1. the Committee on the Global Financial System (CGFS);
2. the Committee on Payments and Market Infrastructures (CPMI); and
3. the Markets Committee.

The GEM oversees the organisation of these committees and appoints the chairs; receives reports from the committees and decides on publication; and provides guidance on work priorities. A smaller group of central bank Governors in the Economic Consultative Committee (ECC) supports the GEM by preparing proposals for discussion and decision by the GEM.

General Economy Meeting

The Global Economy Meeting (GEM) has two main roles:

1. monitoring and assessing developments, risks and opportunities in the world economy and the global financial system; and
2. providing guidance to three Basel-based central bank committees - the Committee on the Global Financial System, the Committee on Payments and Market Infrastructures and the Markets Committee.

The GEM also receives reports from the chairs of those committees and decides on publication.

The GEM, chaired by Agustín Carstens, Governor of the Bank of Mexico, comprises the Governors of 30 BIS member central banks in major advanced and emerging market economies that account for about four fifths of global GDP:

Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Malaysia, Mexico, the Netherlands, Poland,

Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Thailand, Turkey, the United Kingdom and the United States and also the President of the European Central Bank and the President of the Federal Reserve Bank of New York.

The Governors of another 19 central banks attend the GEM as observers:

Algeria, Austria, Chile, Colombia, the Czech Republic, Denmark, Finland, Greece, Hungary, Ireland, Israel, Luxembourg, New Zealand, Norway, Peru, the Philippines, Portugal, Romania and the United Arab Emirates.

Introduction to relevant terminology

1. **Macro-Prudential Instruments**: These are instruments used for macro-prudential regulation, which characterizes the approach to financial regulation aimed to mitigate the risk of the financial system as a whole or 'systemic risk'. In the aftermath of the late-2000s financial crisis, there is a growing consensus among policymakers and economic researchers about the need to re-orient the regulatory framework towards a macroprudential perspective.
2. **Basel Accords**: the banking supervision Accords (recommendations on banking regulations)—Basel I, Basel II and Basel III—issued by the Basel Committee on Banking Supervision (BCBS). They are called the Basel Accords as the BCBS maintains its secretariat at the Bank for International Settlements in Basel, Switzerland and the committee normally meets there. The Basel Accords is a set of recommendations for regulations in the banking industry.
3. **Systemic Risk**: Risk of collapse of an entire financial system or entire market, as opposed to risk associated with any one individual entity, group or component of a system, that can be contained therein without harming the entire system. It refers to the risks imposed by *interlinkages* and *interdependencies* in a system or market, where the failure of a single entity or cluster of entities can cause a cascading failure, which could potentially bankrupt or bring down the entire system or market
4. **Over-the-Counter Trading**: (**OTC**) trading is done directly between two parties, without the supervision of an exchange. It is contrasted with exchange trading, which occurs via exchanges. A stock exchange has the benefit of facilitating liquidity, mitigates all credit risk concerning the default of one party in the transaction, provides transparency, and maintains the current market price. In an OTC trade, the price is not necessarily published for the public.
5. **Electronic Trading**: The term "electronic trading" covers a variety of activities that are part of the life cycle of a trade. In this report, electronic trading refers to the transfer of ownership of a financial instrument whereby the matching of the two counterparties in the negotiation or execution phase of the trade occurs through an electronic system. Electronic trading broadly covers: trades conducted in systems such as electronic quote requests, electronic communications networks or dealer platforms; alternative electronic platforms such as dark pools; the quotation of prices or the dissemination of trade requests electronically; and settlement and reporting mechanisms that are electronic. For example, this includes both high-frequency trading on exchanges and trades negotiated by voice but executed and settled electronically.

