FINANCIAL SECTOR ASSESSMENT PROGRAM

MALAYSIA

BOND MARKET DEVELOPMENT

TECHNICAL NOTE

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THE WORLD BANK
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GLOSSARY

ADI	Authorized Depository Institution
ASNB	Amanah Saham Nasional Berhad
BM	Bursa Malaysia
BNM	Bank Negara Malaysia
BPAM	Bond Pricing Agency Malaysia
CMP	Capital Market Masterplan
CUTA	Corporate Unit Trust Agency
EPF	Employee Provident Fund
ETP	Bursa Malaysia's Electronic Trading Platform for Bond Market
FAST	Fully Automated System for Issuing/Tendering
FIMM	Federation of Investment Managers Malaysia
GLC	Government-Linked Companies
KWAP	*Kumpulan Wang Persaraan*, Retirement Fund Incorporated
MARC	Malaysian Rating Corporation Berhad
MYR	Malaysian Ringgit
PNB	Permodalan Nasional Berhad
PPKM	Persatuan Pasaran Kewangan Malaysia – Malaysia Financial Market Association
RAM	Rating Agency Malaysia Berhad
RENTAS	Real Time Electronic Transfer of Funds and Securities System
RFQ	Request for Quotes
RMBS	Residential Mortgage Backed Securities
SC	Securities Commission
SIDC	Securities Industry Development Corporation
SOCSO	Social Security Organization
UTMC	Unit Trust Management Company

EXECUTIVE SUMMARY

1. **Malaysia has been successful in developing the capital markets, particularly bond markets, in the past decade.**[1] This development was guided by the initiatives set out under the Capital Market Masterplan 1 (CMP 1). The growth over the last 10 years has benefited both the government, as a major debt issuer, and the private sector. Since the reform on the regulatory framework in 2000/2001 and the incentive framework put in place for Sukuk, the issuance of private debt securities has been growing and become a consistent source of corporate funding. The financial sector, infrastructure, and housing, are key sectors benefitting from the strong growth of the bond markets. Thanks to the modern regulatory framework and strong and competent regulators, Malaysia has been seen as a leader in the development of domestic bond and Sukuk markets among emerging markets.

2. **The challenge going forward is how to improve broader access and efficiency of the bond market**. The Capital Market Masterplan 2 (CMP 2) sets out various measures aimed at growing the capital market, including bond and sukuk market, to the next level over the next 10 years, whilst cultivating a strong governance culture. To become a developed market in 2020 as envisioned, Malaysia will need the level of growth and modernization of the economy that will in turn require long-term financing at all levels. The market is currently heavily concentrated in highly-graded instruments, notably large corporations and government linked companies (GLCs), which is a reflection of market demand, presenting challenges for growing medium-sized companies which are potential drivers of the economic modernization. Market efficiency can be improved in order to make it more attractive to a broader constituency and further complement the banking sector as a source of funding and investment opportunity.

3. **The lack of lower-rated, medium-sized companies in the bond markets appears to be the result of a high degree of investor risk aversion**. Bonds issued by government linked companies and infrastructure issuers backed by government-linked contracts represented a significant portion of the markets. While investors are more risk takers in their equity investments they will tend to compensate by taking a very conservative approach in their fixed income portfolios. There is concentration in the high-grade segment – possibly as well due to default experience following the Asian financial crisis and the recent global financial crisis – such that they demand very high yield from lower-grade issuers or second-tier companies. Medium-sized companies therefore find it more attractive to get funding from banks which are happy to provide financing on balance sheets via loans, partly because there is ample liquidity in the Malaysian banking sector.

4. **A high degree of investor concentration, dominated by government pension funds, plays a significant role in impeding the growth of higher-yield bond market.** The current structure of the investor base adversely affects the higher-yield bond market in several ways. First, a concentration of pension and unit trust industry in a few government-related institutions creates a constraint on the investment size, which is typically too large for lower-rated, medium-sized issuers. Second, these investors take a very conservative approach in their fixed-income investments, despite arguably higher risk they take on equity and real-estate investments. A similar approach is taken by insurance companies. Third, the dominant presence of the Employee Provident Fund (EPF), whose returns are guaranteed and tax free, makes it hard for bond funds to grow as they are less attractive on a risk-adjusted basis.

5. **There is a risk distortion created in the retail investor base toward high-return funds backed by PNB, a government-linked investment company, constraining the growth of fixed income mutual funds**. Retail investors are missing from the bond markets due to a lack of interest in fixed

[1] For the purpose of this note, the term bonds or debt securities will be used to include Sukuk (Shari"ah compliant securities whose risk and payment profile closely resemble bonds) unless stated otherwise.

income mutual funds, primarily due to a distortion created by PNB funds.[2] While they are equity funds, they offer stable and relatively high returns with limited disclosures on portfolio holding and valuation. These result in perceived low volatility and constant returns, akin to a fixed income fund, altering the risk perception of the funds vis-à-vis other funds. With both EPF and PNB funds as primary investment options for individual investors, there is little incentive to invest in fixed income funds. In addition, the distribution and fee structures of mutual fund industry put fixed income funds at a significant disadvantage against equity funds and bank products.

6. **With the current level of market equilibrium, Malaysia runs the risk that certain types of financing needs may not be fulfilled**. The country's high savings rate should be directed to productive sectors of the economy via appropriate channels. The current demand and supply factors limiting the access to capital market funding to only large, top-rated corporates, while the second-tier corporate segment has banks as their primary source of funds, may create a funding gap due to incomplete substitution of bonds and bank products. For example, long-term projects that carry relatively high risk could not be funded efficiently by either product. Filling this gap is important as Malaysia is pushing for aggressive infrastructure development in the next 5-10 years. Reducing the risk profile of potential issuers by simply providing guarantees, explicit or implicit, will not be sustainable due to increasing contingent liabilities of the government. In addition, as noted, the current market structure presents challenges for the entry of growing medium-sized companies that could be the drivers of the economic modernization.

7. **The role of government in stimulating the growth of the bond markets should be now shifted toward encouraging more diversity**. The government has had a significant role in stimulating the growth in corporate bond market, through various interventions such as explicit guarantees, the creation of government entities to absorb credit risks (e.g. Danajamin) and to provide funding to private entities while raising funds through the bond markets (e.g., Cagamas). Going forward, government interventions may still be needed, but they should be targeted at the missing components of the markets. Explicit or implicit government guarantees should be gradually reduced, while measures to increase diversity in risk and in the investor base should be pursued.

8. **In order to promote risk diversity, significant measures should be taken to increase competition on the demand side**. Large government-backed institutional investors, such as EPF, should be encouraged to award mandates to independent asset managers to invest in the high-yield fixed income market, as already been recommended under CMP 1. With more mandates awarded to independent and specialized asset managers, increased demand and healthy competition will be created, allowing for more risk diversity and access for smaller issuers in the bond market. The government should slowly remove misperceptions created by PNB funds, so that investors have the right understanding of the risk and return profile of the funds. The authorities should also encourage PNB to establish fixed income funds in order to provide a more complete product offering to its investors, particularly given the shift in risk perception toward its current funds. The management of these fixed income funds may be outsourced to independent asset managers. Concurrently, the authorities might provide additional incentives for asset managers and mutual fund companies to establish bond funds. In addition, an assessment of industry practice on sales and distribution is necessary to determine whether additional measures to ensure a healthy environment for mutual funds, particularly fixed income funds, to grow need to be taken. SC is currently working on a Practice Guideline.[3]

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[2] PNB, or Permodalan Nasional Berhad, is government-linked investment company created to promote share ownership in the corporate sector among the Bumiputera, and develop opportunities for suitable Bumiputera professionals to participate in the creation and management of wealth. PNB offers unit trusts through its wholly-owned subsidiary, Amanah Saham Nasional Berhad.

[3] The SC issued the Guidelines on Sales Practices of Unlisted Capital Market Products on December 28, 2012.

9. **On the supply side, there should be an increased focus to encourage more medium-size, lower rated issuers to tap the market**, which is also already recognized in CMP 2. The government should encourage Danajamin to specifically target medium-size corporate among its other objectives. It should consider increasing emphasis on partial guarantee schemes instead of a full guarantee in order to start introducing new issuers who may eventually raise funds on their own merits. Similarly, government could provide sponsorship to medium-sized and smaller issuers to come to market. The sponsorship should not be aimed at bringing these issuers' credit rating into top-grade levels, but rather at facilitating issuance by significantly reducing issuance costs, improving access to information on the issuers and providing liquidity support for issuances by these entities in order to mitigate the various reservations from institutional investors.

10. **Another important challenge for the bond markets going forward is improving transparency to make them more attractive to a broader constituency.** At this time, post-trade transparency in the secondary market appears adequate, at least for very large investors and intermediaries, although there is room for improvement in the quality and timeliness of trade information. Meanwhile, pre-trade transparency is often an issue for investors, particularly those dealing with relatively illiquid securities. The cost and time associated with information search is high especially for private debt securities. Bursa Malaysia's Electronic Trading Platform (ETP) was established to improve transparency, liquidity and increase efficiency in bond trading, but so far it has become a major source of post-trade information but not of trading and pre-trade information. The lack of modern, electronic trading platform widely used by market participants limits the capacity of the market to grow and constrains the supervisory function of the authorities.

11. **To improve liquidity and transparency, the authorities should encourage the establishment of open, independent electronic platforms that integrate price search, negotiation, and trading of bonds**. The establishment of electronic platforms will enable further growth, increase quality of trade information, and assure timely and accurate reporting of trade information which will inform the next trade, thus encouraging more liquidity. Several models of electronic platforms exist in more developed markets; the authorities may encourage competition of these platforms and monitor their development in order to assess their impact. One or more platforms may eventually emerge as the most efficient model. Careful planning will be needed to prepare the authorities with a regulatory and supervisory framework for the establishment and supervision of the platforms. An in-depth review or study may be necessary to assess the shortcomings of Bursa's ETP and evaluate other possible models that may be more acceptable by market participants in Malaysia, including the possibility that the ETP becomes only the central real-time register for all secondary markets transactions done in other venues.

12. **On regulation and supervision, while current coordination between Bank Negara Malaysia (BNM) and Securities Commission Malaysia (SC) appears strong, a more optimal approach to supervise the secondary market may be sought in the long run**. There may be historical reasons for the division of responsibilities between BNM and SC, but the current structure could leave an imbalance in market supervision because many parts of the market and many participants reside within BNM purview, while secondary market supervision is a responsibility of SC. Going forward, to ensure clear homogeneity in the supervision and to optimize the oversight of the whole secondary markets, SC could consider in the future taking full control of market investigations of misconduct by all and any bond market participants, whether or not they are regulated and supervised by BNM. Such clear authority becomes more important as the OTC market becomes more organized and electronic trading platforms are established under the license and supervision of the SC. It is hoped that the enhanced BNM-SC MOU will further strengthen the coordination, minimize duplicative efforts, and address any potential issues or discrepancies in the near future.

