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IMF AND WORLD BANK STAFF NOTE FOR THE G20 MEDIUM-TERM DEBT MANAGEMENT STRATEGIES: RECENT CAPACITY BUILDING EFFORTS

EXECUTIVE SUMMARY

The Medium-Term Debt Management Strategy (MTDS) framework was endorsed by the Boards of the International Monetary Fund (IMF) and the World Bank (WB) in 2007. This endorsement and the mandate to help countries build capacity in this area, and past G-20 attention to debt management issues, reflect a recognition that sound debt management is critical both to macroeconomic stability and to the development and functioning of the financial markets.

The Bank and the Fund have collaborated to deliver a large volume of MTDS-based technical assistance to numerous, mostly middle and lower income countries. Donors have recognized the importance of this work and have been generous in their support. The assistance has taken many forms, including country visits by staff and experts, the delivery of regional training events, and the organization of forums.

This note describes how capacity building on MTDS has been adapted to keep abreast of country needs. Government debt portfolios are becoming more complex (for example, due to the issuance of Eurobonds or local currency bonds, or the potential realization of contingent liabilities), which requires that the MTDS framework be adapted considering additional risk factors and a wider range of strategies. In parallel, modes of delivery have evolved, with increasing use of on-line learning, and more interactive, country-specific presentation of tools and techniques. In many countries, effective capacity building in MTDS analysis was complemented by efforts to strengthen institutions; debt recording; and government cash management. Country ownership, often reflected in commitments under Fund- or Bank-supported programs, has proven critical to the sustained enhancement of debt management capacity.

The value and effectiveness of these capacity building efforts are documented in the note using qualitative and quantitative metrics. Both the responses from national authorities to a questionnaire, and the evolution of various quantitative indicators suggest that effects were positive and generally sustained. Many recipient countries are now more able to integrate debt management into overall economic policy formulation and adapt their debt management strategies to changing countries circumstances. For some, debt risk indicators have improved even while debt levels have increased.

Looking forward, the note suggests that the MTDS framework and modes of delivery should continue to be updated and refined, while maintaining core functions. Some countries will need more sophisticated techniques both to analyze risk-return trade-offs and to implement their chosen strategy. Others are still building a solid foundation in debt management. In addition to hands-on trainings, more use of on-line learning may contribute to an effective and efficient approach. Explicit early commitment to a sustained reform program to strengthen debt management may be helpful both in promoting stabilization and in underpinning the authorities' ownership of those reforms.

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Glossary

ABP	Annual Borrowing Plan
AT	Analytical Tool
DeMPA	Debt Management Performance Assessment
DFN	Debt-for-nature
DMO	Debt Management Office
DMS	Debt Management Strategy
DPI	Debt management performance indicator
DPO	Development Policy Loan
DSA	Debt Sustainability Analysis
EBRD	European Bank for Reconstruction and Development
EMDC	Emerging Market Developing Country
IDA	International Development Association
LCBM	Local Currency Bond Markets
LIC DSF	Low Income Country Debt Sustainability Framework
LIDC	Low Income Developing Country
MAC DSA	Market Access Countries Debt Sustainability Analysis
MEFMI	Macroeconomic and Financial Management Institute of Eastern and Southern Africa
MTDS	Medium-Term Debt Management Strategy
NCBP	Non-Concessional Borrowing Policy
OECD	Organization for Economic Cooperation and Development
PPP	Public-private partnership
PRGT	Poverty Reduction and Growth Trust
SOE	State-owned enterprise

INTRODUCTION¹

A. Scope

1. **This note assesses the IMF and the WB efforts to help countries develop capacity in formulating and implementing debt management strategies (DMS) through the MTDS framework.** It is thus complementary to the 2016 IMF-WB report to the G-20 titled “International Monetary Fund–World Bank Group Technical Assistance Activities on Public Debt Management in Low Income Countries,” which provides an annotated catalogue of a wide range of related assistance.
2. **A DMS is one, guiding component of public debt management, which involves also tactical decisions and operations, and coordination with other public sector policies.** The primary aim of debt management is to raise the required amount of funding at the lowest possible cost over the medium to long run, consistent with a prudent degree of risk.
3. **The MTDS framework consists of a methodology and associated analytical tool (AT) to facilitate sound debt management.** The framework seeks to help countries develop a DMS that explicitly recognizes the relative costs and risks of alternative financing choices; takes into account the linkages with other key macroeconomic policies; is consistent with maintaining debt sustainability; and can facilitate domestic debt market development.² The framework is adaptable, but it is especially geared towards the needs of low-income developing countries (LIDCs) and emerging market developing countries (EMDCs). The elements of the MTDS framework include various metrics, procedures, and guidance (e.g., on scenario construction). The main components addressed by the MTDS framework include: the objectives and scope of debt management; the characteristics of the existing debt portfolio and the identification of risk priorities; the existing DMS; the sources of potential domestic and external financing; the macroeconomic framework and structural factors; and the comparison of alternative funding strategies based on estimates of cost and risk. The resulting DMS is typically published in a DMS document.
4. **This note is organized as follows:** the remainder of the introduction explains the macroeconomic, structural and developmental role of debt management, and the increasing importance of sound debt management for EMDCs and LIDCs. Section II documents capacity building in MTDS and related fields, including data on resources and delivery. Section III provides