6. **Assets**: an economic resource. Anything tangible or intangible that can be owned or controlled to produce value and that is held to have positive economic value. In our context, an asset are nonphysical resources and rights that have a value to the firm because they give the firm some kind of advantage in the market place. Examples of intangible assets are goodwill, copyrights, trademarks, patents and computer programs, and financial assets, including such items as accounts receivable, bonds and stocks.
7. **Asian financial crisis** was a period of financial crisis that gripped much of East Asia beginning in July 1997 and raised fears of a worldwide economic meltdown due to financial contagion or "the spread of market disturbances – mostly on the downside – from one country to the other, a process observed through co-movements in exchange rates, stock prices, sovereign spreads, and capital flows."Financial contagion can be a potential risk for countries who are trying to integrate their financial system with international financial markets and institutions. It helps explain an economic crisis extending across neighboring countries, or even regions.
8. **Russian financial crisis** (also called **Ruble crisis** or the **Russian Flu**) hit Russia on 17 August 1998. It resulted in the Russian government and the Russian Central Bank devaluing the ruble and defaulting on its debt. The crisis had severe impacts on the economies of many neighboring countries.
9. **Procyclical** and **countercyclical** are terms used to describe how an economic quantity is related to economic fluctuations. Their meanings may vary with regard to business cycle theory and economic policy making.The terms are often used loosely to describe a government's approach to spending and taxation. A 'procyclical fiscal policy' can be summarised simply as governments choosing to increase public spending and reduce taxes during an economic boom, but reduce spending and increase taxes during a recession. A 'countercyclical' fiscal policy refers to the opposite approach: reducing spending and raising taxes during a boom period, and increasing spending/cutting taxes during a recession.
10. **Real Property** is property which is any subset of land that has been legally defined and whose improvements come from human efforts. This includes buildings, machinery, wells, dams, ponds, mines, canals, and roads, among other things.

Agenda 1: Reforms in macro-prudential regulations for financial market stability with special emphasis on Basel III

Objectives of Macro-prudential reforms

The main goal of macroprudential regulation is to reduce the risk and the macroeconomic costs of financial instability. It is recognized as a necessary ingredient to fill the gap between macroeconomic policy and the traditional microprudential regulation of financial institutions. the macro- and microprudential perspectives differ in terms of their *objectives* and understanding on the nature of *risk.*Traditional microprudential regulation seeks to enhance the safety and soundness of individual financial institutions, as opposed to the macroprudential view which focuses on welfare of the financial system as a whole. Further, risk is taken as exogenous under the microprudential perspective, in the sense of assuming that any potential shock triggering a financial crisis has its origin beyond the behavior of the financial system. The macroprudential approach, on the other hand, recognizes that risk factors may configure endogenously, i.e., as a systemic phenomenon. In line with this reasoning, macroprudential policy addresses the interconnectedness of individual financial institutions and markets, as well as their common exposure to economic risk factors.

For emerging markets, several central banks have applied macroprudential policies (e.g., use of reserve requirements) at least since the aftermath of the 1997 Asian financial crisis and the 1998 Russian financial crisis. Most of these central banks' authorities consider that such tools effectively contributed to the resilience of their domestic financial systems in the wake of the late-2000s financial crisis.

The idea of Financial Stability

Economic stability refers to an absence of excessive fluctuations in the macroeconomy. An economy with fairly constant output growth and low and stable inflation would be considered economically stable. An economy with frequent large recessions, a pronounced business cycle, very high or variable inflation, or frequent financial crises would be considered economically unstable. A financial system is stable when it dissipates financial imbalances that arise endogenously or as a result of significant adverse and unforeseeable events. When stable, the system absorbs shocks primarily via self-corrective mechanisms, preventing the adverse events from disrupting the real economy or spread over to other financial systems. Financial stability is paramount for economic growth, as most transactions in the real economy are made through the financial system. Without financial stability, banks are more reluctant to finance profitable projects, asset prices may deviate significantly from their intrinsic values, and the payment settlements chedule diverges from the norm. Hence, financial stability is

essential for maintaining confidence in the economy. Possible consequence of excessive instability includes: bank runs, hyperinflation, or stock market crashes.

Indicators of Systemic Risk

In order to measure systemic risk, macroprudential regulation relies on several indicators. An important distinction is between measuring contributions to risk of individual institutions (*the cross-sectional dimension*) and measuring the evolution (i.e. procyclicality) of systemic risk through time (*the time dimension*).

The cross-sectional dimension of risk can be monitored by tracking balance sheet information—total assets and their composition, liability (financial accounting) and capital structure—as well as the value of the institutions' trading securities and securities available for sale. Additionally, other sophisticated financial tools and models have been developed to assess the interconectedness across intermediaries and each institution's contribution to systemic risk.