13. **Alternatively the authorities may consider creating or endorsing a self regulatory**

organization (SRO) to take on the supervisory roles in the bond markets. Currently the only SRO activities recognized and supervised by the authorities are the ones carried out by Bursa Malaysia[4] and the unit trust fund management industry association (FIMM – Federation of Investment Manager Malaysia). Going forward the government might assess whether introducing some SRO responsibilities to the dealer association could be an alternative means of improving the supervision of the OTC bond market. An SRO could relieve SC and BNM from significant supervisory burden while keeping overall responsibility of the markets through an effective oversight of the SRO entity. All bond market participants should be member of this SRO; the SRO would then be able to conduct surveillance and examinations across different types of member institutions. The authorities should carefully analyze the cost and benefit of SRO; a careful consideration must be made to determine which SRO model would best fit for Malaysia's bond market.

14. **The authorities should package the whole set of initiatives (including those identified under CMP2) under a comprehensive bond market development strategy aimed at bringing the market to a more matured and inclusive stage**. While shifting the purpose of government interventions from enabling growth to improving diversity, the government might intensify its campaign to promote Malaysian bond market domestically and internationally. There needs to be aggressive product education both at the retail and institutional investor levels, as the capital market is very biased toward equity due to historical and cultural reasons. A retail bond program could be part of the educational campaign, although the program may first be focused on government bonds or government-linked issues. A joint effort among the Exchange, SC, BNM, SIDC (Securities Industry Development Corporation), and the industry should be established to take on this campaign program, as already envisioned in the Financial Sector Blueprint and CMP 2.

I. OVERVIEW & BACKGROUND

15. **Malaysia has been successful in developing the capital markets, particularly bond markets**. The size of Malaysian market is comparable to that in more developed market (e.g. OECD), and is far above its regional and emerging market peers (Figures 1 and 2). This signifies the importance of the bond market as a funding source for the private sector, as it represents a significant and growing proportion of the domestic financial assets (Figure 3).

16. **In addition, Malaysia is recognized as a global leader in the Islamic bond (Sukuk) market**. Approximately 60% of Malaysian bond issuance is in the form of Shari'ah-compliant (Sukuk); and similarly, approximately 60% of Sukuk issuance in the world is in Malaysia. There is a concerted effort to develop the Islamic capital market, as part of the vision to make Malaysia the global center of Islamic finance. Sukuk gained larger market share in recent years due to its broader investor base, particularly due to the growth of Islamic financial institutions which are allowed to invest in only Shari'ah-compliant instruments. Meanwhile, conventional investors consider Sukuk as having the same risk profile as conventional bonds, and are thus largely indifferent as between the two options. Therefore, issuers tend to opt for issuing Sukuk as far as possible. In addition, in order to support the growth of this market, the government provides issuers with preferential tax treatment in the form of tax deductions on expenses incurred in the issuance of Sukuk.

[4] While not a recognized SRO, Bursa Malaysia carries out certain SRO functions.

Figure 1. Outstanding Domestic Private Debt Securities (% of GDP) – Composite Comparison

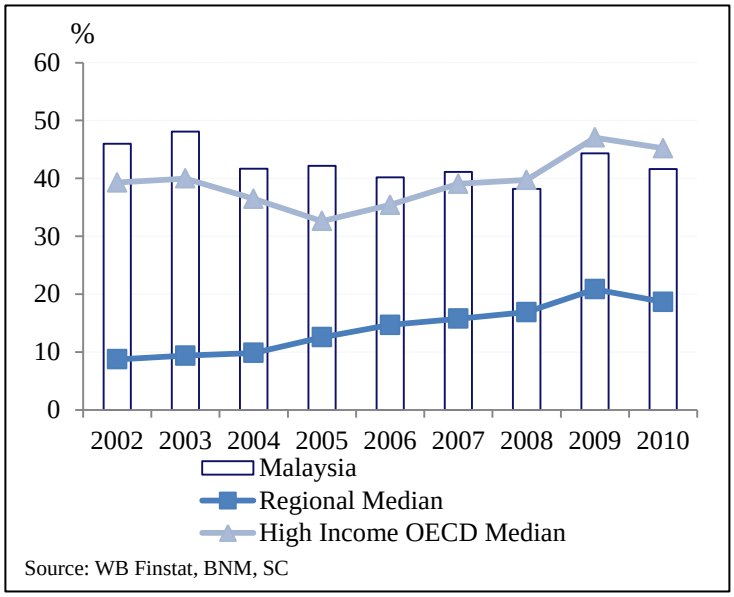


Figure 2. Outstanding Domestic Private Debt Securities (% of GDP) – Country Comparison

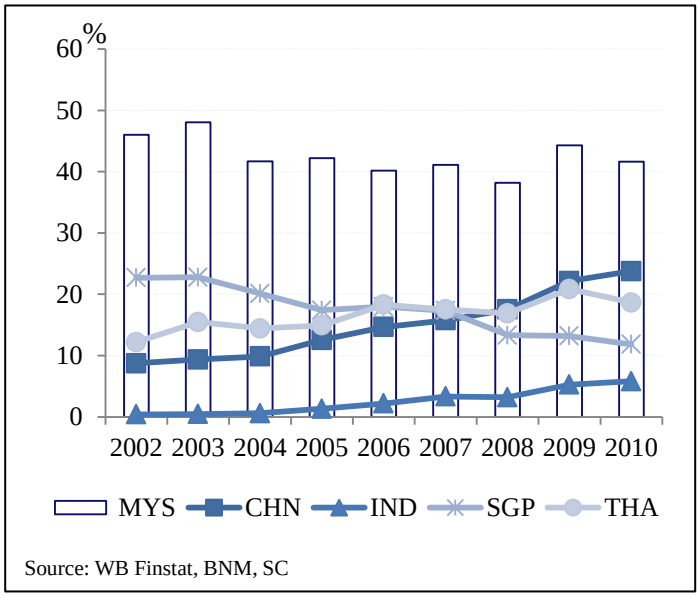
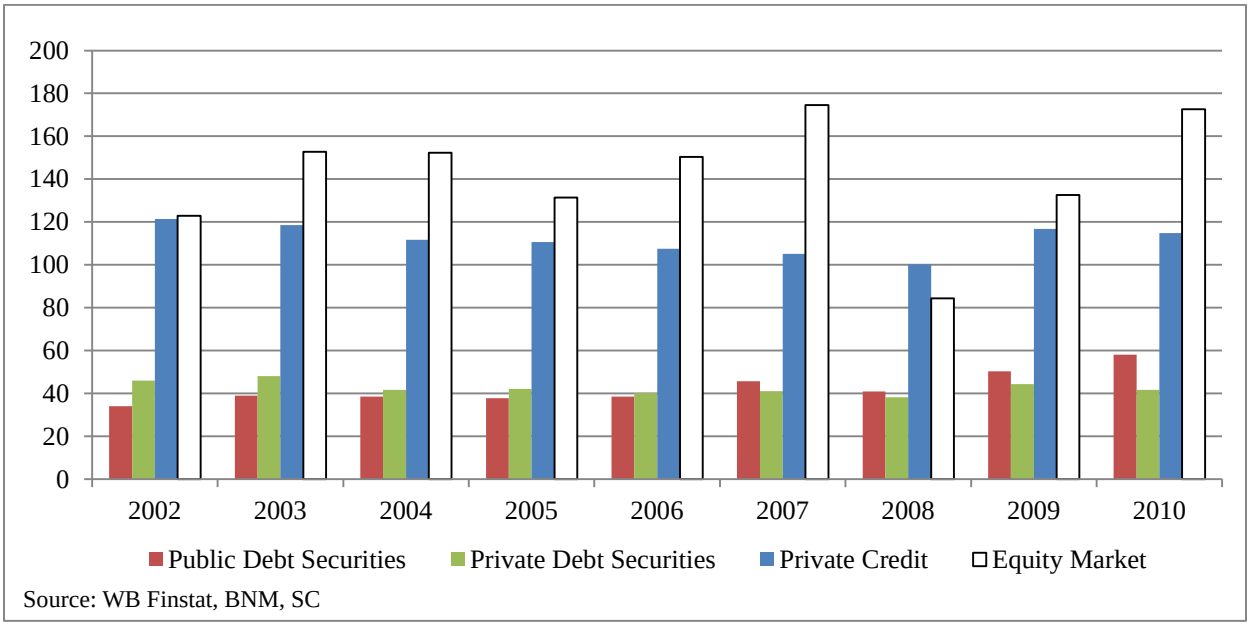


Figure 3. Financial Assets Composition in Malaysia (% of GDP)

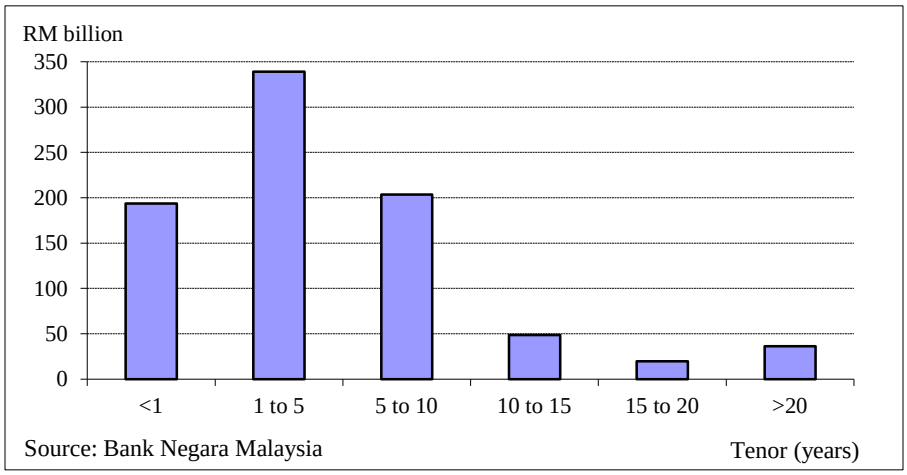


Note: Private debt securities, public debt securities, and private credit are measured by value outstanding. Equity market is measured by market capitalization. Equity market is highly dependent on price, while others are on volume.

