MEF Dipartimento del Tesoro | OECD BETTER POLICIES FOR BETTER LIVES | WORLD BANK GROUP

PDM NETWORK *Newsletter*

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This newsletter lists all papers, reports, courses and other events concerning public debt management recently uploaded by the PDM Network Secretariat in the site www.publicdebtnet.org. The documents which the PDM Network Secretariat have found most interesting are highlighted with a grey background.

From the issue n. 6/July–August 2016 the PDM Network Newsletter is published every two months (September, November, and so on). This change is aimed at improving the quality of the service offered. The Secretariat are also working on updating the organization of the material and the user interface of the website.

The PDM Network Secretariat welcome cooperation on information published on the website. Please feel free to **suggest any documents, news and events** that you think are relevant to the management of public debt at the following email address: **publicdebtnet.dt@tesoro.it**.

Due to the April 2017 site restructuring, the documents' links reported in the newsletters until the January-February 2017 issue no longer work. To find a document reported in previous newsletters, you can copy its title in the site browser, so you can see the new page of the document. We apologise for this inconvenience.

Contents

Documents

Cost and Risk

Evaluating Sovereign Disaster Risk Finance Strategies : Case Studies and Guidance (2017)
World Bank
Disaster risk finance is an important component of the disaster risk management and climate change adaptation agenda. It aims to increase the financial resilience of countries against natural hazards by strengthening public financial management and promoting market-based disaster risk finance solutions (such as, sovereign catastrophe risk transfer solutions for governments or domestic catastrophe risk insurance markets for public and private assets). This report complements the more theoretical framework paper with a demonstration of how the framework can be applied in practice. Five case studies illustrate

a range of questions that policy makers might ask, potential instruments to be considered, and economic conditions, and a Guidance Note presents principles for such analyses. The structure of the report is as follows: the proposed framework is presented, outlining the approach of the opportunity-cost framework and its limitations. The five case studies are introduced and the contingent liability and finance strategies considered in each are outlined. Subsequently, the five case studies are presented in five chapters, each standalone with relevant annexes (including at the back of the report). Finally, a Guidance Note outlines how the framework may be applied in a practical manner to another country's plans for the disaster risk financing of a contingent liability. Lastly, a Glossary is provided. **The purpose of the entire report is to illustrate how to apply the framework to a country-specific question.** All formulae and calculations applied in these case studies follow those in the technical framework paper. It does not aim to make any generalized conclusion about which finance mechanisms are cheapest or how disaster risk finance should be structured.

Secondary Markets

Repo market functioning (2017)
Study Group of the Committee on the Global Financial System – Bank for International Settlements
Repo markets play a key role in facilitating the flow of cash and securities around the financial system. They offer a low-risk and liquid investment for cash, as well as the efficient management of liquidity and collateral by financial and non-financial firms. A well-functioning repo market also supports liquidity and price discovery in cash markets, helping to improve the efficient allocation of capital and to reduce the funding costs of firms in the real economy. **However, excessive use of repos can facilitate the build-up of leverage and encourage reliance on short-term funding.**

External debt composition and domestic credit cycles (2017)
Stefan Avdjiev, Stephan Binder, Ricardo Sousa - Bank for International Settlements
The authors assess the role of external debt in shaping the dynamics of domestic credit cycles. Using quarterly data for 40 countries between 1980 and 2015, the authors examine four dimensions of external debt composition: instrument, sector, currency and maturity. The authors show that the first two dimensions provide valuable information about the likelihood of credit booms and busts. In particular, the authors find that a higher share of external bank lending in the form of bonds is associated with a greater likelihood of credit booms. Their results also reveal that credit busts tend to be associated with a lower share of interbank lending and a higher share of lending from banks to nonbanks.