To address the time dimension of risk, a wide set of variables are typically used, for instance: ratio of credit to GDP, real asset prices, ratio of non-core to core liabilities of the banking sector, and monetary aggregates. Some early warning indicators have been developed encompassing these and other pieces of financial data.

Instruments of Macro-Prudential Regulation

A large number of instruments have been proposed; however, there is no agreement about which one should play the primary role in the implementation of macroprudential policy. There are broadly two kinds of instruments for macro-prudential regulation:

1. **Instruments aimed at preventing the procyclicality of the financial system** on the asset and liability sides, such as:

a) **Loan-to-value (LTV) ratio** is a financial term used by lenders to express the ratio of a loan to the value of an asset purchased. The term is commonly used by banks and building societies to represent the ratio of the first mortgage line as a percentage of the total appraised value of real property.

b) **Debt income ratio** (often abbreviated **DTI**) is the percentage of a consumer's monthly gross income that goes toward paying debts. (Speaking precisely, DTIs often cover more than just debts; they can include principal, taxes, fees, and insurance premiums as well.

For the same purpose as above, the following are some more sophisticated instruments:

c) Countercyclical capital requirements (is the amount of capital a bank or other financial institution has to hold as required by its financial regulator. This is usually expressed as a capital adequacy ratio of equity that must be held as a percentage of risk-weighted assets. These requirements are put into place to ensure that these institutions do not take on excess leverage and become insolvent) are used to avoid excessive balance-sheet shrinkage from banks in trouble.

d) Cap on leverage (any technique involving the use of borrowed funds in the purchase of an asset, with the expectation that the after tax income from the asset and asset price appreciation will exceed the borrowing cost. Normally, the finance provider would set a limit on how much risk it is prepared to take and will set a limit on how much leverage it will permit, and would require the acquired asset to be provided as collateral security for the loan) is used to limit asset growth by tying banks' assets to their equity.

e) Time-varying reserve requirement (a central bank regulation employed by most of the world's central banks, that sets the minimum amount of reserves that must be held by a commercial bank.) is used as a means to control capital flows with prudential purposes, especially for emerging economies.

2. Instruments aimed to prevent the accumulation of excessive short-term debt

a) Liquidity coverage ratio mentioned also in Basel III

b) Liquidity risk charges that penalize short-term funding

Implementation of Macro-Prudential regulation

1. **Role of central banks**: In pursuing their goal of preserving price stability, central banks remain attentive to the evolution of real and financial markets. Thus, a complementary relationship between macro prudential and monetary policy has been advocated, even if the macro prudential supervisory authority is not given to the central bank itself. This is well reflected by the organizational structure of institutions such as the Financial Stability Oversight Council and European Systemic Risk Board, where central bankers have a decisive participation. The question of whether monetary policy should directly counter financial imbalances remains more controversial, although it has indeed been proposed as a tentative supplementary tool for addressing asset price bubbles.
2. **International dimension**: On the international level, there are several potential sources of leakage and arbitrage from macro prudential regulation, such as banks' lending via foreign branches and direct cross-border lending. Also, as emerging economies impose controls on capital flows with prudential purposes, other countries may suffer negative spillover effects. Therefore, global coordination of macro prudential policies is considered as necessary to foster their effectiveness.

Basel III

Basel III (or the Third Basel Accord) is a global, voluntary regulatory framework on bank capital adequacy, stress testing, and market liquidity risk. It was agreed upon by the members of the Basel Committee on Banking Supervision in 2010–11, and was scheduled to be introduced from 2013 until 2015; however, changes from 1 April 2013 extended implementation until 31 March 2018 and again extended to 31 March 2019. The third installment of the Basel Accords (*see Basel I, Basel II*) was developed in response to the deficiencies in financial regulation revealed by the financial crisis of 2007–08. Basel III is intended to strengthen bank capital requirements by increasing bank liquidity and decreasing bank leverage.