A. Government Securities

17. **The government bond market is well-developed, with clear benchmark issues.** There has been a conscious effort to develop benchmark government issues for 3, 5, 7 and 10 years, and also to expand the tenor to 20 years (Figure 4). Trading in the benchmark issues is relatively active, approximately MYR1 - 2 billion daily, with spreads ranging between 5-10 bps. Unlike in many other emerging markets, government securities are not considered as crowding out private debt securities, and the ratio of government debt securities and private debt securities is relatively low.[5]

Figure 4. Tenor Composition of Government and Non-Government Bonds



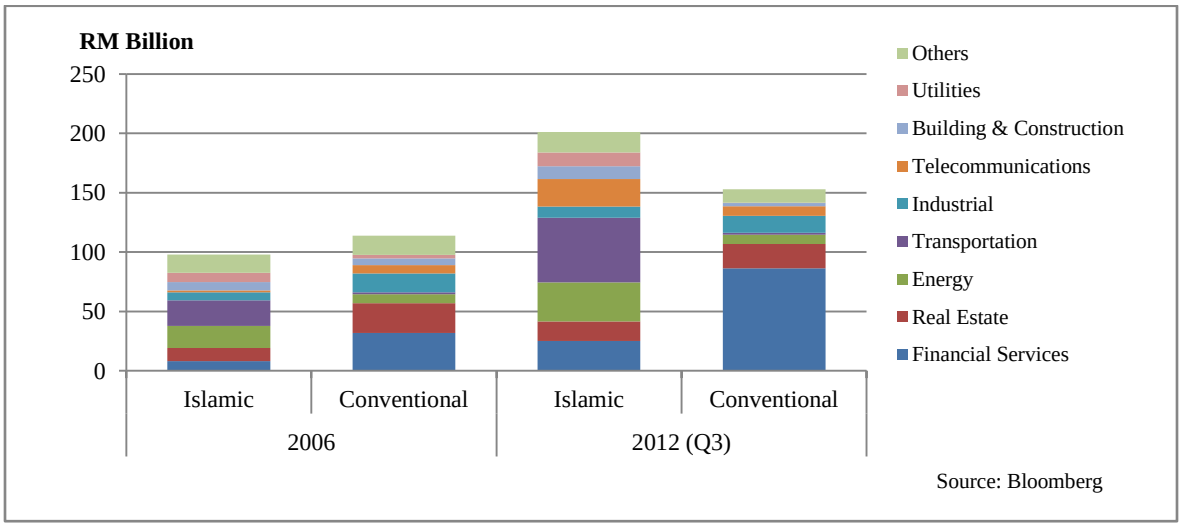
B. Private Debt Securities

18. **Since the reform on the regulatory framework in 2000/2001, the issuance of private debt securities has been growing and has become a consistent source of corporate funding.** There is a wide variety of sectors using the bond market to raise funds, although the financial sector remains the majority of the market. Particularly, sectors like infrastructure and construction, which need long-term local currency financing, are able to use the bond market due largely to a facilitative regulatory framework for issuance and significant demand from institutional investors looking for long-term investment opportunities. Housing finance has also benefitted from the use of bond market by Cagamas, which has been an active issuer to support the extension of the maturity of the mortgage loans provided by banks, and has also used the securitization model (RMBS) to do so.

19. **The infrastructure sector is a significant issuer in the Sukuk market.** Because Sukuk is asset-based, the existence of assets and pre-determined cash flows is important in enabling issuers to issue Sukuk. It is apparent that infrastructure issuers, such as transportation operators and energy producers, have an advantage in the Sukuk market due to their large asset base and, in many instances, predictable future cash flows. Figure 5 shows that the Sukuk market is dominated by the infrastructure sector, namely Energy, Telecommunication, Transportation, and Utilities (total 61%) as compared to the conventional bond market, where financial institutions represent the largest portion (56%).

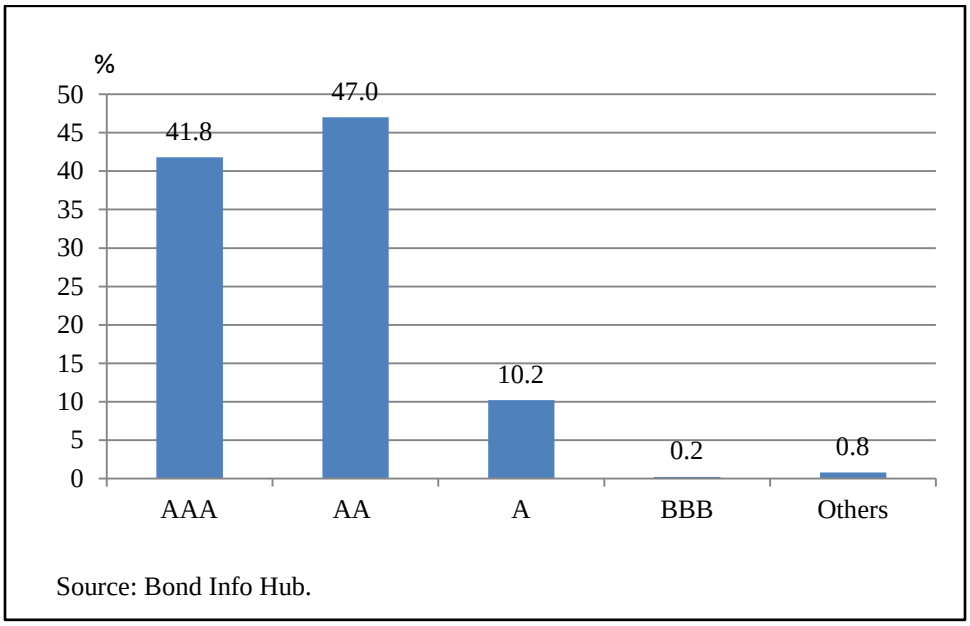
[5] However, a portion of private debt securities are issued by government-sponsored entities or government-linked companies.

Figure 5. Outstanding Private Debt Securities, by Sector



20. **The private debt securities market is concentrated in high-grade instruments.** Nearly 90% of outstanding bonds are in the AAA and AA rating categories (Figure 6). In the past several years, investors have been shifting away from bonds with other than AAA and AA ratings. Despite being investment grade, only a very small portion of bonds are rated A, and are negligible at BBB level. Bonds rated single-A are primarily subordinated bonds of banks which have household names in Malaysia, apparently giving investors some additional comfort.

Figure 6. Outstanding Private Debt Securities by Ratings (%)

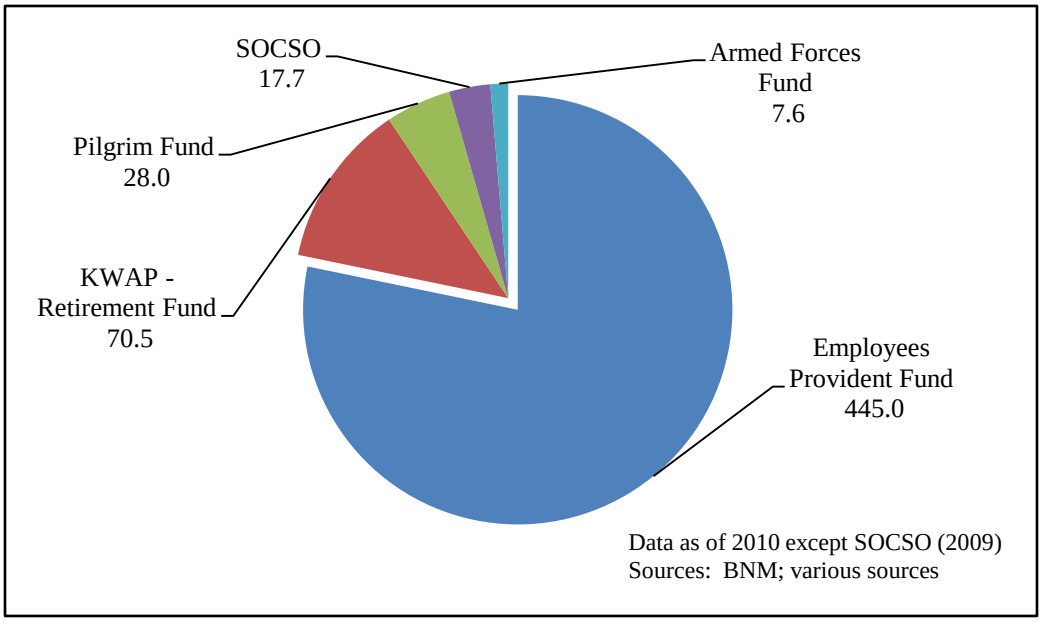


C. Investor Base

21. **Pension funds and other special purpose funds are the largest institutional investors in the bond markets, and among all institutions, EPF is by far the single largest investor**. Jointly, the five government sponsored pension and special-purpose funds (EPF, KWAP, Armed Forces Pension Fund,

Pilgrim Fund, and Social Security Organization [SOCSO]) manage approximately MYR569 billion of assets (Figure 7).[6] Among these institutions, EPF is by far the largest and the most active buyer of bonds. Approximately 64% of the EPF portfolio is in fixed income instruments, including government debt securities (approximately 27%), private debt instruments (32%), and money market instruments (5%). In the government bond market, where it is the single largest investor, with holdings only marginally smaller than total foreign investor holdings, and more than double the total holding of domestic banks (Figure 8). It exemplifies the dominance of EPF in the domestic fixed income market (also Figure 9). The government recently established private pension funds which manage voluntary pension contributions, but these funds are still very small.[7]

Figure 7. Pension Funds and Social Security Institutions by Asset Size (MYR billion)



22. **Life insurers are other major buyers of bonds, given the fit with the profile of their liabilities**. They are key investors in Malaysia's corporate bonds. They invest both on their own balance sheet (against insurance liability), as well as for investment-linked insurance products, a product having both protection and investment features. However, investment-linked insurance products are invested primarily in equities, the most common retail fund products in the market (see paragraph on mutual funds below). The total size of life insurance industry is MYR 166 billion in 2011. Fixed income investments represent approximately 73% of total investment portfolio. Within the fixed income investments, private debt securities typically account for more than 50%.

[6] EPF, the Employee Provident Fund, administers pension contribution for private sector workers; meanwhile, KWAP is the administrator of pension contribution for employees of the Federal Government, statutory bodies, local authorities, and other agencies.

[7] The forecast is that the private pension funds will reach RM30billion (US$10 billion) in assets by 2020, as compared to EPF's current assets of RM479 billion (US$160 billion).