¹ This note was prepared on the basis of a forthcoming IMF-WB joint Board paper “The Medium-Term Debt Management Strategy (MTDS): An Assessment of Recent Capacity Building.” It was prepared by Apostolos Apostolou, Thordur Jonasson, Michael Papaioannou, Miriam Tamene, Eriko Togo (Monetary and Capital Markets Department, IMF), and Emre Balibek, Sebastian Essl, Antonio Velandia (World Bank) in consultation with other departments. The work was supervised by Daniel Hardy (IMF) and Abha Prasad and Coskun Cangoz (World Bank).

² See IMF and World Bank (2009), “Managing Public Debt: Formulating Strategies and Strengthening Institutional Capacity.”

evidence on the effectiveness of technical assistance, based on various quantitative and qualitative measures. Section IV includes concluding remarks and possible lessons for future efforts in this area.

B. Background and Motivation

5. The international community continues to strongly support the debt management agenda:

- **The G20 has endorsed an action plan to support the development of local currency bond markets (LCBMs), which involves appropriate debt management.**³ Under this action plan, the IMF, the World Bank, the EBRD, and OECD have prepared a diagnostic framework to identify general preconditions, key components, and constraints for successful LCBM development.⁴ One such element is sound debt management that fosters the sound evolution of a country's LCBM.
- **The United Nations Addis Ababa Action Agenda on Financing for Development** concludes that borrowing is critical for financing investment and reaching sustainable development goals. In that context, prudent debt management is a priority. The efforts of the IMF, the World Bank and the United Nations in further strengthening debt management capacity and analytical tools for debt management were stressed.⁵

6. There has been increased emphasis on debt management in IMF-WB policy frameworks, commensurate with the increasing importance of debt management for developing countries. For example:

- **Revised IMF and WB Guidelines for Public Debt Management** (2014).⁶ The Revised Guidelines for Public Debt Management stressed the importance of having a DMS to avoid risky debt structures.
- **Introduction of the market access country debt sustainability analysis (MAC DSA).** The MAC DSA includes five indicators of debt structure characteristics relating to maturity, currency composition, spreads of investor base and total external financing requirement in the analysis of debt distress. Therefore, effective debt management and the use of the results from an MTDS analysis will have a strong bearing on the assessment of the sustainability of a country's debt.

³ Development of Local currency Bond Markets: Overview of Recent Developments and Key Themes. Staff Note for the G20 IFAWG. International Monetary Fund and World Bank Group, 2016. Available at <http://www.imf.org/external/np/g20/pdf/2016/121416.pdf>

⁴ Local Currency Bond Markets: A Diagnostic Framework, 2013. Available at <https://www.imf.org/external/np/pp/eng/2013/070913.pdf>

⁵ Addis Ababa Action Agenda of the Third International Conference on Financing for Development, United Nations 2015, available at http://www.un.org/esa/ffd/wp-content/uploads/2015/08/AAAA_Outcome.pdf

⁶ Available at <http://www.imf.org/en/Publications/Policy-Papers/Issues/2016/12/31/Revised-Guidelines-for-Public-Debt-Management-PP4855> .

- **IMF’s Public Debt Limits Policy in Fund-Supported Programs** (effective June 2015).⁷ The reformed policy uses an assessment of debt management capacity (see below) in determining the debt limit under a program.
- **The Public Investment Management Assessment (PIMA) Framework.** The PIMA framework focuses on the need to ensure that all costs (including debt service costs) associated with these projects are published.
- **WB revised non-concessional borrowing policy (NCBP).** Findings from the application of the Debt Management Performance Assessment (DeMPA) tool have been integrated into WB’s lending instruments. The capacity assessment (undertaken jointly by the WB and the IMF) is primarily focused on capacity in debt recording, which is critical to the ability of a country to develop sound debt management.⁸

7. This attention to debt management reflects a recognition that sound debt management is critical to macro and financial stability, and financial and overall development. It follows that debt management is an integral part of a country’s macroeconomic and financial policy framework, and needs to be coordinated with other policy areas. On the one hand, within the constraints of the macroeconomic framework, the debt manager has the delicate task of balancing domestic and external sources of financing of various tenors so as to meet the government funding needs at low over-all cost and contained risk. On the other, sound debt management contributes to reduced macro-financial risks, complementing prudent fiscal management and monetary policy implementation. For example, the debt manager’s ability to cover external public financing requirements through external debt issuance, and avoid undue bunching of debt service obligations helps reduce crowding out, exchange rate pressures, or large swings in international reserves. Moreover, a sound debt management strategy and its implementation are essential to the functioning of the domestic sovereign debt market. The development of that market is a public good that promotes intermediation, provides a saving tool, and strengthens monetary policy transmission.

