

Approach Paper

Evaluation of the World Bank Group's Support for Capital Market Development

March 30, 2015

Introduction

- Well-functioning capital markets are an integral part of the financial framework and help support the development of the real sector of the economy. Long-term bank finance is limited in supply, reflecting the difficulty of matching the duration of assets and liabilities and appropriately pricing its risk. Capital markets thus complement bank finance, allowing households and firms to better manage interest rate and maturity risk associated with long-term real sector investments, such as housing and infrastructure. Research provides evidence to support the links between sound financial development, real sector economic growth and poverty alleviation, showing that financial development can disproportionately benefit the incomes of the poorest, thus supporting the twin goals of the WBG, of reducing poverty and improving the lives of the poorest. Moreover, properly channeled finance can help avert instability and incidents of crisis that are known to have severe effects on poverty. A more diverse financial system also tends to be more stable and better able to absorb shocks, providing a financial "spare tire" to firms in case of banking crises. Well-functioning capital markets, that are an integral part of such financial systems, particularly support the achievement of real sector growth in those sectors that require long term finance, such as infrastructure and housing. And local capital markets expand the range of investment opportunities available to local institutional investors, such as pension funds and life insurance companies that have long time horizons for their liabilities.
- 2. Deep and liquid domestic government debt markets support sound budget management and help finance overall economic development, growth, and poverty alleviation in all areas of the real economy. They enable governments to finance their fiscal deficits and manage public debt without exposure to the currency risks associated with foreign borrowing, and at lower costs. Government bond markets strengthen monetary management, provide benchmarks and build yield curves that support the overall financial sector.² Long-term bond markets give valuable information for the conduct of monetary policy. These arguments were clearly stated even prior to the financial crisis, in the G8 (2007) Action Plan for Developing Local Bond Markets

¹ As discussed further in Box 2 below.

² See e.g., Papaiannou, Das, Pedras, Surti and Ahmed (2010), Anderson, Silva and Velandia-Rubiano (2010) and Miyajima, Mohanty and Chan (2014).



in Emerging Market Economies, and reiterated after the crisis, and with more broad based support, in the G20 (2011) Action Plan.³

- 3. More recently the case for developing bond markets, especially project bonds, for infrastructure finance in emerging markets, has received increasing attention. Estimated variously at US\$57 trillion to US\$67 trillion from 2013 through 2030, it is recognized that traditional financing from governments and banks will not be enough to cover these financing needs, even without including social infrastructure. 4 Given their long maturities and stable cash flows, project bonds can help make up the deficit and attract institutional investors. Such capital markets instruments had declined in the years following the financial crisis, but are now making a comeback. The G-20 High Level Panel on Infrastructure has pointed to the critical need to find new mechanisms for leveraging resources for infrastructure projects.⁵ This evaluation is even more timely and relevant as the World Bank Group envisages a scale up of its infrastructure financing activities, as described in its umbrella report on Long-Term Investment Financing for Growth and Development (2013), in the latest WB (2013) infrastructure strategy update FY13-15, and in its recent establishment of a Global Infrastructure Fund (World Bank, 2014). Moreover the most recent Global Financial Development Report, under preparation at the Bank's Research group (DEC), focuses on the provision of long term finance, significantly in the context of capital market development.6
- 4. The development and expansion of capital markets, and indeed financial markets as a whole, is not without risk. Instability may limit the impact of financial development on poverty alleviation. Banking, a central part of most financial systems, is highly leveraged and has been prone to exaggerated credit cycles that sometimes end in crisis, and there are some signs of increasing global levels of leverage and possibly nascent bubbles in the real economy. The greater role of capital markets in more developed financial systems can diversify some risk away from banks, dampening overall economic effects of shocks to the banking system. Yet, in a changing world, technological shifts have introduced new forms and delivery mechanisms of financial services that bear their own risks. And dynamic changes in global financial structure, in a post-crisis environment, including regulatory shifts in the banking system, could shift risks towards 'shadow banks' and capital markets, and towards emerging as opposed to developed markets.

³ Underpinning the G8 Action plan was a BIS (2007) report by the Committee on the Global Financial System, discussing the benefits of local currency bond markets for financial stability.

⁴Garcia-Kilroy (2014), based on estimates from Ernst & Young (USD 57tn); the OECD (USD 50tn), and the McKinsey Global Institute (USD 57-67tn).

⁵ G20 High Level Panel on Infrastructure (2011).

⁶ World Bank (2014).

⁷ Credit derivatives are a recent example. Certain market processes, such as high frequency trading, now increasingly present in the larger middle income countries, also carry own risks of exacerbating volatility.

⁸ 'Shadow banking' refer to structures that are not new, nor are they illegal, untaxed, or unmonitored. Rather they use instruments and legal structures deliberately designed to fall outside the traditional purview of regulators. While these complex structures may use capital markets as financial



- 5. Such areas of potential risk underscore the need to be aware that extrapolation from the past may not be the most reliable guide for a future road map and further highlight the importance of governance and regulation. The role of capital market development must be viewed against the backdrop of a given country's overall financial framework and its levels of leverage. If capital markets are to serve the economic welfare of all economic segments, including small entrepreneurs, the balance between the developments of different segments of capital markets must also be taken into account.
- 6. In this evaluation, the Independent Evaluation Group (IEG) will assess the World Bank Group's support for capital market development, against the backdrop of overall financial system development, and support for poverty alleviation. This evaluation will (i) examine the nature of all forms of support extended by the World Bank, and International Finance Corporation (IFC) to capital market development; (ii) identify the extent to which the World Bank Group strategy for capital markets development supported priority challenges and the extent to which it met these challenges; and (iii) draw lessons to help build a strategic picture of the Bank Group's future approach to capital market development, including the overall balance between support to different segments of the market, and links between capital market development and overall financial system development, in a dynamic context. 9
- The scope, issues, and questions for this evaluation were identified in an independent manner, following a broad-based consultative process across the World Bank Group. This process covered consultations with a range of persons in the Finance and Markets global practice, beginning with senior management and advisors, and a range of operational departments. The latter included, in particular, the WBG Capital Markets unit (persons responsible for government and corporate bonds, equities market development, corporate governance and infrastructure finance). Another core unit consulted was the Non-Bank Financial Institutions unit including persons working on housing markets, pensions and insurance. In addition, IEG met with the Payments Group, the Financial Sector Policy and Risk Management unit (that inter alia manages the Financial Sector Assessment FSAP-program). The team also met with the administrators of the Financial Sector Reform and Strengthening (FIRST) program. Within IFC operations units, consultations were held with the housing finance and corporate governance groups, and with the

intermediaries for transactions that would likely have previously involved banks, this is primarily a challenge for regulators in the most developed financial markets.

⁹ Some recent arguments suggesting a link between capitalism, inequality and instability, e.g., Piketty (2014), are not linked to capital markets. His argument is against the tendency of capitalism, in general, to concentrate wealth in the hands of capitalists. There is not a single variety of capitalism and some countries, for example, Sweden and Japan, operate capitalists systems with well developed capital markets and low inequality. Rajan and Zingales (2009) also recognize the inherent problems with capitalism, but argue that financial markets offer a way out of poverty when they are well managed and developed. Galbraith (2014) offers four factors impeding a return to normal growth after the 2008 crisis, among which is the breakdown of law and ethics of the financial sector, but he does not differentiate between the financial sector and capital markets.

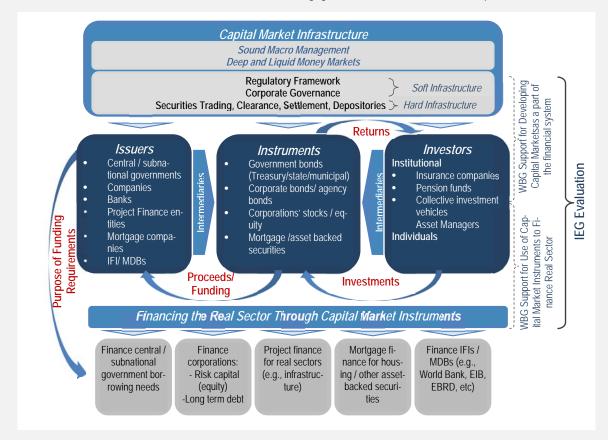


Corporate Strategy and Investment departments. Across the WBG, the team met with the respective Treasury departments of the World Bank and the IFC, and also met with MIGA management (Attachment 6).

Box 1. What are Capital Markets and What is Needed for their Development?

Capital markets are financial markets for the buying and selling of securities, whether long-term debt, equity, or asset backed securities, either publicly or privately issued or traded. Capital markets thus provide an interface for suppliers and users of capital to come together, allocating capital according to market-based pricing of risk and returns, and in the process providing important public goods (information, transparency, and risk management for investors). Such markets enable the channeling of individual savings towards long-term productive investments, thus supporting *issuers* - companies or governments - to raise long term capital. These securities encompass:

- Bonds or debt instruments that earn investors a regular 'coupon', allowing them to become creditors to the issuer;
- Equity instruments or stocks and shares, which permit investors to acquire ownership of companies and thereby share risk
- Bundles of claims, such as asset-backed securities mortgage backed securities are an example.



On *primary markets*, issuers of new stocks or bonds - enterprises or governments- sell these securities to investors via an underwriting process. In *secondary markets*, existing securities are sold and bought among investors or traders, usually on an exchange, or over-the-counter. Liquid secondary markets increase the willingness of investors to buy securities, as they can sell their investments when desired. Securities markets *investors* can include, in particular, institutions such as pension funds and insurance companies that have large pools of assets to be invested for long periods. Less commonly, they can also include individuals, mutual funds, or investment banks trading on their own behalf. Entities hosting securities trading systems include exchanges or over-the-counter markets, and the latter may be intermediated by networks of brokers or primary dealers. Capital market instruments are generally deemed to have maturities of at least a year; instruments of shorter maturity,



known as *money market* instruments (overnight paper on the interbank market, or short term Treasury bills), provide the liquidity to support the development of secondary markets.

Sound and stable macroeconomic management – low inflation and stable interest rates - is critical for the development of sound capital markets. Governments must adopt a clear issuance strategy and debt management framework, so that investors can anticipate a reliable supply of fixed-income securities, and access the liquidity needed to finance capital market transactions. Second, a solid legal and institutional environment especially with regard to information disclosure requirements is also critical because it provides the basis for the protection of investor rights, including minority interests. Equity holders need to have voting rights to exert control over management and the board, and bond holders need to have the rights to claim collateral when defaults occur. And adequate mechanisms to enforce contracts are needed. Sound financial infrastructure is a third requirement – including the physical underpinnings of trading systems and securities clearance and settlement arrangements, here referred to as 'hard' financial infrastructure, as well as the 'soft' infrastructure such as the legal and regulatory apparatus and industry to process, evaluate, and validate the information being produced and used by the market. Finally, markets need critical size, including deep money markets, as in their absence, there will be insufficient liquidity for trading and market development.

Source: IEG

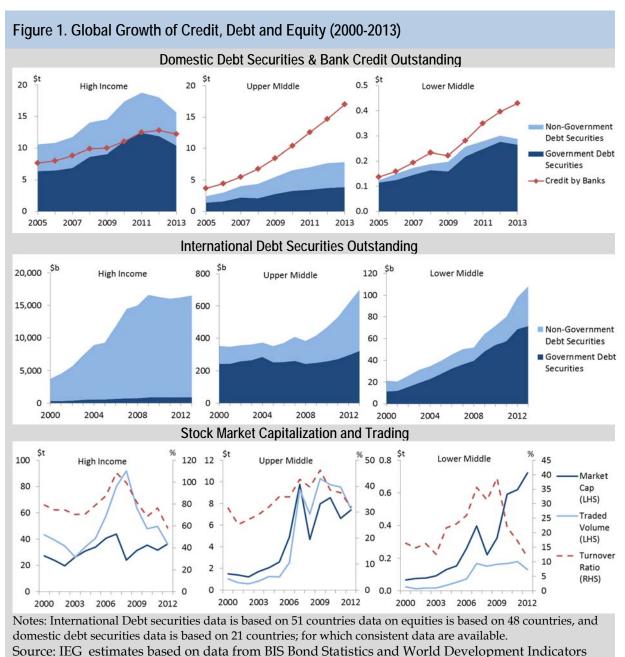
Background, Context, and Motivation

CAPITAL MARKET DEVELOPMENT IN WBG CLIENT COUNTRIES (2005-2014)

- 8. During the period covered by this evaluation, capital markets, especially debt markets, grew rapidly in WBG client countries, much more so than in high income countries. International debt issues by lower middle income countries have grown particularly rapidly. However, both domestic debt issues and international debt issues by lower and upper middle income countries remain dominated by government securities. Domestic debt issues remain lower than bank credit, which is growing at a faster pace than the debt market, indicating an overall increase of leverage even if not from capital markets (Figure 1).
- 9. Stock markets have grown too, but the pace of growth has faltered and become erratic after the global crisis. And although the numbers of listed companies has grown perhaps most rapidly in lower middle income countries, trading volumes have not kept pace with market capitalization, and turnover ratios (trading value as a proportion of market capitalization) have in fact declined. The evaluation will attempt to weigh the potential benefits for greater encouragement towards support for equities markets that among WBG client countries have shown poor recovery, relative to further support for debt market development.¹⁰

¹⁰ The traditional problem for emerging economies was a lack of credit. In some emerging economies, this is no longer the case as indebtedness has increased significantly. There is also some emerging evidence that easy global liquidity conditions may have led to a surge in some emerging market firms' bond issuance in international markets, largely for refinancing and securing lower rates and longer maturities. The shift towards safer maturity structures may have come at the expense of a leveraging-up in foreign-currency-denominated financial debt and there are trade-offs between these risk structures (Bastos et. al 2015).





CAPITAL MARKETS, ECONOMIC GROWTH AND POVERTY ALLEVIATION

10. Over the last two decades research has established that financial development spurs economic growth and can disproportionately benefit the incomes of the poorest. Much of the research has focused on the evidence that links overall financial development to economic growth and poverty alleviation (Box 2), and their cumulative findings provide strong evidence of positive linkages. More recent work has also examined the links between financial development and the poorest, and again, demonstrates positive results.



- 11. There has also been considerable research on the topic of the relative contributions of bank-based financial systems, as compared to capital markets based financial systems, as drivers of growth. The accepted consensus over the past fifteen years or more is that there is no specific support for either the bank-based or the market-based approach. There is a complementarity between the approaches, and their relative benefit is related rather to the overall level of development of markets and financial infrastructure, including the ability of the economic system to reduce information asymmetries. As discussed in Box 2, as countries develop they increase their demand for the services provided by securities markets relative to those provided by banks. Bank-based structures tend to dominate in the early stages of growth, but the relative importance of banks decreases as economies develop.
- 12. Financial instability and incidents of financial crisis can also have severe effects on poverty. During the course of the 2008/09 financial and economic crisis, it was estimated by the World Bank that 28 million persons lost their jobs after 2007, and an additional 53 million persons were plunged into poverty in the developing world. Research also shows that financial development helps the poor in countries with stable financial systems. However instability may limit the impact of financial development on poverty alleviation. Available research does not so far fully reflect the evolution of financial markets in recent years, including greater market instability and volatility, which prompts the need for researchers to raise additional questions and further probe the links between choices adopted regarding the development of different segments of financial markets, and poverty alleviation, in a dynamic and evolving world. Property world.

Box 2 Financial Sector Development, Capital Markets, Economic Growth and Poverty Alleviation

FINANCE AND GROWTH

Financial systems help to allocate capital, mobilize and pool savings, monitor investments, facilitate risk diversification and management, and ease the exchange of goods and services (Levine 2005). Evidence of a causal link between *financial depth* and economic growth was traced by King and Levine (1993), in a multi-country study that showed that financial development *predicts* long-run economic growth; a finding that remains robust in more recent scrutiny (e.g., Panizza 2013). While this initial assessment of the link between finance and growth was focused on banking as the measure of financial sector development, Gerschenkron (1962), Allen and Gale (2000) and Demirguc-Kunt and Levine (2001), provided theoretical and empirical reasons to look at the financial sector beyond banks as a driver of growth. Beck and Levine (2005) expanded the analysis to include stock markets and found that the size of the banking sector and stock market development were both positively related to economic growth. Extending this further, Fink, Haiss and Hristoforove (2003) found that in addition to banks and stock markets, bond market development also influences economic activity.

Levine (2002, 2005) based on an empirical examination, shows that classifying countries as having bank-based versus market-based financial systems is not very fruitful. Although overall financial development is robustly linked with economic growth, there is no specific support for either the bank-based or the market-based view. As pointed out by IEG (2006a) 'Research on the best mix of financial institutions, in terms of bank-based systems versus market-based (capital markets), shows a striking

¹¹ Ötker-Robe and Podpiera (2013) review the social impact of financial crises.

¹² Note however some very recent work in this area including Arena et. al., (IMF, 2015).



lack of results. Rather, it is the overall level of financial sector development, regardless of which structure dominates, that matters for growth. Thus, whether to promote the establishment or expansion of capital markets in a country will depend on the circumstances, including the ability of the country to reduce informational asymmetries.'

Studies also showed that financial depth influences not just the level of economic activity, but also the nature of real sector activity, and the industrial structure of an economy. Capital market development encourages industries that need external finance (Rajan and Zingales1998), Demirguc Kunt and Maksimovic (2000) also show that stock market development is more related to the availability of long term financing, whereas banking sector development is more related to short term finance. While Beck, Demirguc-Kunt, Laeven and Levine (2004) suggest that financial development, overall, disproportionately helps small firms, Didier and Schmukler (2013) point out that larger firms, especially, benefit from stock and bond market access in some prominent emerging economies.

FINANCIAL SECTOR DEVELOPMENT & CAPITAL MARKETS

The extent to which *financial structure* (bank-based versus market-based) affects economic growth has also been explored, and the implications of financial structure on growth. Cross-country empirical research (reported by Levine 2005) finds fairly consistently that there is no single preferred system, even for financially-dependent industries, or firms with external financing needs. Overall, the conclusion from the literature to date is that while financial sector development is good for growth, the financial structure adopted by a country is less important. However, Demirguc-Kunt, Feyen and Levine (2011) find that as countries develop they increase their demand for the services provided by securities markets relative to those provided by banks. Bank-based structures tend to dominate in the early stages of growth, but the relative importance of banks decreases as economies develop. Most recently, Valickova et. al (2014) suggest that stock markets may support faster economic grown than other financial intermediaries. However, at a practical level, credit institutions and capital markets are not strictly independent, especially in emerging market economies, where banks often tend to be early issuers as well as buyers of corporate bonds, benefitting from the term transformation and hedging opportunities offered by capital markets.

FINANCE AND MACROECONOMIC VOLATILITY

The financial sector has played a contributing role in many, if not most, of the economic crises that have taken place in recent years. The implications of such events on both growth and poverty are significant. Even before the 2008 crisis, Easterly, Islam and Stiglitz (2000) found that the development of the financial sector as measured by both bank credit to the private sector and stock market traded value are negatively related to macroeconomic volatility. But they also pointed out that while bank credit is negatively related to macroeconomic volatility, the relationship is not linear; above a certain level of credit, financial sector development adds to macroeconomic volatility. This is similar to the finding of Arcand, Berkes and Panizza (2012), who find that financial sector development, defined in this case as private credit to GDP, is positively related to economic growth, until it reaches 100 percent of GDP, beyond which it has a negative impact.

Caprio and Klingebiel (2003) showed that fiscal costs of financial crises often exceeded 20 percent of GDP. Bordo et al. (2001), determined that twin (banking and currency) crises have led to cumulative GDP losses on the order of 18 percent, and Halac and Schmukler (2004) discuss the significance of regressive wealth transfers unleashed by financial crises. During the course of the 2008/09 financial and economic crisis, it was estimated by the World Bank that an additional 53 million persons were plunged into poverty in the developing world. Banking, a central part of most developed and developing financial systems, is highly leveraged and has been prone to exaggerated credit cycles that sometimes end in crisis. But historical evidence informs us that in fact financial crises are more frequent in developing than in developed countries, likely due to better macroeconomic policy, regulation and supervision in the latter (Reinhart and Rogoff 2009). The greater role of capital markets in more developed financial systems diversifies some risk away from banks, dampening overall economic effects of shocks to the banking system.

FINANCE, POVERTY AND INEQUALITY

Does financial development help the poor through better resource allocation and more information? Or does financial development inordinately help the rich, because the poor rely mostly on informal networks and family? Beck, Demirguc-Kunt and Levine (2007) and Clarke, Xu and Zhou, (2006) find that that financial development, measured by growth in private credit, disproportionately boosts incomes of the poorest quintile of the population and reduces income inequality. Akhter and Liu (2010), using a broader measure of financial development that includes non-bank financial institutions, find that financial development



helps the poor in countries with stable financial systems. However instability may limit the impact of financial development on poverty alleviation; a caution echoed by Jeanneney and Kpodhar (2008). Perez-Moreno (2010) also points out that it is the moderately poor that clearly benefit. Kim and Lin (2011), using measures of both bank and stock market development, also find that the relation between financial development and inequality depends on the development level the country has reached. Studies on individual countries also exist, though most use bank-based measures of financial development. Ayyagari, Beck and Hoseini (2013) also find that financial development is strongly associated with poverty reduction, a result echoed for Kenya by Odihambo (2010) and for Pakistan by Imran and Khalil (2012), using bank based data. Jalil and Feridun (2001), in a study on China which uses a wider spectrum of financial development variables, also finds that increased financial development will reduce income inequality in China. Nevertheless, the effect of finance on shared prosperity has not been studied exhaustively. And studies that isolate the effects of capital markets as a component of the financial system, and poverty, are rare.

Source: IEG Review

13. Beyond the research, there is direct evidence of links between capital market access and poverty, and the evaluation is expected to yield further such examples, based on an underlying theory of change that links the eased provision of financing to institutions that support the financial needs of the poor. At least three microfinance institutions have listed so far on public equity markets: in Kenya, Mexico and India. One international MFI holding company, Procredit, has issued public equity in the international markets. And securitizations of microcredit loans have also taken place - which amounts to the conversion of a portfolio of microfinance loans into securities, which are then issued to investors, often institutional investors. Microfinance institutions have also issued bonds, both private and public placement. In the area of housing finance, the establishment of mortgage liquidity facilities can enable mortgage lenders to reach out to a wider segment of the population, including lower income citizens. And sound and diversified portfolios for pensions and insurance companies help to safeguard the assets of the elderly and the vulnerable.

THE WORLD BANK GROUP'S EVOLVING STRATEGY TOWARDS CAPITAL MARKET DEVELOPMENT

14. At the IFC, the importance of the financial sector in general, and specifically, capital markets has long been recognized, and it remains prominent in IFC's strategy. The Capital Markets Department was established at IFC as a jointly funded WBG department in the 1970s with the mandate of providing technical assistance, advisory services and institution building investment. Its initial investments included several stock exchanges, its technical assistance to Korea and then the launching of a Korea country fund helped to put the country on the investment map. IFC's Emerging Market Growth fund was a pioneering success despite early skepticism. IFC helped the emergence of a new asset class, as well as the most comprehensive source of



emerging markets stock market data in its Emerging Markets Database, and additionally, the construction of early emerging markets indices.¹³

- 15. IFC has maintained a strong focus in most of these areas during the period under review (2004-2014), although there may have been some shifts in emphasis of different elements of its support.¹⁴ Its Strategic Directions (2004) identified strengthening the focus on frontier markets, as well as maintaining the focus on local financial markets development, as among its core priorities. Promoting local currency financing remained a strategic focus in the Strategic Directions FY08-10 document as well, in three ways: working alongside the World Bank to create supportive policy, legal and regulatory frameworks; investing and providing technical assistance to financial institutions; and helping build the necessary financial infrastructure for such institutions to operate effectively. IFC (2008) produced an Advisory Services product review specifically for securities markets, and expanded this in IFC (2011a and b) in the form of a more comprehensive capital market development strategy. The strategy reaffirmed support to issuers, intermediaries, investors, and the development of market infrastructure, with the building of government and corporate bond markets (the latter especially for real sector engagement), and a re-engagement in equities markets, with a focus on smaller companies, as key elements. Inter alia it suggest a low priority for support to broker-dealers, rating agencies, and investments in exchanges. It also affirmed the need for greater coordination with the IFC Treasury. At a country level, it pointed out the need to move away from one-off engagements, towards a comprehensive, 'deep dive' approach. In parallel, IFC's Treasury recognized the need to provide local currency financing for it clients, and has moved beyond loans to bond issuance, derivatives and swap products as well as to structured finance and securitization through guarantees and risk sharing facilities (IFC 2010, and IFC 2014).
- 16. In IFC's most recent strategy, the 'Road Map for 2015-2017;' IFC reiterates the focus on frontier markets, as well as on the need to develop local capital markets, especially in the context of infrastructure and real sector finance. It also emphasizes the need to leverage its investments to promote good corporate governance and environmentally and socially responsible investment.
- 17. At the World Bank, there have been fewer formal articulations of financial sector strategy. The most recent, dating from March 2007, is essentially a continuation of an earlier strategy note from the year 2000, which emphasized the continuing central role of the Bank in providing systemic policy advice and lending support to governments. It also points to the need to distinguish WB long term structural support, based on its analytical and diagnostic capability, from the

¹³ The IFC's Antoine van Agtamel has been credited with coining the term 'emerging markets' in the 1980s; later described in his pioneering volume 'the Emerging Market Centrury' (van Agtamel, 2007). Barger (1998) documents the IFC's early contributions in this area.

¹⁴IEG has found only a limited number of interventions directly concerned with equities market development across the WBG, numbering around 19.



IMF's focus on stability, and IFC's strength in market intelligence. With respect to capital markets, specifically, it discusses an agenda that continues ongoing diagnostic work, especially FSAPs, as well as, in particular, the promotion of local currency bond markets, the deepening of Bank advisory work for financial sector aspects of pensions systems, catastrophic insurance products, low-income housing, and building financial infrastructure, especially, payments systems. A new financial sector strategy is under preparation and may be available in FY16. Useful inputs from the present evaluation are expected to feed into that and close informal discussions will be maintained.