Figure 8. Holders of Government Bonds, by type of investors (%)

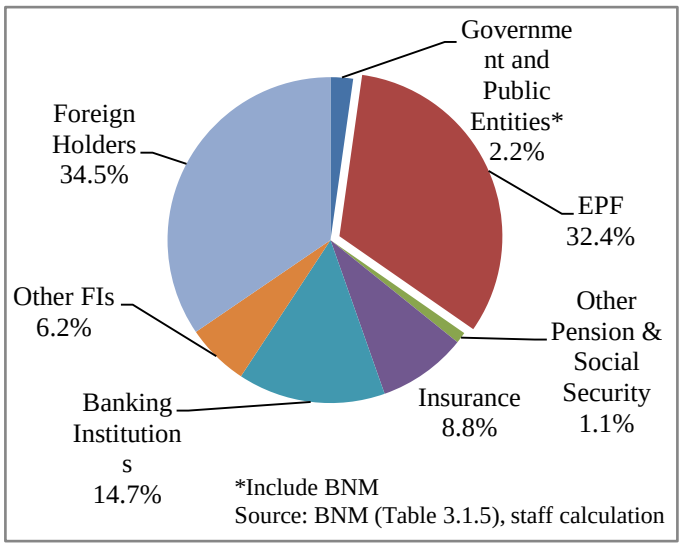
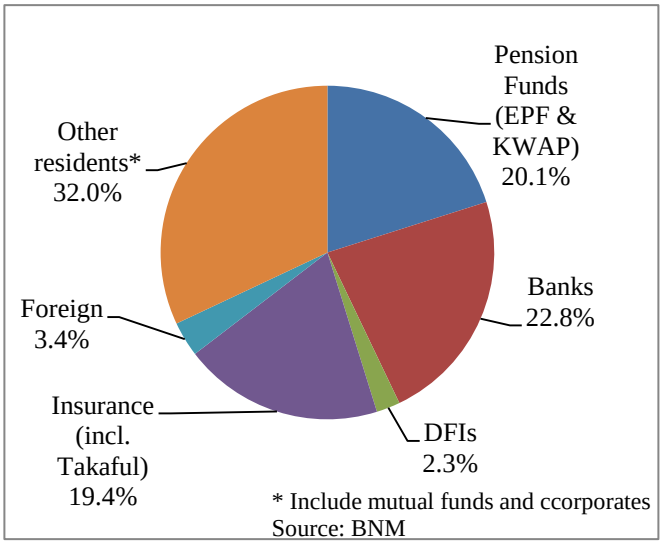


Figure 9. Holders of Private Debt Securities, by type of investors (%)



23. **Banks and foreign investors are other major investors in bonds, although they primarily hold securities with sovereign or near-sovereign risk**. Banks generally don't hold private debt securities outside the top-rated issues, for if they want exposure to the higher credit risk in the lower-rated categories, they generally prefer to take it in the form of loans rather than bonds as they will provide them better margins per operation and possible better protection through collateral and covenants. Liquidity in the banking system is high, so banks are willing to take these debtors on their books. Banks may from time to time hold private debt securities; however, it is usually on a temporary basis as part of their intermediation business. Foreign investors are not particularly active in the private debt market, except a small holding of bonds issued by government-linked companies.

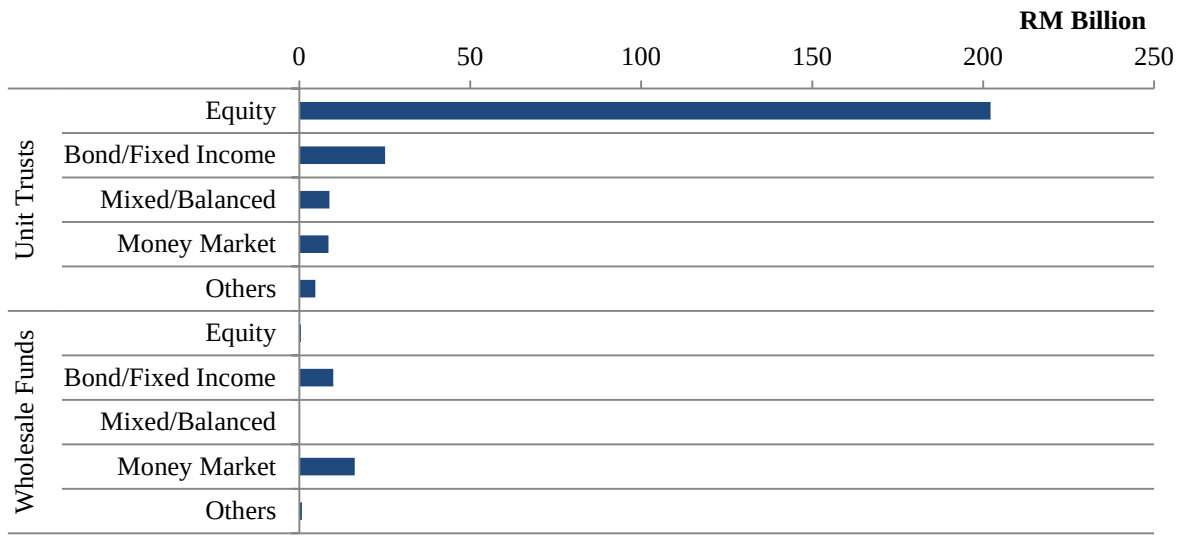
24. **The asset management business in Malaysia is quite well developed, but the majority of the investment is in equities, partly explained by the longer history of Malaysia's equity market.** There are currently 40 unit trust management companies (UTMCs) and 81 fund managers, with total funds under management of MYR 277 billion, which includes MYR 249.5 billion of unit trust funds (or "mutual funds") targeted at retail customers and MYR 27.4 billion of wholesale funds targeted at qualified investors (institutions and high net-worth individuals). Of total mutual funds assets, approximately 81% are in equities (Figure 10). Among the equity funds, funds managed by PNB are the majority by far.[8] Fixed income and bond funds represents only 12.7% of total asset under management, or approximately MYR 35 billion, retail and wholesale combined.

25. **Mutual funds so far have had limited role in expanding the bond market investor base to the retail segment**. In other countries' markets, retail investors' participation in fixed income markets is often through mutual funds. In Malaysia, however, the mutual fund industry is heavily biased toward equity funds. The fixed income mutual fund market in Malaysia is also relatively less prominent as compared to its regional peers. Bond or fixed income funds in Malaysia represent only 10% of the total

[8] The total asset under management of Amanah Saham Nasional Berhad (ASNB), a unit trust management company under PNB, is currently around MYR 180 billion, most of which is invested in equity.

industry,[9] as compared to Thailand (49%) and Indonesia (43%).[10] Malaysia's fund management industry is among the fastest growing segments in the capital market;[11] it is hoped that the development will bring about the creation of more fixed income funds.

Figure 10. Asset Management Industry, by Types of Funds (MYR billion)



Source: Securities Commission. Data as of December 31, 2011

D. Market Infrastructure

26. **The bond market has a very strong primary market infrastructure**. Issuance of bonds, both government and non-government, is facilitated through a fully automated system for issuing and tendering (FAST) managed and supervised by the BNM. The system is sufficiently flexible, allowing different methods of issuance and tendering, including open tender and private placement. Government bond reopening and private debt securities issuance are both facilitated through the system. The use of the system for all public and private debt securities enables the authorities to monitor primary market activities and to have a strong and complete market database.

27. **The market is predominantly over-the-counter (OTC) market, but all trades are reported through Bursa Malaysia and settled through a BNM system.** Effectively all bond trades are conducted OTC, where prices are negotiated and trades conducted directly between the buyers and sellers. While Bursa Malaysia operates the Electronic Trading Platform (ETP), it serves mainly as a reporting system for trades; no trades occur in the system. By regulation, trading of bonds must be reported to ETP within 10 minutes. OTC trades settle on a delivery-versus-payment basis through the Real Time Electronic Transfer of Funds and Securities System (RENTAS), operated by MyClear. All unlisted bonds are deposited in RENTAS or authorized depository institutions (ADIs). While listed bond's would follow Bursa Malaysia

[9] Excluding wholesale funds targeting at institutional clients and high net-worth individuals.
[10] Singapore also has a predominantly equity mutual fund industry; fixed income funds represent only 7% of the industry, but exposure may be made through mixed/balanced funds which represent 20% of industry. In Malaysia, mixed/balance funds are even smaller, i.e. approximately 3.5%.
[11] The authorities forecast that the asset under management will grow from MYR377 billion in 2010 to MYR1.6 trillion in 2020, as set out in the CMP 2.

trading and settlement arrangements similar to equity, i.e. via BM Clearing (a BM subsidiary), effectively all bonds are issued in the wholesale OTC market, unlisted, and therefore are subject to BNM-sanctioned clearing, settlement, and depository systems.[12]

28. **There is a strong bond market ecosystem including credit rating agencies, money brokers, bond pricing agency, and other information providers.** There are two domestic credit rating agencies, RAM Ratings and MARC, both of which are supervised by the SC. All tradable Ringgit-denominated private debt securities must be rated by one of these agencies; a non-transferable issue may be unrated. In terms of secondary market support, there exist six money-market brokers (or "money brokers"). Regulated by BNM, these institutions mainly offer intermediation services to bank treasuries in multiple products, such as interbank deposits, foreign exchange, and bonds. A bond pricing agency, BPAM, also supervised by SC, was registered in 2006 to provide price information for nearly all bonds issued in Malaysia. The use of price information from BPAM for asset valuation is mandatory for mutual funds but not for other investors (such as banks, pension funds, and insurance companies), although the latter also use the information as reference. In addition, international information vendors, such as Bloomberg and Reuters, are well established Malaysia.