Financial Analysis

Arbitrage costs and the persistent non-zero CDS-bond basis: Evidence from intraday euro area sovereign debt markets (2017)
Jacob Gyntelberg, Peter Hördahl, Kristyna Ters and Jörg Urban - Danske Bank, Bank for International Settlements, University of Basel
The authors find evidence that in the market for euro area sovereign credit risk, arbitrageurs engage in basis trades between credit default swap (CDS) and bond markets only when the CDS-bond basis exceeds a certain threshold. This threshold effect is likely to reflect costs that arbitrageurs face when implementing trading strategies, including transaction costs and costs associated with committing balance sheet space for such trades. Using a threshold vector error correction model, the authors endogenously estimate these

unknown trading costs for basis trades in the market for euro area sovereign debt. During the euro sovereign credit crisis, the authors find very high transaction costs of around 190 basis points, compared to around 80 basis points before the crisis. **The authors' results show, that even when markets in times of stress are liquid, the basis can widen as high market volatility makes arbitrage trades riskier, leading arbitrageurs to demand a higher compensation for increased risk. Their findings help explain the persistent non-zero CDS-bond basis in euro area sovereign debt markets and its increase during the last sovereign crisis.**

How does risk flow in the credit default swap market? (2017)

Marco D'Errico, Stefano Battiston, Tuomas Peltonen, Martin Scheicher - University of Zurich, European Systemic Risk Board, European Central Bank

The authors develop a framework to analyse the Credit Default Swaps (CDS) market as a network of risk transfers among counterparties. From a theoretical perspective, the authors introduce the notion of flow-of-risk and provide sufficient conditions for a bow-tie network architecture to endogenously emerge as a result of intermediation. This architecture shows three distinct sets of counterparties: i) Ultimate Risk Sellers (URS), ii) Dealers (indirectly connected to each other), iii) Ultimate Risk Buyers (URB). **The authors show that the probability of widespread distress due to counterparty risk is higher in a bow-tie architecture than in more fragmented network structures.** Empirically, the authors analyse a unique global dataset of bilateral CDS exposures on major sovereign and financial reference entities in 2011 - 2014. The authors find the presence of a bow-tie network architecture consistently across both reference entities and time, and that the flow-of-risk originates from a large number of URSs (e.g. hedge funds) and ends up in a few leading URBs, most of which are non-banks (in particular asset managers). Finally, the analysis of the CDS portfolio composition of the URBs shows a high level of concentration: in particular, the top URBs often show large exposures to potentially correlated reference entities.

Flow effects of central bank asset purchases on euro area sovereign bond yields: evidence from a natural experiment (2017)

Roberto A. De Santis, Fédéric Holm-Hadulla - European Central Bank

The authors estimate the response of euro area sovereign bond yields to purchase operations under the ECB's Public Sector Purchase Programme (PSPP), using granular data on all PSPP-eligible securities at daily frequency. To avoid simultaneity bias in the estimated relationship between yields and purchase volumes, the authors exploit a PSPP design feature that renders certain securities temporarily ineligible for reasons unrelated to their yields. Using these temporary purchase restrictions as an instrument to identify exogenous variation in purchase volumes, **the authors find that the "flow effect" of PSPP operations has, on average, led to a temporary 7 basis-point decline in sovereign bond yields on the day of purchase.** This impact estimate is well above those found in similar studies for the US; at the same time, authors' results imply that flow effects have accounted for only a limited share of the downward pressure of PSPP on sovereign yields, most of which instead derived from anticipation and announcement effects at the onset of the programme.

Scarcity effects of QE: A transaction-level analysis in the Bund market (2017)

Kathi Schlepper, Heiko Hofer, Ryan Riordan, Andreas Schrimpf - Bank for International Settlements

This paper investigates the scarcity effects of quantitative easing (QE) policies, drawing on

intra-day transaction-level data for German government bonds, purchased under the public sector purchase program (PSPP) of the ECB/Eurosystem. This paper is the first to match high-frequency QE purchase data with high-frequency inter-dealer data. The authors find economically significant price impacts at high (minute{by{minute) and low (daily) frequencies, highlighting the relevance of scarcity effects in bond markets. **Asset purchase policies are not without side effects, though, as the induced scarcity has an adverse impact on liquidity conditions as measured by bid-ask spreads and inter-dealer order book depth.** The authors further show that the price impact varies greatly with market conditions: it is considerably higher during episodes of illiquidity and when yields are higher.