8. Many EMDCs and LIDCs currently face increasing and increasingly complex debt-related vulnerabilities, making effective and prudent debt management all the more macro-critical. Several countries’ debt vulnerabilities—in terms of total and external debt stocks, but also financing and debt service needs—have been rising.⁹ These trends over the past few years are mainly due to:

- A prolonged growth slowdown and increased fiscal deficit faced in some developing countries;

⁷ Available at <http://www.imf.org/external/pp/longres.aspx?id=4926>.

⁸ See Annex 5 of the 2015 NCBP Board paper: <http://ida.worldbank.org/sites/default/files/pdfs/ncbpoct2015.pdf>.

⁹ See International Monetary Fund, *Fiscal Monitor*, various issues, and International Monetary Fund and World Bank, *Public Debt Vulnerabilities in Low-Income Countries: The Evolving Landscape*, December 2015.

- Negative terms of trade shocks—particularly commodity and energy price shocks—weather related shocks, and contagion from global financial market crisis; and
- A deliberate increase in reliance on foreign financing in a low interest rate environment.

9. EMDCs and LIDCs are widening the range of debt instruments that they employ and therefore must take into account in their DMS. LIDCs had benefited from the significant reduction in debt burden obtained through the Heavily Indebted Poor Countries Initiative and the Multilateral Debt Relief Initiatives. Opportunities then opened for LIDCs to access non-concessional sources of financing, particularly Eurobonds. Those countries may benefit from having extended and diversified their investor base so as to accelerate development, but they may thereby incur new exchange rate, interest rate, and roll-over risks—a possibility that will be put to the tests as global interest rates return to historical levels and the initial wave of Eurobonds start to mature.¹⁰ An overlapping group of countries have been pursuing the development of their respective LCBMs and are now attracting foreign investors on commercial terms. In Africa, for example, countries such as Senegal, Namibia, Cote d’Ivoire, and Uganda increased the issuance of local currency government bonds, the stock of which is now on average equivalent to 8.5 percent of GDP. An increased share of borrowing on commercial terms may sharpen the risk profile of the debt portfolio, necessitating a careful and on-going assessment of the DMS.

TECHNICAL ASSISTANCE IN DEVELOPING MTDS CAPACITY

A. Resources and Delivery

10. A large volume of technical assistance has been delivered and resources deployed within the context of the MTDS framework. There have been 90 WB and IMF technical assistance missions on MTDS since 2008.¹¹ About half have been to Africa, followed by Latin America and the Caribbean (about one quarter), and the rest spread across other regions. It is notable that this assistance goes not only to LIDCs, but also many middle-income and even some high-income countries, where more complex debt portfolios demand a more worked-out DMS.

11. The bilateral technical assistance missions have been supported by regional and international training on the MTDS framework. Typically, about 30 national officials take part in each training event. Since 2008 over 20 dedicated MTDS training events have been held, relatively evenly spread across all regions. This effort has been supplemented by 5 more general trainings on debt management that have incorporated selected elements of the MTDS training. In many instances the delivery has been with other development partners, broadening the pool of trainers,

¹⁰ IMF “Capital Flows—Review of Experience with the Institutional View,” December 2016, provides an up-to-date discussion of related issues.

¹¹ Most missions involve staff from both institutions, but some technical assistance has been delivered separately by the Bank and the Fund on MTDS-related subjects.

and used venues such those provided by the Joint Vienna Institute, the Asia Pacific Finance Development Institute, and Japanese International Cooperation Agency.

12. Capacity building efforts have been leveraged through the contributions of various partners, who are well-placed to provide training and advice tailored to regional needs and at relatively low cost. Regional partners can complement IMF-WB technical assistance in select topics targeted to their member countries, at relatively low-cost. In particular, the DMF II facility finances “implementing partners” that collaborate with WB-IMF teams in debt management capacity building as well as in organizing training events.¹²

13. The modalities of technical assistance missions have been adjusted to increase effectiveness, ownership, and coordination across agencies in the recipient countries. In recent years, increasing use has been made of “hands-on” workshops, yielding an analysis of alternative debt management strategies with immediate applicability to the respective country circumstances. From 2015, staff have started to deliver the “Advanced MTDS and Annual Borrowing Plan (ABP)” training course, in which teams of representatives from selected EMDCs and LIDCs prepared and delivered presentations on MTDS and ABP issues, based on their respective country data. Feedback from participants suggests the structure is effective because of its practical orientation; focus on relatively advanced issues; and the scope for peer-to-peer interchange.