II. ISSUES & RECOMMENDATIONS

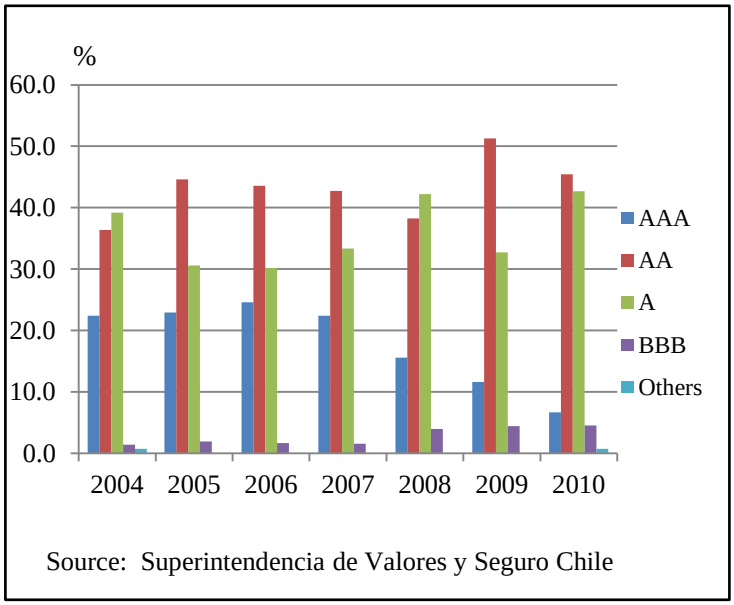
A. Bond Market Access by "Second-tier" Companies and Riskier Sectors

29. **Despite having a vibrant market, the corporate bond market is concentrated in the very high-grade segment of market**. For an economy with the size and financial sector sophistication of Malaysia, one would expect to see a growing shift toward more diversity in the risk profile of the bond instruments. As a comparison, in Chile there is a continuous shift from the top rating category (AAA) into other rating categories as the market has grown and more issuers tap the bond markets (Figures 11 and 12).

30. **Although there is no apparent high degree of institutional investor concentration, government pension funds, appears to play a significant role in impeding the growth of the higher-yield bond market**. Risk appetite in the market is highly influenced by few large institutional investors, particularly pension funds and insurance companies, which are very conservative. The high level of influence of a small group of institutional investors also adversely affects market liquidity. These investors, knowing there are few other players to absorb any possible sales of their large holdings, take extra precaution in managing price or credit risk. In turn, the extra precaution further influences the already-low risk appetite given the types of investors that exist today, and results in a market which is heavily concentrated in the high-grade segment.

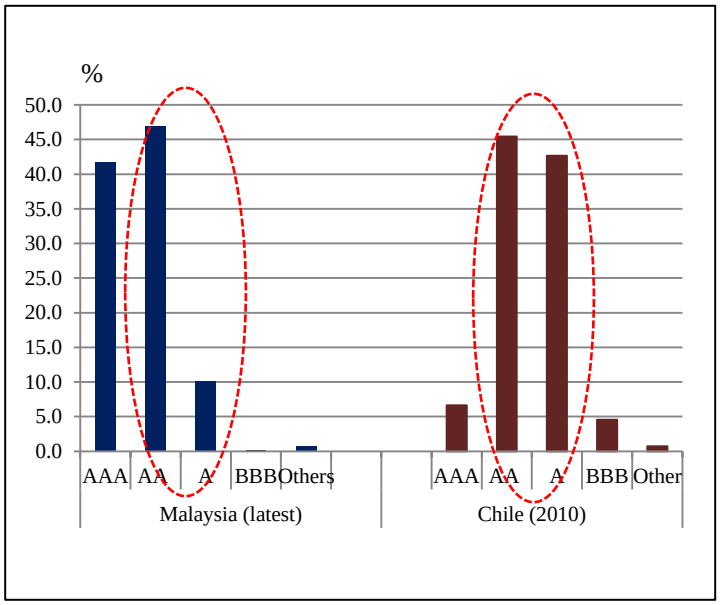
[12] Debt securities issued by both listed and non-listed issuers may be listed on Bursa Malaysia under an exempt listing regime, established to cater for issuers who wish to have a listing status for profiling purpose. The regime is also targeting sophisticated investors and not retail investors. By an exempt listing regime, it means that the securities which are listed on the Exchange will not be quoted nor traded on the Exchange.

Figure 11. Rating Distribution of Corporate Bonds, Chile



Note: The proportion of bonds in the AAA rating category declined over time, compensated with an increase in all other rating categories

Figure 12. Rating Distribution of Corporate Bonds, Malaysia and Chile



31. **Institutional investors are constrained by the size of their investments, which is typically too large to accommodate lower-rated, medium-sized issuers.** The investor concentration particularly in a few government related institutions, most notably at EPF, creates a constraint by the size of their investments, which is typically too large for lower-rated, medium-sized issuers (smaller and less liquid issues). Investing in small issuance (e.g. smaller than US$50 million) will be too costly given relatively similar effort needed to analyze the issue as compared to larger issuance.

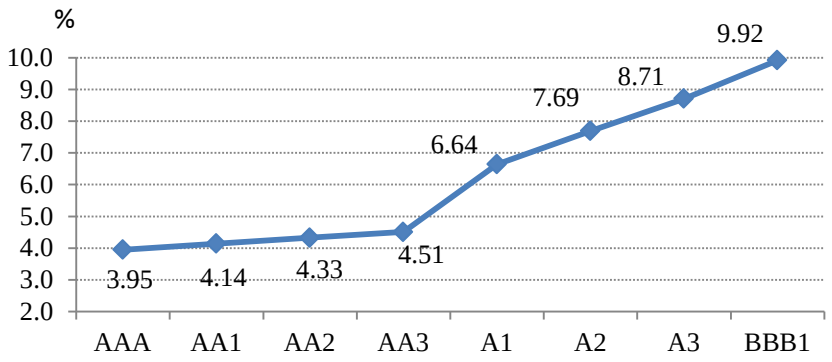
32. **Despite broad diversification in term of asset classes, pension funds and insurance companies take a very conservative approach to their bond investments**. The pension funds and insurance companies appear to have broadly diversified investments, ranging from government securities, private debt securities, equities (including private equities), to real estate (including international properties). In theory, equities and real estate are riskier than private debt securities. Despite their ability and willingness to take risks in these investments, their investment in private debt securities is extremely conservative, with primarily AAA and AA rated bonds. While the high-yield debt securities market is indeed illiquid, so are property investments. Similarly, while there is a risk of default on private debt securities, there is also a volatility risk in equities; it seems that the investors accept the volatility risk of equity investments due to their relative liquidity and their expected higher returns.

33. **Institutional investors' tendency to avoid bonds in the single-A rating categories and below may also stem from defaults that have occurred in these rating categories.** Corporate default history in Malaysia in the past two decades indicates that there has been no default at the triple-A and double-A rating categories (see Table 1). Defaults started to occur in the single-A ratings, particularly in the aftermath of the Asian financial crisis (1999-2002), and again in 2008 during the global financial crisis. While the default rate for single-A rated bonds remains low, largely influenced by macroeconomic

conditions and limited to times of macroeconomic distress, institutional investors seem to avoid obligors in this rating category and below. It may indicate an asymmetry between reward and penalty given to managers in these institutions for their investment decisions. From our interviews, it appears that investment managers avoid any default because of the direct and indirect costs associated with dealing with it.

34. **The price differential between AAA/AA rated bonds and A rated bonds could have an even further influence over investors' preference for higher rated bonds.** As demonstrated in Figure 13, due to investors' strong preference for AAA and AA rated bonds, bond yield jumps abruptly at the A1 rating category. Given this yield differential, investors might avoid holding a AA3-rated bond due to the large potential loss that they would suffer if the bond was downgraded. This behavior makes the market even more concentrated at the top-grade market.

Figure 13. Malaysia Corporate Bond Yield by Rating Category



Note: Corporate Bond Yield, 5-year tenor
Source: Bond Pricing Agency Malaysia, price as of Apr . 13, 2012

35. **The government has responded to bias towards high graded credits by themselves creating government entities that will absorb the credit risks or stand between the investors and the funded companies/projects**. A significant portion of the corporate bond market is issuers with strong links to government, either as government-owned entities, government sponsored programs or issues guaranteed by the government. Common names include Khazanah, a government-linked financial institution, which issues bonds with and without explicit guarantees by the government; Cagamas, the government-backed housing finance liquidity facility; and other state-owned enterprises. In addition, many private debt securities issued by the private sector in the infrastructure sector, such as by toll road operators and independent power producers, are structured as government sponsored projects with the backing in most cases by contracts with the government or government-linked entities. In 2009, the government created Danajamin, the government-backed credit guarantee institution, to enable bond issues that would not otherwise be able to come to market; all issuances guaranteed by Danajamin have obtained a AAA rating.

Table 1. Malaysia Corporate Default History

Rating Category: AAA

	Year of Default																		
Age of Static Pool	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1-Year Vintage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Year Vintage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-Year Vintage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Year Vintage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-Year Vintage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Rating Category: AA

	Year of Default																		
Age of Static Pool	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1-Year Vintage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Year Vintage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-Year Vintage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Year Vintage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-Year Vintage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Rating Category: A

	Year of Default																		
Age of Static Pool	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1-Year Vintage	-	-	-	-	-	-	4%	4%	3%	2%	-	-	-	-	-	3%	-	-	-
2-Year Vintage	-	-	-	-	-	-	5%	4%	4%	3%	-	-	-	-	-	3%	-	-	-
3-Year Vintage	-	-	-	-	-	-	6%	4%	4%	4%	-	-	-	-	-	2%	-	-	-
4-Year Vintage	-	-	-	-	-	-	-	6%	5%	4%	-	-	-	-	-	-	-	-	-
5-Year Vintage	-	-	-	-	-	-	-	-	-	5%	-	-	-	-	-	-	-	-	-

See note below.

Rating Category: BBB

	Year of Default																		
Age of Static Pool	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1-Year Vintage	-	-	-	-	-	-	7%	-	-	3%	-	4%	-	-	-	-	5%	-	-
2-Year Vintage	-	-	-	-	-	-	7%	-	-	3%	-	5%	-	-	-	-	5%	-	-
3-Year Vintage	-	-	-	-	-	-	8%	-	-	4%	-	5%	-	-	-	-	6%	-	-
4-Year Vintage	-	-	-	-	-	-	3%	-	-	4%	-	6%	-	-	-	-	9%	-	-
5-Year Vintage	-	-	-	-	-	-	6%	-	-	4%	-	-	-	-	-	-	13%	-	-

Rating Category: BB

	Year of Default																		
Age of Static Pool	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1-Year Vintage	-	-	-	-	-	-	31%	-	6%	8%	-	9%	10%	9%	-	-	17%	60%	-
2-Year Vintage	-	-	-	-	-	-	32%	-	10%	10%	-	9%	11%	9%	-	-	17%	60%	-
3-Year Vintage	-	-	-	-	-	-	27%	-	10%	17%	-	11%	11%	10%	-	-	20%	60%	-
4-Year Vintage	-	-	-	-	-	-	20%	-	11%	17%	-	-	13%	10%	-	-	20%	50%	-
5-Year Vintage	-	-	-	-	-	-	29%	-	13%	18%	-	-	-	11%	-	-	20%	50%	-

Note: The number in each cell denotes the default percentage of the pool of obligors (static pool) which were in the same rating category in the pool's vintage year. For example, in 1999, four percent of obligors which were in the "A" rating category one year before (1998) went into default. Similarly, 5% of obligors in the "A" rating category two years before (1997) went into default in 1999.