High-frequency trading in the Bund futures market (2016)

Kathi Schlepper - Deutsche Bundesbank

In this work, the author studies the impact of high-frequency trading (HFT) on price discovery and volatility in the Bund futures market. Using a new dataset based on microseconds, the focus of the study is on the reaction of high-frequency traders (HFTs) to major macroeconomic news events. The author shows that through their fast and strong reaction to news, HFTs contribute more to price discovery compared to Non-HFTs, but also add a higher share to noise than to permanent volatility. Moreover, the author finds evidence that HFTs tend to supply less liquidity after an unexpected rise in market volatility and prior to upcoming macroeconomic news events. **These findings suggest that in times of high market stress, HFT behavior may exacerbate intraday price volatility and amplify the risk of market disruptions in fixed income markets.**

Debt Crisis

Optimal Fiscal and Monetary Policy, Debt Crisis and Management (2017)

Cristiano Cantore, Giovanni Melina , Joseph G Pearlman, Paul L Levine - University of Surrey, International Monetary Fund, City University

The initial government debt-to-GDP ratio and the government's commitment play a pivotal role in determining the welfare-optimal speed of fiscal consolidation in the management of a debt crisis. Under commitment, for low or moderate initial government debt-to-GPD ratios, the optimal consolidation is very slow. A faster pace is optimal when the economy starts from a high level of public debt implying high sovereign risk premia, unless these are suppressed via a bailout by official creditors. Under discretion, the cost of not being able to commit is reflected into a quick consolidation of government debt. Simple monetary-fiscal rules with passive fiscal policy, designed for an environment with "normal shocks", perform reasonably well in mimicking the Ramsey-optimal response to one-off government debt shocks. **When the government can issue also long-term bonds–under commitment–the optimal debt consolidation pace is slower than in the case of short-term bonds only, and entails an increase in the ratio between long and short-term bonds.**

Debt Restructuring

An Ethical Representation of Sovereign Clients in Debt Disputes (2017)

Michael J. Lockman - Morristown High School

This Article examines the unique ethical questions that arise when representing foreign states in sovereign debt disputes. Although sovereign representation has become commonplace, no existing scholarship has attempted to study the particular ethical quandaries of foreign sovereign representation. **When**

representing a sovereign, basic assumptions about the principal-agent relationship may be inapplicable, the welfare of an entire foreign people depends on the lawyer's competence, and attorneys may find it necessary to rebalance their ethical duties in light of inconsistencies between a client's responsibilities under domestic law and its rights under international law. While this Article limits its scope to the context of sovereign debt litigation, much of its analysis is more broadly applicable. The Article begins by examining client identity and the need to serve client autonomy by deferring to a client's governmental structure. It then explores the duty of preserving client confidences, the attorney's role as a global actor, and how one may represent repugnant regimes while still serving the goals of transnational justice. Finally, the Article employs the Argentina debt litigation as a case study to examine the ethics of candid noncompliance. It concludes that sovereign litigators must subordinate a duty of compliance to the higher ethical obligations of advocacy and candor.

[Courts, Sovereign Immunity, and Credible Commitment in Sovereign Debt Markets]() (2017)

Mark C. Weidemaier - University of North Carolina (UNC) at Chapel Hill

This essay revisits the role of legal enforcement in sovereign debt markets. The conventional view, which has long held sway in the economic literature, is that the law of sovereign immunity denies creditors effective legal remedies when governments do not repay their debts. To many observers, weak legal enforcement is problematic, for effective legal remedies would facilitate credible repayment commitments and thereby increase access to credit. Though substantially correct, this perspective is also flawed. The assumption that creditors lack effective legal remedies implicitly treats sovereign immunity law as a set of mandatory rules. In fact, sovereign lenders can and do bargain for greater enforcement rights. When courts enforce these bargains — as they seem increasingly willing to do — legal remedies gain potency. Yet potent remedies need not improve the functioning of debt markets. Courts can create effective remedies against sovereign debtors only by imposing significant costs on third parties. Many loan debt contracts are drafted so as to maximize these externalities. The important question — given short shrift thus far — is whether the credibility-enhancing virtues of legal enforcement justify the costs.

[Sovereign Debt Restructuring and English Governing Law]() (2017)

Steven L. Schwarcz - Duke University School of Law

Whether or not their fault, nations sometimes borrow at levels that become unsustainable. Until resolved, the resulting debt burden hurts not only those nations but also their citizens, their creditors, and — by posing serious systemic risks to the international financial system — the wider economic community. The existing contractual framework for restructuring sovereign debt is inadequate, often leaving little alternative between a bailout, which is costly and creates moral hazard, and a default, which raises the specter of financial contagion and chaos. Although global organizations, including the United Nations and the International Monetary Fund, have tried to strengthen the sovereign-debt-restructuring framework through treaties, such a multilateral legal approach is highly unlikely to succeed in the near future. […]

[Sovereign debt restructuring - Main drivers and mechanism]() (2017)