14. Innovative online training has greatly increased exposure to the IMF-WB toolkits, including the MTDS. Since 2013, 7 offerings have been made of the two online courses on debt sustainability and debt management (5 in English and 2 in French). More than 5,000 participants were involved in the courses, and a total of 3,237 participants were awarded course certificates (more than half of which were government officials). In addition to those, several hundred government officials have accessed the online material ahead of MTDS technical assistance missions. Going forward, consideration is being given to making the courses available year-round.

15. MTDS-related technical assistance is undertaken in the context of a Results-Based Management Framework, which enhances accountability by systematizing the definition of objectives and the tracking of outcomes. At each level, a logical framework is established to describe the development objectives of the activity, outcome indicators, how they will be verified, and the associated risks and risk mitigants.

16. A considerable portion of costs was covered by donors (Box 1). Numerous donors have recognized the importance of sound debt management for development and stability in EMDCs and LIDCs, and have therefore supported WB and IMF capacity building in this area.

¹² The implementing partners comprise the Center of Latin American Monetary Studies; the Commonwealth Secretariat; the United Nations Conference on Trade and Development; Debt Relief International; Macroeconomic and Financial Management Institute of Eastern and Southern Africa; the West African Institute for Financial and Economic Management; and the Agence UMOA-Titres.

Box 1. Donor Funding

The Debt Management Facility (DMF) trust fund is dedicated to supporting technical assistance on debt management and debt sustainability. The DMF is a multi-donor trust fund currently supported by Austria, Germany, The Netherlands, Norway, the Russian Federation and Switzerland, with the objective of strengthening debt management capacity and institutions. The DMF works with all LIDCs, IDA-eligible and PRGT countries (84 in all). Along with on-going program activities, new activities have been included, such as: strengthening capacity in the application of the Joint Bank-IMF Debt Sustainability Framework, domestic debt market development, sub-national debt management, risk management, and international capital markets access. Besides “traditional” country missions, DMF supports training events, on-line training courses, outreach programs, and research and development. From its inception to end-FY15, the DMF supported over 200 missions across 75 countries and twenty subnational governments, and trained over 600 client practitioners. Moreover, peer learning and outreach activities include the DMF Stakeholders Forum, The Debt Managers’ Network, the quarterly DMF newsletter, and the Debt Management Practitioners’ Program.

The Government Debt and Risk Management Program provides medium-term technical assistance for middle income countries. Implemented by the World Bank, the program covers Azerbaijan, Colombia, Egypt, Indonesia, Ghana, Macedonia, Peru, Serbia, South Africa, Tunisia and Vietnam, and is currently supported by Switzerland. The technical assistance covers governance arrangements, risk management, strategy design and implementation, debt market development, and management of contingent liabilities.

Regional advisors on debt management, including MTDS, are hosted by the Central and Eastern African Regional Technical Assistance Centers, and are thus supported by donors to those centers (including governments from the respective regions). The Canadian International Development Agency has supported a resident advisor in the Caribbean who contributes to strengthening debt management capacity in that region. Some donors provide support in kind: the MTDS training session in December 2016 was held in Tokyo, facilitated by the Japanese International Cooperation Agency.

B. Technical Assistance Recommendations and Themes

Common themes

17. MTDS technical assistance missions and training courses provide overarching recommendations on how best to design, produce and document a DMS based on an analysis of a range of options and scenarios. Technical assistance teams conduct comprehensive and systematic analysis of the existing debt portfolios, the macroeconomic and financial market circumstances and prospects, the financing choices available to the sovereign, the baseline and shock pricing assumptions, and the overall cost and risk implications of the financing choices over the medium-term. Thus, the framework provides strategy options and an approach to assess the costs and risks attached to each under various circumstances. The selection of a specific strategy to be followed is the responsibility of the authorities.

18. MTDS technical assistance missions typically analyze the need for complementary reforms to strengthen institutional capacity and deepen the domestic debt markets, and make recommendations in those areas. For example, using the MTDS framework requires the availability of coherent, timely debt data derived from debt records, but often record keeping is

found to be outmoded. Hence, MTDS capacity building is complementary to other technical assistance on related topics, with the aim not only of enhancing debt management, but also of achieving financial deepening and improving fiscal management (Box 2). “Closest” to assistance on the MTDS framework is advice on such matters as the appropriate legal framework and institutional arrangements for debt management; cash management; use of instruments to hedge market risks faced by governments; debt recording; the organization of primary debt markets and regulation of secondary debt markets; the use of government securities in monetary policy implementation; and debt sustainability analysis.