Source: RAM Ratings, "2010 Corporate Default and Rating-Transition Study (1992-2010)."

36. **There are a number of factors limiting the development of the fixed income mutual fund industry in Malaysia:**

a. **Given government backing (explicit or perceived) and consistently high returns provided by EPF and PNB funds, fixed income funds seems to be less attractive for retail investors.** Despite their respective portfolio composition that are not necessarily fixed income portfolios, both EPF and PNB funds could be considered by retail investors as having risk profiles much closer to fixed income funds. Pension participants are guaranteed minimum return of 2.5 % at EPF; and it so far has given consistently high tax-free returns of about 6% in the past 5 years. Similarly, the features of PNB funds alter the risk perception of investors in the funds vis-à-vis other funds. PNB funds are perceived as having government backing, and have also consistently provided relatively high returns (about 5-7%). While there are actually equity funds, there are limited disclosures on the portfolio and their valuation, particularly those categorized as "fixed price" funds. These results in perceived low volatility and constant returns, akin to a "fixed income" fund.[13] With both EPF and PNB funds playing such an important share of the available investment options for individual investors combine with historical inclination for equity instruments in the country, there seems to be little incentive to invest in fixed income funds.

b. **The dominance of bank-controlled capital market intermediaries, including asset managers, may create a tendency to prioritize bank-based fixed income products, i.e. deposits relative to fixed income mutual funds**. The largest mutual fund managers are effectively owned by major Malaysian banks.[14] With such ownership structure, it is natural that the banks will prefer to keep the consumer base within the banks' balance sheet, particularly as Malaysian banks tend to compete by size. This diminishes incentives to sell fixed income mutual funds to retail customers.

c. **The fee structure of mutual fund agencies exacerbates the bias toward equity funds**. Like in many Asian countries, retail participation in the equity markets is relatively larger and had a longer history than in fixed income markets. The funds' retail base is very much driven by an equity culture, making it harder for the fund managers to sell bond funds. In Malaysia, this bias is further aggravated by the agency fee structure which provides incentives for selling agents to offer equity funds rather than fixed income funds. For equity funds, mutual fund agents can earn a selling fee of 5% or more, compared to only 1% for fixed income funds. Thus, agents may not have the investors' best interest in mind; they may encourage investors to make riskier investments in equities.

d. **The current distribution structure of mutual funds may contribute to the lack of growth in fixed income funds.** While Malaysia has a relatively open architecture for mutual fund distribution, the lack of independent distribution channel presents a harsh environment for fixed income funds to grow. Mutual fund distribution is heavily dominated by agents of unit trust management companies linked to banks; the role of financial advisors, who serve the customers and assist them in finding the best financial products according to the customer needs, is extremely small compare with countries like the US were 45% of investors in mutual funds did it with the support of professional advisors (UK 30%). In 2011, only less than 3% of the funds were sold via independent channel. Approximately [53%] of funds are sold either by the unit trust management companies (UTMC) themselves (or their affiliates) or by their agents, who are bound by contract to exclusively sell funds from one UTMC. Meanwhile, the rest [44%] are sold

[13] Such misperception is not limited to unsophisticated retail investors. A number of market participants in our interviews suggested that some banks provide loans to customers for the purpose of purchasing PNB fund, which indicate that banks also perceive the fund as having low risk, unlike typical equity investments.

[14] The largest mutual fund managers outside of Amanah Saham Nasional Berhad (subsidiary of PNB) are Public Mutual (subsidiary of Public Bank), CIMB-Principal Asset Management (subsidiary of CIMB Bank), AmInvestment/AmMutual (AmBank), and Hwang DBS (DBS Bank).

by institutional agencies, primarily banks. More independent distribution channels could bring about more competition, both within the fund management industry and between the fund management industry and bank-based savings products. Consumers would be exposed to better performing funds and fund managers, a condition which would eventually allow specialized, and possibly independent, fund managers to rise.

Recommended Measures

37. **The role of government in stimulating the growth of the bond markets should be now shifted toward encouraging more diversity, as already recognized and set out in CMP 2.** The government has had a significant role in stimulating the growth in corporate bond market, through various interventions such as explicit guarantee or the creation of government entities to absorb credit risk, but there should be a clear exit strategy for this type of direct government intervention. The government should start reducing explicit or implicit government guarantees, as it may distort the market and prevent risk diversity. While there may be justified roles for government intervention – as demonstrated by Danajamin's ability to help lengthen maturity of some issuances – it should have clear added value and exit strategy.

38. **In order to develop the higher-yield segment of the market, large pension funds (particularly EPF) should give additional mandates to independent asset managers to invest in this segment.** For very large investors like pension funds, it may become more efficient to operate as fund of funds particularly in order to diversify and tap the specialized skills in certain asset classes. By doing so, they reach a segment of smaller issuers and issuances such the mid cap and SME segment. Growing demand and healthy competition will be created in the market, allowing for more risk diversity and more access for smaller issuers to raise funds through capital markets. The private pension funds, recently established under new for voluntary pension savings, may play a role in broadening the investor base;[15] however, their role is expected to be minimal at least in the near future. Therefore, in addition to this, outsourcing mandates by large, government controlled pension funds could jump start the growth of specialized fund managers and high-yield fixed income market.

39. **The government should slowly remove distortions created by, or misperception toward PNB funds**. The government should be cautious to avoid a perception that PNB funds are guaranteed by the government. Investors' misperception of the risk and return profile of the funds that are managed by this government institution should be avoided. The funds should be subject to same requirements as equity funds issued by other unit trust companies, in terms of portfolio holding disclosure, valuation, performance measurements, and performance presentation. Not only will this level of disclosure reduce government contingent liabilities in the case of extreme stress in the equity market, but it would also create a level playing field vis-à-vis other funds in equity and other asset classes.

40. **Concurrently, the authorities should provide incentives for asset managers and mutual fund companies to establish bond funds.** In other countries and markets, bond funds are usually an effective and efficient way for retail investors to gain access to bond investments. The government could encourage the creation of fixed income mutual funds by sponsoring temporally the funds, providing liquidity support to the debt instruments or providing tax incentives to the funds or the investors. In Spain for example, during the 90's the Spanish Treasury sponsored the creation of specialized mutual funds investing in government T-bills and bonds (Fondtesoros) by providing a tax incentive to the investor[16]. This program

[15] EPF contributors are already allowed to channel up to 20% from their savings in excess of the Basic Savings amount in their Account 1, to be managed by independent asset managers.
[16] For further information on the Fondtesoros please check the website of the Spanish Treasury www.Tesoro.Esp.

had a great impact in reaching the retail base and was a major source of development of the fixed income funds in Spain. As a principle, however, these incentive schemes should be designed with a clear exit strategy.

41. **Additionally, the authorities may consider developing a special framework for fixed income mutual funds** to mitigate the types of risks fixed income funds typically suffer from. For example, the authorities may allow non-marked-to-market valuation for bond funds which intend to hold securities to maturity and provide strong disincentives for early withdrawals, so that the funds are not exposed to market risk.[17]

Box A. Types of distribution channels for mutual funds

Fundamentally, there are two types of channels: (i) direct distribution, where sales by the fund management company or its affiliate are made directly to the investors; and (ii) indirect distribution done through an external party.

Methods of direct distribution include:

- Sales persons employed by the asset management company or its parent/affiliates;
- Branch networks belonging to a parent/affiliated company (e.g. a bank);
- Direct marketing, including via Internet or direct mail.

Methods of indirect distribution include selling through:

- Financial advisors (e.g. stockbrokers, qualified financial advisors, private and retail banks);
- Sales networks (sometimes known as "tied agents");[18]
- Fund supermarkets and discount brokers;
- Other institutional investors, i.e. through fund of funds or multimanager funds.

The proportion of sales through direct and indirect channels varies greatly from country to country. Broadly, a higher percentage of sales in Britain and the US are made through indirect channels, particularly independent financial advisors in the UK and broker dealers in the US. In continental Europe, generally a higher percentage of sales is made directly through bank branches which have traditionally sold their own products, although open architecture seems to change this.

One might expect that as consumers become more financially sophisticated, the need for advice as to what or which products to choose would decline, and that sales directly to customers would increase. However, this does not appear to hold true, possibly because of the growing proliferation of instruments or simply because people value personal contact and advice. In the US in 2008, of those who purchased mutual funds outside retirement accounts, only 12% bought direct without advice, while 43% bought through professional advisers. In the UK, 30% took advice from an independent advisor and 28% from their banks also indicating a preference for professional advice.

The picture has become more blurred recently with the development of "wrap platforms," often operated by insurance companies, which permit a wide range of funds from different management companies to be selected by an investor or advisor. Australia, where investors may use a wide variety of wrap platforms largely offered by insurance companies, is a good example of this development. This format features in the enormous expansion of the fund industry as a result of the establishment of mandatory pillar pensions.

In general, the trend is clear: an increasing number of different structures is being interposed between the product originator (the fund management company) and the ultimate costumer.

[17] A similar mutual fund framework is established in Indonesia. Funds in this category have finite life, portfolio holding of few securities with similar maturity profile, only few withdrawal windows and high early withdrawal/exit fee. Dubbed as "principal-protected funds," they have effectively minimal exposure to market risk, while remain exposed to credit risk. As of 2011, this type of funds represents approximately 40 % of the mutual fund industry.
[18] In Malaysia context tied-agents come under 'direct distribution' as they are tied to a particular UTMC.