Risto Nieminen and Mattia Osvaldo Picarelli - EPRS – European Parliamentary Research Service

This briefing provides an overview of the main issues relating to the restructuring of sovereign debt, and outlines the factors which impact the decision as to whether or not to proceed with debt restructuring. Restructuring is a complex issue – it involves positive and negative aspects, which need to be analysed in order to be able to determine whether it can deliver any added value. **'A sovereign debt restructuring can be defined as an exchange of outstanding sovereign debt instruments, such as loans or bonds, for new debt instruments or cash through a legal process'**. The current situation in the euro area, characterised by high levels of debt and the continuing trend of many Member States to run budget deficits, combined with a low growth environment, raises the issue of debt sustainability. In addition, the low level of inflation recorded in recent years (and deflation in some cases) has played an important role in the increase of debt burdens. **The lack of an EU - level transparent framework for sovereign debt restructuring could potentially entail higher additional costs. As part of the EU's financial stability management instruments, sovereign debt restructuring could form a part of the EU toolbox.**

Accounting, Statistics, Reporting and Auditing

The cost of interventions in the financial sector since 2008 in the EU countries (2017)
Antonio Millaruelo, Ana del Río - Bank of Spain
Since the start of the financial crisis, the advanced countries have deployed numerous measures in support of the financial system, requiring a sizeable volume of public funds. In the EU, aid has been authorised and subject to the conditionality required by the European Commission, in respect of its accountability for competition-related matters. **This article explains the broad criteria for recording aid in general government accounts and discusses the different ways of measuring its direct cost.** On Eurostat figures for the 2008-2015 period, the impact of interventions on general government accounts in terms of debt, debt net of assets, deficits and contingent liabilities are shown for the EU countries. Nevertheless, the final cost will not be fully identified until the restructuring processes outstanding have been concluded and the public sector's remaining exposure to the banking sector has been removed.

The Effects of Data Transparency Policy Reforms on Emerging Market Sovereign Bond Spreads (2017)
Sangyup Choi, Yuko Hashimoto - International Monetary Fund
The authors find that data transparency policy reforms, reflected in subscriptions to the IMF's Data Standards Initiatives (SDDS and GDDS), reduce the spreads of emerging market sovereign bonds. To overcome endogeneity issues regarding a country's decision to adopt such reforms, the authors first show that the reform decision is largely independent of its macroeconomic development. **By using an event study, the authors find that subscriptions to the SDDS or GDDS leads to a 15 percent reduction in the spreads one year following such reforms.** This finding is robust to various sensitivity tests, including careful consideration of the interdependence among the structural reforms.

Macroeconomic Analysis

Commodity price risk management and fiscal policy in a sovereign default model (2017)
Bernabe Lopez-Martin, Julio Leal and Andre Martinez Fritscher- Banco de México
Commodity prices are an important driver of the behavior of fiscal policy and the business cycle in commodity exporting

developing and emerging market economies. Among other factors, these results have been attributed to the fact that governments in many economies rely to an important extent on commodity revenues to finance their budgets. For example, in more than twenty countries hydrocarbon revenues account for over thirty percent of total fiscal revenue (IMF, 2007). Given their reliance on a highly volatile source of revenue, these economies face a significant challenge in terms of their capacity to smooth fiscal policy and fluctuations in economic activity. **Different instruments have been proposed and implemented with the purpose of moderating the impact of commodity-price fluctuations on public finances.** In this article the authors exploit a dynamic model of sovereign default with endogenous fiscal policy, introducing a stochastic endowment of commodity-revenues for the government, to contribute to our understanding of the potential macroeconomic consequences of using these instruments. This model is a natural framework to illustrate the tradeoffs faced by a government subject to significant fluctuations in commodity-related revenues as it endogeneizes the decisions of public expenditures, distortionary tax rates, the issuance of debt and the default of sovereign debt. Furthermore, it allows us to do so in a relatively standard business cycle environment.

Public Debt Sustainability Under Uncertainty: An Invariant Set Approach (2017)

Rossen Rozenov - International Monetary Fund

The paper offers an approach to assessing the sustainability of public debt taking into account the effect of fiscal policy on output, as well as uncertainty in the model parameters and system dynamics. Uncertainty is specified in general terms, and the analysis is based on the notion of invariant sets. Examples are provided to illustrate how the method can be applied in practice.