Implications of Basel III Proposals (source: KPMG)

Impact on individual banks	Impact on the financial system
Weaker banks crowded out Under adverse economic conditions, with regulatory scrutiny ever more intensive, the weaker banks will likely find it more difficult to raise the required capital and, funding, leading to a reduction in different business models and, potentially, in competition.	Reduced risk of a systemic banking crisis The enhanced capital and liquidity buffers, together with the focus on enhanced risk management standards and capability, should lead to reduced risk of individual bank failures and reduced interconnectivity between institutions.
Significant pressure on profitability and ROE Increased capital requirements, increased cost of funding, and the need to reorganize and deal with regulatory reform will put pressure on margins and operating capacity. Investor returns will likely decrease at a time when firms need to encourage enhanced investment to rebuild and restore buffers.	Reduced lending capacity Although the extended implementation time line is intended to mitigate the impact, significant increases to capital and liquidity requirements may lead to a reduction in the capacity for banking activity or, at the very least, a significant increase in the cost of provision of such lending.
Change in demand from short-term to long-term funding The introduction of two liquidity ratios to address the short- and long-term nature of liquidity and funding will likely drive firms away from sourcing shorter-term funding arrangements and more towards longer-term funding arrangements with the consequent impact on the pricing and margins that are achievable.	Reduced investor appetite for bank debt and equity Investors may be less attracted by bank debt or equity issuance given that dividends are likely to be reduced to allow firms to rebuild capital bases, ROE and profitability of organizations will likely decrease significantly, and some of the proposals on non-equity instruments (if implemented) could start to make debt instruments loss-absorbing prior to liquidation for the first time. This will become evident through investor sentiment in the cost of new capital issuance and the interbank lending rate.
Legal entity reorganization Increased supervisory focus on proprietary trading, matched with the treatment of minority investments and investments in financial institutions, is likely to drive group reorganizations, including M&A and disposals of portfolios, entities, or parts of entities, where possible.	Inconsistent implementation of the Basel III proposals leading to international arbitrage If different jurisdictions implement Basel III in different ways, issues we saw under Basel I and Basel II with respect to international regulatory arbitrage may continue to disrupt the overall stability of the financial system.

Key Basel III recommendations

1. Increased quality of capital

Regulatory objective – (1) Increased quality of capital	
Basel III contains various measures aimed at improving the quality of capital, with the ultimate aim to improve loss-absorption capacity in both going concern and liquidation scenarios.	
Description of the key changes	**Implications**
• Common equity and retained earnings should be the predominant component of Tier 1 capital instead of debt-like instruments, well above the current 50 percent rule.	• BCBS measures are already discounted by markets, so banks are likely to clean up their balance sheets as soon as possible.
• Harmonized and simplified requirements for Tier 2 capital with explicit target for Tier 2 capital.	• Likely to see raising of significant capital by banks, along with retention of profits and reduced dividends.
• Full deduction for capital components with little loss-absorption capacity such as minority interests, holdings in other financial institutions, Deferred Tax Assets.	• National regulators will have less flexibility to allow capital instruments to be included in Tier 1 or Tier 2 capital.
• Gradual phase-out of hybrid Tier 1 components, including many of the step-up/innovative/SPV–issued Tier 1 instruments used by banks over the past decade.	• Systemically important banks (and, potentially, all banks) may be allowed to issue contingent convertibles to meet additional capital requirements.

Regulatory objective – (2) Increased quantity of capital	
Basel III contains various measures aimed at increasing the level of capital held by institutions, as well as providing counter-cyclical mechanisms.	
Description of the key changes	**Implications**
Minimum common equity Tier 1: • Increased from 2.0 percent to 4.5 percent • Plus capital conservation buffer of 2.5 percent • Bringing total common equity requirements to 7.0 percent • To be phased in from 2013 to 2019 Minimum total capital: • Increased from 8.0 percent to 10.5 percent (including conservation buffer) • To be phased in from 2013 to 2019 Counter-cyclical capital buffer is being developed, which is expected to be implemented by increases to the capital conservation buffer during periods of excessive credit growth.	• Banks will face a significant additional capital requirement, and the bulk of this shortfall will need to be raised as common equity or otherwise by retaining dividends. • In principle, banks will be able to draw on the capital conservation buffer during periods of stress, but it seems unlikely that they would choose to do so, given the associated constraints on their earnings distributions. • Consequently, banks are likely to target a higher common equity ratio and the market expectation for common equity Tier 1 appears to be moving to approximately 9 percent • There is likely to be further add-ons for Pillar 2 risks, systemically important firms, and the counter-cyclical capital buffer, so banks may target a total capital ratio of 13–15 percent.