- 18. **Despite limited formal strategies, there has been an evolution of the role of the WB in the global financial sector architecture.** Some changes are reflected in the periodic Board documents reviewing the FSAP program.¹⁵ Especially after the global crisis, there was an increase in the role of the IMF in surveillance activities (reflected in the role of the Fund as a member of the Financial Stability Board) and a corresponding increase in the role of the WB in the structural development aspects of countries' financial systems.¹⁶ These changes emphasize the role of the Bank as a key institution for support to financial systems of poorer countries.
- 19. Support for capital market development in client countries has been implicit in the setting up of internal WBG organizational structures underpinning the importance of this area of work. Thus the joint WBG capital markets department was established in 2007, which has incorporated both WB and IFC staff. And at the end of 2014, both IFC and the WB have articulated

¹⁵ However on the FSAP program, specifically, there have a series of strategic papers and stocktakings. The FSAP program began in 1999 as a joint IMF-World Bank response to the Asian financial crisis. IMF-World Bank Financial Sector Assessment Program (FSAP) (SM/99/116 and SecM99-371) provides a general early description of the FSAP; the October 2002 Progress Report on the Bank-Fund Financial Sector Liaison Committee (SM/02/308 and SecM2002-0507); World Bank and IMF Staff paper (2003) (which details all reports on the program to date); and an IEG stocktaking (IEG 2006). More recently, WB (2009) and SecM2009-0416 (2009) describes strategic changes to the program proposed following the global crisis, with greater integration of the program into the IMF's surveillance work, and more emphasis on development aspects of financial systems at the World Bank. In the latest review (SecM2014-0419, September2014) it describes the fact that the IMF and WB conduct independent FSAP program reviews, though still coordinated through the joint Bank-fund Financial Sector Liaison Committee (FSLC). The Bank paper focuses on the FSAP as a vehicle to address the needs of emerging markets and developing economies (EMDEs), while the fund paper focuses on the FSAP as a key pillar of financial sector surveillance. The FSAP plays a pivotal role for the financial sector work at the Bank, which in turn is an essential component for achieving the twin goals of reducing extreme poverty and sharing prosperity. As the cornerstone of financial sector analysis work at the Bank, the FSAP provides an analytical framework for operations and technical assistance (TA), and a vehicle for policy dialogue. ¹⁶There have been institutional shifts in terms of the guardians of the architecture of financial stability. With the formalization of the Financial Stability Forum in 2009, in the form of the FSB (Financial Stability Board), and the expansion of its membership, to include the G20 and the IMF as a Board member, the orientation of the WB towards low income countries was further emphasized. Discussants of the new politics of international financial regulation, including the role of the FSB, the FSAP program and the IFIs, claim that the FSB still lacks powers of enforcement. (Knaack 2014, Helleiner 2011).



the need to integrate relevant aspects of the work of their Treasury departments with the overall support given to financial sector development.

20. Although the articulation of a Bankwide strategy towards the role of capital market development in the financial sector was limited, individual country strategies were nevertheless spelled out, albeit at a technical level, in the context of countries' financial sector diagnostic work, especially in the FSAP program (Box 3). The FSAP tool, developed and implemented jointly with the IMF, permitted the articulation of a strategy towards individual countries' domestic capital markets across a broad spectrum of issues, and enabled their prioritization in the context of an overall financial sector agenda.

Box 3 World Bank Strategic Advice to Capital Markets at the Country Level – FSAP Programs

Guatemala September 2014

The FSAP discussed the need for *a new Securities Markets Law* which is seen as a necessary precondition for overall capital market development to ensure enhanced oversight of intermediaries, the exchange, and securities issuers, with special emphasis on debt issuers and mutual funds. As regards the *government bond market*, it identified dematerialization as a top priority as it has hindered the development of a secondary market and the creation of a yield curve. It also paid attention to the investor side with a review of rules governing institutional investors, recommending a new life insurance tax policy to increase savings.

Saudi Arabia May 2012

The FSAP points out that Saudi Arabia could further strengthen its *institutional investor base* and encourages public disclosure of the investment guidelines for pension funds, making greater use of private investment managers, and a reduction of their short-term liquid holdings. The insurance sector is also seen as a potential source of institutional assets with rapid implementation of recent reforms by Saudi Arabia Monetary Agency (SAMA). On *the bond market* side, the FSAP pointed out that fixed income and derivative markets were lacking as government debt markets dried up, corporate bonds have only been issued by three companies, very few derivative products are available. Suggested reforms focus on maintaining a stable volume of government bonds to allow for the development of a benchmark yield curve and a private sector agreement on Sharia compliant transactions.

India May 2013

The update points out that regulatory and tax distortions have increased the use of money market funds as an alternative to bank deposits, which can weaken the transmission of monetary policy. A reduction in the Statutory Liquidity Ratio (of Banks, holding government securities) and reducing the amount of qualifying securities that can be accounted for as held to maturity are prescribed to improve liquidity in the secondary market for *public bonds*. These efforts combined with improved *investor protection* and strengthening *securities clearing and settlement* systems will help expand *the corporate bond market* and may help India meet the financing needs for its ambitious infrastructure program.

Nigeria March 2013

Nigeria's post-2009 banking crisis FSAP describes a multifaceted strategy, touching on investment guidelines for the pension sector, privatization of state assets to reenergize IPO activity, and a *comprehensive policy framework for the private equity industry including demutualization of the Nigerian Stock Exchange*. On the government Debt Management Office side, it urged a *focus on building a yield curve*, as well as introduction of pre and post trade information systems in the fixed income market.

Source: IEG, FSAP program.



21. The mission of MIGA is to promote foreign direct investment into developing countries. MIGA fulfills its mission by providing political risk insurance guarantees to private sector investors and lenders. MIGA has no articulated strategy specific to capital market development. Some MIGA projects have a capital markets dimension, although these are very limited in number. These guarantees protect investments against non-commercial risks and can help private investors obtain access to funding sources with improved financial terms and conditions. Over the ten year period reviewed, some half dozen such projects were identified. Although individually of interest to the discussion, their total volume is small (see Attachment 5 for details). Given its limited involvement, MIGA is excluded from the scope of the evaluation.¹⁷

WBG Support for Capital Markets: Advisory Services, Lending, Investments, and Treasury Operations

- 22. Capital market support at the WBG has been provided for the following areas:
 - Securities issues and the development of capital markets instruments;
 - Development of an investor base, especially institutional investors;
 - Development of 'hard' and 'soft' market infrastructure including policy and regulation;
 - Support for the use of capital markets instruments for financing real sector investment.

and by the following activities:

- WBG Analytic and Advisory Services;
- WBG Loans and Investments;
- WBG Treasury Operations.
- 23. A brief discussion of the evolution of *analytic* work in each core capital market segment within the WBG follows, traced against the backdrop of the evolving internal and external agenda with regard to technical support, advisory services, as well as research. This is followed by an overview of WBG *operational support* to capital market development, which followed the foundations laid by core analytic work. The present overview of WBG operational support is complemented by more detailed portfolio analysis of each segment in Attachment 5.

WBG ENGAGEMENT IN CAPITAL MARKETS - EVOLUTION AND EXPERTISE

Issuers and Instruments – WB and IFC Support to Bond and Stock Market Development

24. Parallel to the establishment of IFC's capital markets division, and DEC-led analytical research on the relative benefits of bank-led versus market led systems, the WB's financial sector anchor also began to build up core expertise on key segments of capital markets, with early

¹⁷ MIGA has been the subject of a comprehensive recent IEG evaluation, although support to capital markets was not its focus. See: MIGA's Financial Sector Guarantees in a Strategic Context (IEG, 2011).



emphasis on local bond market development.¹⁸ Strong external partnerships, notably with the IMF and with the OECD, were established. The World Bank and IMF (2001) provided a first guide to developing government bond markets.¹⁹ Soon after, a series of annual conferences on government debt markets were jointly initiated, together with the OECD.²⁰ More market specific studies followed in the period under review, including a 12 country World Bank/IMF pilot program on debt management and public bond market development (World Bank (2007a and 2007b), which emphasized the uniqueness of each country case and the length of time needed for results.²¹ And most recently, the OECD WBG and IMF jointly prepared a diagnostic framework and an action plan for local currency bond market development (OECD 2013).²²

25. Meanwhile, factors affecting bond market development were also explored by the WB Treasury. Sienaert (2012) examined the role of foreign investors in local government debt markets. From the research perspective, Claessens, Klingebiel and Schmukler (2013) show that institutional and macroeconomic factors are related to the development of government bond markets, as echoed, external to WBG, in Rojas-Soares (2014) and Laeven (2014). And at present, the forthcoming DEC Global Financial Development Report (2015), focused on developing markets for long term finance, also reviews WBG efforts at supporting capital market development in client countries.

-

¹⁸ Several relevant works were produced, in this period, often jointly contributed to or managed. Dalla et al (1995), in the WB EAP department, presented a pathbreaking review of nine emerging Asian bond markets. Soon after, the OECD organized a review of specific issues associated with capital markets in transition economies (OECD 1997). In-depth individual country studies were undertaken (e.g., Kumar, 1997a), together with strategies for bond markets for infrastructure finance, including subnational and municipal finance (el Daher, 1997, Gray et. al., 1997, Dailami, 2003, Freire and Peterson 2004). Harwood (2000) discusses, in a conference edition, the benefits of bond markets and their establishment. More broadly, Harwood and Smith (1997) address the sequencing of capital markets reforms, Kumar et. al (1997b) and Carmichael and Pomerleano (2002) discuss the regulation of the non-bank financial sector and Litan, Pomerleano and Sundararajan (2003), in a joint WB / IMF / Brookings conference, recognized the role that local capital markets play in mitigating risks associated with cross-border capital flows.

¹⁹ Reflecting the widespread view at the time that an important reason for the Asian crisis was the relatively poorly developed local capital market, leaving these countries dependent on external capital. Interestingly, during the 2008 crisis the EBRD recognized the lack of domestic financial markets as a key cause of volatility in its client countries (EBRD 2010, 2014).

²⁰ The joint OECD-World Bank -IMF Global Bond Market Forum (Blommestein and Harwood, 2011). ²¹ Bakker and Gross (2004) and Iorgova and Ong (2008) have examined EU accession countries'capital markets development. An in-depth analysis of the Brazilian public debt market was prepared jointly by the World Bank and the Brazilian government (Silva et al, 2007). Sophastienphong (2008) investigated South Asia's bond markets, and Garcia-Kilroy and Silva (2011) examine government bond markets in five countries in MENA.

²² These build upon former OECD has a long tradition of involvement in government debt management, viewed by some as a cornerstone of any financial sector. Its original Green Book on public debt management was first published in 1983, revised in 1993 and again in 2002, providing an overview of trends in the markets and a discussion of important policy issues.



- 26. Corporate bond markets also became the focus of attention.²³ The IMF Financial Stability Report (2005), discussed relevant challenges and policy issues, followed by WBG research on the regulatory framework, impediments, and domestic vs. international issuance.²⁴ At the country level, the World Bank undertook a comprehensive review of the corporate bond market in India (Marathe, WB 2006). Recent attention in the non-government bond area is shifting towards the development of project bonds, especially for infrastructure financing, given their prospective benefits in terms of cost of finance and complementarity with other sources (Garcia-Kilroy, 2014, draft).
- 27. Perhaps reflecting market evolution, less attention has been paid to the development of stock markets at the WBG of late, although there was a rich body of WBG research in this area a decade or more ago, including the impact of market restrictions on share issuance and trading.²⁵ A new interest is emerging however in the financing of small firms in emerging markets which includes a review of stock markets for this purpose (Harwood and Konidaris, 2014). And overall securities market regulation is a foundation upon which most capital markets development is based, as recognized in Carvajal and Elliott (2007), who discuss issues of enforcement and compliance in emerging economies.²⁶

Issuers and Instruments – WBG Treasury Support to Capital Markets - Local Currency Bond Issues

28. Together with other supranationals, the World Bank Group has also undertaken local currency bond issues through its Treasury departments. However, these were undertaken pri-

²³ Empirical research documenting the impact of capital markets development on firms remains limited. As early as 2001, Gallego and Loayza show that in Chile, firm investment became less constrained as capital markets developed. Most recently, Didier and Schmukler (2013) suggest that while beneficial, typically the larger firms have gained the most in India and China.

²⁴ See, e.g., Endo (2008), Gozzi et al (2012), Loladze (2014).

²⁵ Domowitz, Glen and Madhavan (1997) show that firms segment the market in order to discriminate between different shareholder groups. Also in Mexico, Domowitz, Glen and Madhavan (1998) show that cross-listing shares on international markets brings both costs and benefits that vary by investor class. Primary market issuance activity, the actual raising of capital, is documented in Aylward and Glen (1999), who show a dramatic increase in issuance activity over 1980-1995. Claessens, Klingebiel and Schmukler (2002) examine the migration of listings from emerging markets to international financial centers and document policy factors that increase stock market development. Finally Glen (1995) also looked at issues related to trading infrastructure for securities exchanges, and market microstructures in emerging markets, following early activities of IFC in this area.

²⁶ And in parallel there is increasing recent global acknowledgement of the critical role of equities markets (Kay, 2012).



marily from the perspective of optimizing its own funding, rather than with the focus of developing local capital markets.²⁷ The Treasury departments also contribute through the tailoring of IBRD currency swaps that contribute to the lengthening of maturities in local currencies.²⁸

Box 4. Local Currency Bond Issues by the WBG Treasury – 'Maharaja' and 'Masala' Bonds

Both the IBRD and IFC have been active issuers in the local currencies of client countries for many years. Those issues, which form part of the organizations' overall funding programs, can play an important role in developing the capital markets of those currencies by providing benchmark issues that attract international investors to the currencies and markets without exposing them to credit risk, extending the maturity and helping define a yield curve. Recently, the IFC treasury issued two bonds that illustrate how they can play an important role, both in developing the markets and in providing clients with access to local currency funding.

In September 2014 IFC issued an onshore Indian rupee bond, setting an international triple-A benchmark for that market. The IFC Maharaja bond, as onshore issues by foreign issuers are called, raised 6 billion rupees, or approximately \$100 million, from international and domestic investors. There are four tranches of the bonds, with maturities ranging from 5 to 20 years and, for the first time, the five year and ten year tranches were both priced below the comparable Indian government bond, reflecting large investor appetite for IFC credit. The bonds will be listed on India's National Stock Exchange and all proceeds from the bonds will be used for infrastructure investments in India, allowing IFC to provide local currency credit to its clients without exposing itself to exchange rate risk.

In November 2014 IFC issued a 10-year 10 billion Indian rupee-denominated bond (equivalent to \$163 million) in London, the first rupee-denominated bonds listed on the London Stock Exchange. These so-called Masala bonds, named by IFC as the first issuer, will be used to fund infrastructure projects in India and are the longest maturity rupee-denominated bonds in the offshore market. The bonds yield 6.3 percent, about 190 basis points below a comparable Indian government bond, reflecting the perceived credit quality difference between the two issuers. The investors are mostly European institutional investors who are interested in IFC credit quality combined with the currency exposure that the bonds provide.

Sources: WB and IFC Treasuries, IEG

Issuers and Instruments - Supporting Real Sector Financing through Capital Markets

29. Both the Bank and IFC have tried to support the financing of certain real sectors of the economy through the use of capital markets instruments. IFC projects across a variety of sectors have introduced structured financing arrangements that encourage the use of capital market instruments and have supported bond issues for project financing though credit enhancements and guarantees. These have helped project financiers to access markets on better terms. In the case of the WB, such advice and such guarantees have been offered notably in the area of infrastructure

²⁷ Supranational bond issues in local currencies were surveyed for the ADB and IDB in Garcia and Dalla (2005), and a broad based survey of supranational bond issues was undertaken by Wolff-Hamacher (2007). BIS (2007) makes a case for local currency financing. More recently EBRD Treasury (2014) summarizes its perspectives on local currency issues. Herrera-Pol (2014) summarizes the WB Treasury position, and IFC's perspective is discussed in IFC (2010) and in IFC's Local Currency brochure (undated).

²⁸ IBRD Treasurers also advises on the management of sovereign wealth funds; however sovereign wealth management is not necessarily related to the development of local capital markets, and is thus outside the scope of this evaluation.



finance. The WB has also offered advisory services on project bonds, though until recently, interest in this area waned after the financial crisis.²⁹ In addition, some recent Treasury programs provide support for the financing of programs in areas such as environment in particular, but also, other areas of 'social impact investment' through bond issues that are linked to an underlying portfolio of operations in these areas.³⁰ Box 5 describes recent WBG trends in the provision of environmental finance through 'green bonds.'

Box 5. Support to the Real Sector by the WBG Treasury: Green Bonds and Theme Bonds

In 2008 the World Bank launched the Strategic Framework for Development and Climate Change to help stimulate and coordinate public and private sector activity to combat climate change. IBRD and IFC green bonds are an example of the kind of innovation the WBG is trying to encourage within this framework.

The WBG green bonds raise funds from investors to support WBG investments for projects that seek to mitigate climate change or help affected people adapt to it. The product was designed in partnership with a Swedish bank (SEB) to respond to specific investor demand for a triple-A rated fixed income product that supports projects that address climate change. Pioneered by the EIB in 2007, the World Bank has raised \$6.4 billion through 67 green bonds in 17 currencies since its inaugural issue in 2008. Separately, IFC has issued more than \$3.5 billion in green bonds. Globally, the green bond market from all issuers surpassed \$20 billion in 2014.

Green bonds have been embraced by institutional and retail investors with a strategic focus on climate change issues and the issuance of these bonds is seen as a way to engage these investors who might otherwise not invest in WBG bonds and to build a market for private financing for climate change-related investments.

World Bank and IFC green bonds support climate investments across a range of sectors, including renewable energy installations, energy efficiency projects, new technologies in agriculture and forestry that reduce greenhouse gas emissions, as well as financing for forest and watershed management, and infrastructure to prevent climate-related flood damage and build climate resilience. World Bank green bonds are supporting 50 projects in 20 countries, including an eco-farming project in China that converts methane gas from animal waste on rural farms to electricity. IFC green bonds are supporting companies like Mexico's Optima Energia, which helps hotels in Mexico achieve energy savings.

Given the success of green bonds, other types of theme bonds have been placed in the market by the WBG in recent years, including microfinance bonds, banking on women bonds and inclusive business bonds, all of which operate under principles similar to green bonds, but with the underlying projects meeting different criteria.

Sources: WBG Treasuries, IEG

Issuers and Instruments: Asset-Backed and Mortgage-Backed Securities

30. Capital markets can allow both financial sector and non-financial sector companies to securitize assets, possibly expanding the base of both investors and issuers and potentially lowering the cost and increasing the ease of funding. As early as 1998, IFC, IBRD and ADB held

²⁹ Gray et. al., (1997), Dailami (2003), historically, and recently, Bond (2014), Bravo (2014), Garcia-Kilroy (2014) and Inderst and Stewart (2014).

³⁰ See e.g., Afholter (2014), WB Treasury Reichelt et al (2014), the IFC Treasury's 'Investing for Impact' (2013), the WB Treasury's Annual Green Bond Newsletter (the most recent, sixth edition, published in 2014), and Global Capital (Euroweek) March 31, 2014.



a joint workshop on mortgage-backed securities (Watanabe 1998). The use of mortgage-backed securities in emerging markets is summarized in Chiquier, Hassler and Lea (2004), who also provide case studies of their use in several emerging markets. Globalization and its profound implications for housing finance are described in BIS (2006). Zanforlin and Espinosa (2008) track and highlight the key legislative and institutional reforms leading to the development of primary and secondary mortgage markets in Mexico, including the use of mortgage-backed securities. Chiquier and Lee (2009) provide a complete overview of housing finance in emerging markets, including a discussion of mortgage securities. Hassler and Walley (2012) review the experience with housing liquidity facilities, which intermediate between primary mortgage companies and bond markets and have been effective in emerging markets where mortgage-backed securities are not well developed. This rich body of technical experience and research is reflected in a large and diverse portfolio of WBG lending, investments and advisory work related to both mortgage-backed and asset-backed securities.

Investors – Pension Funds and Insurance Institutions

31. The size and structure of the institutional investor community strongly influences capital market development, and the World Bank has long been an advocate of the need for or multi-pillar pension systems, which include employer and employee funded pillars that can provide accumulations for capital markets investment.³¹ Vittas (1996) and Vittas (1999), describe links between pension system reform and capital market development; more recently Castañeda and Rudolph (2010) review issues of portfolio choice for pension funds. Rudolph et al (2007) assess links between the Colombian funded pension system and the related capital market, and Rudolph and Rocha (2007) conduct a similar analysis for Poland. Raddatz and Schmukler (2008) and Opaz, Raddatz and Schmukler (2014) look closely at the investment portfolios of pension fund managers in Chile in order to understand how the development of those funds impacted the capital markets and find that the fund managers are not investing as expected and that there is room for additional reform to change manager incentives to promote capital market development. Stewart (2014) pursues this theme by looking at alternative approaches that could adjust the incentives for pension fund managers, increasing the odds of meeting the needs of retirees. Hinz et al (2010) also examine pension fund financial allocations and performance, but expand the sample to 23 countries in order to improve understanding of what has happened to definedcontribution pension systems. Holzman (2009) focuses on pension systems in Central and Eastern Europe, noting the challenges there owing to a combination of an ageing population and the still relatively undeveloped capital markets. Yermo (2004) argues that capital market development in Latin America has been driven largely by pension regulation.

-

³¹ See especially Estelle James et. al (1994), 'Averting the Old-age Crisis', Palacios (1994). World Bank activities related to pension systems are documented and summarized by Dorfman and Palacios (2012).



32. The insurance industry can also play an important role in the development of capital markets, especially life insurance, which accumulates large pools of capital that needed to be invested for long periods of time. But insurance can play other roles as well. For example, Pollner (1999) explains the role of multilateral development banks in the development of pooled insurance coverage supported by liquidity and credit enhancements, as well as hazard indexed bonds that allow risk to be securitized.³²

Capital Market Development – 'Soft' Infrastructure: Legal Frameworks and Corporate Governance

- 33. Financial market infrastructure encompasses both 'soft' aspects, such as the development of sound regulatory frameworks, or good corporate governance, as well as 'hard' aspects such as building payment systems networks. It should however be recognized that the latter also includes many policy and regulatory issues. Attention has been given to building up the legal and regulatory aspects of capital markets in all 'product' segments identified above. Securities markets regulation has often been an element of the Bank's development policy-based loans (DPLs). Of the approximately 250 DPL operations that took place from 2004-2014, 40 included a capital markets sector code. Of these around 30 are included in the IEG review portfolio.³³ Apart from interventions at the individual country level, the WBG had a significant role in the formulation of global policies in this area, inter alia including the thirty core IOSCO Objectives and Principles of Securities Markets Regulation, and the recent CPSS-IOSCO comprehensive set of Principles for Financial Market Infrastructure.³⁴
- 34. Developing good corporate governance frameworks is a cornerstone of building the 'soft' aspects of sound capital markets infrastructure. Both IFC and the Bank have supported good corporate governance principles, essential for building investors' confidence and deepening equities markets. Corporate governance in a capital market context deals with the way in which holders of corporate stock in listed companies, especially minority shareholders, are fairly treated and protected from predation by management and majority shareholders. The CG ROSC, the Bank's main product for assessing corporate governance frameworks and practices for listed companies, assesses and benchmarks law and practice against the OECD Principles of Corporate Governance (2004), which are the international standard. The OECD, with World Bank support, developed a Methodology in 2006 which forms the basis for the CG ROSC assessment.
- 35. World Bank (1999) announced the establishment of the joint WB/OECD Global Corporate Governance Forum, and described the main issues and current practices. Fremond and Capaul (2002) reviewed 15 corporate governance Reports on Observance of Standards and Codes

³² Lester (2014) provides an overview of WB insurance interventions for growth and poverty reduction, however there is limited specific discussion of capital market enhancement.

³³ There were a handful of (10) DPLs over FY 2004-2014 which had sector content in the capital markets area but were dropped from portfolio in some cases due to the very low weighting to the capital markets conent, or reflecting feedback from consultations on limited relevance.

³⁴ IOSCO is the International Organization of Securities Commissions.



(ROSCs); a framework itself based on the OECD principles. Corporate governance was also the subject of a joint WB/IMF/Brookings conference, (Litan, Pomerleano and Sundarajan 2002) who concluded that there is a need to enhance transparency and contestability of markets. Carson (2003), in a Bank commissioned paper, discussed corporate governance of stock exchanges in the context of demutualization (the transition of an exchange from a not-for-profit to a for-profit form), a topic also discussed by Elliott (2002) in an IMF paper. A recent scholarly overview of corporate governance in emerging markets (Pargendler 2014) points out why this has risen to importance with the increase in prominence of cross border investments, and Grimminger and Di Bendetta, with the World Bank and IFC (2013) summarize attempts made by 8 stock exchanges to create indices of 'good governance' firms. Corporate governance programs at the WBG finance and markets practice encompass banks, SOEs as well as general corporate entities - ROSCs are the standard form of support to the latter, and are the only form of the corporate governance activity included in the WBG portfolio.35 In addition to the CG ROSC as a diagnostic tool, greater emphasis is being placed on moving to implementation through follow up advisory services, especially with IFC. IFC's corporate governance development program today focuses on a number of broad areas, ranging from 'due diligence' of proposed investee companies, legal and regulatory issues, training fora, and public awareness campaigns.

Capital Market Development – 'Hard Infrastructure' - Securities Clearance and Settlement

36. Confidence in the clearance and settlement systems for securities is essential for market development, but these systems have serious problems in some countries. Stehm (1996) explains the role of these systems and describes critical design features, while De La Lastra et al (2000), document the various sets of clearance and settlements standards available and World Bank (2002) develops a methodology for assessing these systems. Guadamillas and Keppler (2002) describe a set of settlement systems in a cross-section of Latin American countries. National payments systems, which allow financial institutions to transfer money efficiently, are also an important part of World Bank work. Listfield and Montes-Negret (1994) and Humphrey (1995) describe these systems and provide advice on their design. These matters are further explored by Bossone and Cirasino (2001), which reflects the Western Hemisphere Payments and Securities Clearance and Settlements Initiative, an effort led by the World Bank. Cirasino and Guadamillas (2004) offer advice on reforming payments and settlements systems. Lessons from the work performed by the Bank, the IMF and other international institutions on payments systems are summarized in World Bank (2006).

³⁵ In practice, some SOEs may also make share offerings on public equity markets (WB 2013).



Capital Market Development – The Sequencing of Interventions

37. Given these multiple different segments of capital markets, that they fit into a larger picture of the financial system as a whole in any given economy, to what extent should there be an element of sequencing or prioritizing of support for capital market reform? There have been some attempts to look at issues relating to the sequencing of financial system development that suggest some broad principles, particularly with regard to the liberalization of capital account transactions and cross border flows, which point out that the prior achievement of sound macroprudential management is suggested to reduce risk and contain volatility. Beyond this, there is some natural sequencing that emerges as a consequence of the nature of different financial instruments. Thus, deep and liquid money markets (for overnight and short term paper) clearly aid the development of bond markets (and longer term instruments); and within such markets, sound primary market structures underpin the development of efficient and liquid secondary markets. Yet it is difficult to go further in prescription; there are no a priori broadly accepted sequences between the development of debt and equity instruments, and their evolution is usually a reflection of broader requirements in the real sectors and in the government. And both require the development of other elements of the capital market, especially including both 'soft' and 'hard' infrastructure; including sound regulatory frameworks, good corporate governance, and efficient financial infrastructure.36

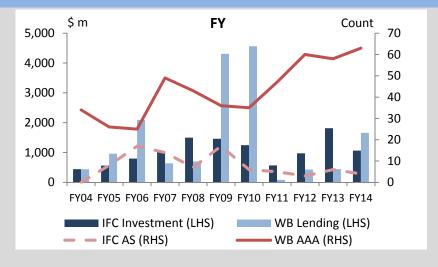
A QUANTITATIVE OVERVIEW OF WBG OPERATIONAL AND ADVISORY SUPPORT FOR CAPITAL MARKETS

38. **An overview of World Bank Group support for the development of capital markets is summarized in Figure 2.** From an operational perspective, the richly diverse program of the WBG 's support to capital market development is reflected in the large numbers of projects, loans and advisory services with capital markets content, spread over a range of sectors and segments of the portfolio. Over FY04-FY14, 677 WB AAA and 124 lending projects had *some* exposure to Capital Markets accounting for 5.2 percent of WB AAA, and 2 percent of WB Lending. IFC, conversely, exhibits a predominance of investments, as opposed to advisory services, as 543 IFC investments and 103 IFC advisory services were broadly identified as pertaining to capital markets – 14.2 percent of all IFC investments and 4.1 percent of all advisory services.