Box 2. Complementary Technical Assistance

Capacity building related to the MTDS is often complemented by, and complements, technical assistance in other areas, notably:

- Strengthened public debt and associated risk management capacity, going beyond the MTDS and including broader fiscal risk management, e.g., contingent liability risk management;
- Establishing the requisite institutions, subject to suitable arrangements for operational independence and accountability, including the centralization of the public debt management functions in one office/unit of the MoF;
- Putting in place the appropriate legal framework for debt operations and debt market functions;
- Deepen domestic primary and secondary debt markets, for example, by establishing a primary dealer network and instituting reliable settlement and depository services;
- Development of securities markets generally, refining monetary policy operations, and issuing and enforcing a suitable framework of regulation and oversight;
- Improving government cash and public investment management;
- Ensuring the timely and reliable recording of government debt and the availability of government debt statistics;
- Preparing, developing and implementing rules-based fiscal frameworks; and
- Building capacity to apply the debt sustainability framework and undertaking debt sustainability analysis.

Development and innovations

19. Experience from recent technical assistance suggests that some emerging issues need to be addressed, even while capacity in certain “traditional” areas needs to be enhanced. For many countries, capacity building starts with “getting the basics right”—for example, monitoring fundamental cost, risk and duration indicators, but also for example the operation of debt recording and reporting systems—and can now be refined and extended. Moreover, as countries develop their debt management capacity and their debt markets, and especially as they move on to being “frontier” markets, the analytic framework and techniques need to evolve.

20. A questionnaire of country authorities helped identify priorities for more detailed advice, in particular on issues such as:¹³

- Expanding the perimeter of public debt covered by the strategy beyond that of central government;
- Incorporating contingent liabilities (see below);
- Promoting more consistent implementation of the DMS with stronger linkage to individual financing decisions; and
- Constructing well-targeted macro-financial scenarios that are tractable but well-calibrated, using diverse risk metrics, and establishing benchmarks.

21. Already the MTDS AT has been updated, incorporating improvements and adaptations to evolving country needs. The aim is to make it more adaptable, transparent, and user-friendly by introducing operational financing targets as policy anchors and constraints; adding more advanced and customizable features; and enhancing the transparency of the calculation of indicators and outputs.

22. Another area of emerging importance relates to the use of innovative instruments.

Some EMDCs have begun introducing debt instruments other than conventional loans and bonds, and while the MTDS framework can accommodate them, some of their special features and conditions could be better captured. Of special interest are:

- **Sukuk**, the equivalent of bonds in Islamic finance. Sukuk rely on the transfer of benefits on an underlying asset, and its structure should adhere to the Islamic legal principles. Therefore, their use requires some adjustment mainly in the legal and operational framework, especially in non-Islamic jurisdictions;
- **Green bonds**, to fund projects that have positive environmental and/or climate benefits. Disclosure and ex ante and ex post verification of “green” features, and firmly linking the bond to individual projects, remain challenges;
- **Debt-for-nature (DFN) swaps** used for generating funding for environmental programs. Ensuring long-term, predictable sources of financing for environmental purposes often proves to be challenging; and
- **State Contingent Debt Instruments and hedges.** Many EMDCs and LIDCs could potentially benefit from linking debt servicing to some state variable capturing their ability to pay (such as

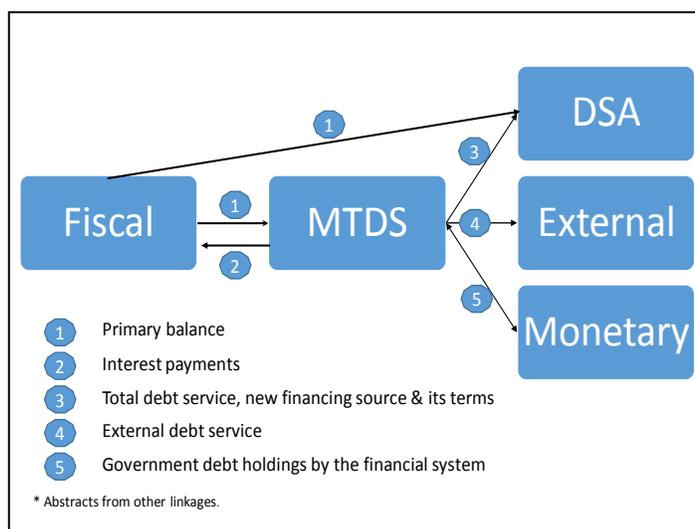
¹³ The survey covered current DMS practices, experience with technical assistance, and priorities going forward. More than 60 countries responded. Other questionnaire responses are discussed below.

GDP, a commodity price or export performance), either through “bundled” instruments or through hedges.