2. Reduced Leverage

Regulatory objective – (3) Reduced leverage through introduction of backstop leverage ratio

The leverage ratio acts as a non-risk sensitive backstop measure to reduce the risk of a build-up of excessive leverage in the institution and in the financial system as a whole. The leverage ratio remains controversial, and there remains ambiguity about certain aspects of the exact mechanics.

Description of the key changes	Implications
• The leverage limit is set as 3 percent, i.e. **a bank's total assets (including both on- and off-balance-sheet assets) should not be more than 33 times bank capital.**	• The introduction of the leverage ratio could lead to reduced lending and is a clear incentive to banks to strengthen their capital position, although it remains to be seen whether the ratio will bite for individual firms.
• In 2011, reporting templates will be developed. In 2013, regulators will start monitoring leverage ratio data, and the ratio will be effective from January 2018.	• The non-risk-adjusted measure could incentivize banks to focus on higher-risk/higher-return lending.
• The ratio is introduced to supplement the risk-based measures of regulatory capital.	• Pressure arises on banks to sell low margin assets (e.g., mortgages), which could drive down prices on these assets.
• The leverage ratio is implemented on a gross and unweighted basis, not taking into account the risks related to the assets.	• Banks may be required by the market and the rating agencies to maintain a higher leverage ratio than required by the regulator.

Regulatory objective – (4) Increased short term liquidity coverage

The regulatory response to the financial crisis has seen a long overdue rebalancing towards the importance of liquidity risk management and to complement its "Principles for Sound Liquidity Risk Management and Supervision," the Basel Committee has further strengthened its liquidity framework by developing two minimum standards for funding liquidity:

Description of the key changes	Implications
• The 30-day Liquidity Coverage Ratio (LCR) is intended to promote short-term resilience to potential liquidity disruptions. The LCR will help ensure that global banks have sufficient high-quality liquid assets to withstand a stressed funding scenario specified by supervisors.	• The Risk of impact from a bankrun should be reduced, which would improve the overall stability of the financial sector.
• For the LCR, the stock of high-quality liquid assets is compared with expected cash outflows over a 30-day stress scenario. The expected cash outflows are to be covered by sufficiently liquid, high-quality assets.	• The introduction of the LCR will require banks to hold significantly more liquid, low-yielding assets to meet the LCR, which will have a negative impact on profitability.
• Assets get a 'liquidity'– based weighting varying from 100 percent for government bonds and cash to weightings of 0 percent – 50 percent for corporate bonds.	• Banks will change their funding profile, which will lead to more demand for longer-term funding. This funding may not be available from institutional investors that generally seek to reduce their holdings in the financial sector.
	• Interpretation of 'right' run-off rates by national regulators may cause level-playing field discussions.

3. Increased stable long term balance sheet changes

Regulatory objective – (5) Increased stable long-term balance sheet funding

The Net Stable Funding Ratio (NSFR) is designed to encourage and incentivize banks to use stable sources to fund their activities to reduce the dependency on short-term wholesale funding.

Description of the key changes	Implications
• The NSFR compares available funding sources with funding needs resulting from the assets on the B/S. • Available stable funding > required stable funding. • Required and available funding amounts are determined using weighing factors, reflecting the "stability" of the funding available and the duration of the asset. • The weighing factors for assets vary from 0 percent and 5 percent for cash and government bonds, respectively to, 65 percent for mortgages, 85 percent for retail loans, and 100 percent for other assets. • For determining stable funding available for liabilities, the weighing factors vary from 100 percent for Tier 1 capital to 90 percent for core retail deposits and 50 percent for unsecured wholesale funding. ECB funding is weighed at 0 percent.	• The NSFR incentivizes banks to reduce their reliance on short-term wholesale funding and increase stability of the funding mix. • Banks will need to increase the proportion of wholesale and corporate deposits with maturities greater than one year, but currently, the appetite for term debt is limited. • For most banks, it will be difficult to increase the proportion of wholesale deposits with maturities greater than one year (limited market demand), which is likely to lead to higher funding costs. • Managing the NSFR by altering the asset mix will likely result in an increase in the proportion of short-term assets, reducing yield. • Stronger banks with a higher NSFR will be able to influence market pricing of assets. Weaker banks will see their competitiveness reduced, which will potentially decrease the level of competition.