³⁶ E.g., Harwood (1997), IMF and World Bank (2005) Financial Sector Assesment: A Handbook (Chapter 12).



Figure 2. WBG Portfolio of Lending, Investments, Advisory services and Technical Assistance that Contribute to Capital Market Development (2004 to 2014).



Source: IFC MIS extract data, WB Business Warehouse

39. This initial group was further filtered to identify a more relevant set of projects for review by IEG (as detailed in Attachment 3). The share of such activities in the WBG portfolios measured in terms of number of projects remains large, even if we focus on the IEG-identified relevant portfolio. In all, between FY04-14, the IEG portfolio of projects that had relevant capital markets content amounts to 3.7 percent of WB AAA, 1.4 percent of WB lending, averaging 2.9 percent of all WB interventions. Percentages are higher for the IFC, reflecting the importance of the financial sector in its overall work - 11 percent of IFC investments, 3.4 percent of advisory services and an average of 8 percent of all IFC interventions.



Table 1 IEG Capital Markets Portfolio Identification: WB and IFC Lending, Investment, Analytic and Advisory Services (2004-2014), (Nos.)

IFC AS	IFC Invest- ments	WB AAA	WB Lending	Total
87	421	476	87	1071
7	288			295
	59			59
13		81	21	115
21	46	63	17	147
8	24	92	26	150
		34	6	40
1		23	1	25
3	2	52	4	61
2	2	18	3	25
32		73	3	108
		40	6	46
	(59)			(59)
	7 13 21 8	AS ments 87 421 7 288 59 13 21 46 8 24 1 3 2 2 2 32	AS ments 87	AS ments Lending 87

Source: IEG.

Notes: Projects / Advisory Services (AS) and Analytical and Advisory Activities (AAA) approved between July 2003 and June 2014.

For IFC the table only includes projects Completed or still in the Portfolio; excludes Projects Dropped, Terminated, or Not Yet Approved (Pipeline)

- 1. Investment funds here include 23 Distressed Assets Relief (DARP) projects
- 2. Projects identified by search of Product codes for ABS, Bonds, and Guarantees of Bonds, and further by review of project documents
- 3. Includes 41 Gemloc, 11 ESMID projects, 14 projects identified together with FABDM team, 13 recommended by GFMDR team and additional projects based on word search criteria
- 4. For WB, based on sector classification payments (FG) and capital markets (FK). For IFC, includes sector Market Infrastructure (O-IB). Also includes 11 projects recommended by GFMDR, and word search.
- 5. Included 31 IFC AS regional projects with Legal and Regulatory components, as well as 45 WB ROSCs
- 6. An additional six projects in this area are included in IFC Securities Instruments support to Investments
- 7. Repeated here for reference (but not double counted) as these investments also support real sector investment. They include six projects that support infrastructure.

40. Operational departments at the World Bank Group have supported capital market development through a number of different vehicles. In the World Bank's lending portfolio (Table



1, with extensive further details in Attachment 5), specific Bank financed loans, for housing, insurance and bond market development have been identified, for direct support for the development of these areas of securities markets.³⁷

- In terms of non-lending services, in recent years, the Bank executed Financial Sector 41. Reform and Strengthening (FIRST) initiative, a trust funded program, has been an important vehicle for the provision of technical assistance. FIRST operates across the full spectrum of financial market development activities, including capital markets TA projects. A total of 96 relevant FIRST financed capital markets activities were undertaken over FY04-FY14.38 FIRST was initially conceived as a source of finance for follow up technical assistance to the World Bank's FSAPs (Financial Sector Assessment Programs) programs, jointly undertaken with the IMF, which undertake diagnostics of financial sector fundamentals and risk assessments. FSAPs themselves usually include diagnostics and policy recommendations on a significant spectrum of securities markets activities (see Box 3).39 The IFC and World Bank have worked closely together in terms of bond market advisory work, and IEG identified 81 Bank-financed projects in this area. The Bank's GEMLOC program, on local government bond market development, provided a total of 30 advisory services to WBG clients over this period, and it has been succeeded by the complementary ESMID program, that takes a broader look at bond market development, notably, corporate bond markets.⁴⁰ IFC's bond market advisory also works closely with the Treasury Debt management unit. A limited number of the Treasury Debt Management unit's projects also have debt market development programs and 14 are included in the scope of the present evaluation.
- 42. The Bank's advisory services on housing finance, corporate governance and market regulation and development were numerous, though interventions for securities clearance and settlement were smaller in number. These include housing finance and the development of

³⁷ In addition, several broad-spectrum policy based loans have supported the development of securities market regulations and institutional frameworks. Since most of these have only a limited focus on securities markets development, in conjunction with other policy areas, these have therefore not been included for review in the IEG portfolio.

³⁸ These are included in the IEG portfolio. Over phases 2 and 3 of FIRST, the Bank executed 325 FIRST funded projects total, as there were also IMF executed projects. Phase 1 projects were recipient executed. ³⁹ Over FY04 to FY14, a total of 148 FSAPs were undertaken by the WB, several in partnership with the IMF. Of these, 55 included technical notes on capital markets, and an additional 51included detailed reviews of other capital market related topics, such as public debt management, pensions, insurance, and financial infrastructure. FSAPs will not be included in the scope of the present evaluation due to their specialized character, covering all areas of the financial system, and because they are typically undertaken jointly with the IMF. However, FSAPs will be used as a source of information when evaluating the relevance and effectiveness of WBG interventions in specific capital market areas. ⁴⁰ GEMLOC, a special initiative jointly undertaken by the Bank and IFC, aimed to provide comprehensive support for developing emerging bond markets through a three pronged approach – the creation an index against which local currency bonds could be benchmarked, through direct investment in countries' government securities, and through WBG advisory work.



mortgage markets (63 tasks and 13 percent of the AAA portfolio), insurance and pensions (a quarter of the AAA portfolio), capital markets regulation and development (75 tasks and 16 percent of the portfolio), an almost equal volume of work on corporate governance (73 tasks and 15 percent of the total), and a numerically small but important set of advisory activities on securities clearance and settlement. Finally, the Bank provided support to the use of capital markets instruments in real sector investments in infrastructure, amounting to some 40 AAA tasks over this period.

43. IFC investment activities related to capital markets development fall into three main areas. These are: investments in financial sector institutions directly or indirectly related to capital markets; investments in collective investment vehicles, which consist of portfolios of private or public equity and sometimes debt instruments; and non-financial sector investments that involve capital markets instruments, including bonds, asset-backed securities and securities guarantees. Combined, these three have grown from 29 projects in FY04, to 44 projects in FY14. Over the period FY04-14, total capital markets commitments by IFC were \$11.4 billion, representing 9 percent of total IFC commitments over this period and 421 projects. In addition, 59 investment projects were identified that used capital markets instruments over the period. 41 Financial Sector Institutions represented the smallest part of total capital markets development investments, accounting for only 74 projects (18%) and \$1.4 billion (12%) of total volume. Of that total, housing finance accounted for the bulk both by number of projects (46) and by volume (\$1.1 billion). As regards the category, of investments in projects related to capital markets institutions and infrastructure (such as trading mechanisms, exchanges, clearance and settlement systems, credit rating agencies and broker-dealers), IFC's portfolio has dwindled to negligible levels over the past decade, likely reflecting its strategic choices.⁴² Table 1 summarizes the relevant portfolio identified jointly by IEG and the WBG.

Purpose, Objectives, and Audience for the Proposed Evaluation

44. This evaluation aims to assess how well the WBG supported countries in the development of their capital markets, across the full spectrum of activities that contribute to the development of such markets, and to contribute towards the development of a strategic roadmap for future directions of such work, in the dynamic context of evolving financial markets, and the new WBG twin goals. It will also assess the extent to which the WBG achieved and leveraged synergies across the several different areas of the organization involved in capital market development and examined the appropriateness of sequencing in the context of risk mitigation. It will review the extent to which it benefitted from as well as contributed to external partnerships in this area, including other IFIs (the IMF, EBRD, EIB, ADB and IDB), standard setting bodies, and

⁴¹ Details are in Attachment 3.

⁴² IFC had only two investments in an exchange or trading platform during this period, and two in broker-dealers.



organizations such as the OECD/ DAC which also have considerable involvement in this area. As regards the evaluation community, the ECG would also be interested. Another possibility is the Donor Committee for Enterprise Development (Cambridge, U.K.). The team welcomes further suggestions.

- While the primary audience of this evaluation is the World Bank Group Boards of Directors, IEG anticipates also working closely with World Bank Group management, the second target audience. WBG management is particularly important for the quest to leverage synergies across the various units dealing with capital markets, and beyond this, IEG hopes to closely collaborate with all WBG capital market staff, to ensure that the evaluation goes beyond accountability, toward the incorporation of institutional learning at a working level. Outside the Bank, there would be an audience for the evaluation among the numerous external agencies and international institutions that face similar challenges, and also, among the numerous donors that support significant areas of the WBG capital market development work.
- 46. The value added of this evaluation follows from its importance for the realization of the twin goals and support to the real sectors of the economy, the absence of significant previous IEG evaluations in this area, clearly manifest donor demand, and a resurgence of WBG and external (G20) attention especially in the context of the recent infrastructure financing initiatives. As illustrated in Box 6, donors that have financed such work over the preceding years have commissioned their own independent evaluations with regard to the WBG's use of resources.

Box 6. The WBG and Capital Markets: Evaluative Material

Few major IEG evaluations have discussed issues relevant to financial sector development, and there are no major IEG evaluations of the WBG role in capital markets development. In the available IEG financial sector reviews, references to the role of the WBG in capital market development are scarce. In IEG's most comprehensive review, limited to WB support for financial sector reforms (2006a), the report mentions that only 22 percent (of financial sector projects) included capital market reform as a component; the Bank's lending tended to target banking and bank-like financial institutions. Inclusion of this area was more frequent in East Asia and Latin America (30 percent) and much lower in Africa (14 percent) and even East Europe (18 percent). The evaluation itself did not explore issues related to outputs of such interventions or their outcomes; however it includes changes in stock market capitalization and trading value as a measure of outcomes of WB interventions in the overall financial sector in specific countries. Countries that were Bank borrowers for the financial sector and those that were not did not show any difference in changes in these parameters.

IEG's evaluation of the Financial Sector Assessment Program (2006b) pointed out that while the quality and thoroughness of FSAP banking sector analyses were consistent, there was greater variability in the coverage and quality of the analysis of other sectors, including non-banks, likely reflecting their small size in many countries covered. And few FSAPs analyzed the linkages between sectors - for example only a third of detailed FSAP reviews had an integrated discussion of insurance issues and capital markets and investment. A number of FSAPs discussed the need to expand the insurance and pension sectors, and to diversify asset holdings (which would help develop capital markets), but failed to discuss the lack of available investment instruments. It noted that nurturing local currency bond markets should be a policy objective for many countries and that more and better information on these markets is needed.



In the WB Pension Reform evaluation (IEG 2006c), capital market development was explicitly included as one element of the secondary goals of pension reform, to be supported by the design of multi-pillar, funded, defined contribution pension schemes. In terms of findings, the report shows that diversification of pension funds' investments was not achieved and in many cases pension investments remained concentrated in government securities markets, under tight investment guidelines – possibly reflecting macroeconomic constraints. On the whole capital market development was not observed in case study countries despite the introduction of multi-pillar systems, although government debt maturity showed some signs of increasing.

One relevant evaluation that covered both the WB and the IFC is the IEG (2009) review of the WBG's Guarantee instruments. The report points to the differences and similarities in partial credit guarantees (PCGs) offered by both institutions. In terms of outcomes, it shows that such guarantees have helped public agencies tap bond markets for better terms than they would have received without guarantees. Most public agencies that accessed capital markets under the PCGs subsequently accessed commercial markets again, without guarantees. In Jordan, the PCG helped the telecom utility become the first Middle Eastern corporation to tap the Eurobond market. The Jordan operation also involved the participation of the local capital market, facilitating mobilization of domestic foreign exchange deposits. A Colombia operation enabled Colombia to reestablish access to U.S. capital markets at a time when investor interest was minimal. In Argentina, although the country was able to access non-U.S. capital markets at similar terms, the PCG enabled it to issue a significantly larger bond (\$1.2 billion) than would otherwise have been possible at the time.

Although coverage of capital markets in IEG macro and sector evaluations is thin, IEG does have individual micro level evaluation reports for a small proportion of the portfolio. Out of 421 IFC investment projects in the included portfolio, 202 are old enough to have been reviewed, 55 have XPSRs/PESs (self-evaluation), and 40 of the 58 projects have completed IEG EvNotes. As regards advisory services in the review portfolio, 60 of the 87 are completed and thus eligible for review. Of these, 27 have project completion reports, six of which have not yet been finalized by IEG. On the WB side, ICRRs are available for 47 out of 67 closed projects, out of a total of 87 projects in the IEG portfolio. However, there is no evaluative coverage of the large body of 476 WB AAA, as there is no self-evaluative or independent evaluation convention for AAA at the WB/ IEG. Available task team led AAA completion reports have limited information compared to project self-evaluations.

In terms of performance, out of the 47 evaluated lending products at the WB, a large proportion - 39 or 83 percent - received satisfactory ratings (highly satisfactory, satisfactory, and moderately satisfactory). Performance at IFC was more mixed. Of the 40 EvNotes reviewed by IEG, less than half projects were given a satisfactory rating by IEG. As regards IFC's advisory services, 13 of the 21 IEG reviewed projects were given satisfactory ratings, 6 were given unsatisfactory ratings, and 2 were determined to be too early to judge.

Despite limited coverage of the WBG and capital markets in IEG evaluative material, there have been independent external evaluations of some segments of the WBG capital markets portfolio, due to their considerable trust fund financing, and the demand for such evaluations by the funding donors. Thus, the FIRST program had monitoring and evaluation reports in 2009, 2011(undertaken by a team of former IEG staff) and 2014 (USC DPMG). There have been country specific evaluations of the Vietnam capital markets work and corporate governance interventions (Adam Smith International, 2013). The ESMID program has had evaluations of its interventions in Africa (Genesis Analytics, 2013) and in Latin America (Analistas Financieros Internacionales).

Other IFIs do have major evaluations in the capital markets area. Most recently, EBRD has undertaken an evaluation of local currency operations, including bonds and swaps (EBRD 2013), and the Asian Development Bank has undertaken a more broadbased evaluation of its capital markets operations (ADB 2008).

Sources: IEG (2006a, 2006b, 2006c, 2007) EBRD (2013), ADB (2008): FIRST (2009, 2011, 2014), Adam Smith International, (2013), Genesis Analytics (2013) and Analistas Financieros Internacionales (2014)



Evaluation Questions and Scope

EVALUATION QUESTIONS

The evaluation addresses the following overarching questions:

- Has the WBG been relevant, effective and efficient in supporting the development of its client countries' domestic capital markets, in the evolving context of countries' overall financial sector development?
- Has the WBG been relevant, effective and efficient in supporting the use of capital market instruments in its client countries to realize *real* sector development?
- Has the nature of WBG support for countries' capital markets development reflected the realization of the WBG's twin goals of poverty alleviation and shared prosperity?

Following from these overarching questions, the **specific evaluation questions** to be addressed are described below.

Relevance of Objectives

- 1. Have WBG capital market interventions been relevant to client countries?
 - Were they based on their Country Assistance Strategies?
 - Were they based on financial sector knowledge, diagnostics and strategies?

Relevance of Design

- 2. To what extend did the intervention focus on the right issues and provide appropriate and adequate solutions to clients' needs?
 - Did interventions build on prior achievements and was support sustained over time?
 - Was support appropriately linked to the development and evolution of other areas of the financial sector?
 - Did the WBG engage strategically with the right country counterparts?

Effectiveness:

- 3. To what extent did WBG intervention achieve their objectives, primary or secondary, relevant to capital market development?
 - What was achieved in terms of domestic capital market development, relative to WBG and client objectives, relevant financial sector research, diagnostics and strategies, and the dynamic evolution of the country specific and global financial system?
 - What was achieved in the use of capital market instruments for financing real sector development, in terms of sustained, demonstrative or catalytic effects?



Work Quality and Organizational Efficiency

- 4. Was the WBG capital market work undertaken effectively in terms of internal and external quality control and coordination?
 - Has the WBG met internal work quality standards in preparation, implementation and supervision, and leveraged synergies through coordination?
 - Were activities consistent / complementary with donor engagement and was funding consistently available?
 - Were WBG monitoring and evaluation standards adequate for accountability and learning and has WBG management used the resulting data to improve future performance and to adapt to the evolving financial environment?
- 48. It would be desirable to add an additional question, regarding effectiveness, in terms of the achievement of long term goals at broadest level robust and more resilient financial systems, or greater long term capital availability. However, severe problems of attribution exist which makes it unlikely that these questions could be answered with any level of confidence. Therefore, while acknowledging the desirability of addressing such questions, they are omitted from the scope of the evaluation. To the extent that IEG is able to present evidence, however, it will be included in the evaluation.
- 49. There is also the possibility that the actions undertaken by the WBG for capital market interventions had unintended consequences, positive or negative. Although it is not possible to anticipate such unintended consequences and include them with the scope of specific evaluative questions, to the extent that information on such effects or outcomes becomes available during the course of the evaluation, their influence on outcomes achieved would be included in the findings of the evaluation.
- 50. As illustrated in the discussions of the preceding sections, there is heterogeneity and a high level of specialization of interventions supporting capital markets development in individual segments of the WBG capital markets portfolio. Therefore, beyond the questions described above that are relevant to all sections of the identified capital markets portfolio, IEG proposes to construct metrics, based on supplementary additional questions for individual sections of the portfolio, which would be used for evaluating outcomes in each segment. Examples of such supplementary questions are given in Table 2.



Table 2 Examples of Supplementary Evaluative Questions Specific to Individual Areas of Support

Capital Market Segment Supported

Capital Market Issuers:

- Did the WBG provide support to *governments* to meet their funding needs for public debt management?
- Did the WBG help to facilitate *corporations* to meet their funding needs through capital market access through private equity, publicly listed equity, or through the issue of corporate debt?
- Did the WBG support *project finance entities* (e.g., for infrastructure) or *housing finance companies* to obtain long term funding through the use of capital markets instruments?
- Did the WBG's own programs of *Treasury issuance* of local currency bonds and theme bonds provide additionality to funding the development needs of client countries?

Capital Markets Instruments: Bonds, Equities, Asset backed securities

- Did the WBG support the development of robust *government bond markets* that (i) integrated with public debt management needs; (ii) reduced funding costs and increased the predictability and availability of funding; (iii) improved liquidity and price discovery of debt markets and (iii) provided benchmarks with longer maturities and extended the domestic yield curve?
- Did WBG support provided for the development of the *corporate bond* market help to remove impediments to issuing and build more liquidity in these markets?
- Did the WBG help catalyze the development of *private equity* through IFC collective investment vehicles? Did the funds support the eventual movement of investee companies towards publicly listed companies? Did IFC catalyze the entry of other investors into private equity?
- Did IFC help enhance project finance for better financing long term real sector investment or better handling risk, e.g. through quarantees issues or structured financing arrangements / project bonds?
- Did the WBG support for the development of *asset backed securities* such as mortgage bonds / covered bonds used for housing finance provide sustained help towards the creation of a market in such securities?
- Did the WBG's own fund raising in local currencies help to create the necessary legal environment for local currency bond issues, extend maturities in local bond markets and attract other investors? How does this compare with other IFIs?

•

Capital Markets Investors: Insurance Funds, Pension Funds

- Did the WBG support the development of insurance systems that would support the accumulation of funds for investment in capital markets? Did the WBG support the development of investment rules for these funds that would encourage the development of a diversified capital market?
- Did the WBG help to develop funded pensions systems that invest in domestic capital markets, with investment rules conducive towards such investment?

Capital Markets Infrastructure: Legal and Regulatory Frameworks, Corporate Governance, Payments Systems

- Did the WBG help contribute to the preparation / modification of a sound legal and regulatory framework for securities?
- Did the WBG effectively support the development of sound systems for securities clearance and settlement, shortening elapsed time to settlement, achieving DvP and reducing counterparty risk?
- Did the WBG effectively support the improvement of corporate governance for listed companies in terms of protecting the rights of minority shareholders, more transparent appointments of boards of directors?
- 51. The results chain that describes the theory of change underpinning this evaluation, linking the various World Bank Group interventions with outputs and intended outcomes is illustrated in Figure 3. One of the challenges faced by this evaluation is that tracing final outcomes is extremely difficult, due to the small size of WBG interventions compared to the size of



the markets that these interventions are made in, and the many factors and complexities affecting overall outcomes, due to actions by other market players, be they governments, other multilaterals, or private market participants. Additionally, capital market outcomes are notoriously affected by the overall macroeconomic context, by regulatory changes in markets even if not directly related (e.g., tax policies). Situations of instability or volatility can hinder the realization of even well-crafted and sound interventions.

Figure 3. Results Chain – WBG Support to Capital Markets: Activities, Outputs and Outcomes Inputs / Activities Outputs Outcomes WBG interventions that support Capital market Achievement of results capital market development with regard to the identified activities strengthening Helping issuers use capital mar-• More liquid *governmen*t debt markets,, extended kets instruments to meet their yield curve, lower funding costs; more benchmark · Deeper capital marlong term financing needs (central kets for both issuand local governments, corpora-· Eased corporate bond issuance and more liquid tions, project finance entities, corporate bond markets ers and investors housing finance, IFIs · More firm level access to private equity, entry of new domestic investors in private equity Safer and better · More corporate public listing, greater liquidity and Helping the development of develtrading, reduced risk, regulated financial opment of capital markets instru-· Better market for asset backed securities espesystems, reduced ments (Government and Corpocially for *housing finance* rate Bonds, Equities, Asset · Greater access to capital market finance for browninstability backed securities) field and greenfield projects Increased and eased local currency bond issuance, More long term following IFIs, more investors, longer maturities funding availability Supporting the development of capital markets investors: Instifor corporations tutional investors including insur-Strengthened regulatory environment for insurance and for projects ance funds and pension funds and better long term funding, diversified investment needing long term Multi-pillar funded pensions systems that invest in domestic capital markets finance Building better capital markets in- Greater financial frastructure: legal and regulatory frameworks, better corporate gov-· Sound legal and regulatory infrastructure for capital depth and resiliernance for listed companies / exence changes, sound payments / secu-Reduced risk and shortened time in securities clearrities clearance and settlement ance and settlement, reduced counterparty risk systems · Improved minority shareholder protection Assumptions: Macro Economic Stability, Competition, Political Commitment, Other External Factors **Impacts** Deeper and more robust financial systems, Economic growth, Reduction of poverty Source: IEG.



EVALUATION SCOPE

- 52. The evaluation covers World Bank Group interventions that have supported the development of key segments of capital markets during the past 11 years (FY04–14).⁴³ The evaluation will cover IFC investments and advisory services, and World Bank lending and nonlending AAA, and for both, includes trust-funded activities. Details of how the relevant portfolio of activities is identified is described in Attachment 3.
- 53. The evaluation will draw upon and coordinate with other IEG ongoing work, notably, PPARs planned in the area of in housing finance and IFC collective investment vehicles. IEG has a planned FY15 learning products on housing finance, and the capital markets evaluation will coordinate with this team in terms of identifying common projects and questions, establishing to the extent possible a common team and merged questionnaire. Another related and ongoing IEG task is a pilot IFC PPAR that examines an IFC collective investment fund. It is hoped that this will also provide case study information on such investment funds for the present evaluation.

Evaluation Design and Evaluability Assessment

EVALUABILITY ISSUES

- 54. The proposed evaluation has some unusual features that impact upon its evaluability, and influence the design of the evaluation. The following paragraphs describe these features and the next section puts forward proposals for how they may be accommodated in the design of the evaluation.
- 55. Strategies for interventions in capital markets reform are found less in country strategies than in FSAP documents or financial sector strategies. Country strategies do not typically discuss unified overall programs for strengthening a country's capital markets. Sometimes, elements of capital markets development are embedded in a broader financial sector strategy. Certain areas of capital market support, such as housing finance, or pension reform, may be mentioned in contexts other than capital markets development. In many cases, depending on its timeliness, FSAP documents provide the core point of reference for support to capital market development in any given country. Follow up work undertaken for the implementation of the FSAP's findings and recommendations may also be financed outside the country department Bank budget, due to reliance on trust funds such as FIRST, or ESMID.

⁴³ Some segments of capital market infrastructure are omitted, e.g., money markets, bankruptcy and failure resolution, corporate government in entities other than private corporations (e.g. state enterprises or banks), etc.



- Coupled with the extreme heterogeneity of WBG areas of intervention needed for the building of capital markets, each area of intervention is associated with a high level of specialization. Both within the WBG, as well as among external consultants, these are considered specialized skills, and very different areas of knowledge. Thus, the development of government securities markets is not related to the development of insurance, pensions or housing finance (each a specialized area in itself). These areas are again distinct from corporate governance or payments systems reform. Even more diverse are the areas relevant to the IFC elements such as venture capital or private equity funds and the treatment of Treasury bond issues is again different from operational interventions. Implications are that highly specialized skill sets are needed to evaluate each segment of capital market support. Persons knowledgeable in one of the abovementioned areas may well have limited knowledge of the others. This would impact upon the number of specialists required to support the evaluation, and its costs. It also implies that single person field visits would not easily be able to cover the full spectrum of issues, but would clearly be better able to focus on their individual areas of expertise.
- 57. Further challenges in evaluability are the high proportion of WBG operational interventions around half to three fourths that have taken the form of advisory services or AAA. Of the 1071 interventions identified, 563 take the form of AS / AAA. But given that the numbers of lending projects in the portfolio are heavily driven by the 295 IFC funds, netting out such funds, three quarters of the remaining relevant portfolio (563 out of 776 interventions) consists of advisory services. The difficulty for the evaluation stems from the fact that this implies an even more limited amount of evaluative material, or even an IEG /WB agreed evaluative approach. As regards IFC advisory services in the review portfolio, 21 of the 87, or around a quarter, have IEG evaluation notes. ⁴⁴ There is no evaluative coverage of the large body of 476 WB AAA, due to the lack of any recognized vehicles for such evaluation between the WB and IEG, at least during the period under coverage.
- 58. Even on the investments and lending side, there is a paucity of microlevel evaluative material. As illustrated in Box 6, roughly a tenth of the IFC projects evaluated have IEG validated reviews.⁴⁵ Out of 421 IFC investment projects in the included portfolio, 58 have XPSRs/PESs (self-

⁴⁴ Evaluations of IFC AS only cover completed projects that were approved after January 2006 on a sample basis. Out of 87 projects in the review portfolio, 20 were active projects in portfolio and 19 were approved before January 2006, thus were excluded from evaluation sampling by design. Thus, though IEG ratings are only available for 21 IFC AS in the portfolio, about 60% of the projects eligible for evaluation have been reviewed by IEG when including the six projects not yet finalized.