Spillovers from U.S. Monetary Policy Normalization on Brazil and Mexico's Sovereign Bond Yields (2017)

Carlos Góes, Herman Kamil, Jeremy Zook, Mercedes Garcia-Escribano, Phil De Imus, Roberto Perrelli, Shaun K. Roache - International Monetary Fund, Uruguayan Mof, Temasek Holdings, U.S. Treasury Department

This paper examines the transmission of changes in the U.S. monetary policy to local currency sovereign bond yields of Brazil and Mexico. Using vector error-correction models, the authors find that the U.S. 10-year bond yield was a key driver of long-term yields in these countries, and that Brazilian yields were more sensitive to U.S. shocks than Mexican yields during 2010–13. Remarkably, the propagation of shocks from U.S. long-term yields was amplified by changes in the policy rate in Brazil, but not in Mexico. **The authors' counterfactual analysis suggests that yields in both countries temporarily overshot the values predicted by the model in the aftermath of the Fed's "tapering" announcement in May 2013.** This study suggests that emerging markets will need to contend with potential spillovers from shifts in monetary policy expectations in the U.S., which often lead to higher government bond interest rates and bouts of volatility.

Public Debt with Valued Fiat Currency in a Model of Economic Growth (2017)

Debasis Bandyopadhyay - University of Auckland

The paper incorporates Tobin's portfolio balance theory into an overlapping generations model of growth with endogenously valued money in which fiscal policy and/or monetary policy can change the steady state level of the capital stock.

The optimal inflation rate that maximizes the steady-state capital stock is a function of the nominal interest rate and the income tax rate. For example, when the nominal interest rate equals 6%, government balances its budget and sets the average income tax rate to be 20%, then the optimal inflation rate for the model economy is about 3.39%. **The model can be used to demonstrate how open market intervention could hinder economic growth when the targeted inflation rate is not equal to the optimal inflation rate.** In the model, money is neutral but not super neutral. In contrast, with most models that explain real effects of inflation, anticipated changes in the inflation rate have a real effect in this model. This occurs because money and nominal government debt enter the economy not as a helicopter drop but as seigniorage and the Ricardian Equivalence does not hold.

Private and Public Debt: Are Emerging Markets at Risk? (2017)

Lorenzo Forni, Marco Bernardini - Ghent University, International Monetary Fund

Using a dataset covering a large sample of emerging economies (EMEs), the authors study the relationship between debt and economic performance in bad times. While previous research has shown that private debt buildups exacerbate the duration and intensity of recessions in advanced economies (AEs), the authors document that this effect is very pronounced in EMEs as well. **Moreover, although rapid public debt buildups are unlikely to be the primary trigger of financial crises, in EMEs they are associated with deeper and longer recessions than in AEs. Part of this difference is explained by a less supportive fiscal policy in EMEs during crises.**

Sovereign Illiquidity and Recessions (2017)

Violeta Gutkowski - Brown University

Motivated by the European debt crisis and European Central Bank (ECB) measures to restore sovereign bond market liquidity, the author examines the importance of sovereign debt liquidity in a New Keynesian environment with wage rigidities and financial frictions à la Kiyotaki and Moore (2012). The analysis implies that, independently of credit risk, a decrease in the liquidity of government bonds has significant detrimental effects on output, employment and investment. A shut down of sovereign debt market for one quarter generates a 7% drop in output and investment as well as a 2% increase in unemployment. **Sovereign bond market illiquidity can account for 86% of the output drop in Italy between 2011q2 and 2013q1. ECB temporally policies taken in 2012 aimed at rising liquidity seem to have prevented a longer and deeper economic downturn.**

Fiscal reaction function and fiscal fatigue: evidence for the euro area (2017)

Cristina Checherita-Westphal, Václav Žďárek - European Central Bank, University of Warwick

This paper estimates a fiscal reaction function (FRF) framework for euro area countries and derives a novel approach to measure fiscal fatigue. As in previous studies, the authors find evidence that euro area sovereigns abide, on average, by (weak) sustainability constraints. The primary balance improves by about 0.03–0.05 for every 1 percentage point increase in the debt-to-GDP ratio after controlling for other relevant factors. The positive reaction of primary surpluses to higher debt strengthened over the crisis. **Based on this framework, the authors propose a simple, practical measure of fiscal fatigue that can be used to assess the capacity of sovereigns to maintain primary surpluses over**

extended periods of time. This measure can be derived by comparing simulated primary balance paths in the context of debt sustainability analyses with countries' track-record, adjusted for the change in debt with the estimated fiscal reaction coefficient. The evidence of fiscal fatigue in non-linear FRF specifications is weaker for authors' euro area sample.