Regulatory objective – (6) Strengthed risk capture, notably counterparty risk

The BCBS seeks to ensure full coverage of risks in the Pillar 1 framework, increasing the capital requirements against risks not adequately captured in the Basel II framework. Significant increases for trading book and securitization positions have already been introduced in Basel 2.5 proposals (July 2009). The Basel III proposals primarily modify the treatment of exposures to financial institutions and the counterparty risk on derivative exposures and will be effective from January 1, 2013.

Description of the key changes	Implications
• Calibration of counterparty credit risk modelling approaches such as Internal Model Methods (IMM) to stressed periods • Increased correlation for certain financial institutions in the IRB formula to reflect experience of the recent crisis, new capital charges for Credit Valuation Adjustments, and wrong-way risk • "Carrot and stick" approach to encouraging use of central counterparties (CCPs) for standardized derivatives • Improved counterparty risk management standards in the areas of collateral management and stress-testing	• Still a degree of uncertainty over the final capital impact as Credit Valuation Adjustments charge is being revised to reflect significant industry criticism. • Controls and quality of the CCPs' risk management is critical as risk is focused on central bodies. • Reduce level of intra-financial sector business arising from increased capital charges intra-sector. • Costs of dealing with financial counterparties need to be priced into the business, leading to a review of the business model.

Criticism of Basel III

Think tanks such as the World Pensions Council have argued that Basel III merely builds on and further expands the existing Basel II regulatory base without fundamentally questioning its core tenets, notably the ever-growing reliance on standardized assessments of "credit risk" marketed by two private sector agencies-Moody's and S&P, thus using public policy to strengthen anti-competitive duopolistic practices. The conflicted and unreliable credit ratings of these agencies are generally seen as a major contributor to the US housing bubble.

Opaque treatment of all derivatives contracts is also criticized. While institutions have many legitimate ("hedging", "insurance") risk reduction reasons to deal in derivatives, the Basel III accords:

1. **treat insurance buyers and sellers equally** even though sellers take on more concentrated risks (literally purchasing them) which they are then expected to offset correctly without regulation
2. **do not require organizations to investigate correlations of all internal risks they own**
3. **do not tax or charge institutions for the systematic or aggressive externalization or conflicted marketing of risk** - other than requiring an orderly unraveling of derivatives in a crisis and stricter record keeping Since derivatives present major unknowns in a crisis these are seen as major failings by some critics causing several to claim that the "too big to fail" status remains with respect to major derivatives dealers who aggressively took on risk of an event they did not believe would happen - but did. As Basel III does not absolutely require extreme scenarios that management flatly rejects to be included in stress testing this remains a vulnerability.

A few critics argue that capitalization regulation is inherently fruitless due to these and similar problems and - despite an opposite ideological view of regulation - agree that "too big to fail" persists.

Basel III has been criticized similarly for its paper burden and risk inhibition by banks, organized in the Institute of International Finance, an international association of global banks based in Washington, D.C., who argue that it would "hurt" both their business and overall economic growth. Basel III was also criticized as negatively affecting the stability of the financial system by increasing incentives of banks to game the regulatory framework.

Questions to Consider

1. Discuss issues and challenges in implementing Basel III accord
2. How can the existing framework of Basel III be improved to better financial market stability?
3. Are there other macro-prudential regulation reforms that can ensure financial market stability, aside from Basel III?

Agenda 2: Promotion of Global Electronic Asset Trading

History

Traditionally, trading has been organized around dealers (such as large banks or securities houses) and their relationship-based networks of clients. A physically centralized marketplace or organized exchange has generally been absent. Dealers predominantly traded bilaterally via the telephone, either with other dealers or with their customers. The process of matching buyers and sellers required a fair amount of intermediation and involved significant search costs[1]. A customer wishing to trade a specific security would often contact one or more dealers by phone, asking for currently available prices to buy and sell. This market structure is known as a 'quote-driven market', a market in which executable prices are offered in response to counterparties' requests to trade. Markets have historically been marked by a segmentation between the *interdealer segment*, in which dealers trade with one another, and *the dealer-customer segment*, in which dealers trade with their clients (e.g. asset managers, pension funds, insurance companies, corporations). In other words, end users do not trade directly with other end users, therefore involving some nature of financial intermediation. In the *inter-dealer market*, dealers traditionally traded either bilaterally over the phone or multilaterally (and anonymously) via voice brokers.