⁴⁵ IEG only reviews IFC investments they deem as "mature", which generally occurs five years after commitment, but can take longer. 219 of the 421 IFC investments in the portfolio were committed in fiscal year 2010 or later, thus have not been evaluated by IEG at this point. Further, IEG does not review follow on investments and excludes certain other types of projects including those aimed at product development. Thus, only 161 of these projects met the criteria for evaluation. Of these, 58 have XPSRs/PESs (34 percent), though only 40 of the 58 projects have completed IEG EvNotes and thus have recognized ratings.



evaluation), though only 40 of the 58 projects have been reviewed by IEG and have IEG EvNotes. On the WB side, 87 projects are included in the portfolio, of which 67 are closed and just over half (47) have an IEG validated ICR review. This implies that the evaluation will have to largely rely on its own evaluative assessments based on project documents and other sources.

- 59. Another complex feature of the present evaluation is that it is difficult to limit its scope to targeted or 'direct' interventions alone. This is because a number of activities undertaken by the WBG that support the development of capital markets provide *indirect*, or secondary, support to this objective. Yet, they are critical pillars of the development of such markets. Examples are, Treasury issues of local currency bonds, especially those issued in domestic markets, as opposed to offshore issues. Although primarily for funding purposes, they (especially the latter group) can have an important ancillary impact on local capital market development, as is well recognized by WBG and other IFIs. Most IFC investments (such as the large number of private equity funds, or even the investment activities that used securitization / guarantees, had capital market development at best as a secondary objective, if at all explicit. Similarly, an intervention in the area of pensions or insurance may have the primary objective of providing old age security or helping manage risk, yet strengthening the fundamental features of pensions or insurance activities also has the effect of helping to support the accumulation of funds for capital markets investments. This implies also that for some interventions (e.g., IFC's funds or investments) even to the extent that existing evaluative material is available, it will not typically address results achieved in capital markets development.
- 60. A related issue is the extent to which upstream or downstream activities are included within the scope of the present evaluation. Supporting capital market development is a continuum, and a project to support for example the development of mortgage liquidity facilities is a precursor to the development of tradable asset-backed securities. Better corporate governance eventually encourages small investors in stock markets, yet the full spectrum of due diligence of corporate governance for individual firms at IFC is of only limited relevance to overall capital market development.
- 61. Finally, the evaluability of the programs outlined above will be a challenge in terms of mapping outcomes, due to the small marginal size of WBG interventions, in most markets. There is greater likelihood of achieving success in mapping outputs of various efforts, as opposed to outcomes. Efforts will be made nevertheless to review market impact at least in association with WBG activity, even if attribution remains difficult.

EVALUATION METHODS - REFLECTING PROPOSED MITIGATIONS TO SPECIAL CHALLENGES

62. The proposed evaluation design and method embeds ways to try to address the above issues. In the following section, the IEG team first addresses the specific issues raised above, and next, details the broader aspects of the evaluation design.



- 63. In addition to country strategies, given the prominent role of the FSAPs and in some cases, country-level *financial* sector strategies, in setting the capital market support agenda, such documents will also be used as a starting point for the assessment of WB policy based and advisory interventions in relevant core capital markets areas. Thus both country strategies and CASs, as well as FSAP diagnostics and financial sector strategies will be taken as key sources of strategy. When available, FSAPs will be a core point of reference on the initial diagnostics and road map, as they contain rich analysis and specific recommendations of the needs going forward for capital market development, prioritized against the backdrop of overall financial sector development. However, FSAPs will not provide a point of reference for IFC's private sector interventions in specific countries. IFC's overall strategic roadmap can be a point of reference, as well as any available individual regional or sector specific strategies.
- 64. Given the high level of heterogeneity and specialization, IEG will undertake thematic, rather than country-based, portfolio desk reviews. 46 Desk-based sector / theme portfolio reviews will be supplemented where possible with TTL interviews, as well as phone based client interviews if possible. They will be undertaken by a sector specialist, working in close conjunction with Washington-based analysts/ IEG team capital markets staff. Such specialized financial sector skills have resource implications, as discussed further below. Given the large overall number of projects, IEG will adopt a cluster approach to the selection of projects for desk review, following recommended good practice for advisory work in particular, first selecting those in countries with large clusters in a given area, and large overall capital market interventions. IEG also takes into account the heterogeneity across thematic areas both in terms of the numbers of projects overall, and the patterns of distribution of thematic interventions across countries. While overall, there is a high level of country concentration in WBG capital market work, and in some sectors, a relatively small number of countries account for the majority of the work (e.g., IFC private equity, bond market development and housing finance), in contrast, in areas such as pensions and payment systems, the portfolio is more scattered across a wide range of countries.⁴⁷ To accommodate this, and depending upon the numbers of available interventions, the review portfolio includes WBG interventions across 64 countries, with sample size varying across each segment, to ensure representative clustering, and reviewing all projects in some segments where the number of observations are limited.
- 65. A further challenge in the selection of interventions for review is the relatively high proportion that are regionally focused or globally focused, as opposed to country focused, in some segments of the portfolio. These include, in particular, IFC's private equity funds, as well as, on the WB side, areas such as bond markets, housing finance, and insurance. In some segments, such as IFC's private equity funds, a comprehensive approach will be taken, and all funds

⁴⁶ Additionally a number of projects (around 26 percent) are not country based, but rather, regionally or globally focused – a further reason for a strong thematic focus.

⁴⁷ Around two thirds of all country-focused projects reviewed were in a handful of 25 countries over the sample period (see Attachments 4 and 5).



will be included, as the desk-based analysis is expected to rest largely on systematic analysis of IFC's collective investment database. In other segments, as regards regional interventions, a sample will be drawn from each region, with oversampling of those regions that have had a larger number of interventions. IEG has also invited WBG management to help identify interventions of greater or lesser relevance from the perspective of capital market development. In terms of global interventions (typically AAA/ AS, or contributions to international fora), efforts will be made to cover all relevant interventions.

66. The countries that will be drawn upon for the desk-based review include all income groups, though the lower and upper middle income countries account for the majority (Table 3). Only nine of these countries are included in the G20 and belong to the Financial Stability Board. Thus the Bank (and the IEG portfolio examined, by extension), reflects the position of a large number of non-G20 countries in the area of capital market development.

Table 3 Desk Review Portfolio by Country Income Level (64 countries)

Country Groups	IFC AS	IFC Invest- ment	WB AAA	WB Lending	Total	% Total
High Income	7	23	26	2	58	8%
Upper Middle	24	131	121	30	306	45%
Lower Middle	27	98	115	28	268	39%
Low Income	2	10	32	7	51	7%
Total	58	259	289	65	671	100%

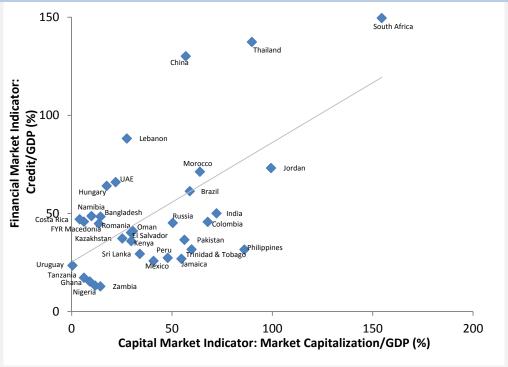
Source: IEG

67. IEG also reviewed the extent to which the desk review portfolio included countries at different levels of financial market maturity and 'readiness', to see whether a sampling strategy could be built around this. As shown in Figure 4, there is a very high proportion of countries with relatively shallow financial markets, whether in terms of credit and banking systems, or equity capital mark indicators. This 'clustering' at one end of the maturity spectrum implies that it is difficult to use as a basis for sampling.⁴⁸ Nevertheless, information on the level of financial market maturity will guide the reviews, to see whether WBG advice was suitably tailored to, and appropriately sequenced with, the stage of market maturity.

⁴⁸ There is also a data issue in terms of mapping maturity, as not all countries have all the relevant statistics, especially some key capital market areas, such as domestic bonds.



Figure 4 Financial System Maturity: Desk Portfolio Review Countries



Source: IEG

Note: Based on 34 countries in the list of portfolio review countries for which both pairs of data are available. Indicators are averages of three years' data from 2010 to 2012.

68. In addition to sector desk reviews, five country case studies will also be undertaken, selected from the countries above, but with additional purposive elements. Such additional purposive elements include regional balance (each country in a different WBG region); a significant capital markets portfolio that reflects different types of interventions (different leading sectors, and including both the WB and IFC, and both lending / investment as well as AAA and advisory work); and an inclusion of countries along different segments of the income scale as well as financial market maturity. In the case of the present evaluation, some questions relevant to outcomes can only be answered by talking to market participants in the field, rather than from desk review. Efforts will be made to ensure that country field visits will supplement desk reviews through the provision of context-specific information, including synergies between different interventions, and shed light on the nature of interaction of WBG with governments, donors, key stakeholders and beneficiaries. Country field visits will utilize a common protocol for their questions, and their subsequent analysis. They will provide context-specific information on whether and how interventions have worked or failed to work and how they responded to country constraints and conditions. In particularly they will help to understand whether and how the combination of WBG activities in a country have worked or failed to work. Also by identifying country patterns that may exist between intervention types and results, the sum of



learning from multiple case studies is expected to be greater than the learning from each country.

- 69. Within the thematic context IEG will develop sector-specific indicators to capture what constitutes success for the various segments of capital market supporting interventions. The assessment criteria (see Results Chain in Figure 3) will be applied using indicators and performance standards / benchmarks that are tailored to each segment. This again is a task requiring a high degree of specialization as well as a high number of specific questionnaires' preparation and design for each segment. Although several IEG evaluations have had to devise multiple questionnaires for individual thematic areas, in this case at least 6 to 10 such specialized thematic questionnaires will be needed.
- 70. As regards the high proportion of non-lending activities, the team will build upon the approaches and guidance used for other recent IEG evaluations, as well as a recent **meta-evaluation of these approaches**. The experience of the present evaluation resembles some other recent large scale IEG evaluations in this regard and the present evaluation will build upon lessons learned from these evaluations. Prominent among recent evaluations is the IEG evaluation of knowledge based country programs. The Afghanistan Country Program Evaluation and the Procurement evaluation also faced similar challenges. Several best practices have emerged from these experiences, and the present evaluation will build upon these methods.⁴⁹ These have included for example the contextualization and clustering of the evaluation of interventions, which the references to FSAPs, and the selection of most active countries, will provide. Other good practices where available are the provision of external benchmarks for performance.⁵⁰ In the capital markets area, such benchmarks exist for certain areas of activity, e.g., for bond markets, there is the joint IMF / WB / OECD tool for diagnostic work (April 2013) which could provide the basis for a yardstick; in the area of corporate governance, there are the OECD Corporate Governance principles, as well as the WB's Reports on the Observance of Standards and Code (ROSCs) for corporate governance, and the IFC Manual for corporate governance at the firm level, etc. The evaluation will also try to make use of the proposed IFC standard methodology for the evaluation of Advisory Services. Finally, to the extent possible, where time series of diagnostic assessments and recommendations are available, IEG will develop a 'chain' of interventions in a given country and in a particular area, to evaluate the extent to which diagnosed difficulties were translated into follow up actions.
- 71. As regards the issue that the activities included in the portfolio do not always have capital market development as a primary objective, IEG proposes a multi-pronged approach. From the point of view of selecting a relevant portfolio, the team undertook quick reviews of

⁴⁹ As discussed in Elliot, Victoria (2014) (Mimeo for IEG).

⁵⁰ As in the recent IEG Procurement Evaluation, where the OECD Methodology for the Assessment of Procurement Systems (MAPS) was used as a benchmark.



identified interventions in consultation and also consulted extensively with sector staff, to identify those interventions that were the most relevant. From an evaluative perspective, IEG's reliance on its own purposely constructed questionnaires, which can tease out such questions, will help to address. Such issues will be even more challenging in the case of interventions that are non-operational, such as Treasury local currency issues. Finally, IEG will additionally draw upon other assessments for an appropriate framework, and on relevant ongoing evaluations.⁵¹ A similar approach is applied to the issue of upstream versus downstream interventions. In all cases, efforts were made to include those interventions that had a more direct, and more downstream, bearing on capital markets reform.

- 72. Finally, to try to tease out outcomes and impacts despite the clear issues of attribution, IEG will examine local market development, over the same interval of time, as WBG interventions. Inferences that are causal will not be made, however, market development can be measured, and compared to WBG interventions.
- 73. Whilst incorporating these additional accommodations, the evaluation questions will be answered through a combination of well-accepted methodologies. These include (i) a review of policy and strategy documents at sector, corporate and country levels, drawing upon relevant FSAPs; (ii) a series of theme-focused portfolio reviews of documents relating to specific World Bank Group interventions that have provided support for the development of capital markets, that are segmented by topic and benchmarked, to the extent possible, against accepted principles of best practice in each area, under the oversight and guidance of thematic experts; (iii) a select number of field visits. These field visits will focus on individual segments of the WBG capital market related portfolio in the selected countries and may not have the characteristics or coherence of a typical 'country case study,' to the extent that there may not be an underlying overall 'capital market development' vision at the country level. Often, relevant interventions may be embedded in different policy areas (e.g., overall financial system soundness, as the most directly relevant, but also, debt management, pension reform, or infrastructure development). The analysis will also make use of (iv) external material for the purpose of benchmarking, e.g., data on similar undertakings in other IFIs / MDBs, especially the EBRD, EIB, ADB, and IADB. In addition, (v), to the extent available, the evaluation will look at evidence on capital market evolution in specific countries using data from BIS, Bloomberg, Datastream, EMPEA and other sources. To the extent possible, (vi) the analysis will also include meetings / surveys with relevant TTLs and project staff. Finally, (vii), the analysis will rely heavily on traditional processes of triangulation to ensure that evidence from all sources is reflected in an evaluative finding. The approach will combine qualitative and quantitative methods.

-

⁵¹ E.g., Eloy Garcia and Dalla, I., (2006) for ADB and IDB, and EBRD 2014 (EvD), regarding Treasury operations. The team will also incorporate information from ongoing IEG evaluations, such as the Housing Finance Learning Evaluation, and the proposed pioneering PPAR on an IFC private equity fund.



Quality Assurance Process

74. Both the Approach Paper and the draft final report will be subject to a rigorous peer review process. The Approach Paper is being peer reviewed, to ensure appropriateness of the scope of the evaluation, relevance of evaluation questions and issues covered, and adequacy of methodology. The draft evaluation report will also be reviewed, to ensure the credibility and impartiality of the findings and usefulness of recommendations. Peer reviewers for the evaluation include Andrew Sheng, former head of the Hong Kong Securities Commission and the Hong Kong Monetary Authority; Cesare Calari, former Vice President, Financial Sector, World Bank; Amedee Prouvost, Director, Chief Risk Office, World Bank, ; Isabelle Laurent, Deputy Treasurer, EBRD; and Noritaka Akamatsu, Chair, Financial Sector Community of Practice, ADB, and former WB staff.

Expected Outputs and Dissemination

75. The primary output of the evaluation will be the report to the Board's Committee on Development Effectiveness (CODE), following a process of parallel and regular interaction with WBG management, as a key stakeholder. During evaluation preparation, the team will solicit feedback and comments from government and private agencies in client countries, practitioners in the industry and, importantly, other IFIs and MDBs, to improve the evaluation's accuracy and relevance. Such stakeholder interaction will contribute important information and qualitative data to supplement data, interviews, case studies, and other research. Ultimately, the finished evaluation will be published and disseminated both internally and externally, based on an outreach plan to be prepared in consultation with IEGCS. Apart from internal dissemination, such a program could include, potentially, donor agencies that have prominently contributed to funding in this area, including SECO / SIDA, the governments of the Netherlands, Germany and UK, etc. On the public sector side, other IFIs and MDBs, the BIS, OECD and IMF, are likely to be keenly interested, together with private sector for on capital markets. Finally, country clients are also likely to have an interest, and outreach to such audiences could potentially be organized through the Bank's Global Distance Learning network.

Resources: Staffing

76. **Team and Skills Mix.** The skills mix required to complete this evaluation includes first of all, practical, policy, and academic expertise in core areas supporting capital markets development, across the very diverse and highly specialized WBG segments of capital markets interventions. It also requires evaluation experience and knowledge of IEG methods and practices; familiarity with the policies, procedures and operations of IFC, MIGA, and the World Bank; and knowledge of World Bank Group and external information sources.



- The evaluation will be prepared by a core team led by Anjali Kumar and Jack Glen (Task Team leaders), together with Isaac Salem and Keita Miyaki, Houqi Hong, Takatoshi Kamezawa, Maria Elena Pinglo and Swizen Rubbani. Senior consultants include Hany Assad, Suman Babbar, Amitava Banerjee, Eric Cruikshank, Ismail Dalla, Jonathan Katz, Pamela Lamoreaux, Ruben Lee, Chad Leechor, Robert Singletary and Silvina Vatnik. The team has benefitted also from early inputs from (especially on Treasury bond issues), as well as from Mari Noelle Lantin Roquiz. In addition, the team will be supported by relevant experts in selected areas, for example, on bond market development, supranational issues and Treasury operations, housing, insurance, pensions, capital markets infrastructure including securities clearance and settlement and corporate governance, and infrastructure finance and real sector support. Relevant persons have been identified and will be contracted following final agreement on the Approach Paper. Together, this team would offer substantial knowledge and experience on subject matters, on the respective institutions of the World Bank Group, as well as on evaluation methodology. The report will be prepared under the direction of Stoyan Tenev, Manager, IEGPE; and Marvin Taylor-Dormond, Director, IEGPE.
- 78. **Timeline and budget.** The IEG team will aim for a one-stop review of the draft final report by September 30, 2015, although this is ambitious. The finalized evaluation will be submitted to CODE in the second quarter of 2015. The budget for the study is estimated at \$1,100,000. Although somewhat greater than the budget norms for other major IEG sector studies, it is submitted that the proposed budget is justified, reflecting a range of factors: the expensive dual TTL arrangement, the several highly specialized areas of work involved, limited availability of inhouse skills on this topic, and the intrinsically high fees for consultants in the financial sector.



References

- Acharya, V. V., & Richardson, M. (2009). Causes of the financial crisis. Critical Review, 21(2-3), 195-210.
- ADB (Asian Development Bank) (2008). *ADB Assistance for Domestic Capital Market Development*. ADB Evaluation Study SES: OTH 2008-36. Operation Evaluation Department.
- Akhter, S., Liu, Y., & Daly, K. (2010). Cross Country Evidence on the Linkages between Financial Development and Poverty. *International Journal of Business and Management*, *5*(1), P3.
- Allen, F. & Gale, D. (2000). Comparing Financial Systems. MIT Press.
- Analistas Financieros Internacionales. (2013). Efficient Securities Markets Institutional Development in Latin America: End of Program Evaluation.
- Anderson, P. R., Silva, A. C., & Velandia-Rubiano, A. (2010). Public Debt Management in Emerging Market Economies: Has This Time Been Different? Policy Research Working Paper No. 5399. World Bank Publications.
- Arcand, M. J. L., Berkes, M. E., & Panizza. (2012). *Too Much Finance?* IMF Working Paper No. 12/161. International Monetary Fund.
- Aylward, A. H., & Glen, J. D. (1999). *Primary Securities Markets: Cross Country Findings*. IFC Discussion Paper No. 39. World Bank Publications.
- Ayyagari, M., Beck, T., & Hoseini, M. (2013). Finance and Poverty: Evidence from India. Working Paper.
- Badev, A., Beck, T., Vado, L., & Walley, S. (2014). *Housing Finance Across Countries: New Data and Analysis*. World Bank Policy Research Working Paper No. 6756. World Bank Publications.
- Bakker, M. R., & Gröss, A. (2004). Development of Non-Bank Financial Institutions and Capital Markets in European Union Accession Countries. World Bank Working Paper No. 28. World Bank Publications.
- Barger, T. (1998). Financial Institutions. International Finance Corporation. World Bank Publications.
- Basel Committee on Banking Supervision. (2010). *Principles for Enhancing Corporate Governance. Consultative Document.* Bank of International Settlement.
- Beck, T., & Levine, R. (2002). Industry Growth and Capital Allocation: Does Having a Market- or Bank-Based System Matter? *Journal of Financial Economics*, 64(2), 147-180.
- Beck, T., Demirgüç-Kunt, A., & Levine, R. (2007). Finance, Inequality and the Poor. *Journal of Economic Growth*, 12(1), 27-49.
- Beck, T., Demirgüç-Kunt, A., & Levine, R. (2010). Financial Institutions and Markets across Countries and over Time: The Updated Financial Development and Structure Database. *The World Bank Economic Review*, 24(1), 77-92.



- Beck, T., Demirgüç-Kunt, A., Laeven, L., & Levine, R. (2004). Finance, Firm Size, and Growth. *Journal of Money, Credit and Banking*, 40(7), 1379-1405.
- Bell, H. A., & Searles, H. (2014). *An Analysis of Global HFT Regulation: Motivations, Market Failures, and Alternative Outcomes.* Working Paper No. 14-11. Mercatus Center, George Mason University.
- Blommestein, H. J. (2002). *Debt Management and Government Securities Markets in the 21st Century.* OECD Publisher.
- Blommestein, H. J. (2005). *Legal and Regulatory Framework for Developing Government Bond Markets: Suggested Issues for Discussion*. OECD Publisher.
- Blommestein, H. J., Harwood, A., Holland, A. (2011). The Future of Debt Markets. *OECD Journal: Financial Market Trends*, 2011(2), 263-281.
- Bond, D. L. (2014). *Peer Group Discussion on Project Bonds*. Presentation at Peer Group Dialogue on Project Bonds.
- Bordo, M., Eichengreen, B., Klingebiel, D., & Martinez-Peria, M. S. (2001). Is the Crisis Problem Growing More Severe? *Economic Policy*, 16(32), 51-82.
- Bossone, B., Cirasino, M., (2001). *The Oversight of the Payments Systems: a Framework for the Development and Governance of Payment Systems in Emerging Economies*. Western Hemisphere Payments and Securities Clearance and Settlement Systems Research Series No. 1. World Bank Publications.
- Bravo, L. F. (2014). *Innovative Structures for Financing Infrastructure Projects in Capital Markets*. Presentation at Peer Group Dialogue on Project Bonds.
- Canuto, O., Silva, A. C., & Garcia-Kilroy, C. (2014). Long-Term Finance in EMEs: Navigating between Risks and Policy Choices. *World Bank Economic Premise*, 152, 1-5.
- Caprio, G., & Klingebiel, D. (1996). Bank Insolvencies Cross-country Experience. Policy Research Working Paper No. 1620. World Bank Publications.
- Caprio, G., Folkerts-Landau, D. F. I., & Lane, T. D. (Eds.). (1994). *Building Sound Finance in Emerging Market Economies*. International Monetary Fund.
- Cardenas, V., Michel-Kerjan, E., Turgel, D., & Zelenko, I. (2011). *Catastrophe Financing for Governments: Learning from the* 2009-2012 *MultiCat Program in Mexico*. OECD Working Papers on Finance, Insurance, and Private Pensions No. 9. OECD Publisher.
- Carmichael, J., & Pomerleano, M. (2002). *The Development and Regulation of Non-Bank Financial Institutions*. World Bank Publications.
- Carson, J. W. (2003). Conflicts of Interest in Self-regulation: Can Demutualized Exchanges Successfully Manage Them? Policy Research Working Paper No. 3183. World Bank Publications.
- Carvajal, A., & Elliott, J. A. (2007). *Strengths and Weaknesses in Securities Market Regulation: A Global Analysis*. IMF Working Paper No. 07/259. International Monetary Fund.
- Castalia. (2013). IFC Demonstration Effects Study.



- Castañeda, P., & Rudolph, H. P. (2010). Portfolio Choice, Minimum Return Guarantees, and Competition in Defined Contribution Pension Systems. *Evaluating the Financial Performance of Pension Funds*, 97.
- Chami, R., Fullenkamp, C., & Sharma, S. (2010). A framework for financial market development. *Journal of Economic Policy Reform*, 13(2), 107-135.
- Chamlou, N., Iskander, M. R. (1999). *Corporate Governance: a Framework for Implementation*. World Bank Publications.
- Cheikhrouhou, H., Rocha, R. R., Rudolph, H. P., & Thorburn, C. (2007). *Financial Sector Dimensions of the Colombian Pension System*. World Bank Working Paper No. 106. World Bank Publications.
- Chiquier, L., & Lea, M. J. (Eds.). (2009). *Housing Finance Policy in Emerging Markets*. World Bank Publications.
- Chiquier, L., Hassler, O., & Lea, M. J. (2004). Mortgage Securities in Emerging Markets. Policy Research Working Paper No. 3370. World Bank Publications.
- Čihák, M., Demirgüç-Kunt, A., Feyen, E., & Levine, R. (2012). Benchmarking Financial Systems Around the World. Policy Research Working Paper No. 6175. World Bank Publications.
- Cirasino, M., & Guadamillas, M. (2004). *Reforming Payments and Securities Settlement Systems a Key Element of Financial Infrastructure*. Access Finance No. 2. World Bank Publications.
- Claessens, S., Klingebiel, D., & Schmukler, S. L. (2002). The Future of Stock Exchanges in Emerging Economies: Evolution and Prospects. *Brookings-Wharton Papers on Financial Services*, 2002(1), 167-212.
- Claessens, S., Klingebiel, D., & Schmukler, S. L. (2007). Government Bonds in Domestic and Foreign Currency: the Role of Institutional and Macroeconomic Factors. *Review of International Economics*, 15(2), 370-413.
- Clarke, G. R., Xu, L. C., & Zou, H. F. (2006). Finance and Income Inequality: What do the Data Tell Us? *Southern Economic Journal*, 72(3), 578-596.
- Committee on Global Financial System (2006) Housing *Finance in the Global Financial Market*. CGFS Papers No. 26. Bank of International Settlement.
- Committee on Global Financial System (2007) *Financial Stability and Local Currency Bond markets*. CGFS Papers No. 28. Bank of International Settlement.
- Dailami, M., & Hauswald, R. (2003). The Emerging Project Bond Market: Covenant Provisions and Credit Spreads. Policy Research Working Paper No. 3095. World Bank Publications.
- Dalla, I. (1995). The Emerging Asian Bond Market. World Bank Publications.
- Das, U. S., Polan, M., & Papaioannou, M. G. (2008). *Strategic Considerations for First-Time Sovereign Bond Issuers*. IMF Working Paper No. 08/261. International Monetary Fund.
- De La Lastra, I., Guadamillas, M., & Holttinen, E. (2000). *Matrix for the Assessment and Recommendations of the Securities Clearance and Settlement systems*. Western Hemisphere Payments and Securities Clearance and Settlement Initiative Working Paper No. 1. World Bank Publications.