23. Government contingent liabilities present a particular challenge that may require adaptation of the MTDS framework or its linkage to more complex tools for debt management. Contingent liabilities as a source of fiscal risks are increasingly becoming prominent in government portfolios.¹⁴ They arose not only in the context of the global financial crisis when banks were under strain, but also, for example, because some governments use them to finance infrastructure investment and public services through “off-budget” borrowing and guarantees. There is a need to develop targeted diagnostics tools and provide dedicated technical assistance that can then provide inputs into an MTDS analysis.¹⁵

24. In recent years, staff have integrated the MTDS AT into the financial programming exercise for a number of countries. In the traditional financial programming exercise, there is no explicit financing file, as financing is normally a residual in the macroeconomic framework. Further, normally only net financing is considered, with refinancing of maturing debt taken as given. However, in countries where financing pressures have been acute, it has been useful to have an explicit financing file that allows for debt management

considerations. This has been the approach in the cases of Ghana, Grenada, and Nigeria. The general architecture for integrating the financing file with the traditional financial programming is illustrated in the text chart. The MTDS (financing) file receives information on the primary balance from the fiscal file, and generates information on (domestic and external) interest payment and amortizations. That information is input into other parts of the framework. Mechanisms are incorporated to represent feedback mechanisms and to ensure consistency. Exploration of more formal linkages between the MTDS analysis and the macro-framework, including the DSA, may help in better integration of the MTDS framework into the Fund and Bank macro-financial work.¹⁶



¹⁴ See Elva Bova ; Frederik G Toscani ; H. Elif Ture ; Marta Ruiz-Arranz, “The Fiscal Costs of Contingent Liabilities : A New Dataset,” IMF Working Paper WP/16/14.

¹⁵ It should be noted that analyzing risks related to contingent liabilities often goes beyond the scope of the explicit responsibilities of the debt manager.

¹⁶ For example, IMF TA to Jamaica and Barbados in 2016, where financing details from the MTDS were incorporated into the MAC DSA.

25. IMF and World Bank staff are making progress towards completing the review and update of the LIC-DSF, where the results from using the MTDS framework will often have a bearing on the assessment of the sustainability of debt. The new framework would, inter alia, introduce new tools to help analyze market related risks and contingent liabilities, for those countries with such exposures.

EFFECTIVENESS

Qualitative measures

26. The questionnaire responses reveal that the MTDS guidance, the associated AT, and related technical assistance are highly valued by national authorities, who see impact on a number of fronts. The great majority of the countries mentioned that technical assistance in MTDS helped them to introduce a better structured and sounder approach to their DMS, which can then be integrated into macroeconomic policy formulation and implementation. For example, more than four fifths of respondents indicated that they have prepared and published MTDS documents. These strategies are reviewed on a regular basis, with more than three quarters being reviewed at least once a year. Another main benefit of technical assistance has been to raise awareness about the importance of the strategy document and the institutional role of the DMO, including through governance reforms. Explicit monitoring of cost and risk indicators is seen as a way to raise risk sensitivity among senior officials and broader stakeholders.

27. National authorities view the technical assistance delivery mechanisms as appropriate and effective. Countries found national workshops very helpful, followed by international and regional workshops. Countries also appreciated integrated Debt Sustainability Analysis–MTDS training.

28. A desk review of experience in countries that use the MTDS toolkit and have recently received technical assistance in this area provided examples of how these countries have tried to optimize the composition of their respective debt stocks. Most of these countries exhibit rising debt ratios and greater reliance on external financing. However, within the envelope, countries have mostly exhibited improvements in refinancing risk indicators. The improvements in the share of debt maturing in the first year, an indicator which captures refinancing risk, have been especially substantial in cases such as Benin, Pakistan, Cameroon and Zambia. Successful improvement of refinancing risk of the portfolio was often complemented by improvements in interest rate risk indicators. Thus, some of these countries seem to have chosen to take on more foreign currency risk in exchange for lower roll-over and interest rate risk. Experience shows also that the MTDS methodology and approach is sufficiently flexible to be applied across a wide spectrum of economic development and market access levels.

29. Yet, even when capacity to formulate a DMS and undertake the necessary analysis has been established, implementation has sometimes lagged. Weakness in translating strategy into operations can often be related to institutional and organizational shortcomings, including fragmentation of debt management responsibilities across several entities, or limited support from

senior officials. The timely compilation of requisite information from the debt recording database and its integration with macroeconomic and market data has often been challenging. Too often, countries continue to lack a capable and fully functional debt recording system; assistance to ensure adequate debt recording is often a precondition for successful assistance related to the MTDS.¹⁷

30. The design, monitoring, delivery, and follow up of technical assistance often demand a medium-term commitment from the delivering institutions and from the recipients. Middle income countries seem to be especially receptive to such a programmatic approach. Also, there is some evidence that MTDS technical assistance recommendations have been more effectively implemented in the context of a Fund-supported adjustment program or a Bank loan agreement. Technical assistance in debt management can complement an adjustment program in the restoration of market confidence, and ensure that financing needs are met while other adjustment measures are being implemented.