Markets experienced a major shift starting in the late 1990s as electronic communication networks (ECNs) started to gain traction in inter-dealer markets for liquid sovereign bonds. An ECN is a system that electronically matches buy and sell orders for securities. ECNs operate as virtually centralized marketplaces, aggregating offers to trade and matching them against incoming trade requests. In contrast to the dealer-client markets, which were quote-driven, these platforms were generally order-driven. An order-driven market is a market in which executable prices are offered in advance of any requests to trade. An example of an ECN is EuroMTS, which is a pan-European platform for benchmark sovereign bonds, agency bonds, and repos among other asset classes. It was launched in 1998 to address the need to integrate European sovereign bond trading under the common currency without altering the pre-existing close ties between dealers and sovereign issuers. Likewise, eSpeed and BrokerTec for US Treasury securities both launched in 1999 and emerged as major interdealer trading venues for

[1] Search Costs: The time, energy and money expended by a consumer who is researching a product or service for purchase. Search costs include the opportunity cost of the time and energy spent on searching - time and energy that could have been devoted to other activities - and perhaps the money spent to travel between stores examining different options, purchase research data or consult an expert for purchasing advice.

benchmark US government securities. In Japan, the electronic trading platforms BB Super Trade and Tri-Trade launched in 2000 and 2006, respectively. These platforms serve as electronic trading venues for inter-dealer Japanese government bond (JGB) markets.

After the early 2000s, electronic trading infrastructure debuted in many other jurisdictions, including emerging market economies, with some exceptions. In markets such as Brazil, India, Korea and Singapore, electronic inter-dealer markets for sovereign bonds successfully developed with the benefit of public sector support: Selic in Brazil, NDS-OM in India, KTS in Korea and E-bond in Singapore. Voice brokering continues to dominate in jurisdictions such as Hong Kong and Mexico.

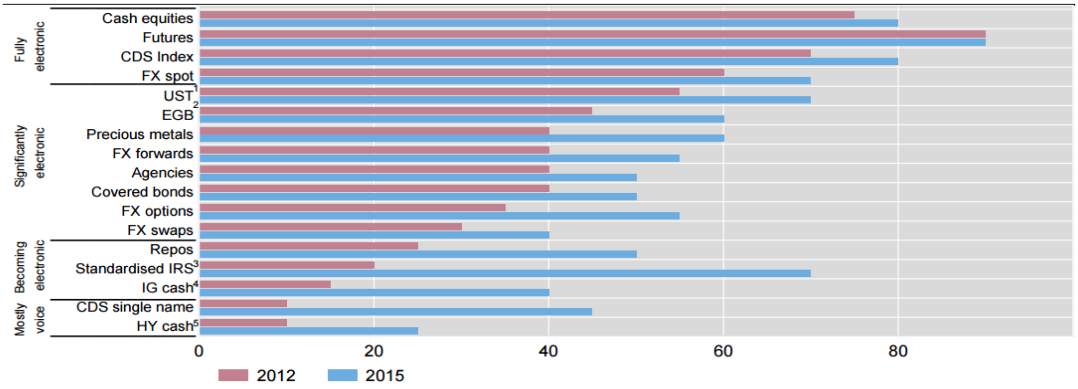
Current Scenario

The extent of electronic trading in fixed income markets varies significantly, but has been growing over time globally. Despite its growing importance, policymakers' direct access to continuous and comprehensive data on electronic trading in fixed income markets is so far limited. The data that exist differ significantly in terms of comprehensiveness, quality and comparability across jurisdictions.