- De la Torre, A., & Schmukler, S. L. (Eds.). (2007). *Emerging Capital Markets and Globalization: the Latin American Experience*. World Bank Publications.
- De la Torre, A., Gozzi, J. C., & Schmukler, S. L. (2008). Capital Market Development: Whither Latin America?. In *Financial Markets Volatility and Performance in Emerging Markets*, 121-154. University of Chicago Press.
- De la Torre, A., Ize, A., & Schmukler, S. L. (2011). *Financial Development in Latin America and the Caribbean: the Road Ahead.* World Bank Publications.
- De Lis, S. F., Ramis, R. C., Sabater, V. L., Osorio, M. M. E., Papp, P. I., Fernández, E. R., & López, F. J. V. (2010). *Corporate Governance and Access to Finance*. World Savings Banks Institute & European Savings Banks Group.
- Demirgüç-Kunt, A., & Levine, R. (1999). Bank-Based and Market-Based Financial Systems: Cross-Country Comparisons. World Bank Policy Research Working Paper No. 2143. World Bank Publications.
- Demirgüç-Kunt, A., & Levine, R. (Eds.). (2001). Financial Structure and Economic Growth: A Cross-Country Comparison of Banks, Markets, and Development. MIT press.
- Demirgüç-Kunt, A., & Maksimovic, V. (2002). Funding Growth in Bank-based and Market-based Financial Systems: Evidence from Firm-Level Data. *Journal of Financial Economics*, 65(3), 337-363.
- Demirgüç-Kunt, A., Feyen, E., & Levine, R. (2012). The Evolving Importance of Banks and Securities Markets. Policy Research Working Paper No. 5805. World Bank Publications.
- Didier, T., & Schmukler, S. L. (2013). The Financing and Growth of Firms in China and India: Evidence from Capital Markets. *Journal of International Money and Finance*, 39, 111-137.
- Didier, T., & Schmukler, S. L. (2014). Financial Development in Asia: Beyond Aggregate Indicators. Policy Research Working Paper No. 6761. World Bank Publications.
- Didier, T., & Schmukler, S. L. (Eds.). (2013). *Emerging issues in financial development: Lessons from Latin America*. World Bank Publications.
- Domowitz, I., Glen, J. D., & Madhavan, A. (1997). Market Segmentation and Stock Prices: Evidence from an Emerging Market. *The Journal of Finance*, *52*(3), 1059-1085.
- Domowitz, I., Glen, J. D., & Madhavan, A. (1998). International Cross-Listing and Order Flow Migration: Evidence from an Emerging Market. *The Journal of Finance*, *53*(6), 2001-2027.
- Dorfman, M., & Palacios, R. (2012). World Bank Support for Pensions and Social Security. Discussion Paper No. 1208. World Bank Publications.
- Easterly, W., Islam, R., & Stiglitz, J. E. (2001, August). Shaken and Stirred: Explaining Growth Volatility. In *Annual World Bank Conference on Development Economics*, 191-211.
- EBRD (European Bank for Reconstruction and Development), IMF (International Monetary Fund), OECD (Organization for Economic Co-operation and Development), & World Bank (2013). Report on Local Currency Bond Markets A Diagnostic Framework. International Monetary Fund.



- EBRD (2013). Local Currency Lending and Borrowing 2000 -2010. EvD Special Study. EBRD.
- Effron, L., Elliot, V., Fostvedt, N. (2011). FIRST Evaluation: Phase I. World Bank.
- EIB (European Investment Bank) (2012). An Outline Guide to Project Bonds Credit Enhancement and the Project Bond Initiative. EIB.
- El Daher, S. (1997). *Municipal Bond Markets: Prospects for Developing Countries*. Infrastructure Note, FM-8b. World Bank Publications.
- Elliott, J. E. (2002). *Demutualization of Securities Exchanges: a Regulatory Perspective*. IMF Working Paper No. 02/119. International Monetary Fund.
- Elliott, V. (2014, Draft). IEG evaluation of AAA: Recent Experience and Next Steps. Mimeograph.
- Endo, T. (2008). Broadening the Offering Choice of Corporate Bonds in Emerging Markets: Cost-Effective Access to Debt Capital. Policy Research Working Paper No. 4655. World Bank Publications.
- Endo, T. (2013). The Development of Government Bond Markets in Emerging Economies: Market Structure Matters. Working Paper.
- Espinosa-Vega, M. A., & Zanforlin, L. (2008). *Housing Finance and Mortgage-Backed Securities in Mexico*. IMF Working Paper No. 08/105. International Monetary Fund.
- Ezike, J. E., & Ogege, S. (2012). The Nigerian Capital Market and Economic Development: a Critical Appraisal. *International Business Research*, 5(8), 228-236.
- Fink, G., Haiss, P., & Hristoforova, S. (2003). *Bond Markets and Economic Growth.* IEF Working Paper No. 49. Research Institute of European Affairs.
- Fink, G., Haiss, P., & Hristoforova, S. (2006). *Credit, Bonds, Stocks and Growth in Seven Large Economies*. Europainstitut Working Paper No. 70.
- Freire, M., & Petersen, J. E. (Eds.). (2004). *Subnational Capital Markets in Developing Countries: from Theory to Practice*. World Bank Publications.
- Fremond, O., & Capaul, M. (2002). *The State of Corporate Governance: Experience from Country Assessments*. Policy Research Working Paper No. 2858. World Bank Publications.
- G20 (2013). Long-Term Investment Financing for Growth and Development. Umbrella Paper.
- G20 High-Level Panel on Infrastructure (2011). Recommendations to G20.
- G20 (2011). G20 Action Plan to Support the Development of Local Currency Bond Markets.
- G8 (2007). G8 Action Plan for Developing Local Bond Markets in Emerging Market Economies and Developing Countries.
- Gadinis, S. (2013). The Financial Stability Board: The New Politics of International Financial Regulation. *Texas International Law Journal*, 48(2), 157-175.



- Galbraith, James (2014). The End of Normal: The Great Crisis and the Future of Growth. Simon & Schuster.
- Gallego, F., & Loayza, N. (2001). Financial Structure in Chile: Macroeconomic Developments and Microeconomic Effects. In *Financial Structure and Economic Growth: A Cross-Country Comparison of Banks, Markets, and Development,* 299-346. MIT Press.
- Garcia, E., & Dalla, I. (2005). The Role of Supranational Institutions in Local Currency Bond Markets: The Experience of the ADB and the IDB. *Infrastructure and Financial Markets Review*, 11(1). Inter-American Development Bank.
- Garcia-Kilroy, C., & Silva, A. C. (2011). *Reforming Government Debt Markets in MENA*. Policy Research Working Paper No. 5611. World Bank Publications.
- Garcia-Kilroy. (2014, Draft). *Infrastructure Project Bonds: Policy Challenges for Domestic Fixed Income Markets in EMEs.* Mimeograph.
- Genesis Analytics. (2013). Efficient Securities Markets Institutional Development in Africa: End of Program Evaluation.
- Gerschenkron, A. (1962). Economic Backwardness in Historical Perspective. Harvard University Press.
- Glen, J. D. (1994). *An Introduction to the Microstructure of Emerging Markets*. IFC Discussion Paper No. 24. World Bank Publications.
- Global Capital. (2014). Green bonds: Getting Investors Out of Bed for the Climate.
- Gozzi, J. C., Levine, R., Peria, M. S. M., & Schmukler, S. L. (2012). *How Firms Use Domestic and International Corporate Bond Markets*. Policy Research Working Paper No. 6209. World Bank Publications.
- Gray, R. D., Hoskote, M., Kumar, A., S., & Ruster, J., von Klaudy, S. (1997). *Mobilizing Domestic Capital Markets for Infrastructure Financing. International experience and Lessons for China*. World Bank Discussion Paper No. 377. World Bank Publications.
- Grimminger, A. D., & Di Benedetta, P. (2013). *Raising the Bar on Corporate Governance: A Study of Eight Stock Exchange Indices*. World Bank Publications.
- Guadamillas, M., & Keppler, R. (2001). *Securities Clearance and Settlement Systems: a Guide to Best Practices*. Policy Research Working Paper No. 2581. World Bank Publications.
- Hafeman, M. (2009). Asset Structure for Insurers. Primer Series on Insurance No. 5. World Bank Publications.
- Halac, M., Schmukler, S. L., Fernández-Arias, E., & Panizza, U. (2004). Distributional Effects of Crises: the Financial Channel. *Economía*, 5(1), 1-67.
- Harwood, A. (Ed.). (2000). Building Local Bond Markets: an Asian Perspective. World Bank Publications.
- Harwood, A., & Konidaris, T. (2014). SME Exchanges in Emerging Market Economies: A Stocktaking of Development Practices. Mimeograph.



- Harwood, A., & Smith, B. L. (Eds.). (1997). Sequencing?: Financial Strategies for Developing Countries. Brookings Institution Press.
- Harwood, A., Litan, R. E., & Pomerleano, M. (Eds.). (2010). Financial Markets and Development: the Crisis in Emerging Markets. Brookings Institution Press.
- Hassler, O., & Walley, S. (2012). Mortgage Liquidity Facilities. World Bank Publications.
- Helleiner, E. (2012). The Limits of Incrementalism: the G20, the FSB, and the International Regulatory Agenda. *Journal of Globalization and Development*, 2(2).
- Herrera-Pol, D. (2013). Emerging Bond Markets: No Longer the Next Frontier. In *The Euromoney International Debt Capital Markets Handbook* 2014, 41-46.
- Hinz, R. P. (Ed.). (2010). Evaluating the Financial Performance of Pension Funds. World Bank Publications.
- Holzmann, R. (2009). *Aging Population, Pension Funds, and Financial Markets: Regional Perspectives and Global Challenges for Central, Eastern, and Southern Europe.* World Bank Publications.
- Humphrey, D. B. (1995). *Payment Systems: Principles, Practice, and Improvements*. World Bank Technical Paper No.260. World Bank Publications.
- IEG (OED, Operations Evaluation Department) (1998). OED Review of Bank Assistance for Financial Sector Reform. World Bank Publications.
- IEG (Independent Evaluation Group) (2006). Financial Sector Assessment Program: IEG review of the Joint World Bank and IMF Initiative. World Bank Publications.
- IEG (2006). IEG Review of World Bank Assistance for Financial Sector Reform. World Bank Publications.
- IEG (2006). Pension Reform and Development of Pension Systems: an Evaluation of World Bank Assistance. World Bank Publications.
- IEG (2011). MIGA's Financial Sector Guarantees in a Strategic Context. World Bank Publications.
- IFC (International Finance Corporation). (2004). Strategic Directions.
- IFC (2008). Securities Markets: Advisory Services A2F Product. Presentation.
- IFC (2010). Corporate Governance Manual Second Edition.
- IFC (2010). Local Currency Financing Using Derivatives. Presentation. IFC Treasury.
- IFC (2011). Securities Markets: Advisory Services A2F Product. Presentation.
- IFC (2012). Risk Taking: A Corporate Governance Perspective. World Bank Publications.
- IFC (2014). Proposed Bond Issuance Program for Local Currency Capital Markets Development in Strategically Important Countries.
- IFC (2014). Road Map FY15-17: Implementing the World Bank Group Strategy.



- IMF (2001). *IMF Reviews Experience with the Financial Sector Assessment Program (FSAP) and Reaches Conclusions on Issues Going Forward.* International Monetary Fund.
- IMF (2003). Guidelines for Public Debt Management. International Monetary Fund.
- IMF (2004). Evaluation of the Financial Sector Assessment Program (FSAP). Issues Paper. International Monetary Fund.
- IMF (2005). Development of Corporate Bond Markets in Emerging Market Countries. In *Financial Stability Report*, 103-141. International Monetary Fund.
- IMF (2014). Review of the Financial Sector Assessment Program Further Adaptation to the Post-Crisis Era. International Monetary Fund.
- IMF, & World Bank (2000). Financial Sector Assessment Program (FSAP) A Review: Lessons from the Pilot and Issues Going Forward. International Monetary Fund.
- IMF, & World Bank (2001). *Progress Report on the Bank-Fund Financial Sector Liaison Committee (FSLC)*. World Bank Publications.
- IMF, & World Bank (2003). Financial Sector Assessment Program Review, Lessons, and Issues Going Forward. International Monetary Fund.
- IMF, & World Bank (2005). Financial Sector Assessment Program Review, Lessons, and Issues Going Forward. International Monetary Fund.
- IMF, & World Bank (2009). *The Financial Sector Assessment Program After Ten Years: Experience and Reforms for the Next Decade.* International Monetary Fund.
- Imran, K., & Khalil, S. (2012). Contribution of Financial Development in Poverty Reduction through Industrial Growth. *International Journal of Asian Social Science*, 2(5), 567-576.
- Iorgova, S., & Ong, L. L. (2008). *The Capital Markets of Emerging Europe: Institutions, Instruments and Investors*. IMF Working Paper No. 08-103. International Monetary Fund.
- Jalil, A., & Feridun, M. (2011). Long-Run Relationship Between Income Inequality and Financial Development in China. *Journal of the Asia Pacific Economy*, 16(2), 202-214.
- James, E. (1994). Averting the Old Age Crisis. World Bank Policy Research Report. World Bank Publications.
- Jeanneney, S. G., & Kpodar, K. (2011). Financial Development and Poverty Reduction: Can there Be a Benefit without a Cost?. *The Journal of Development Studies*, 47(1), 143-163.
- Kay, J. (2012). *The Kay Review of UK Equity Markets and Long-term Decision Making*. European Corporate Governance Institute Final Report.
- Kim, D. H., & Lin, S. C. (2011). Nonlinearity in the Financial Development–Income Inequality Nexus. *Journal of Comparative Economics*, 39(3), 310-325.
- King, R. G., & Levine, R. (1993). Finance, Entrepreneurship and Growth. *Journal of monetary Economics*, 32(3), 513-542.



- Knaack, P. (2014). *Global Financial Regulatory Reform and Government Networks: Issues of Governance and Capture.* Paper presented at the FLACSO-ISA Conference.
- Kumar, A, & Wilton, D. (1995). The Emerging Asian Bond Market: China. World Bank. June.
- Kumar, A., Jun, K., Saunders, A., Selwyn, S., Sun, Y., Vittas, D., Wilton, D. (1995). *China's Emerging Capital Markets. Financial Publishing Asia Pacific.* Financial Times and World Bank.
- Kumar, A. (1997). *The Regulation of Non-Bank Financial Institutions USA, European Union and Other Countries.* World Bank Discussion Paper No. 362. World Bank Publications.
- Kusuma, K. A., Silva, A. C. (2014). *Sukuk Markets: A Proposed Approach for Development*. Policy Research Working Paper No. 7133. World Bank Publications.
- Laeven, L. (2014, Draft). The Development of Local Capital Markets: Rationale and Challenges. Mimeograph.
- Lester, R. (2009). *Introduction to the Insurance Industry*. Primer Series on Insurance No. 1. World Bank Publications.
- Lester, R. (2014). *Insurance and Inclusive Growth.* Policy Research Working Paper No. 6943. World Bank Publications.
- Levine, R. (2002). Bank-Based or Market-Based Financial Systems: Which Is Better?. *Journal of Financial Intermediation*, 11(4), 398-428.
- Levine, R. (2005). Finance and Growth: Theory and Evidence. Handbook of Economic Growth, 1, 865-934.
- Listfield, R., & Montes-Negret, F. (1994). *Modernizing Payment Systems in Emerging Economies*. Policy Research Working Paper No. 1336. World Bank Publications.
- Litan, R. E. (2003). The Future of Domestic Capital Markets in Developing Countries. Brookings Institution Press.
- Litan, R. E., Pomerleano, M., & Sundararajan, V. (Eds.). (2002). *Financial Sector Governance: the Roles of the Public and Private Sectors*. Brookings Institution Press.
- Loayza, N. V., & Ranciere, R. (2006). Financial development, financial fragility, and growth. *Journal of Money, Credit and Banking*, 1051-1076.
- Loladze, T. (2014). Select Country Practices in Primary Market Regulation of Corporate Bonds: Analysis and Impact of Hybrid Offer Regimes. World Bank Publications.
- Merton, R. C., & Bodie, Z. (1995). A Conceptual Framework for Analyzing the Financial Environment. In *The Global Financial System: A Functional Perspective*, 3-31. Harvard Business School Press.
- Merton, R. C., & Bodie, Z. (2005). The Design of Financial Systems: towards a Synthesis of Function and Structure. *Journal of Investment Management*, 3(1), 1-23.
- Miyajima, K., Mohanty, M. S., & Chan, T. (2014). Emerging Market Local Currency Bonds: Diversification and Stability. *Emerging Markets Review*.



- Nenova, T. (2010). *Expanding Housing Finance to the Underserved in South Asia: Market Review and Forward Agenda*. World Bank Publications.
- O'Connor, S. (2006). *Development of a National Payment System: Some Lessons Learned*. Access Finance No. 9. World Bank Publications.
- Odhiambo, N. M. (2010). Is Financial Development a Spur to Poverty Reduction? Kenya's Experience. *Journal of Economic Studies*, *37*(3), 343-353.
- OECD (1998). Capital Market Development in Transition Economies: Country Experiences and Policies for the Future. OECD Publisher.
- OECD (2004). OECD Principles of Corporate Governance 2004. OECD Publisher.
- Opazo, L., Raddatz, C., & Schmukler, S. L. (2014). *Institutional investors and long-term investment: evidence from Chile.* World Bank Publications.
- Otker-Robe and Podipiera, Anca Maria (2013) *The Social Impact of Financial Crises*. Policy Research Paper, World Bank
- Pagano, M. (1993). Financial markets and growth: an overview. European economic review, 37(2), 613-622.
- Palacios, R. J. (1996). *Averting the Old-Age Crisis: Technical Annex*. Policy Research Working Paper No. 1572. World Bank Publications.
- Papaioannou, M. G., Das, U. S., Pedras, G., Surti, J., & Ahmed, F. (2010). *Managing Public Debt and its Financial Stability Implications*. International Monetary Fund.
- Pargendler, M. (2014). Corporate Governance in Emerging Markets. In Oxford Handbook of Corporate Law and Governance. Oxford University Press.
- Panizza, U. (2014). Financial Development and Economic Growth: Known Knowns, Known Unknowns, and Unknown Unknowns. *Revue d'Économie du Développement*, 2, 35-65.
- Perez-Moreno, S. (2011). Financial Development and Poverty in Developing Countries: a Causal Analysis. *Empirical Economics*, 41(1), 57-80.
- Piketty, Thomas (2014). Capitalism in the 21st Century. Belknap Press.
- Pollner, J. D. (1999). *Using Capital Markets to Develop Private Catastrophe Insurance*. Viewpoint Note No. 197. World Bank Publications.
- Raddatz, C., & Schmukler, S. L. (2008). *Pension Funds and Capital Market Development: How Much Bang for the Buck?* Policy Research Working Paper No. 4787. World Bank Publications.
- Rajan, R. G., & Zingales, L. (2003). The Great Reversals: the Politics of Financial Development in the Twentieth Century. *Journal of Financial Economics*, 69(1), 5-50.
- Rajan, R.G. and Zingales, L. (2009), Saving Capitalism from the Capitalists. Princeton University Press.



- Ratha, D., & Ketkar, S. (2007). *Development Finance via Diaspora Bonds*. In a Presentation to the ASSA Annual Meetings in Chicago, IL.
- Reichelt, H. (2014). *Green Bonds Market Tops* \$20 *Billion, Expands to New Issuers, Currencies & Structures.* Retrieved at http://blogs.worldbank.org/climatechange/green-bonds-market-tops-20-billion-expands-new-issuers-currencies-structures
- Rewilak, J. (2013). Finance is Good for the Poor But it Depends Where You Live. *Journal of Banking & Finance*, *37*(5), 1451-1459.
- Rocha, R. (2011). Financial Access and Stability: a Road Map for the Middle East and North Africa. World Bank Publications.
- Rojas-Suarez, L. (2014). *Towards Strong and Stable Capital Markets in Emerging Market Economies*. BIS Papers No. 75, 13-20.
- Rudolph, H. P., & Rocha, R. R. (2007). *Competition and Performance in the Polish Second Pillar*. World Bank Working Paper No. 107. World Bank Publications.
- Sienaert, A. (2012). Foreign Investment in Local Currency Bonds Considerations for Emerging Market Public Debt Managers. Policy Research Working Paper No. 6284. World Bank Publications.
- Silva, A.C., García-Kilroy, C. (2013). Development of deeper more liquid local currency bond markets. In *The Euromoney International Debt Capital Markets Handbook* 2014, 5-10.
- Silva, A.C., Oliveira de Carvalho, L., & Ladeira de Medeiros, O. (2010). *Public Debt: the Brazilian Experience*. World Bank and National Treasury (Brazil).
- Sophastienphong, K., Mu, Y., & Saporito, C. (2008). *South Asian Bond Markets: Developing Long-Term Finance for Growth.* World Bank Publications.
- Stehm, J. (1996). Clearance and Settlement Systems for Securities: Critical Design Choices in Emerging Market Economies. World Bank Discussion Paper No. 321. World Bank Publications.
- Stewart, F. (2014). Proving Incentives for Long-Term Investment by Pension Funds The Use of Outcome-Based Benchmarks. Policy Research Working Paper No. 6885. World Bank Publication.
- USC DPMG (University of Southern California Development Portfolio Management Group) (2014). *The Financial Sector Reform and Strengthening Initiative (FIRST): Phase II Evaluation.* World Bank.
- Valickova, P., Havranek, T., & Horvath, R. (2014). Financial Development and Economic Growth: A Meta-Analysis. *Journal of Economic Surveys*.
- Van Agtmael, A. (2007). The Emerging Markets century: How a New Breed of World-Class Companies Is Overtaking the World. Simon and Schuster.
- Vitols, S. (2001). The Origins of Bank-Based and Market-Based Financial Systems: Germany, Japan, and the United States. In *The Origins of Nonliberal Capitalism: Germany and Japan in Comparison*, 171-199.
- Vittas, D. (1996). Pension Funds and Capital Markets: Investment Regulation, Financial Innovation, and Governance. Viewpoint Note No. 71. World Bank Publications.



- Vittas, D. (1999). Pension Reform and Capital Market Development:" Feasibility" and "Impact" Preconditions. World Bank Publications.
- Vittas, D. (Eds.). (1992). *Financial Regulation: Changing the Rules of the Game*. World Bank Development Studies. World Bank Publications.
- Watanabe, M. (1998). *New Directions in Asian Housing Finance: Linking Capital Markets and Housing Finance.* International Finance Corporation. World Bank Publications.
- Wolff-Hamacher, S. (2007). *Local Currency Bond Issues by International Financial Institutions*. Working Paper prepared in connection with CGFS Publications No. 28, Deutsche Bundesbank.
- World Bank (2002). *Methodology for the Assessment of Securities Clearance and Settlement Systems*. Western Hemisphere Payments and Securities Clearance and Settlement Initiative Working Paper No. 2. World Bank Publications.
- World Bank (2006). Developing India's Corporate Bond Market. World Bank Publications.
- World Bank (2007). Developing the Domestic Government Debt Market: From Diagnostics to Reform Implementation. World Bank Publications.
- World Bank (2007). Managing Public Debt: From Diagnostics to Reform Implementation. World Bank Publications.
- World Bank (2012). Infrastructure Strategy Update FY2012-2015: Transformation through Infrastructure.
- World Bank (2012). Rethinking the Role of the State in Finance. Global Financial Development Report 2013.
- World Bank (2013). *Multi-Country ECA Mortgage Funding Platform: International Mortgage Securitization Company, IMSCO*. White Paper, Prepared under the Russia Financial Sector TA / AAA Program. World Bank.
- World Bank (2013). Report on the Observance of Standards and Codes (ROSC), Thailand. World Bank Publications.
- World Bank (2013). Report on the Observance of Standards and Codes (ROSC), Vietnam. World Bank Publications.
- WB (2013). Share Offerings of State-Owned Enterprises on Equity Markets: A Review of Recent Emerging Market Trends. World Bank Publications.
- World Bank (2014). A Multipronged Integrated Approach to the Development of Securities Markets: Deep Dive.
- World Bank (2014). Global Financial Development Report 2015: Long-Term Finance Concept Note. Approach Note. Mimeograph.
- World Bank (2014). Pension Funds and Private Equity Unlocking Africa's Potential. World Bank Publications.
- World Bank (2014). Request for Fund for Global Infrastructure Facility. Board Paper.



- World Bank (2014). The Financial Sector Assessment Program: Addressing the Needs of Emerging Markets and Developing Economies (EMDEs). World Bank Publications.
- World Bank (2015). *Financial Developing Report*. Development Economics (DEC) Vice Presidency. World Bank Publications.
- World Bank, & IMF (2001). Developing Government Bond Markets: A Handbook. World Bank Publications.
- Yermo, J. (2004). Pension Reform and Capital Market Development: Background Paper for Regional Study on Social Security Reform. World Bank.



Evaluation Design Matrix

Eva	aluation questions	Information required	Information sources	Data collection methods	Data analysis methods	Limitations							
	Overarching questions 1. Has the WBG been relevant, effective and efficient in supporting the development of client countries' domestic capital markets, and in using capital market instruments in client countries to support real sector development? Specific Questions - Relevance of Objectives 1. Have WBG capital market interventions been relevant to client countries?												
a.	Were the interventions based on their Country Assistance Strategies?	Information on strategic fit between capital markets activities and country development priorities.	Country Assistance Strategies (CAS), their Completion Reports (CASCR) (embedded in follow up CASs), and IEG Reviews (CASCR-Rs)	Downloading relevant documents from WBG / IEGCC databases.	Content / text analysis, to assess the extent to which capital markets interventions reflected priority issues according to the relevant documents.	CAS / CASCR may not reflect all activities especially as some may have been undertaken (outside the Bank budget). CAS may have only generalized descriptions of overall financial sector development strategies as opposed to specific elements of capital markets strategies.							
b.	Were the interventions based on financial sector knowledge, diagnostics and strategies?	Information on capital market development and sequencing in the context of an overall financial sector development strategy.	FSAPs, FSAP follow-ups, country-level financial sector strategies outside the FSAP program. Financial sector strategies where available. Relevant research.	Access to FSAP database and review of its reports, Access to country financial strategies / relevant research from internal and external online sources.	Content and text analysis to assess the extent to which capital markets interventions reflected identified priority issues according to the FSAP/financial sector strategy/ relevant research.	Infrequency of FSAPs, non-availability for some countries. Ad hoc nature of financial sector strategies. Ad hoc nature of research on some topics only.							