31. The review of country cases underlined the importance of adapting technical assistance to the needs of the relevant country. This view was corroborated by the responses to the questionnaire of country authorities. MTDS analysis has been extended to address specific country needs, for example, by:

- Analyzing jointly government assets and liabilities in a commodity exporting country;
- Incorporating state owned enterprises (SOEs) into the MTDS analysis where quasi-fiscal activities are significant;
- Applying the MTDS framework to sub-national debt in a confederal system;
- Taking into account debt related to leasing obligations in the MTDS analysis;
- Exploring the value of possible liability management operations;
- Basing the development of more complex, stochastic models of debt dynamics on the MTDS framework.

Quantitative measures

32. Results from the 31 countries with more than one DeMPA intervention across time (text table) indicate progress in most debt management areas.^{18 19} Generally, coordination with

¹⁷ MTDS missions typically devote much time to compiling consistent and up to date data to serve as a basis for the analysis.

¹⁸ The DeMPA is a demand driven program, and hence the assessments are updated upon request from authorities; data are therefore not available for all countries that have received MTDS assistance.

¹⁹ Incremental measures and reforms were undertaken by countries that are not necessarily reflected in score upgrades.

macroeconomic policies is relatively strong, and both governance and capacity in borrowing operations have been improving. Debt recording and operational risk management show significant improvements, reflecting strengthened debt data quality and introduction or updating of related procedures, although they remain one of the weaker core functions across several debt offices. The relatively weak and stagnant scores in cash flow forecasting and cash flow management (which is not part of the MTDS framework) suggest both technical capacity deficits and deeper structural issues with budget formation and execution.²⁰

Comparison of scores from the countries that have repeated DeMPAs
(percent)

Share of the scores that have experienced	Up-grade	Down-grade	Stable	Share C and above Latest DeMPA	Share C and above First DeMPA
Overall	17	8	69	37	29
I. Governance and Strategy Development	16	6	67	39	29
II. Coordination w/ Macroeconomic Policies	19	16	59	58	57
III. Borrowing and Related Financing Activities	13	4	76	35	28
IV. Cash Flow Forecasting and Cash Balance Management	7	5	87	13	15
V. Debt Recording and Operational Risk Management	21	9	68	31	19

Source: WB.

33. An examination of Country Policy and Institutional Assessments (CPIA) scores for countries that received MTDS intervention paints a broadly similar picture of improvements in debt policy and debt management.²¹ Between 2008 and 2015, CPIA scores for criteria on debt policy and debt management increased steadily for countries in the sample. On average, the number of countries where debt management was found to be weak, defined as a score of 2.5 or below, fell by a quarter, while the number of countries in which debt management was rated as moderate, defined as a score between 3 and 4, increased by a fifth over the same period. Viewed overall, the CPIA scores indicates that by 2015 debt management performance was moderate in 68 percent of DMF-eligible countries, up from 52 percent in 2008, with the remaining 32 percent of

²⁰ Separate technical assistance is provided by both WB and IMF on cash management issues.

²¹ The CPIA aims to capture the quality of a country's policies and institutional arrangements on an annual basis. Criteria 3b addresses specifically debt related policies, and the extent to which debt management is conducted in a way that is conducive to minimizing budgetary risks and ensuring long term debt sustainability.

countries divided between those with debt management rated as strong (13 percent) and those where it was found to be weak (19 percent).²²

34. Data from the Debtor Reporting System (DRS) suggests a parallel improvement in debt reporting.²³ Most countries that received MTDS TA borrow from the World Bank and thus report to DRS.²⁴ Based on end 2015 data, 75 percent of these countries were rated satisfactory, measured in relation to adherence to the specified reporting requirements and timetable. This was a marked improvement over end 2010 when only 50 percent met the criteria. The accuracy and comprehensiveness of DRS reports has also improved, albeit more moderately, over the same period.

Enhancing effectiveness

35. The questionnaire results suggested some approaches to improving the effectiveness of capacity building and to address issues ancillary to the MTDS:

- Several countries mentioned the need for stronger involvement of high-level officials in the process, as they play a pivotal role in ensuring that the strategy is disclosed and implemented on a sustained basis, and that institutional capacity is maintained;
- Some respondents pointed to the need to facilitate the exporting of debt data from the debt recording system to the AT, thus allowing effort to focus on debt management analysis;
- Some countries mentioned the value of greater flexibility and granularity in the AT to allow for more country-specific scenarios;
- A few respondents mentioned the need to expand the scope of the MTDS framework and the AT to cover possible debt restructuring or liability management operations.