42. **An assessment of industry practice on sales and distribution policy is necessary to ensure a healthy environment for mutual funds, particularly fixed income funds, to grow**. A review of sales agent practice should be conducted to ensure no improper conduct (e.g. churning) and to find a fund distribution architecture which puts investor interest as the top priority. A study on the distribution of mutual fund return to the fund managers, sales agents, and end investors should be part of the review. The result could then inform the kind of policy to be put in place on fees and distribution arrangement. For example, selling fee could be removed altogether, and agents are compensated through a share of management fee. This may increase management fee, but this way, agents will have the interest to have the investors stay in the equity of fixed income funds as long as the managers perform well, which is consistent with the long-term nature of the investments. The authorities would also need to encourage more independent distribution channels (e.g. fund supermarket). The concept of financial planner should be promoted more broadly; and investors should be educated on the value of independent advice (vis-à-vis selling agents). A new SC's Sales Practice Guidelines is already at an advanced stage of development and will be launched soon, which hopefully address some of the concerns.[19]

43. **There should be an increased focus to encourage more medium-size, lower rated issuers to market**, a focus which is already recognized and recommended under the CMP 2. The government should encourage Danajamin to specifically target medium-size and lower-rated corporate issuers among its other objectives. In a few issuances, Danajamin has been able to help lengthen the maturity of some issuances, so there is important evidence of Danajamin's added value. To further increase its role, Danajamin should help introduce less well known issuers in order to promote greater diversity; but it should not simply bring the issuers into the crowded AAA segment. It may consider moving to providing only partial guarantee schemes, instead of partial and full guarantee featured in all issuances so far.[20] Issuers' eventual ability to raise funds on their own merits should be one of Danajamin's key performance indicators. Similarly, government could provide incentives to smaller issuers into coming to market. However, this should not be aimed at bringing these issuers' credit rating into top-grade levels, but rather to facilitate issuance via removal of significant cost components (e.g. negotiating lower fees for rating services if the government is able to bring a certain number of issuers to be rated), improving access to information on the issuers (e.g. by subsidizing investment research covering these issuers, similar to the existing program for mid/small-cap equities), and providing liquidity support for issuances by these entities (e.g. by appointing an agent to be the market maker for these issues). These programs could be conducted jointly with development banks or other entities with development role, where these entities will help identify eligible issuers to be supported. As an example, Brazil is currently implementing a program called "Novo Mercado for Debt Market" which provides liquidity support to bonds and market makers participating in the program (see Box B).

44. **In addition, the authorities should consider fine tuning regulations in order to strengthen the credit risk management culture and possibly reduce reliance on ratings going forward, as already considered by the authorities.** One possible measure is to remove rating requirements from regulations for issues targeting qualified investors. This measure may not change significantly market behavior in the near future, as investors could well still require issuers to be rated and remain focused on high-grade papers, but it could at least start a shift in investors' mindset and approach. While investors interviewed suggest they conduct rigorous internal assessments on issuers, it is clear from the homogeneity of the portfolio profile that investment decisions are greatly influenced by external credit ratings. Similarly, with the new approach to regulations in the international arena post global financial

[19] The SC issued the Guidelines on Sales Practices of Unlisted Capital Market Products on December 28, 2012.

[20] There is a number of issuance where Danajamin guarantees only partially. In this issuance, however, other parties guarantee the rest of the issuance, effectively ensuring a 100% guarantee of the total issuance.

crisis where there are ongoing efforts aim to gradually reduce reference to credit ratings in regulations on banking and insurance, Malaysia may want to consider similar approach.

Box B. Brazil's Novo Mercado for Debt Market

After very successful experience with its Novo Mercado or "new market" for its equity market, Brazil recently (2011) launched a new program aimed to deepen its corporate bond market. While the former program focused on elevating corporate governance standards for listed companies and increase local and international demand for those securities, the program for corporate bonds has an objective of increasing attractiveness through the improvement of liquidity and transparency standards of debt instruments participating in the program. This effort is specifically targeted at the institutional segment, self-regulated, and voluntary in nature.

Bond issues that will participate should comply with, among others, a minimum level of spread, have a risk rating updated every year, have an analyst coverage (market researcher) in their first year, have a fixed-rate coupon, adopt a standard format for prospectus, and comply with minimum standards of corporate governance.

The main components of the program are:

- **Liquidity support mechanism.** There will be two types of liquidity funds: a first one is participating directly in the market and offering tight bid-ask spread and funded with public and private money (i.e. compulsory bank reserves); the second one is operating as a liquidity guarantor to those intermediaries acting as market makers when facing serious liquidity problems.
- **Tax incentive.** The program is supported with tax equalization with the government bonds with respect to foreign investors, and is providing equal tax exemption if the bonds are issued for an infrastructure or an investment project. The program also expects to achieve tax equalization between investments made directly and indirectly by means of investments funds, with the expectation of making funds more attractive.
- **Transitional liquidity enhancements provided by the Brazilian development bank (BNDSE).** BNDSE will offer underwriting services which includes issuance of two tranches, one of which will be fully purchased by BNDSE and the other is to be sold in the market. The bank will also act as a market maker or as an investor of the liquidity support fund, and also create a credit line to intermediaries and market makers.

This program is led by AMBIMA, the Brazilian association of financial sector intermediaries.

45. **The above measures should be taken concurrently with a bond market educational program targeting both institutional and retail segment.** A joint effort among the Exchange, SC, BNM, SIDC (Securities Industry Development Corporation), and the industry could be established to take on this ambitious educational program on board. Though retail bond market is unlikely to be the major driver for further growth, and it would likely be limited to government bonds or government-linked issues (which would not help alleviate the risk concentration issue discussed above), retail education could still help bring retail attention to this asset class. In turn, it could strengthen the parallel effort to grow the fixed income mutual funds, a more common and efficient way for retail investors to access bond investments. The CMP 2 already recognizes the importance of consumer education in order to widen the corporate bond market investor base.

B. Liquidity and Price Discovery

46. **In the secondary market, pre-trade transparency remains lacking**. Bond price information is generally available via various media, including one-on-one communication (telephone or electronic messaging), dealers' Bloomberg or Reuters screen, or through money brokers. However, this information is limited to very liquid securities. For less liquid securities, information is obtained only through a traditional telephone communication; providing the information in a more open manner such as using Bloomberg screen would pose significant risk of adverse selection for the dealers. As a result, cost and time associated with information search is high especially for private debt securities.

47. **The absence of electronic trading platform effectively and widely used as trading venue limits the capacity of the market to grow and constrain the authorities' supervisory function**. Bursa's ETP was designed to be both a platform for reporting as well as for market participants to trade; however, it is rarely used as a trading platform. It is primarily used as a trade reporting platform. While regulation stipulates that each OTC trade must be reported to ETP within 10 minutes, its enforcement seems to be suboptimal. While there is so far no evidence of unreported trade because all trades are reconcilable with actual settlements through RENTAS; market participants often observe late key-in of trades.[21] Intermediaries must input the trade both for ETP (trade reporting) and for RENTAS (settlement system) separately; thus, by not using the same information source, the system may present some inconsistencies. Currently this situation is addressed by internal compliance requirements; but it may not be an optimal solution going forward as the market is expected to grow. As most of the trades are conducted via telephone negotiation, the supervisors wishing to analyze and/or investigate a trade will have limited information because the history behind the trade may not be well recorded.

Recommended Measures

48. **The authorities may encourage the establishment of independent electronic platforms for market participants to search price information, negotiate, and trade bonds.** The establishment of electronic platforms would enable further growth in the market, because they will inter alia remove a significant amount of manual intervention. Furthermore, more accurate and timely post-trade information will create a positive feedback loop as it becomes the pre-trade information for the next trade, thus encouraging more liquidity. However, one should be careful as not to prescribe what type(s) of platform would be appropriate for Malaysia. There are several models of electronic platforms that exist in other, more developed markets (e.g. single-dealer system, dealer-to-dealer system, and multiple dealer system); the authorities may encourage the establishment of such platforms in Malaysia and monitor their development in order to analyze their effectiveness and efficiency. Several platforms may eventually emerge as the most efficient model(s) for Malaysia. The current ETP system under Bursa Malaysia does not seem to provide the optimum solution due to several factors, including poor perception on user-friendliness and lack of connectivity with the settlement system;[22] eventually, ETP could be modified to allow connectivity, as well as to facilitate automatic posting of trade information from different trading platforms. International experience has shown that while centralization of post-trade information is an important objective, trading of bonds (unlike equity) does not render to be centralized. On the contrary, a series of different type of venues addressing different needs of players (see Box C) but interconnected to the central registry may be a more effective solution for the bond markets. The ETP therefore could be converted into the central post-trade information registry for purpose of market transparency and support the supervision functions of the SC.

49. **Careful study and planning are needed to help the authorities prepare with the right regulatory and supervisory framework as well as the impact analysis of the electronic platforms**. The scope and regulatory mandate of the authorities, Securities Commission and Bank Negara Malaysia, must be made clear at the outset, without burdening platform providers with significant regulatory cost especially at the start of the project. In addition, baseline measurements should be established to assist the authorities in the eventual impact evaluation of the platforms. For example, the baseline study and impact evaluation will help answer questions such as: how much liquidity on different measures (e.g. volume, spread) is improved (or not) after the establishment of the platforms, what are the impacts for different market segments (government vs. private debt securities, more liquid vs. less liquid), etc. It should be noted that studies indicate that some measures to improve liquidity through trade transparency might in fact be counter-productive.

[21] For example, most of the trade inputs occur immediately before market closes.

[22] ETP is connected with the Bursa Malaysia settlement system; however, as effectively all debt securities are unlisted and traded OTC, the actual settlement system used is the RENTAS system at BNM.

Box C. Electronic Trading Platform for Bonds

When securities are traded in an Exchange (e.g. for equities), pre-trade and post-trade information are available and observable by market participants in real time. Because bond trading in most markets is conducted primarily outside of Exchanges, trade information transparency becomes a typical issue.

Generally, investors who wish to trade bonds can obtain pre-trade price information through (i) dealers' bid and ask quotes, obtained using telephone or screen-based communication, and/or (ii) price vendors or indices providers. In the latter, price vendors or indices providers obtain information from multiple dealers and then provide aggregated information to investors. Post trade information is usually obtained through regulatory reporting services (e.g. TRACE in the US) and bond price agencies.

A major problem in the over-the-counter market is that obtaining *executable* pre-trade information is often time consuming and/or costly. Dealers' bid and ask quotes are very often only indicative, thus it requires contacting several dealers to get the best, executable quotes for the trade size and direction a trader or investor wants to have. This process often corresponds with high direct and opportunity costs (e.g. traders' time, lost opportunity), while also limiting liquidity due to the capacity of the market to trade. Electronic trading platforms, which facilitate price discovery and trade execution, can be a solution.

In Europe, activities through electronic trading platforms have been growing. There are several types of electronic trading platforms that exist, but they generally can be categorized as follow:[23]

(i) Single-dealer platforms. In these platforms, a dealer offers electronic system through which investors can purchase or sell securities from or to the dealer, who provides executable quotes under specific terms of trade. Essentially, these platforms represent stand-alone 'markets,' each of which is controlled by only one dealer. Investors who have access to several single-dealer platforms can have essentially full price transparency and get best trade execution. These platforms are typically offered through common market information vendors such as Bloomberg.