Limitations **Evaluation questions** Information Information Data Data analysis required sources collection methods methods Relevance of Design To what extend did the intervention focus on the right issues and provide appropriate and adequate solutions to clients' needs? Did interven-Time Documents Download of WBG Content / Only partial a. tions build on sequences of related to the Sequence availability of documents and prior achievediagnosis and specific project databases. analysis and documents. outcomes or program, comparison Incomplete time ments and was supplementary FSAP, financial support susinterviews with over time sequences. tained over TTLs / country between sector time? strategies, as clients where successive well as possible points of documentation especially in the interventions on specialized context of field diagnosis tools visits. (e.g. corporate governance: ROSCs) where available, project/ program documents, advisory works, IFC Board documents for its investments. Documents Was support ap-Interlinkages Review of relevant Content Details on wider propriately between the related to the documents: analysis, focus context and linkages linked to other intervention interviews with on relationship not always available specific project areas of the fiundertaken or program, AS TTLs / country if interventions are between nancial sector? and other / AAA - FSAP, clients where different areas specifically focused areas of financial sector possible. of financial on individual financial sector strategies, as sector reform segments. well as reform (e.g., banking / documentation capital markets proposed as on specialized reform, and priority. diagnosis tools linkages (e.g. corporate between e.g. governance: corporate and ROSCs) where government available. bond market project/ development, program primary vs documents, secondary advisory market works, IFC development Board for housing, documents for etc.). its investments.



Eva	aluation questions		sources		ta analysis ethods	Limitations
C.	Did the WBG engage strategically with the right country counterparts?	Level of engagement and response among country counterparts	Project / program / AS / AAA documents, ISRs and back to office memos if available, interviews with TTLs and with country staff in the context of field visits.	Review of relevant documents; interviews with TTLs / country clients where possible.	Content analysis and analysis of survey information with TTLs to the extent collected.	Information not always available especially if elapsed time is long.
Eff 3.	fectiveness: To what extent did \ development?	WBG intervention	achieve their objec	tives, primary or seco	ndary, relevant to c	apital market
a.	What was achieved in terms of domestic capital market development, relative to WBG and client objectives and relevant financial sector research, diagnostics and strategies?	Outcomes of WBG actions	Variety of sources: analysis of market data on local capital markets in terms of the depth and evolution following WBG interventions – adjusted for overall market growth.	Downloading and analysis of relevant data. Review of any available EvNotes, IEG RRs, etc.	Data analysis over cross section and time series. Analysis of TTL interview data.	Mixed availability.
b.	What was achieved in the use of capital market instruments for financing real sector development, in terms of sustained, demonstrative or catalytic effects?	Market evolution following WBG interventions.	WBG data – supervision and completion reports, subsequent diagnostics, externally conducted evaluations, external databases and information sources e.g. Bloomberg etc. Field visits	Downloads of internally and externally available data. TTL interviews, interviews with other market participants. Site visits and country case studies	Content analysis, data analysis using methods such as difference- in-difference, etc. Analysis of questionnaires and field visit surveys.	Mixed availability, limited number of case study countries



Eva	aluation questions		Information sources		Data analysis nethods	Limitations
W o 4.	rk Quality and Orga Was the WBG capit coordination?			y in terms of interna	l and external quality	control and
a.	Has the WBG met internal work quality standards in preparation, im- plementation and supervision, and leveraged synergies through coordi- nation?	Review of project / program documents, implementation supervision reports, completion reports as available, TTL interviews and surveys, client interview, interviews with management of relevant departments. Field visit data.	WBG staff and clients	Downloading of relevant documents, Interviews and surveys	Content analysis of documents, field visit data and questionnaire responses	Data collection is difficult especially with regard to getting enough feedback for representative sampling. Limited number of country case studies.
b.	Were activities consistent / complementary with donor engagement and was funding consistently available?	Review of donor priorities and donor funding	Donor documents, project reviews undertaken by ESMID, FIRST, etc.	Collection of relevant reports and donor interviews	Text analysis, category building,	Donor feedback not available for all policy areas
C.	Were WBG monitoring and evaluation standards adequate for accountability and learning and has WBG management used the resulting information to improve performance?	Information on the results frameworks and monitoring and evaluation arrangements for the intervention, on the information collected, and the use made of such information	Project / program AS / AAA documents. Completion reports where available. External reviews. Discussions with TTLs on use of such information.	Review of documents and TTL discussions	Review of results frameworks to assess good practice, review of data on results achieved, and review of such data.	Early interventions had no results frameworks and current ones still do not for e.g. WB AAA. Cannot compare earlier and later results frameworks as expectations have changed over time. Limited information on use of results data.



Portfolio Selection: WB and IFC Lending and Analytic and Advisory Services

In determining relevant World Bank Group interventions for the support of capital market development, the present evaluation looks across World Bank and IFC investments, advisory work (Advisory Services for the IFC – AS, and Analytical and Advisory Activities for the World Bank – AAA), and treasury issuance. The portfolio review however does not include treasury issuance, which refers to the funding side of WBG activities, and does not constitute a part of WBG lending or advisory activities.

The identification of a relevant portfolio focuses on projects approved between fiscal year 2004 and fiscal year 2014, and the evaluation presents data by approval year. For IFC investments only, data are presented by the commitment year. It includes *both direct and indirect* interventions to support capital market development, where direct interventions refers to activities aimed at supporting the strengthening of capital markets instruments as a part of countries' *financial* sector development (bonds, equities and asset backed securities), investors (insurance or pension funds) and capital markets infrastructure (payments and securities clearance and settlement, and the strengthening of corporate governance). It also includes projects in the *real* sector that indirectly support client countries' capital market development through the use of, or support for the use of, capital markets instruments (e.g., through the issue or purchase of corporate bonds or provision of guarantees for bonds, asset backed securities, etc.). The review leaves out projects that were terminated, dropped, or are still in the pipeline.

The identification of relevant projects was uniquely complex from certain perspectives. A first reason is the heterogeneity of products relevant to capital market development – e.g., insurance, pensions, payments systems or housing finance projects, are intrinsically very different in terms of how they contribute to capital market development. This limited the usefulness of global criteria, such as global word searches, as relevant words differed by product segment. A second major complication was conceptual – the identified segments of projects in areas such as payments systems, insurance, pensions, housing etc., and much of IFC lending rarely had capital market development as a *primary* objective, although it was often a secondary or ancillary objective, to varying degrees. For example, the primary objective of Bank pension projects generally relates to old age security, but many seek to establish multi-pillar systems, where the second and third pillars constitute private funded pools of funds available to support capital markets investments, and where the sound investment of such funds may be an overall element of the project. Thus projects have a continuum of involvement in market development, and the selection of a cut-off point for inclusion or exclusion involves judgment and is not absolute.

System Information: Sector codes. Due to the difficulty of using a global approach, a starting point for the screening of relevant projects from the eligible universe began with the use of the



Bank and IFC sector classifications available in the Bank's Business Warehouse (BW) and IFC's Management Information System (MIS).⁵² For IFC, the initial portfolio included projects in the following sectors: Securities Markets, Housing Finance, Insurance, Collective Investment Vehicles and Distressed Assets (DARP).53 On the WB side, projects with any weighting to the WB sectors Capital Markets, Housing Finance, or Non-Compulsory Pensions and Insurance were included as relevant to capital market development (Table 3.1).

Table 3.1 IEG Capital Markets Portfolio Identification: Sectors Included in Capital Markets Review Portfolio

Topic	WB Sector	Sector Code	IFC Sector	Sector Code
Collective Investment Vehicles			Collective Investment Vehi- cles	Р
Distressed Assets			Distressed Assets	O-FB
Bond Market Advisory	Capital Markets	FK	Securities Markets	0-1
Housing	Housing Finance	FC	Housing Finance	O-E
Insurance	Non-Compulsory Pensions and Insurance	FD	Insurance	O-J
Pensions	Non-Compulsory Pensions and Insurance	FD	Contractual Savings and Pensions	O-JE
Capital Market Regulation or Development	Capital Markets	FK	Securities Markets	0-1
Payments, clearance, and settlement	Payments, Settlements, and Remittance Systems	FG	Market Infrastructure	O-IB

Source: IEG analysis.

Notes: Sector codes refer to preceding sectors

⁵² The World Bank and IFC not only have different sector codes but also, different underlying systems for project classification. IFC uses a nested approach in which each project has a single sector classification with three levels of specificity. For example, a project related to asset backed securities in Colombia would have the primary sector classification Finance & Insurance ('O') a secondary sector classification, within that, of Housing Finance ('O-E'), and a tertiary sector, also within that, of Secondary Mortgage Institutions ('O-E-B'). In contrast, WB projects are assigned up to five, separate sector classifications, not nested, which can be assigned any percentage weights by relevance, that add up to 100 percent. One major implication is that WB projects can be cross listed in different sectors, whereas IFC projects cannot be. Since projects may belong to more than one category, the table below shows them in their major category, but this does not preclude them from also belonging to a second area.

⁵³ Another relevant category, Asset Management companies, was omitted from the scope of the present evaluation, as it will be included in a forthcoming evaluation of IFC mobilization.

Supplementary System Information: Product codes, flags and clusters. The sector code filter also had limitations as an exclusive approach, both due to insufficient granularity, and in the case of IFC, the nested approach. Supplementary system information was therefore used. Thus with regard to *IFC's investment products*, portfolio identification required the identification of those real sector investment projects which had used or supported the use of a capital markets instruments. The identification by sector code was therefore supplemented by IFC's identifications by product codes, attached to projects, not included in the MIS database.⁵⁴ Relevant product codes selected were those for asset-backed securities (ABS), bonds, and guarantees. Use was also made of system flags in the MIS database for *IFC advisory services*. Thus corporate governance related advisory services in the IFC may be identified by a 'governance flag' in the advisory service database.

Word searches. These were attempted as a third filter for relevant projects, to help to limit the error inherent in the sector classification based approach. First, global word searches were attempted, using a 'standard set' of terms relevant to capital markets. Second, word searches were used within product clusters, to identify the part of the spectrum of a product area that was relevant for capital market development. Global word searches proved to be of limited usefulness, as described above, though within certain product segments, such as bond market advisory activities, word searches helped to identify projects for which no sector codes or systems flags exist, as well as to eliminate projects that were of limited relevance to capital market development (Table 3.2).

Annex Table 3.2 IEG Capital Markets Portfolio Identification: Word Search Terms

Capital Markets	Bond Market	Housing	Insurance	Pension	Payments
Bond	Government Security	Bond	Life Insurance	Pillar Two	Security
Security	Public Bond	Security	Investment	Pillar II	Securities
Credit Rating	Corporate Bond	Securities	Invest	Pillar 2	Clearance
Secured Trans- action	Bond Market	Asset-backed		Pillar Three	Settlement
Listed Company	Bond Issue	Secondary Mort- gage		Pillar III	Depository
Investment Index				Pillar 3	Counterparty
Crop Receipt					DvP
Distressed Asset					Delivery versus Payment

Source: IEG.

⁵⁴ See IFC Investment Product Schema. IFC IQ (Information Quality) group. http://ifcint.ifc.org/APPS/IPS/InvProdSchema.nsf/HomeForm?Readform



Individual Screening. Fourth, IEG team members screened projects identified through the preceding three approaches in order to remove any projects that seemed unlikely to be relevant, and also, to fine tune the categories under which certain projects were classified. In the case of some segments of the portfolio such as IFC investments, each project document had to be screened (e.g. to eliminate 'guarantees' of bank loans rather than of bonds. In other segments, such as FIRST funded WB projects which are typically small and focused, a title search generally provided the needed information.

Consultations with Project Teams. A final step in identifying the relevant portfolio was consultations with project teams. In conjunction with discussions aimed at understanding the nature of the work of individual teams, feedback was solicited on the proposed portfolio of projects related to their specific areas of expertise. This process had a significant effect on the selection of the final portfolio. In areas such as WB and IFC corporate governance, decisions were made to focus on policy (WB ROSCs) and legal and regulatory aspects (IFC). In other instances, project teams highlighted core sets of projects that were particularly relevant, allowing the portfolio to be trimmed of others. A list of persons consulted is appended (Attachment 6).

The portfolio includes 1071 projects across IFC and WB advisory and investment work, broadly grouped in the following areas: instruments and issuers; investors; and capital market infrastructure such as clearance and settlement systems (legal and regulatory systems, payments, clearance, settlement and corporate governance) (Annex Table 3). In the table below, projects are not double counted even if they contribute to more than one segment. Broad based market development projects relevant to a range of segments are grouped under the capital markets development category. Finally, the portfolio is presently identified to include a select number of real sector projects that introduced the use of capital markets to fund World Bank Group real sector activities. Funding of real sector activities also underpins some segments of the Treasury portfolio, and is separately described.

In conclusion, while every effort was made to identify a relevant group of projects / investments / advisory services for evaluation, conceptual and practical challenges were significant, and some residual type I and type II error is possible. Judgment had to be exercised for conceptual issues. As the review advances and more project documents are examined, the portfolio of relevant projects will continue to evolve and be further clarified.



Table 3.3 IEG Capital Markets Portfolio Identification: WB and IFC Lending and Advisory Services (2004-2014)

Total	WB Lending	WB AAA	IFC Investments	IFC AS	
1071	87	476	421	87	Capital Markets Projects Identified
					1. Developing Capital Markets Instruments
295			288	7	IFC - Private Equity and Investment Funds ¹
59			59		IFC - Securities Instruments support to Investments ²
115	21	81		13	WB / IFC Bond Markets Advisory ³
147	17	63	46	21	WB / IFC Housing and Mortgage securities
					2 Command's a Combal Mark all large
					2. Supporting Capital Market Investors
196	26	92	24	8	Insurance
40	6	34			Pensions
					2 Duilding Conital Marketa Infractionation
25	1	22		1	3. Building Capital Markets Infrastructure
25	1	23	0	1	Capital Market Regulation, Supervision
61	4	52	2	3	Capital Market Development incl. FSAP, ROSC follow up
25	3	18	2	2	Payments / securities' clearance and settlement / securi-
					ties exchanges ⁴
108	3	73		32	Corporate Governance ⁵
					4 Hairan Canital Manhata ta Commant David Canton In
					4. Using Capital Markets to Support Real Sector Investment
46	6	40			Financing Infrastructure ⁶
(59)			(59)		(Memo item: IFC - Securities Instruments support to In-
	6	40	(59)		Financing Infrastructure ⁶

Source: IEG.

Notes: Projects / Advisory Services (AS) and Analytical and Advisory Activities (AAA) approved between July 2003 and June 2014. For IFC the table only includes projects Completed or still in the Portfolio; excludes Projects Dropped, Terminated, or not yet approved (Pipeline)

- 1. Investment funds here include 23 Distressed Assets (DARP) projects
- 2. Projects identified by search of Product codes for ABS, Bonds, and Guarantees of Bonds, and further by review of project documents
- 3. Includes 41 Gemloc, 11 ESMID projects, 14 projects identified together with FABDM team, 13 recommended by GFMDR team and additional projects based on word search criteria
- 4. For WB, based on sector classification payments (FG) and capital markets (FK). For IFC, includes sector Market Infrastructure (O-IB). Also includes 11 projects recommended by GFMDR, and word search.
- 5. Included 31 IFC AS regional projects with Legal and Regulatory components, as well as 45 WB ROSCs
- 6. An additional six projects in this area are included in IFC Securities Instruments support to Investments
- 7. Repeated here for reference (but not double counted) as these investments also support real sector investment. They include six projects that support infrastructure.



Country Distribution of the Capital Markets Portfolio

The process of identifying individual *countries* for in-depth review in the portfolio began with the project selection process discussed in Attachment 3. Based on the list of projects selected, the countries or regions in which these projects were conducted were identified, and the frequency of occurrence in each country was identified. After an initial count for all projects, the process was repeated with two further iterations: (i) omitting the IFC collective investments; and (ii) looking only at the most recent six years of our eleven year time period. The reason underlying the first additional filter is the numerical preponderance of the collective investment vehicle (funds) category in the portfolio, which could distort overall findings, in terms of the importance of other areas of intervention. The second filter, of the most recent time period, was included because obtaining information on older projects is frequently a challenge in field visits. The results of these filters are described in Annex Table 4.1.

Results show that *on average* a relatively small number of countries benefitted from a large number of projects across all areas of the spectrum of capital markets activities. Ten countries accounted for 357 projects in the full portfolio, or around a third of the total. IEG analysis shows that this proportion does not change significantly if the filters above are applied. There is a limited difference in proportions or rankings between the full portfolio and the list without the funds category, presumably reflecting the fact that close to half (44 percent) of all the funds projects were regional or global projects and did not have a country focus. Indeed the top ten countries are the same for both groups, and so are 24 of the top 25. As regards the second filter, there is some change in the geographical focus of the portfolio reflecting changing priorities over time. Africa and Latin America saw a higher proportion of the projects in the second half of the period than in the first half while Eastern Europe had fewer. These trends are evident at the country level with Nigeria and Kenya rising into the top ten while the other eight countries remained the same. Of the top 25, 21 remain the same.



Annex Table 4.1 Capital Markets Portfolio by Country

	Full por	tfolio	Excl. CI\	/ countries	2009-20	14 only
	No of Coun- No of pro- tries jects		No of Coun- tries	No of projects	No of Coun- tries	No of pro- jects
Only one project	32	32	33	33	35	35
2-5 projects	43	136	45	143	37	124
6-10 projects	16	121	14	104	8	57
11-20 projects	10	147	14	219	9	137
21-30 projects	6	151	2	50	2	46
Over 30 projects	4	206	2	79	1	49
Total Countries	111	793	110	628	92	448
Regional projects		191		93		126
Global projects		87		55		63

Source: IEG analysis.

At the same time, it is noteworthy that there is a long tail of countries where just one (32 countries) or two (20 countries) interventions have been made. The bulk of these (43) take the form of WB advisory work. Most are in countries that are too small for a meaningful capital market, or are at low income levels.

In terms of WBG institutions, interventions by the IFC are the most concentrated (86 percent in the top 25 countries on the investment front, and 70 percent for advisory services). The World Bank's lending is less concentrated, and its advisory services even more diverse, (65 percent and 58 percent respectively). In terms of sectors, some sectors had a noticeably higher country concentration in terms of interventions. For example, the housing sector, or IFC's collective investment funds, are particularly concentrated, whereas the payments sector had over half of its work scattered across a wide range of countries that did not belong to the top 25 (Annex Tables 4.2 and 4.3). In order to select at least fifty (or the maximum available if less than fifity) WBG interventions in capital markets for each thematic sector, desk review portfolios will include interventions in a number of countries beyond the top 25, to adequately reflect sectors where interventions have been more scattered, such as pensions and payments. On this basis, a total of 64 countries are represented in the portfolios reviewed.⁵⁵ As shown in Annex Table 4.2, the top 25 countries account for 550 of the 793 country focused projects (69 percent), and the 64 countries that enable adequate coverage of all areas of the portfolio account for 683 out of the 793 country focused projects (86 percent). Moving from the top 25 to the longer list of 64 increases coverage only 4 percent in e.g., IFC Investment Funds, or 5 percent in Housing, where the interventions

_

⁵⁵ A full list of these countries by frequency and their distribution of projects by sector is given in Annex Table 4.3.



were highly concentrated. But in Pensions and Payments, the percentage of the portfolio covered increases from 38 percent to 83 percent, and from 28 percent to 80 percent, respectively.

Annex Table 4.2. IEG Capital Markets Portfolio Identification: Country Concentration of WB and IFC Lending and Advisory Services (2004-2014)

	Top 25 Countries	Top 25 Countries	64 Se- lected	64 Selected Countries	Regionally focused
	(Nos.)	(Nos.) (% total) (Nos.) (% t		(% total)	(% total)
Investment Funds	143	48%	152	52%	44%
IFC Securities Instruments	41	69%	51	86%	8%
Bond Market Advisory	53	46%	67	58%	37%
Housing	117	80%	125	85%	8%
Insurance	59	39%	76	51%	22%
Pensions	15	38%	33	83%	18%
Capital Market Regulation	10	40%	17	68%	20%
Capital Market Development	33	54%	41	67%	20%
Payments	7	28% 20		80%	20%
Corporate Governance	46	43%	68	63%	13%
Infrastructure	26	57%	33	72%	28%
Grand Total	550	51%	683	64%	26%

Source: IEG analysis.

Annex Table 4.3 IEG Capital Markets Portfolio Identification: 64 Selected Countries - WB Lending, IFC Investments, and Advisory Services (2004-2014)

Country	Invest- ment Funds	Secur- ities Instru- ments	Bond Market Advisory	Hous- ing	Insur- ance	Pen- sion	Cap Mkt Regula- tion and Dev't	Pay- ments, Settle- ment	Corp Gover- nance	Infra- struc- ture	Total	Treas- ury Issu- ance
India	35	9	3	23	2		3		2	5	82	19
China	26	1	3		3	1	5		3	3	45	12
Mexico	9	2	1	24	1	2				2	41	135
Colombia	9	5	5	8	3	1	4		1	2	38	47
Brazil	10	1	3	6	5	2			2		29	86
Russian Fed- eration	9	6	2	2	2	1	4	1	2		29	247
Vietnam	6	3	3		2		4		5	3	26	
Indonesia	3	1	1	5	6	3	1		1	2	23	
Egypt, Arab Republic of	5		2	8	3		2		2		22	
Peru	1	1	1	5	10	2		1		1	22	2
Nigeria	3	1	4	6		1	3		1		19	21
Turkey	5	6	3		2					3	19	158
Kenya	2	1	4	4	1		1		1	4	18	



Martine	Country	Invest- ment Funds	Secur- ities Instru- ments	Bond Market Advisory	Hous- ing	Insur- ance	Pen- sion	Cap Mkt Regula- tion and Dev't	Pay- ments, Settle- ment	Corp Gover- nance	Infra- struc- ture	Total	Treas- ury Issu- ance
Note		5						2	2	2			1
Pakistan	South Africa	4	4	2	3	2						15	440
Sarbia 3 1 2 3 1 <td></td> <td>1</td> <td></td> <td></td> <td>4</td> <td>3</td> <td></td> <td>1</td> <td>1</td> <td>4</td> <td></td> <td></td> <td></td>		1			4	3		1	1	4			
Serbia 3 1 2 3 1 11 Thalland 3 2 2 2 3 1 11 Azerbajlan 2 2 1 2 3 10 Bangladesh 3 2 2 1 2 3 10 Ghana 6 1 2 9 9 6 1 1 1 1 9 Kazakhstan 1 2 3 1 1 1 1 9 9 Philippines 3 1 1 1 1 1 2 8 8 9	Pakistan	3		1		2		2	1	3		12	
Thailand	Saudi Arabia				5	2		1		3		11	1
Azerbaijan 2 2 1 2 3 10 Bangladesh 3 2 1 3 9 Ghana 2 3 1 1 1 1 9 Kazakhstan 2 3 1 1 1 1 9 Sri Lanka 1 2 2 1 3 9 9 Philippines 3 1 1 1 1 2 8 8 Romania 4 1 1 1 3 1 6 1 8 1 8 1 8 1 8 1 1 8 1 1 8 1 1 8 1 1 8 1	Serbia			3	1	2		3		2		11	
Bangladesh S	Thailand	3		2		2				3	1	11	1
Sama	Azerbaijan			2	2	1		2		3		10	
Kazakhstan 2 3 1 1 1 1 9 Sri Lanka 1 2 2 1 3 1 2 8 Philippines 3 4 1 1 1 1 2 8 Romania 4 1 2 2 2 1 1 8 Albania 1 1 2 2 2 1 6 6 Costa Rica 1 1 4 1 3 1 6 6 Uruguay 4 4 4 4 4 4 6 6 West Bank 1 1 4 4 5 <td>Bangladesh</td> <td>3</td> <td></td> <td></td> <td></td> <td>2</td> <td></td> <td>1</td> <td></td> <td>3</td> <td></td> <td>9</td> <td></td>	Bangladesh	3				2		1		3		9	
Sri Lanka 1 2 2 1 3 1 2 8 Romania 4 1 1 1 1 1 1 8 Albania 1 1 2 2 2 1 1 8 Costa Rica 1 1 4 1 3 1 6 Tanzania 1 1 4 1 3 1 6 West Bank 1 1 4 1 3 1 6 West Bank 1 2 1 3 1 6 Boznia and Herzegovina 1 2 1 5 5 5 Rwanda 1 2 1 1 1 1 5 Rwanda 1 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1<	Ghana				6	1				2		9	10
Philippines 3	Kazakhstan			2	3		1	1	1	1		9	
Romania 4 1 1 1 1 3 1 6 Albania 1 1 6 Costa Rica 1 1 1 1 1 3 6 Costa Rica 1 1 1 1 1 3 6 Costa Rica 6 Costa Rica 1 1 1 1 1 3 6 Costa Rica 6 Costa Rica 1 1 4 6 Costa Rica 1 6 Costa Rica 6 Costa Rica 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <t< td=""><td>Sri Lanka</td><td>1</td><td></td><td>2</td><td></td><td>2</td><td>1</td><td>3</td><td></td><td></td><td></td><td>9</td><td></td></t<>	Sri Lanka	1		2		2	1	3				9	
Albania	Philippines	3				1	1			1	2	8	
Costa Rica 1 1 1 1 3 6 Tanzania 1 1 4 2 6 Uruguay 4 1 3 1 6 West Bank 1 2 1 3 1 6 Boznia and Herzegovina El Salvador 1 2 1 5 5 5 El Salvador 1 2 1 2 5 5 5 Lebanon 1 2 3 1 2 5 5 Rwanda 1 1 1 1 1 5 5 Zambia 1 1 1 1 1 1 5 Jamaica 3 2 1 1 1 1 4 Jordan 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 <td>Romania</td> <td></td> <td>4</td> <td></td> <td>1</td> <td></td> <td></td> <td>1</td> <td></td> <td>1</td> <td>1</td> <td>8</td> <td>12</td>	Romania		4		1			1		1	1	8	12
Tanzania	Albania			1		2	2			1		6	
Uruguay 4 1 3 1 6 Boznia and Herzegovina El Salvador 1 2 5 5 El Salvador 1 2 1 5 5 Lebanon 1 2 1 2 5 5 Rwanda 1 3 1 1 1 5 5 Zambia 1 3 1 1 1 1 5 Jamaica 3 1 1 1 1 5 Jamaica 3 1 1 1 1 4 Macedonia, former Yugo-slav Republic of Moldova 1 1 1 1 1 4 Nepal 1 1 1 1 1 4 Oman 1 1 1 1 1 4 United Arab Emirates 1 1 1 1 2 3 Bahrain 1 1 1 1	Costa Rica			1		1	1	3				6	1
West Bank 1 3 1 6 Boznia and Herzegovina El Salvador 1 2 1 5 El Salvador 1 2 1 5 Lebanon 1 2 1 2 5 Rwanda 1 1 1 1 1 5 Zambia 1 1 1 1 1 5 Jamaica 3 2 1 1 1 5 Jamaica 3 2 1 1 1 1 4 Jordan 2 1 1 1 1 4 4 Macedonia, former Yugo-slav Republic of Moldova 1 1 1 1 1 4 4 Nepal 1 1 1 2 1 4 4 United Arab Emirates 1 1 1 1 1 2 4 Bahrain 1 1 1 1<	Tanzania		1	1	4							6	
Society Soci	Uruguay			4							2	6	4
Herzegovina El Salvador 1 2 1 5 Lebanon 2 1 2 1 2 5 Rwanda 1 3 1 1 1 5 Zambia 1 1 1 1 1 5 Jamaica 3 1 1 1 4 4 Jordan 2 1 1 1 4 4 4 Jordan 2 1 1 1 4	West Bank	1					1	3		1		6	
El Salvador 1 2 1 5 Lebanon 2 1 2 5 Rwanda 1 3 1 1 5 Zambia 1 1 1 1 5 Jamaica 3 1 1 1 1 5 Jordan 3 2 1 1 4 4 Macedonia, former Yugo-slav Republic of Moldova 1 1 1 1 4 4 Nepal 1 1 1 1 1 4 Oman 1 1 1 1 4 United Arab Emirates 1 1 1 1 3 Bahrain 1 1 1 1 2 Bhutan 1 1 1 1 2 Botswana 1 1 1 1 2 Dominican 1 1 1 1 2	Herzegovina									5		5	
Rwanda 1 3 1 5 Zambia 1 1 1 1 1 5 Jamaica 3 1 1 4 4 Jordan 2 1 1 1 4 4 Macedonia, former Yugo-slav Republic of Negolulic		1	2			1						5	
Zambia 1 1 1 1 5 Jamaica 3 1 1 4 Jordan 2 1 1 1 4 Macedonia, former Yugo-slav Republic of Moldova 1 1 1 1 1 1 1 4 Nepal 1 1 1 1 1 1 1 4 Oman 1 1 1 2 4 United Arab Emirates 1 1 1 1 3 Afghanistan 1 1 1 1 2 Bhutan 1 1 1 1 2 Botswana 1 1 1 1 2 Dominican 1 1 1 1 2	Lebanon							2	1	2		5	
Jamaica 3 1 4 Jordan 2 1 1 4 Macedonia, former Yugo-slav Republic of Moldova 1 1 1 1 1 1 1 4 Nepal 1 1 1 1 1 1 4 Oman 1 1 1 2 4 United Arab Emirates 1 1 1 1 3 Bahrain 1 1 1 1 2 Bhutan 1 1 1 1 2 Botswana 1 1 1 1 2 Dominican 1 1 1 1 2	Rwanda	1				3			1			5	1
Jordan 2 1 1 4 Macedonia, former Yugo-slav Republic of Moldova 1 1 1 1 1 4 Moldova 1 1 1 1 1 4 Nepal 1 1 1 1 1 4 Oman 1 1 2 4 United Arab Emirates 1 2 1 3 Bahrain 1 1 1 1 2 Bhutan 1 1 1 1 2 Botswana 1 1 1 1 2 Dominican 2 2 2 2 2	Zambia		1			1		1		1	1	5	4
Macedonia, former Yugo-slav Republic of Moldova 1 1 1 1 1 4 Nepal 1 1 1 1 1 1 4 Oman 1 1 1 2 4 United Arab Emirates 1 2 1 2 4 Bahrain 1 1 1 1 3 Afghanistan 1 1 1 1 2 Bhutan 1 1 1 1 2 Dominican 2 2 2 2 2	Jamaica			3					1			4	
former Yugo-slav Republic of 1 1 1 1 4 Moldova 1 1 1 1 1 4 Nepal 1 1 1 1 1 4 Oman 1 1 2 4 4 United Arab Emirates 1 1 1 1 3 Bahrain 1 1 1 2 1 2 Bhutan 1 1 1 1 2 2 Botswana 1 1 1 1 2 2 Dominican 2 2 2 2 2 2 2 2 3	Jordan				2	1			1			4	
Nepal 1 1 1 4 Oman 1 1 2 4 United Arab Emirates 1 2 1 1 1 1 3 Afghanistan 1 1 1 1 2 Bhutan 1 1 1 1 2 Botswana 1 1 1 2 Dominican 2 2 2	former Yugo- slav Republic									4		4	
Oman 1 1 2 4 United Arab Emirates 1 2 1 4 Bahrain 1 1 1 3 Afghanistan 1 1 1 2 Bhutan 1 1 1 2 Botswana 1 1 1 2 Dominican 2 2 2						1		1	1	1		4	
United Arab Emirates 1 2 1 4 3 Bahrain 1 1 1 1 3 Afghanistan 1 1 1 2 Bhutan 1 1 1 2 Botswana 1 1 1 2 Dominican 2 2 2	Nepal	1						1		1	1	4	
Emirates Bahrain 1 1 1 3 Afghanistan 1 1 1 2 Bhutan 1 1 1 2 Botswana 1 1 1 2 Dominican 2 2 2	Oman		1			1		2				4	
Afghanistan 1 1 2 Bhutan 1 1 1 2 Botswana 1 1 1 2 Dominican 2 2 2	Emirates	1			1								
Bhutan 1 1 2 Botswana 1 1 2 Dominican 2 2 2				1			1						
Botswana 1 1 2 Dominican 2 2 2	_					1			1				
Dominican 2 2										1			
							1	1					2
Ethiopia 1 1 2	Reublic			1		1			2				1