In some fixed income segments, electronification is now nearly as developed as in cash equities and foreign exchange. Electronic trading is most advanced in those markets in which assets are most standardized and highly liquid – in particular, futures and the inter-dealer on-the-run US Treasury market. It is less advanced in less liquid and more heterogeneous markets, such as credit markets. In some markets, an increase in electronic trading has been driven directly by technological improvements that have facilitated a reduction in the marginal cost of providing intermediation services and lowered the barriers to entry for companies with a technology advantage. In others, still, it has been catalyzed by regulatory change.

State of electronification in various asset classes

In per cent Graph 3



[1] US Treasuries. [2] European government bonds. [3] Standardised interest rate swaps. [4] Investment grade cash bonds. [5] High-yield cash bonds.

Sources: Greenwich Associates (2014); McKinsey & Company and Greenwich Associates (2013).

Drivers of change: Transition from traditional to electronic trading

There are many forces that have promoted the adoption of electronic trading. The drivers can broadly be categorised under three headings: (i) technological evolution which lowers costs; (ii) market structure features that influence demand; and (iii) the regulatory framework contributing to changes in dealer's business models.

1. **Technology**: Technological innovations tend to reduce costs. A commonly cited benefit of electronic trading is that, if the electronic trading platform (ETP) is used on a sufficient scale, it can generate very low marginal and average trading costs. Recent innovations have also reduced the fixed cost of building new trading systems, which has lowered the entry barriers for new platform providers. However, the costs of adopting the technology may be high. ETPs can also lower the indirect costs of transacting by bringing down search costs. They can do this because they provide the capacity for increased transparency through the more efficient dissemination of market information to more market participants. Furthermore, ETPs can reduce search and transaction costs to the extent that they offer liquidity benefits via pooling transactions, reducing market segmentation and fragmentation and promoting competition among market participants.
2. **Market structure features**: The scalability for an ETP depends on the capacity of the technology (described above), but also on the size of the market and features of the market structure. For instance, there is greater potential for economies of scale to be realised for standardised products that are traded frequently or for a market with a large number and diverse range of investors. The usage of a particular ETP may also depend on its ancillary benefits, such as

its capacity to provide solutions for clearing, settlement, risk management, and regulatory, reporting or market-making requirements.

3. **Regulatory changes**: The regulatory drivers of the usage of ETPs can be broadly divided into those that are directly concerned with the arrangements of trading venues and markets and those that may have an indirect impact on their usage. The former are broadly framed by principles outlined by IOSCO. The latter include some regulatory changes introduced since the financial crisis which have had the objective of ensuring that banks are not a source of liquidity contagion. Due to changes in the regulatory environment and in dealer's' business models, the relative cost of providing intermediation services via electronic means, rather than voiced means, has changed. Due to a strong level of competition in many markets, dealers have been unable to fully pass on higher trading costs to clients. At the same time, the potential for them to withdraw from market-making activities is limited by client relationships and certain obligations, especially when acting as primary dealers. Consequently, dealers have scaled down high-cost market-making and increased their provision of lower cost structures by providing customers with a capacity to transact via electronic trading platforms.

Shortfalls & challenges with electronic trading

It is clear that electronic trading in fixed income markets is advancing and that this is creating efficiencies for many market participants, improving transparency and reducing market segmentation. However, electronic trading, and in particular automated trading, is confronting policymakers with new challenges. The appropriate responses may differ across jurisdictions because of the heterogeneous nature of fixed income markets as well as the varying degrees of electronification. Four core areas can be identified for further policy assessment:

1. data, disclosure and monitoring;
2. market quality and stability;
3. risks and risk management; and
4. Trading practices and regulation.

Questions to Consider

1. Further explore the shortfalls & challenges concerning electronic trading and the reasons for the same.
2. Discuss risks arising from the aforementioned challenges.
3. All the risks arising from extensive use of electronic trading of assets.
4. Impact of non-standardized characteristics of assets across the world. For example, European options can be ‘called’ only at maturity, while American options can be redeem at spot price at and any time before the maturity period, assuming the option under consideration is a call option (while the same structure is followed for put options as well).
5. Taxation agreements and laws concerning global trading of assets electronically.
6. Application of transaction costs.
7. Monitoring & regulation of electronic assets trading globally, with special emphasis on preventing illicit trades or payments for illicit activities.
8. Time Zone differences with respect to electronic sale and purchase of assets.