36. Building institutional capacity in debt management is a long-term endeavor, and therefore a “programmatic” approach to technical assistance may often be needed. Such an approach would involve diagnosis and the design of a series of steps, followed by technical assistance in requisite forms and action by national authorities. Up-front country ownership and political commitment, coupled with commitment from technical assistance providers and donors,

²² The quality of debt management performance frequently correlates to other, broader, vulnerabilities. All countries where the CPIA currently scores debt management at 2.5 or below are classified as fragile and/or small states. Conversely, those with a score of 4.5 and above are typically countries with middle-income classification and access to market-based sources of financing, including to IBRD financing; or low- and lower-middle income countries with low levels of public debt, relative to GDP.

²³ As a condition of borrowing from IBRD and IDA countries are obligated to submit detailed information on the terms and conditions of long-term external debt borrowing and related stocks and flows to the DRS.

²⁴ MTDS-eligible countries with no loan obligations to IBRD or IDA do not report.

are crucial to this approach. Also, capacity development in related areas and follow-up through regular reviews and adjustment would typically be part of the program.

37. A more programmatic approach can be implemented through an up-front commitment from the authorities and providers to an assistance program, based on an agreed diagnosis and scoping effort. Regular consultations between country authorities and the Fund and the Bank could provide a vehicle for discussing progress made and remaining obstacles, and for reinvigorating high level commitment. Measures to enhance debt management, where macro-critical, may be included more widely in a Memorandum of Economic and Financial Policies or a Bank loan agreement such as Development Policy Operations or Investment Project Financing, thus underlining and reinforcing authorities' sustained commitment in this area.

38. Nonetheless, flexibility is needed to suit country circumstances and other constraints. One-off engagements can run a risk of failed implementation and wasted resources, but designing a technical assistance program is no guarantee of success. A programmatic approach implies substantial start-up costs (to donors and technical assistance providers), which in some cases may have to be written off if country circumstances change. For a given resource envelope, a programmatic approach implies less actual delivery of technical assistance, and turning down ad hoc requests. Some countries request and make good use of focused technical assistance, for which a programmatic superstructure would be wasteful.

CONCLUSIONS

39. Debt management and specifically the MTDS analysis have been gaining in importance in both LIDCs and EMDCs and evolving, with parallel demands on capacity building. As a wave of Eurobonds and local-currency bonds issued by LIDCs and EMDCs in the past decade reach maturity and global interest rates start to rise, debt managers will require more intensive technical assistance to navigate through the challenges and difficulties they are likely to face.

40. Evidence has been provided on the effectiveness of MTDS advisory missions, recommendations, and training. Activities have been shown to be a relevant, practical, and adaptable. Some countries have made rapid strides in developing their debt management capacities with the help of this assistance. Those that have made greatest progress typically require MTDS support due to external requirements, or because they face a more complicated set of decisions. These countries have put in place a legal framework and a coherent institutional set-up that provides a platform for the analysis of cost-risk trade-offs, links that analysis to operations, and generates high-level attention to debt management issues.

41. Despite good progress overall, fundamental capacity building continues to be required in several EMDCs and LIDCs that still have far to go. Their ability to formulate a DMS is limited, and staff turn-over precludes the growth of sustained institutional capacity. Often their debt management planning is not well integrated with the fiscal policy formulation process, and debt operations are conducted in a more or less ad hoc manner. These countries may have other priorities so long as they rely on (or are limited to) long-term concessional borrowing. But their

eventual evolution needs to be anticipated with basic assistance: once their development accelerates, lack of capacity in debt management may become costlier and riskier.

42. There is a need for continued effort to develop and extend the MTDS. In this connection, defining appropriately the perimeter of sovereign debt to be managed is crucial. Especially for smaller member countries highly prone to natural disasters or commodity price fluctuations, consideration should be given to adding an analytic framework that facilitates making the choice between taking out insurance and issuing debt. For some countries, contingent liabilities may have to be taken more explicitly into account, not only from a debt sustainability perspective, but also in the development and implementation of the DMS. Also, the AT could be better adapted to deal with new instruments, such as green bonds and hedging instruments. There is a need, moreover, for a smooth transition to capacity building on more “advanced” issues (e.g., sovereign asset-liability management, hedging of debt portfolio risks, developing annual borrowing plans and auction calendars, integration into macro models and financial market surveillance).

43. Enhancing the effectiveness of technical assistance in this area requires more emphasis on strengthening operational capacity and support functions. MTDS-related advice has mostly concentrated on supporting capacity building in the formulation of a strategy; more emphasis might in the future be placed on the mechanics of translating strategy into specific actions and transactions. Another functional area deserving added attention may be the linkage between the debt management strategy and short-term borrowing plans and government cash management. Moreover, there is a case for focusing on strengthening capacity to record and monitor public debt, where such capacity remains low, so as to have in place the empirical basis for formulating and implementing any DMS.

44. There may be a case for delivering MTDS and other debt management technical assistance more often using a “programmatically” approach. A programmatic approach could be substantiated by an up-front agreement between the country and assistance providers, where country ownership and a plan for debt management capacity development are acknowledged.