Country	Invest- ment Funds	Secur- ities Instru- ments	Bond Market Advisory	Hous- ing	Insur- ance	Pen- sion	Cap Mkt Regula- tion and Dev't	Pay- ments, Settle- ment	Corp Gover- nance	Infra- struc- ture	Total	Treas- ury Issu- ance
Hungary		-				2	-				2	21
Madagascar	1					1					2	
Montenegro						1			1		2	
Namibia		1						1			2	
Seychelles					1			1			2	
Syrian Arab Republic					1			1			2	
Yemen, Republic of						1			1		2	
Fiji						1					1	
Guyana						1					1	
Mali						1					1	
Myanmar								1			1	
Niger						1					1	
Trinidada and Tobago						1					1	
Turkmeni- stan								1			1	
Total	152	51	67	125	76	33	58	20	68	33	683	1226

Source: IEG analysis.

These countries include all income groups, though the lower and upper middle income countries account for the majority (Annex Table 4.4). Only nine of the countries whether among the 25 or among the 64, are included in the G20 and belong to the Financial Stability Board. Thus the Bank reflects the position of a large number of non-G20 countries in the area of capital market development.

Annex Table 4.4 Desk Review Portfolio by Country Income Level

Country Groups	IFC AS	IFC Invest- ment	WB AAA	WB Lending	Total	% Total
25 Countries						
High Income	6	13		21	40	7%
Upper Middle	17	86	22	125	250	45%
Lower Middle	24	94	25	90	233	42%
Low Income	2	17	2	6	27	5%
Total 25	49	210	49	242	550	100%
64 Countries:						
High Income	7	23	26	2	58	8%
Upper Middle	24	131	121	30	306	45%

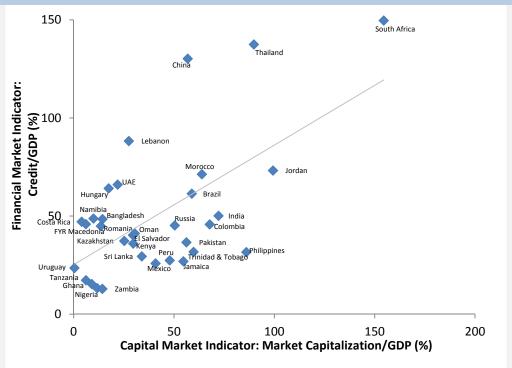


Country Groups	IFC AS	IFC Invest- ment	WB AAA	WB Lending	Total	% Total
Lower Middle	27	98	115	28	268	39%
Low Income	2	10	32	7	51	7%
Total 64	60	262	294	67	683	100%

Source: IEG

Even with the larger group of 64 countries, as shown in Figure 4.1Error! Reference source not found., there is a very high proportion of countries with relatively shallow financial markets, whether in terms of credit and banking systems, or equity capital mark indicators. Due to their clustering at the bottom left corner, market 'maturity' does not provide a criterion for sample selection.

Figure 4.1 Financial System Maturity: Desk Portfolio Review Countries



Source: IEG

Note: Based on 34 countries in the list of portfolio review countries for which both pairs of data are available. Indicators are averages of three years's data from 2010 to 2012.



Countries selected for field visits will include five to six from this group, reflecting a number of additional criteria but with additional purposive elements. Such additional purposive elements include regional balance (each country in a different WBG region); a significant capital markets portfolio that reflects different types of interventions (different leading sectors, and including both the WB and IFC, and both lending / investment as well as AAA and advisory work); and an inclusion of countries along different segments of the income scale - as well as financial market maturity, to the extent possible.

One further consideration to be taken into account for the selection of countries, and especially field visit countries, is the extent to which the WBG has been active in issuing local currency bonds in local currencies of client countries. WBG Treasury bond issues have followed an even more pronounced pattern, in terms of country concentration, relative to the distribution of the lending / investment and advisory services portfolio, with an extremely large concentration in certain markets (the top 4 currencies account for three quarters of total issues), but a long tail of countries in which there have been only a few issues (Annex Table 4.5). However, in this case, more issues are not necessarily of greater interest, as they are likely to represent straightforward funding operations. For the portfolio review, clusters of currencies / countries will be selected in each region, that include pioneer one off issues as well as countries with more frequent transactions. And to the extent possible, countries selected for field visits will also include those where there has been some issuance activity by the WB / IFC. In the final selection, consideration will also be given to regional balance across the six WBG regions, together with practical considerations in terms of organizing field visits, etc.

Annex Table 4.5 IEG Capital Markets Evaluation - Local Currency Bond Issues by the WBG (2004-2014)

Currency of Issue	IFC Treasury # Issues	IFC Treas- ury US\$ mil	WB Treasury # Issues	WB Treas- ury US\$ mil	Total # Is- sues	Total US\$ mil
South African Rand	69	2,988	356	9,680	425	12,668
Brazilian Real	112	3,600	130	6,101	242	9,701
Turkish Lira	79	2,901	72	3,629	151	6,530
Mexican Peso	16	502	100	2,774	116	3,276
Russian Ruble	11	523	72	1,826	83	2,348
Chinese Yuan	6	1,011	13	281	19	1,292
Chilean Peso	8	836	3	412	11	1,248
Malaysian Ringgit			25	999	25	999
Korean Won	1	132	23	774	24	906
Indian Rupee	2	39	11	834	13	872
Colombian Peso	1	99	27	705	28	804
Polish Zloty			21	662	21	662
Nigerian Naira	1	76	20	546	21	622
Romanian Lei			12	497	12	497
Hungarian Forint	1	47	19	299	20	347
Saudi Riyal			1	267	1	267
Ghanaian Cedi	1	12	9	199	10	211
Moroccan Dirham	1	117			1	117
Zambian Kwacha	1	29	3	84	4	112
Uruguayan Peso	1	10	1	100	2	110
Central African CFA Franc	1	46			1	46
Peruvian Sol	2	45			2	45
West African CFA Franc	2	44			2	44
Thai Baht			1	41	1	41
Botswana Pula			2	40	2	40
Costa Rican Colon	1	40			1	40
Ugandan Shilling			2	25	2	25
Rwandan Franc	1	22			1	22
Hong Kong Dollar			1	19.354	1	19
Dominican Republic Peso	1	10			1	10
Armenian Dram	1	5			1	5
Grand Total	320	13,132	924	30,796	1,244	43,929

Source: IEG analysis.



Preliminary Portfolio Review

This preliminary portfolio analysis aims at providing an overview of the World Bank Group's interventions that supported capital market development, both directly and indirectly, over the period FY04-14. In terms of instruments of intervention, this comprises IFC investments and advisory services, and World Bank lending and non-lending technical assistance, and advisory services (AAA).

WORLD BANK GROUP SUPPORT TO CAPITAL MARKETS

The World Bank Group has supported the development of their client countries' capital markets through a sizeable portfolio of advisory and capacity building effort, together with financial support through IFC investments and World Bank loans. The present portfolio review focuses on the portfolio of the most relevant interventions, detailed in Attachment 3, and is subject to its caveats. In addition, it must be pointed out that much of the discussion below is in terms of numbers of interventions, since the majority were advisory services, where the value of the activity has limited meaning. Additionally, activities (loans, investments and advisory services) are sometimes programmatic in nature, which can lead to some inflation in numbers of interventions.

IEG's preliminary portfolio analysis identified 87 advisory activities supported by the IFC and 476 items of AAA from the WB. On the investment side, IFC approved 421 projects that supported the development of capital markets. While there have been more IFC investments than World Bank loans (421 to 87), WBG loans are much bigger on average, reflecting their intrinsic nature, lending support to governments instead of individual private firms (\$27 m on average for IFC compared to \$188 m on average for the World Bank). A large part of IFC investment in terms of numbers (288) took the form of investment funds, including 23 debt and asset recovery projects (DARP), which supported the development of private equity. IFC's investment funds amounted to \$6.69 billion in value, and DARP contributed another \$837 million. Another 59 investments with a total commitment value of \$2.52 billion introduced the use of securities instruments (asset backed securities, bonds or bond guarantees) to support IFC investments across a wide range of sectors. Eighty seven relevant World Bank lending projects were identified.

A large proportion of the interventions were regional or global in focus, as opposed to projects focused on individual countries. For the portfolio as a whole, regional or global projects account

⁵⁶ IFC's asset management company (AMC) activities are not included in this review because they are primarily intended as resource mobilization tools, and also because they are expected to be the subject of an upcoming IEG evaluation scheduled for FY17.



for 29 percent of the total numbers of projects. This is particularly true of sectors such as collective investments, where 44% of projects by numbers or 57% by value were regional or global in focus. Bond market advisory work was the next most concentrated in regional work at 37% while sectors such as housing (8%) were much more focused on specific countries. The regional focus was especially unusual for IFC Investments as outside investment funds, regionally focused projects accounted for only 10% of the 154 IFC investments in the portfolio.

MIGA's involvement in activities supporting the development of capital markets has been relatively small over this period, although some half dozen relevant guarantees were identified, over the period from fiscal year 2004 through 2014. Given its limited involvement, MIGA is excluded from the scope of the evaluation.⁵⁷ Putting together lending and advisory services, WBG interventions amount to a total of 1071 in the identified portfolio.

Box 7. MIGA Contributions to Capital Market Development

The mission of MIGA is to promote foreign direct investment into developing countries. MIGA fulfills its mission by providing political risk insurance <u>quarantees</u> to private sector investors and lenders. These guarantees protect investments against non-commercial risks and can help private investors obtain access to funding sources with improved financial terms and conditions.

Some MIGA projects have a capital markets dimension, although these are very limited in number. Over the ten year period reviewed, the following projects were identified, involving a capital markets product and an international investor, with MIGA enhancing the value of the product through its political risk guarantee.

- \$10.2 million (2007) and \$75 million (2006) guarantees against transfer and convertibility restrictions on investments made in *securitized portfolios of residential mortgages* originated in Kazakhstan.
- \$99 million (2012) to support a cross-currency swap agreement between the government of Senegal and an international bank against non-honoring of sovereign obligations. That swap agreement hedged the currency exposure of the government related to a \$500 million bond issued in 2011.
- \$10.1 million (2005) to the parent company of a Latvian mortgage company to protect against transfer restrictions and expropriation of funds related to an investment in *a mortgage-backed securitization*.
- \$575 million in 2014 against the risk of non-honoring of sovereign obligations by the Hungarian Exim bank, on its
 offshore notes issues.
- \$66.5 million guarantee to cover the risks of transfer restrictions and expropriation on parent funding for *a local currency securitization of trade receivables* by a bank in Brazil.
- \$107.6 million in political risk insurance covering an international bond issue by a highway authority in the Dominican Republic.

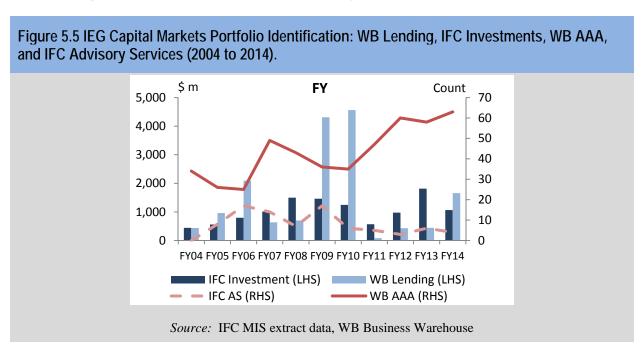
Sources: IEG.

⁵⁷ For MIGA, these capital markets projects total \$948 million over FY04-14, of which \$575 is a single non-honoring sovereign obligation in FY14 (Hungary). As a percentage of total MIGA guarantees over this period these six operations represent 4.6% - but only 1.8% excluding the Hungary project in FY14. For IFC over the same period, capital markets projects represented 9.4% of total IFC investments. Inter alia, MIGA has been the subject of a comprehensive recent IEG evaluation, although support to capital markets was not its focus. See: MIGA's Financial Sector Guarantees in a Strategic Context (IEG, 2011).



EVOLUTION OVER TIME

During this period, World Bank Group support to capital markets activities fluctuated, without a clear trend. In terms of lending and investments, there was a sharp increase in response to the 2008 financial crisis, especially in 2009 and 2010. After the crisis years, there was a fall-off in fiscal year 2011, before resuming a slow growth trend through 2014. The number of advisory projects undertaken by the IFC has declined in recent years (from an average of 13 per year from 2005 through 2009 to an average of 5 a year from 2010 through 2014). Conversely, the number of capital markets-related AAA projects has increased significantly over time (reaching 63 in 2014 from 34 in 2004). This may reflect the addition of sources of funding such as the FIRST fund, which financed a large number or small and discrete advisory activities for the WB.

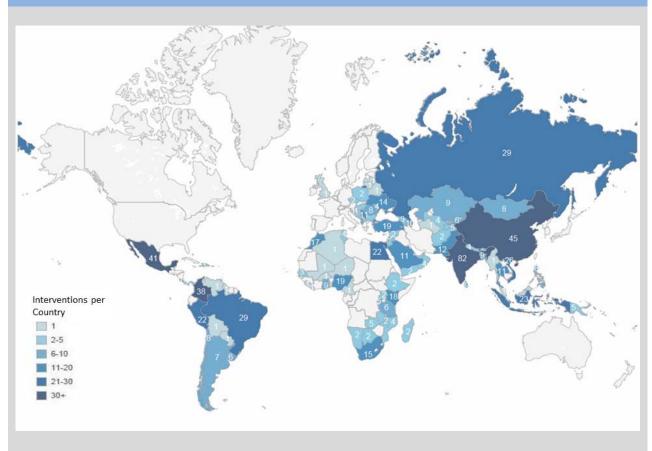


REGIONAL DISTRIBUTION OF CAPITAL MARKETS INTERVENTIONS

Globally, the World Bank Group's interventions supporting client countries' capital markets, as identified in the IEG portfolio, supported 111 countries. Seventy nine countries had more than one intervention, and 69 percent of all capital markets interventions were concentrated in the top twenty five countries (see Attachment 4). Figure 5.2 depicts the distribution by total number of interventions per country, indicating particularly strong support to a group of middle income countries, but also, a large number of projects across a very wide spectrum of countries, including 302 country specific interventions in lower middle income countries and 78 in lower income countries.



Figure 5.6. Distribution of the World Bank Group's Support for Capital Markets (Numbers of Projects / Advisory Services per Country)



Source: IEG.

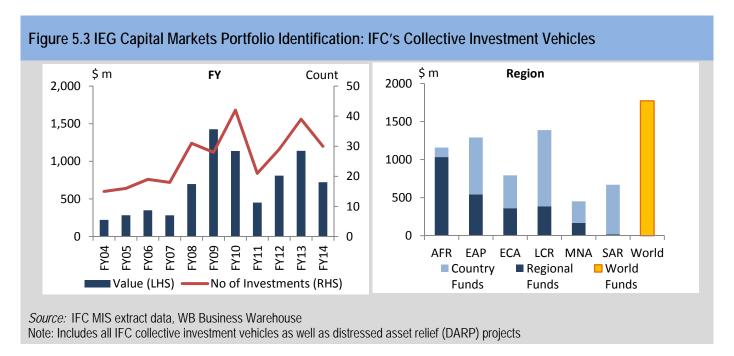
Note: Each country received one point for each intervention in the following categories: IFC Investment, IFC Advisory Services, World Bank Lending, World Bank AAA.

Distribution of WBG Portfolio by Segments of Activity

Support for capital market development was provided through a number of different sectors, reflecting different market segments. Brief descriptions of the nature of the WBG portfolio in major segments follow below.



IFC'S INVESTMENT FUNDS



IFC's collective investment vehicles, commonly known as funds, take a variety of forms. In the context of capital markets development, we are interested in private equity funds, wherein a set of investors (known as the limited partners) provide capital in the form of equity to a fund manager (known as the general partner) to invest in target companies. The nature of those companies determines the nature of the fund, which could be restricted by geography, sector or strategy. In the funds that we are interested in, the investments are most often made in the form of private equity, which means that the companies are privately held and have not issued public shares. Just as public equity markets are a significant part of capital markets, private equity markets also play an important role in capital market development, especially for young and relatively small enterprises. Importantly, in addition to providing capital, private equity investors often contribute to their investee companies through mentoring activities. If successful, these private companies can be the source of initial public offerings whereby they list their shares on the public market. By allowing investors to diversify risk, private equity funds attract scarce capital to risky ventures.

Over the period FY 2004-14 IFC invested in a total of 221 private equity funds, with an additional 26 investments made in foreign and domestic mutual funds, 23 investments made in distressed assets management companies and 18 investments in fund management companies. Of the total \$7.5 billion committed, \$5.3 billion was in private equity funds, with the remainder divided about equally between the other three categories.



Regionally, almost 24 percent of the total committed amount was invested in funds with a mandate that extends beyond a single region, although these investments represent only 10 percent of the total number of investments. AFR, EAP and LCR are the three most represented regions in the fund portfolio, each accounting for nearly 20 percent of the number of projects. MNA is the least represented region in the portfolio, accounting for only 6 percent of the total committed amount and 8 percent of the number of investments.

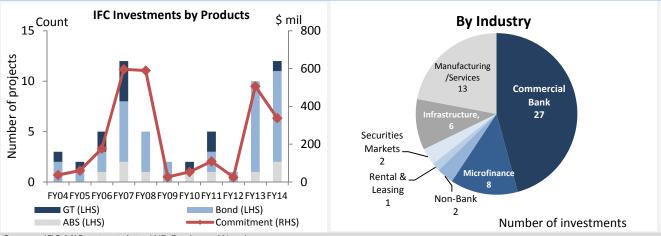
The IFC's Debt and Asset Recovery Program (DARP) was a crisis response initiative, rekindled in 2009, that evolved into a mainstream business in 2012. DARP invests in funds and companies that manage and restructure pools of distressed banking system assets. Its equity is used to purchase distressed assets at a discount from financial institutions, who benefit from being able to receive cash for assets that have likely already been written off and which they are ill prepared to manage. In addition, the program offers complementary technical advisory services for nonperforming loan and risk management programs. DARP investment instruments are a mix of debt, quasi-equity, and equity. From a capital markets perspective, the value of DARP is that it is funded in large part by private equity investments. At origination, the program was expected to reach \$4 billion-\$7 billion, with IFC contributing up to \$1.6 billion and other IFIs and private sector partners investing about \$5 billion over three years. Through FY14, total IFC commitments have been \$905 million, invested in 23 funds with the program continuing to expand. To date, about half the total project commitments have been in LAC, with another third of the total in East Asia.

IFC – Real Sector Investments using Bonds, Bond Guarantees or Asset Backed Securities –

IFC investment activities related to capital markets development also include non-financial sector investments that involve capital markets instruments, including bonds, asset-backed securities and securities guarantees. Fifty nine IFC investment projects were identified to have relevance for capital market development during the period from fiscal year 2004 through 2014. Bonds were the most frequently used of the three instrument types, representing 64 percent of the number of capital markets instruments investments and 77 percent by volume. Guarantees were used much less frequently, representing 20 percent of the total number of investments, and they tend to be smaller in amount and represented only 10 percent of total commitment volume; note that these guarantee figures do not include short-term guarantees, such as the Global Trade Finance Program. Asset-backed securities, which transform a pool of risky assets into more stable securities, were infrequently used, accounting for only 15 percent by number and 13 percent of volume.



Figure 5.4 IEG Capital Markets Portfolio Identification: IFC's Investment using Bonds, Guarantees or Asset Backed Securities (2004-2014) (Nos)



Source: IFC MIS extract data, WB Business Warehouse

Note: IFC investments here include its collective investment vehicles (private equity and portfolio funds), as well as its distressed asset management (DARP) portfolio.

The level of investment activity and the product composition varied widely across different industry groups. It was by far the most common in the financial services industry group, where it accounted for 68 percent of total such investments by number of projects and 66 percent by volume, with bonds alone accounting for nearly half of total volume. The Infrastructure industry group accounted for 10 percent of projects and 20 percent of volume, while the manufacturing, agribusiness and services industry group accounted for 22 percent of projects and 14 percent of volume. Use of asset-backed securities was dominated by the financial services industry group, which accounted for 81 percent of that product's use by project count and volume over the period.

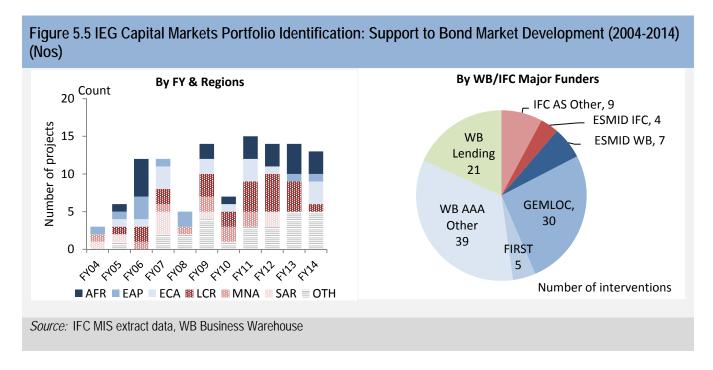
Only one investment in this category was global, and three others were regional. The ECA region had the most investments (17), followed by LCR (13). Out of 22 countries with projects in this category, 13 countries received a single investment. India accounted for the largest number of projects (9), all of which were bonds, followed by Russia and Turkey with 6.

SUPPORTING BOND MARKET DEVELOPMENT – WB AND IFC ADVISORY SERVICES AND WB LOANS

One of the most significant areas of WBG support to capital market development has been through support for the development of domestic bond markets. Domestic government bonds in particular have received a lot of support not only because of their integral role funding the government's borrowing requirements and thus in public debt management, but also due to their core function in providing a yield curve that offers a risk-free benchmark for the pricing of risk in other assets. The Bank's portfolio of interventions has evolved over time, from support to middle income countries such as Brazil and Turkey that have now established deep, liquid domestic



public debt markets, towards the development of private bond markets in such countries, in tandem with improving domestic government bond markets in poorer developing economies.