(ii) Dealer-to-dealer (inter-dealer) platforms. In these platforms, dealers can express interest (often anonymously) to purchase or sell securities, which are then automatically executed when another dealer's hit the price with an opposite interest. Given the intensity of the trade, end investors do not typically participate in this market, hence the term 'inter-dealer.'

(iii) Multi-dealers-to-customers platforms. Multiple dealers and multiple customers participate in these platforms, which usually operate through a request for quote system. The system enables traders to conduct electronic auction for the selling or purchase of securities. A trader can execute the trade based on the best price available to him/her.

Among multi-dealers-to-customer platforms, the most successful one is the one which developed an electronic equivalent of the traditional telephone-based OTC trade. Using a **request for quote (RFQ)** system, a customer (an investor or a dealer) announces his/her desired size and direction of trade for identified securities; and ask for quotes from several dealers. Dealers can provide quotes executable within a short period of time (several minutes); the customer can then take the best price and execute the trade by clicking it. Mimicking pure OTC market, the identity of the customer is revealed to the dealers and vice versa, but the identity of dealers providing quotes and their respective quotes are not revealed to other dealers or customers. This system enhances market efficiency as it simplifies and shortens information search process; it also fosters competition among dealers to provide best execution for investors – without dealers' suffering from adverse selection if their firm quotes were published to the whole market.[24]

Any combination of the above platforms is useful from information transparency perspective, even for non-participants in respective platforms because these platforms can and should publish post-trade prices with minimal or no delay. Electronic platforms also provide better and more reliable information for supervisory/surveillance purposes.

[23] See "European Bond Price Discovery and Market Data Guide," (February 2011) for some examples and details of electronic trading platforms. The document which can be downloaded at http://www.afme.eu/Documents/Statistics-and-Reports.aspx

[24] Adverse selection problem occurs when a dealer providing firm quotes suffers from execution of trade done by a client who has better or inside information about the securities. To address this problem, dealers may inter alia choose to provide different quotes for different customers.

For example, a study by CERP on European corporate bond markets indicated that too much pre-trade information for less liquid securities could instigate dealers exit given lack of expected profit from the business, thus counter-productive to the original intention.[25]

C. Supervisory Framework

50. **The Malaysian bond secondary market is characterized by dual-supervisory framework, i.e. between Bank Negara Malaysia and Securities Commission.** As the issuer (on behalf of the Government of Malaysia) and administrator of government bonds, BNM has effective regulatory and supervisory role on the issuance of the government bonds. The Fully Automated System for Issuance/Tendering was established to facilitate efficient government bond issuance process, but is also used for tendering process of private debt securities, although the approval of the issuance rests within the SC. Similarly, secondary market activities for both government bonds and private debt securities are supervised by SC; however, as most bonds are unlisted and traded over-the-counter, they are settled and deposited within BNM-regulated settlement and depository systems (RENTAS and ADIs). Furthermore, some of the participants in the market are supervised by BNM (i.e. banks, insurance), while others by SC (i.e. mutual funds, investment banks). Major investment banks often use the treasury function of the groups' commercial banking arm to conduct activities in the secondary market, thus further complicating the supervisory process. Finally, money brokers are licensed by BNM, but they also intermediate trading of with government and corporate bonds, a function commonly supervised by securities market supervisor.

51. **While coordination between SC and BNM appears strong and works well thus far, the arrangement may not be optimal going forward**. It seems that the current mandates are clear and there are concerted and continued efforts to strengthen the coordination between BNM and SC towards minimizing duplicative efforts and guaranteeing a proper functioning of the markets, as seen in the new MOU recently signed by BNM and the SC.[26] However, the arrangement may be sub-optimal going forward as BNM, as bank supervisor, will tend to have a strong *prudential* approach in its supervisory style in contrast with the SC, which as specialized securities market supervisor will predominantly perform *conduct* supervision to all participants in the market. In this regard, it will be a challenge to ensure full homogeneity in the ways different players are supervised in the current two supervisor-one market model currently in place.

Recommended Measures

52. **In the medium term, the authorities may consider moving to "one-supervisor one-market" model for the supervision of the secondary markets, as it will optimize the difference skills from the two types of supervisors**. International experience shows that over the last two decades, more advance bond markets around the world have gradually shifted their secondary markets activity from the traditional OTC trading environment, with very limited information available, to a model where electronic trading platforms are starting to take over a large part of the OTC activity. In this model, transactions are reported close to real-time to the supervisors. Along with such change, the supervision model has also evolved from a situation where there was limited involvement from the regulator[27] to a new situation where the securities supervisor has centralized information that allows it to monitor the market and conduct market supervision on all market players. The US and several European countries

[25] "European Corporate Bond Markets: Transparency, Liquidity, Efficiency," CEPR, 2006.
[26] The enhanced BNM-SC MOU was signed on 30 October 2012. The MOU will serve to detail, among others, principles in information sharing, coordination as well as policy development.
[27] Trading is dominated by professional players and very limited information is available on the trades done in the OTC.

(e.g. France, Spain, Portugal) are some examples. In these markets, the shift is arranged through MOUs between the supervisor of the activities (capital market supervisor) and the supervisor of the entities (bank supervisor). The arrangement ensures a "one-supervisor one-market" model without a formal introduction of a "twin peaks" model that would concentrate all market supervision in the conduct supervisor separately from the prudential supervisor (e.g. Netherlands, Australia).[28] In the case of Malaysia, the conditions may be ripe in the near term for an initial approach that may be facilitated through a modification of the existing BNM-SC MOU.

53. **Alternatively, the authorities may consider creating or endorsing a self regulatory organization (SRO) that would take on the supervisory roles in the bond market**. Currently the only SROs activities recognized and supervised by the authorities are the ones carried out by Bursa Malaysia[29] and the unit trust fund management industry association (FIMM – Federation of Investment Manager Malaysia). Going forward the government may assess if introducing some SRO responsibilities to the dealer association could be an alternative way of improving the supervision of the bond OTC market.[30] An SRO could relieve SC and BNM from significant supervisory burden and, if designed properly, could address supervisory overlap between the two authorities. All bond market participants should be member of this SRO; the SRO would then be able to conduct surveillance and examinations across different types of member institutions. The authorities should carefully analyze the cost and benefit of SRO; a careful consideration must be made to determine which SRO model would best fit for Malaysia's bond market.[31]

D. Other Areas for Further Development

54. **The authorities may encourage regular issuer GLCs to establish systematic approach to ensure lead managers provide support in the secondary market.** Given their large size and regular issuance, GLCs can exert their power to demand lead managers to act in a manner similar to those of primary dealers for government securities. In this arrangement, issuance managers who provide strong support in the secondary market will be given privileges and more business in the following issue. Market making arrangement could be very expensive for non-regular issuers, as market makers are exposed to significant credit and liquidity risk associated with holding the securities. Therefore, for non-regular issuers, market making could be conducted by institutions which have development role under the same program aimed at sponsoring more medium-size, lower-rated issuers to market (see paragraph [43] above).

55. **The use of securitization may be reinvigorated to enable more types of asset classes to tap the bond market**. Securitization techniques have been used in the past in Malaysia, but are rarely used again in recent years following the global financial crisis where many believe that securitization was a major reason. There were a few collateralized loan obligation (CLO) issues that were downgraded or defaulted. Reasons for the downgrades and defaults include small number of collateral (thus, lack of diversification within the loan portfolio) and quality of the collateral (e.g. unseasoned loans). However, other securitization transactions continue to perform well, such as Cagamas SME loan securitization,

[28] A "twin peaks" model is a form of regulation in which there is a separation of regulatory functions between two regulators: one that performs the safety and soundness supervision function and the other that focuses on conduct-of-business regulation. For more explanation and details of different supervisory approaches, see for example "The Structure of Financial Supervision: Approaches and Challenges in a Global Marketplace" (Group of Thirty, 2008), http://www.group30.org/images/PDF/The%20Structure%20of%20Financial%20Supervision.pdf.

[29] While not a recognized SRO, Bursa Malaysia carries out certain SRO functions.

[30] Currently, PPKM (Persatuan Pasaran Kewangan Malaysia), a dealers association, is considering its move toward that direction.

[31] For analysis of different SRO, please refer to World Bank Policy Paper "Self Regulation in Securities Markets," 2011.

whose rating was upgraded recently. A more comprehensive set of lessons from those transactions should be extracted in order to rejuvenate the securitization market going forward, as it can be used to support access to finance for key areas such as SME lending.

56. **The authorities should pursue their plan to establish inflation-linked bonds to provide appropriate investment vehicles for pension and insurance companies**. As the government has recently established a framework for private pension funds to encourage voluntary savings and facilitate competition, the need for investment diversity will grow. Additionally, as the authorities are putting together a framework for pension payout phase such as annuity products, the government should pursue its plan to establish inflation-linked bonds to provide the industry with suitable investment vehicles for these products, as already proposed in CMP 2 and BNM's Financial Sector Blueprint (FSBP). With the availability of inflation-linked bonds, annuity providers would be able to focus on longevity risk rather than inflation risk. Inflation linked bonds would also align the incentives of the government, as managing inflation would also mean managing the cost of government borrowing.

III. CONCLUSION

57. **While Malaysia has been successful in developing the bond and Sukuk markets, there is further room for improvement**. This has been recognized by authorities, as some of the issues and measures are already identified in the CMP2 and the FSBP. Particularly, as Malaysia aspires to be a developed market in 2020, the growth and modernization of economy will require long-term financing at all levels. As such, bringing the bond market into a mature and inclusive stage will be a priority. The current market equilibrium presents a risk that certain types of financing needs may not be fulfilled.

58. **The government has played a significant role in facilitating the growth of the market; the role should now be shifted toward encouraging more diversity**. Government interventions may still be needed, but they should be targeted at the missing components of the markets. On the issuer side, explicit and implicit guarantees should be gradually removed; the policy should be replaced by promoting more issuers particularly in the second tier. On the demand side, promoting more competition and removing misperceptions created by government-backed entities would lead to more vibrant market.

59. **Measures to bring the market into a more matured stage should be presented and executed as part of a comprehensive bond market development strategy, in conjunction with broader policy reform.** Many of the measures are interlinked. For example, measures to encourage more diversity on the investor base are interlinked with, among others, pension and insurance sector policy. Some of the measures are also linked to broader policy reform. For example, any measures affecting PNB constituents would likely involve political economic issues, and therefore should be carefully considered. Nonetheless, it is hoped that these measures will help Malaysia achieve its goal to become a developed market in the coming decade.