The identified portfolio included 81 WB advisory projects, 13 IFC advisory services, and 21 WB lending projects. Thirteen of the WB lending projects were broader DPLs that included components for bond market development. A large proportion of the advisory services offered were linked to special financing facilities, including prominent trust funded activities. These advisory projects were all conducted by the Capital Markets group in the Finance and Markets global practice, which is a joint IFC / WB unit. Thus separation of some of these interventions into 'IFC' or 'World Bank' is notional to some extent. A large proportion of the earlier projects were funded by the GEMLOC program which accounted for the largest number of advisory service interventions; 41 in all.⁵⁸ More recently the portfolio has included eleven ESMID financed programs (four notionally under the IFC and seven labeled WB advisory programs).⁵⁹ Another five advisory services in this area were financed by FIRST, a trust fund established initially for funding follow up to FSAP recommendations, but later extended to include a wide spectrum of financial sector

⁵⁸ The Global Emerging Markets Local Currency Bond Program (Gemloc) is a World Bank Group (WBG) initiative that supports local currency bond market development in emerging market countries (EMCs) to increase their investability and attract domestic and international investment. Gemloc had three separate elements: a global emerging markets bond index, a private investment manager, PIMCO, and funding for advisory services provided by the World Bank aiming to strengthen emerging local bond markets.
⁵⁹ The Efficient Securities Markets Institutional Development (ESMID) program, also a joint World Bank / IFC program for bond market development, with the additional element of focusing support particularly on the development of local non-government bond markets to improve financing for key real sectors.



work.⁶⁰ Together, these three programs cover two-thirds of the WBG advisory projects in this area.

Overall, these interventions have increased in recent years, averaging 13 per year in the last five years of the period versus 8 per year in the first 5 year under review. The decline in the number of projects in regions such as East Asia has been more than made up for by an increase in activity in Latin America but also, Africa. In addition, this area has a relatively large number of globally focused projects, primarily focused on research and analytics, as opposed to country focused technical assistance.

Within the country focused portion of the portfolio, 53 of the 73 interventions belonged to the top 25 countries in the overall IEG portfolio. Twenty one of the top 25 countries had bond market support, and overall, the portfolio spans just 34 countries, one with up to 5 projects (Colombia).

SUPPORTING BOND MARKET DEVELOPMENT – WB AND IFC TREASURY LOCAL CURRENCY BONDS

IBRD and IFC both issue bonds on a regular basis in a variety of currencies and markets as part of their funding requirements. Each has undertaken some issuance in client countries' currencies, in some cases, directly in their domestic markets. Some local currencies now have well developed international markets for bonds denominated in those currencies and so issuance in those currencies represents as much a funding cost decision as it does a market development issue. Examples include the South African rand, which represented 3 percent of total IFC bond issuance over the period and which was an important source of funding for the IBRD as well.

Issuance in a local currency, even if in the international market, can be an important market development tool. Such issues have the potential of contributing to the development of benchmarks, extending the yield curve, and providing low risk opportunities for both global institutional investors to gain exposure to these currencies, and to tap into growing local savings and pension funds in client countries, thereby also expanding the pool of investors in local currency bond markets.

During the period 2005-2014, IBRD issued a total of \$30.8 billion equivalent in local currencies. IBRD has consistently issued more than US\$1 billion annually in local currencies since 2007, with issuance peaking at \$5.6 billion in FY10, when there was a total of 146 bonds issued in local currency in 18 different currencies. As a percentage of total issuance, local currency issues peaked in FY08 at 23 percent of the total. IFC issued a total of \$13.1 billion equivalent in local currencies during the same period. For IFC, local currency issuance peaked in value at \$3.2 billion in FY14, with a total of 59 issues in 10 different currencies representing 20 percent of total issuance volume

⁶⁰ Financial Sector Reform and Strengthening initiative.



in that year. Local currency issuance peaked as a percentage of total issuance at 34 percent of the total in FY07.

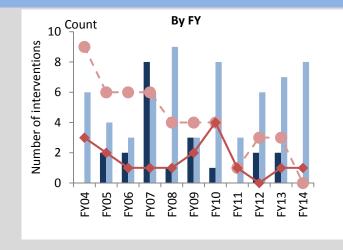
Figure 5.6 IEG Capital Markets Portfolio Identification: IBRD and IFC Local Currency Bond Issues (2005-2014)Nos **Local Currency Bond Issuance** 160 40 140 35 120 30 100 25 20 80 15 60 40 10 20 FY05 FY06 FY07 FY08 FY09 FY10 FY11 FY12 FY13 FY14 IFC LCY Issuance (LHS) IBRD LCY Issuance (LHS) IFC % LCY/Total (RHS) IBRD % LCY/Total (RHS) Source: IEG, based on data from WB and IFC Treasurer's departments

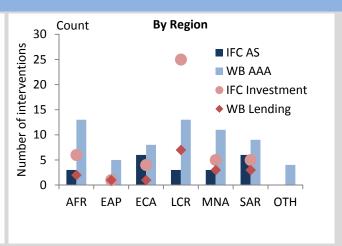
HOUSING FINANCE - SUPPORT TO CAPITAL MARKETS

Housing finance can support the development of capital markets to the extent that it supports the development of a new tradable asset class of asset-backed securities, and a fortiori if these are then actively traded. Both IFC and the WB have an active portfolio of work in the housing finance sector. IEG first identified projects in the housing finance area using sector codes. However, a large number of such projects, e.g. in the low income housing finance area, have little association with capital markets development. While the intention was to focus the selection on those projects that had a secondary mortgage market focus, in some countries, support was given to primary mortgage market development with the expectation that this would pave the way for secondary markets to develop. Identification is also an issue with regard to those housing finance projects that focus on the strengthening of the legal and regulatory framework for housing finance, a prerequisite for the development of housing finance markets. The final selection was therefore made in consultation with the relevant experts in WB and IFC. This includes a set of 17 lending and 63 AAA interventions at the WB, and 46 investments and 21 advisory service respectively in the IFC.



Figure 5.7 IEG Capital Markets Portfolio Identification: Housing – Mortgage Securities and Secondary markets





Source: IFC MIS extract data, WB Business Warehouse

One notable feature in this sector is its high level of country concentration. Thus 80 percent of all interventions were in the top 25 countries identified in Attachment 4; partly due to repeat investments into certain mortgage companies in the region. Looking into the characteristics of IFC housing projects, whereas those for primary mortgage institutions were distributed over a wide spectrum of countries, those associated with secondary mortgage market development were focused on a limited set of countries, especially in the ECA, LCR and MNA regions. This is associated with the level of development of existing financial institutions and infrastructure, critical for the existence of liquid markets for secondary mortgage securities.

Over the period from FY04 to FY14, IFC investments in this portfolio suggest some decline, perhaps reflecting the global freeze of housing financial markets after the crisis, including some losses to the corporation. On the World Bank side, a noticeable change is the geographical shift of AAA advisories from SAR, where India was virtually the only client, towards the LCR and AFR regions.

INSTITUTIONAL INVESTORS - INSURANCE AND PENSIONS

Both insurance funds and pension funds can potentially support the development of capital markets as they provide large pools of investable funds, which can then purchase either debt or equities. Moreover, such funds have the need to match their long term liabilities and assets, so they

⁶¹ The companies for which the IFC have maintained the share and continuously invested include Companhia Brasileira de Securitização and Rio Bravo Securitizadora in Brazil, GSC, Su Casita, and Vertice in Mexico, and Titulizadora Peruana Sociedad Titulizadora in Peru.



are well placed to make long term investments. Paid-in pension funds are necessary for the accumulation of such funds in the pension sector; pay-as-you-go systems would not be able to accumulate investable resources. As with housing finance, not all pensions work in the WB is focused on the development of investable assets. Indeed, a primary objective is usually related to old age security or the management of contingent budgetary liabilities. However, most pension fund interventions of the WB seek to set up multi-pillar systems, and the second and third pillars in such systems (employer and private pillars of paid-in contributions) would deal with issues related to fund management. In the insurance sector, analogously, life insurance funds (including term life) would have the potential to accumulate pools of investable funds for capital markets investments. IEG's identification of relevant insurance and pensions portfolios also began with a combination of sector codes and word searches, and was eventually narrowed in focus in consultation with the relevant departments.

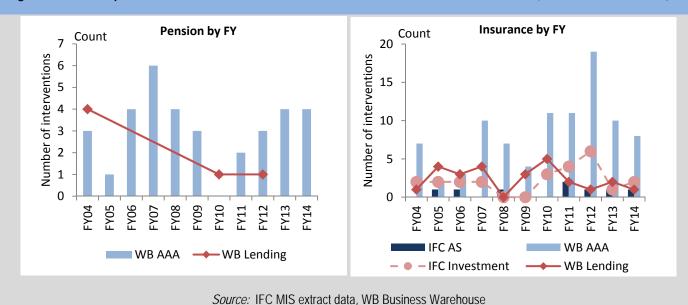
The IEG portfolio for insurance projects and advisory services that include a focus on fund management and investment identifies 150 interventions in total, associated with capital market development: 92 WB AAA, 26 WB lending, and 24 IFC investment projects, and 8 IFC advisory services. Of those 150, 41 and 37 interventions took place in the LCR and ECA regions respectively from fiscal years 2004 to 2014, with only 11 and 10 interventions, respectively, in MNA and SAR. The overall portfolio in terms of the number of interventions in this segment has been increasing, from an annual average of 10 from 2004 to 2009 to an annual average of 18 for the latter 5 fiscal years examined (2010 to 2014), largely due to an increase in WB AAA advisory activities, but also, though to a lesser extent, increased IFC investments.

IEG also identified just 40 interventions in the pension reform area that included a capital market development component, mostly consisting of 34 WB AAA advisory services, with an additional 6 WB lending projects. IFC has no pension reform activities, due to the nature of its business. The pattern of geographical distribution is similar to that of insurance, with 11 and 10 interventions in LCR and ECA, compared to just 3 projects each in MNA and SAR. There is no discernible trend over time in WB advisory projects. Whereas 4 out of the total of 6 lending projects occurred in FY04, there was just one each in FY10 and FY12.62

⁶² The one in FY2010 aimed primarily to stabilize the financial market in Hungary after the financial crisis.



Figure 5.8 IEG Capital Markets Portfolio Identification: Pension and Insurance Funds (Nos of interventions)



CAPITAL MARKETS REGULATION, SUPERVISION AND DEVELOPMENT

IEG's portfolio includes a number of projects targeting relatively broad based capital market enhancement. These fall into two general categories, those focused primarily on regulation and supervision or those focused on development and growth. Across both these areas, WB advisory services were by far the most common form of intervention, accounting for 23 out of the 25 regulatory reforms and 52 of the 61 interventions for broad-based capital market development. The prevalence of WB advisory work is not surprising as such reforms draw upon the expertise of the Bank, more than on its financial resources, and generally require government partnership for implementation.

Beyond bank budget (BB), one important source of funds for these interventions has been the FIRST program. FIRST funded 14 of the 25 regulation and supervision projects and 13 of the 61 broad based development projects. This proportion is high considering that FIRST only started funding WB executed projects during its second phase, beginning in 2007. Since then, FIRST funded 41 percent of the projects in these areas.

A fairly regular stream of around 8 activities for capital markets have been approved each year. There has been an evolution over time in the location of these projects. EAP accounted for 23 percent of such projects between FY04 and FY09, with ECA tying for the largest share. However, from 2010 through 2014, only 8 percent were in Asia. Sub-Saharan Africa saw the largest increase, rising from 11 percent of projects to 18 percent. This shift away from Asia (17 to 13 percent) and



toward Africa (15 to 18 percent) mirrors the trend within the entire capital market development portfolio.

Figure 5.9 IEG Capital Markets Portfolio Identification: Capital Market Regulation By FY & Region 15 Count Count By FY 12 Number of interventions **Number of inverventions** 10 10 8 6 5 4 0 FY04 FY05 FY06 FY07 FY08 FY09 FY10 FY11 FY12 FY13 FY14 **WB FIRST** WB AAA AFR FAP FCA **III** LCR **WB** Lending · · · · IFC AS SAR ■ OTH IFC Investment Source: IEG, based on data from WB and IFC Treasurer's departments

Country coverage is fairly broad. The 69 country focused projects covered 37 countries. Twenty seven countries had 1 or 2 projects and no country had more than 5 (China). The top 25 countries' share was 50 percent.

Market Infrastructure – Payments Systems

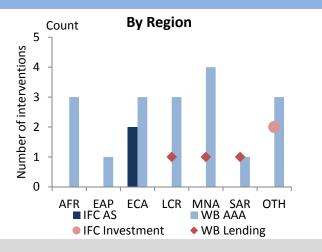
In collaboration with the WB Payments systems group, IEG identified a subset of WBG interventions in the payments system area, which had relevance for securities clearance and settlement. Although the payments infrastructure as a whole is relevant for the first segment of the finalization of a trade, those WBG interventions that look at the delivery versus payments of securities, as well as depository and counterparty arrangements, were of particular interest.

Only 25 projects were thus identified by IEG; a very small part of the overall capital markets portfolio (less than 3 percent in terms of numbers of interventions). Over 70 percent of the portfolio is concentrated in WB advisory services (18 out of 25 interventions). The payments segment has a regional distribution which is different from the rest of the capital markets portfolio, as projects are widely dispersed and are not concentrated in the top 25 countries. Only 6 out of the 20 country focused projects were in these countries. Payments and securities clearance projects included 5 projects Middle East, North Africa as well as Eastern Europe, Central Asia but only 1 in Asia. Even in these regions, projects were in several small countries, such as the Dominican Republic, which together with Morocco were the only countries with more than 1 project, as well as Myanmar and Jordan. Work in this area appears to have picked up significantly in recent years;



16 of the 25 projects enumerated here were approved in 2013 or 2014. In part, this reflects increased client recognition of this subject's importance. With the financial crisis calling into question the central role of banks, laying the ground work for markets to increasingly serve the role of primary financial intermediary has become a higher priority in frontier markets. One other possible explanation for the observed increase in recent years in that institutional memory is stronger regarding those projects. Since this area does not have a clear World Bank sector code, IEG was more reliant on the project team for identifying these projects, compared to other areas.

Figure 5.10 IEG Capital Markets Portfolio Identification: Payments and Securities Clearance and Settlement (2004-2014)



Source: IFC MIS extract data, WB Business Warehouse

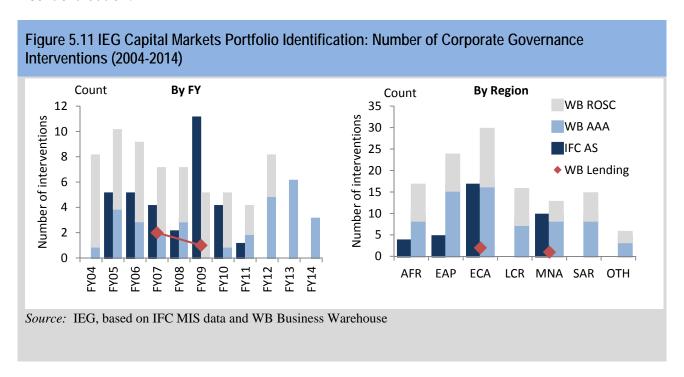
The WB has also undertaken a number of assessments of payments and settlement systems based on the CPSS-IOSCO principles, frequently undertaken as a part of a Financial Sector Assessment Program (FSAP). Over this period, 20 percent of total FSAPs (29) included technical annexes on financial infrastructure. In 14 of the 27 countries covered these were updates of previous FSAPs, though 12 of the initial assessments had taken place prior to the period of analysis.

MARKET INFRASTRUCTURE - CORPORATE GOVERNANCE

Good corporate governance facilitates the listing and trading of companies and protects the rights of investors, especially minority shareholders, in these companies, thus helping to broaden the base of the market. Both the WB and IFC have clusters of staff focused on the improvement of corporate governance. On the WB side, the program is focused on three areas: corporate governance evaluations at a national level (as part of the Reports on the Observance of Standards and Codes, frequently undertaken as a part of a Financial Sector Assessment Program), as well as specialized program areas on corporate governance at banks, and in state owned enterprises. Of



these, the first area (ROSC assessments) was deemed to be of relevance to capital market development. At IFC, much of the corporate governance work is undertaken on individual firms, as part of the due diligence process associated with IFC's investments. However, an important part of IFC's work is also focused on technical assistance for corporate governance, especially in the area of legal and regulatory reform. This is the segment that was considered relevant to the present evaluation.

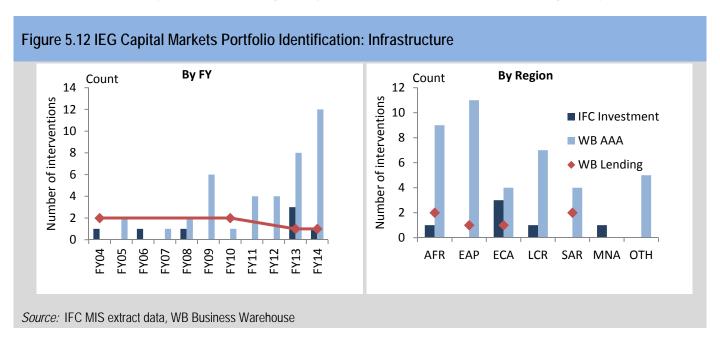


On this basis, IEG identified a total of 108 relevant corporate governance interventions over the period FY04-14. Fourteen of these 108 are still active, while the rest are closed. Virtually all took the form of advisory services - 32 by the IFC, and 73 by the WB. Only 3 were WB lending projects. Forty five of the 73 WB AAAs are ROSCs – Reports on the Observance of Standards and Codes for corporate governance. There is a high level of regional concentration: seventy percent of the 108 projects were in 3 regions: ECA (33 percent), EAP (20 percent), and MNA (19 percent). These interventions were located in 56 countries, and 22 countries had more than 1 (2 to 5) interventions. Around half (46 out of 108, or 43 percent) were in the top 25 countries identified in Attachment 3. The total number of projects per fiscal year has shown a declining trend from FY04 to FY14.



SUPPORTING REAL SECTOR INVESTMENT: INFRASTRUCTURE

Fifty two WBG projects were identified as having core capital markets infrastructure components. These included 40 AAA and 6 lending projects supported by the World Bank and six IFC investment projects that utilized securities instruments to support infrastructure development.⁶³ The number of these WBG activities was relatively stable during the period FY04-12, averaging about 3 projects per year but has risen sharply since FY13 to an annual average of 13 projects. Almost half of the projects are equally distributed between the AFR & EAP regions while the MNA region accounts for only a very small share of capital market activities for infrastructure development. There were 5 projects in India, 5 regionally focused on Africa, and 5 that were globally focused.



World Bank lending interventions for infrastructure were focused mainly on creating an enabling environment for the development of capital markets to provide financing for infrastructure

development. The main areas of support included lending for the development of capital markets regulatory frameworks and for the development of bond markets to provide medium and long

⁶³ The process for selecting the relevant World Bank Group infrastructure and capital market interventions began by identifying all World Bank activities with both capital market related sector codes (FC, FD, and FK) and infrastructure related sector or theme codes. For IFC activities, capital market relevance was determined by sector classification while infrastructure involvement was indicated by the infrastructure flag found in the MIS for AS and by the infrastructure Cluster Department for Investments. Based on the list of projects created, a core group of infrastructure capital market projects was selected by eliminating projects whose primary focus was on other areas of capital market development. IFC investment projects that utilized securities instruments to support infrastructure development were also included.



term financing for infrastructure projects. The bulk of the support was in the form of providing general advisory services on use of bond finance or guarantees (seminars, background papers, policy notes), with little in the way of specific hands-on technical assistance, (e.g., amendments to the legal framework) or practical transactional support (e.g., finding market partners, such as underwriting banks or potential investors). Activities were concentrated in a few countries/regions.

SUPPORTING REAL SECTOR INVESTMENT THROUGH TREASURY ISSUES: ENVIRONMENTAL AND SOCIAL BONDS

Since 2008, both the IBRD and the IFC have undertaken a growing number of bond issues that are associated with the financing of an identified part of their real sector activities. Such 'theme' bonds include, prominently, 'green bonds' associated with the financing of a set of projects generating a direct environmental benefit – renewable energy, energy efficiency and climate change adaptation – as well as social impact bonds, associated with a specific social benefit – social housing, financial inclusion, health or education. Green and social bonds are innovative tools for responsible investors, enabling them to earmark investments according to the environmental or social benefits expected from the underlying projects.

Figure 5.13 IEG Capital Markets Portfolio Identification: Green Bonds and Theme Bonds By Calendar Year 3000 2500 2000 1500 1000 500 **FY08** FY09 FY10 FY11 FY13 WB Green IFC Impact IFC Green Source: IEG, WBG Treasuries

odroc. IEG, WEG Trododinos

IBRD issued its first green bonds in 2008 in Swedish krona for a total amount of about US\$300 million equivalent to Swedish institutional investors. Since its first green bond issuance, IBRD has so far raised over US\$7 billion equivalent in green bonds through 77 transactions in 17 currencies. IFC has also played a pioneering role in developing the green bond market. Since its inaugural issue in 2010, IFC has raised US\$3.7 billion through its green bond program, including the first benchmark-sized green bonds issued in February and November 2013 (for US\$1 billion each).



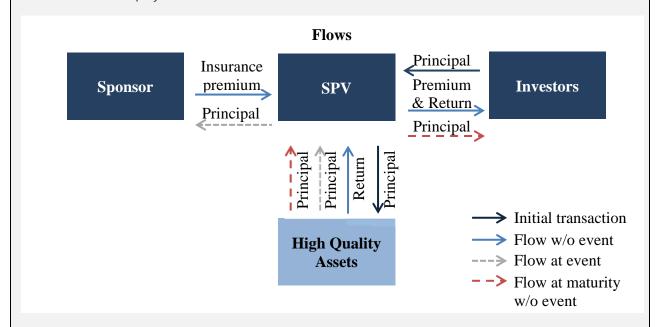
As an example of a social bond, IFC started a bond program to help fund its Banking on Women program, which supports women-owned small and medium enterprises. Roughly one-third of all SMEs in emerging markets are owned by women but often lack access to credit. The Banking on Women bond program was initiated with a 5-year dual tranche bond denominated in Australian dollars and Turkish Lira that raised US\$165 million equivalent from Japanese investors in 2013.

A final product illustrated here is the WBG's recently introduced tool for risk management, as an innovative way to provide for disaster relief, through its Catastrophic Risk (cat) Bonds (see Box 5.1).

Box 5.1 Supporting Risk Management in the Real Sector: Catastrophic Risk (CAT) Bonds

Catastrophe bonds (cat bonds) are a risk management tool, wherein the bond's coupons, and principal depending on its structure, are not paid in the case of a predefined high risk event. The government that issues the cat bond can then use the funds that would have gone to debt service for disaster relief. Thus, cat bond schemes mitigate fiscal risks stemming from the trigger event. Even though the instrument is useful for emerging market countries to manage disaster risks, the lack of knowledge, capacity, and experience with them in emerging economies reduces their use. The World Bank Group has helped fill this market gap by assisting in cat bond issuance in countries vulnerable to natural disasters, notably, in Mexico and the Caribbean.

In a typical cat bond scheme, the sponsor sets up a special purpose vehicle (SPV) that issues the cat bond. The SPV manages the proceeds by investing them in highly rated assets and using the returns to pay coupons. In addition, the sponsor pays the equivalent of an insurance premium to the bond holders via the SPV. If the predefined event does not occur, at the maturity, the principal is refunded to the investors. In the case the trigger event occurs, the SPV is liquidated and disbursed to the sponsor. For investors, there is no credit risk for the principal, and correlation with traditional asset classes is limited. Together with the enhanced yield, they provide attractive investment opportunities. The benefits for the sponsors include the possibly lower insurance cost, fixed for multiple years.



The first emerging market country to operate a cat bond program was Mexico in 2006 after the increase of reinsurance costs due to Hurricane Katrina. Its second issuance was under the MultiCat program the World Bank Treasury established in 2009. Again in 2012, the Mexican government renewed the insurance scheme. The Caribbean Catastrophe Risk Insurance Facility (CCRIF)



is an example of the World Bank's new approach, where the Bank issues cat bonds on its own and uses a catastrophe swap between the CCRIF and WB to mirror the terms of the cat bond. Under that scheme, called Capital-at-Risk-Note, when the referred event triggers, the principal loss of the cat bond is absorbed by the WB, and at the same time the WB pays the equivalent to the pool.

The cat bond insurance scheme can be applied to anything parametrically measurable, and such bonds have been used to insure against risks of longevity/mortality, etc. The Bank's Treasury department is now discussing the insurance of risks such as pandemics through such vehicles.

It should be noted that the Bank also offers a Development Policy Loan (DPL) with a Catastrophe Deferred Drawdown Option (CAT DDO); another initiative by the WB for disaster risk management, launched in 2008. The CAT DDO works as a line of contingent credit so that the sponsors spend it for disaster relief. The facility has been approved for middle income countries such as the Philippines, Costa Rica, Colombia, El Salvador, Guatemala, Panama, Peru, and Sri Lanka to deal with the natural disaster risks. The CAT DDO is a loan facility not involving securities markets.

Sources: IEG, Artemis (2014).

Notes: Taiwan, China used the cat bond scheme to insure against earthquake risks in 2003, and the California Earthquake Authority, a privately funded and publicly managed entity, launched it as early as 2001. In recent years, Louisiana and the government of Turkey issued cat bonds in 2012 and 2013 respectively.



Attachment 6

Preparatory Consultations / Meetings with the WBG

Topics	Individuals	Department
Overviews	Alison Harwood	GFMDR - Capital Markets
	Michel Noel	GFMDR - NBFI
	Ravi Vish	MIGA
	Mario Guadamillas	GFMDR
	Augusto de la Torre	LCRCE
	Sergio Schmukler	DEC
	Thierry Tressell	DEC
	Consolate Rusagara	FIRST
	Jorge Patino	FIRST
	Caroline Goldie	CGESH
IFC Investments	William Haworth	CFGST
	Jean-Marie Masse	GCSVP
	Xavier Jordan	CFGCM
	Josep Julia	CFGAM
	David Wilton	IFC
Bond / Equities Markets	Anderson Caputo Silva	GFMDR
	Ketut Kusuma	GFMDR
	Abha Prasad	GFMDR
	Catiana Garcia-Kilroy	GFMDR
	Tanya Konidaris	GFMDR
Housing	Douglas Grayson	IFC Housing
	Simon Walley	WB Housing
Insurance	Julie Dana	Disaster Risk Insurance
	Craig Thorburn	GFMDR
Pensions	Heinz Rudolph	GFMDR
	Fiona Stewart	GFMDR
Payments and Settlements	Massimo Cirasino	GFMDR
	Maria Teresa Chimienti	GFMDR
Corporate Governance	Darren Hartzler	CRKCG
oorporate Governance	Caroline Bright	IFC Housing
	Alex Berg	GFMDR
	Sunita Kikeri	GFMDR
Treasury Operations	Doris Herrera-Pol	World Bank Treasury
	George Richardson	World Bank Treasury
	Miguel Navarro-Martin	Fin Advisory and Banking
	Donald Sinclair	WB Treasury
	Phillip Anderson	FABDM
	Laura Tlyae	WB Treasury
	Andrew Cross	CTCGK
	Keshav Gaur	CTCGN
		CTCGK
	Evelyn Hartwick	IFC Treasury
	Shida Zhang	,
	Esohe Denise Odaro	IFC Treasury
Infractructure	Simon Bell	Impact Bonds/ MNA Region
Infrastructure	Bayo Oyewole	Global Infrastructure Facility
	Ana Carvajal Katherine Baragona	GFMDR Global Infrastructure Facility
	Z GIROGIRO PARAGORA	I TODAL IDICACTURE L'ACILITY