ECB-Global: introducing ECB's global macroeconomic model for spillover analysis (2017)

Alistair Dieppe, Georgios Georgiadis, Martino Ricci, Ine Van Robays, Björn van Roye - European Central Bank

In a highly interlinked global economy a key question for policy makers is how foreign shocks and policies transmit to the domestic economy. The authors develop a semi-structural multi-country model with rich real and financial channels of international shock propagation for the euro area, the US, Japan, the UK, China, oil-exporting economies and the rest of the world: ECB-Global. **The authors illustrate the usefulness of ECB-Global for policy analysis by presenting its predictions regarding the global spillovers from a US monetary policy tightening, a drop in oil prices and a growth slowdown in China.** The impulse responses implied by ECB-Global are well in line with those generated by other global models, with international spillovers in ECB-Global generally on the high side given its rich real and financial spillover structure.

Fiscal spillovers in the euro area a model-based analysis (2017)

Maria-Grazia Attinasi, Magdalena Lalik, Igor Vetlov - European Central Bank

The fiscal consolidation measures adopted in many euro area countries over 2010–13 reduced excessive domestic fiscal imbalances, but came at the cost of short-term output losses. This simultaneous tightening of fiscal policy raised concerns that such output losses might be exacerbated by negative spillovers from other countries. This paper presents some model-based simulations for the euro area with a view to gauge the cross-country impact of the fiscal measures adopted over 2010–13. **The paper finds that the output effects of the fiscal consolidation were heterogeneous across countries, reflecting the different amounts and composition of fiscal measures adopted.** The authors find that the trade channel is able to generate sizeable cross-border fiscal spillovers in the euro area. However, once the analysis takes into account the remaining channels (e.g. monetary policy reaction, exchange rate, and risk premium) total spillovers are estimated to be relatively small. In general, when compared to the growth fallout of domestic fiscal policies, negative fiscal spillovers do not seem to have added much to the economic growth woes of vulnerable countries.

Economic Policies

Risks and Returns : Managing Financial Trade-Offs for Inclusive Growth in Europe and Central Asia (2017)

David Michael Gould, Martin Melecky - World Bank

During the 1990s, Emerging Europe and Central Asia (ECA) chose a model of rapid financial development emphasizing bank credit expansion often funded by foreign capital. Although boosting financial inclusion of firms and households, the model was accompanied by lower efficiency and increased financial vulnerability. After two waves of crises, in the late 1990s and after 2008, ECA's banking systems again face major stress. The crises and stresses have eroded trust in banks and job creation in credit-dependent firms. ECA's shallow and illiquid capital markets offer no additional support. Stagnating income growth, particularly of middle- to lower-income earners, has led to increasing dissatisfaction with low productivity growth and limited opportunities. This frustration provides the impetus for reshaping financial policies. A healthy and balanced financial sector could strengthen structural adjustment in ECA's eastern, oil-dependent economies and innovation in its western countries. Risks and Returns: Managing Financial Trade-Offs for Inclusive Growth in Europe and Central Asia argues for reaching beyond increasing access to credit. **ECA countries must build integrated financial systems, enabling prudent financial inclusion in a region significantly lagging in the use of saving products.** Striking the right balance across all dimensions of financial development (stability, efficiency, inclusion, and overall depth) is crucial for achieving and sustaining inclusive growth. Redesigning financial policy involves addressing trade-offs often overlooked in the past. Too much credit and imprudent financial inclusion have led to banking crises. Overly stringent regulation to foster financial stability has hindered inclusion and efficiency gains. Both shortfalls have had negative consequences for shared prosperity. **Risks and Returns discusses tools and approaches to help policy makers achieve balanced financial development.**

Leaning Against the Wind: Fiscal Policy in Latin America and the Caribbean in a Historical Perspective **(2017)**

Carlos A. Végh, Daniel Lederman, Federico R. Bennett - The World Bank

This report by the Office of the Chief Economist for Latin America and the Caribbean (LAC) of the World Bank studies the region's fiscal policies. After reviewing LAC's growth performance, Chapter 1 provides an accounting of its financing needs during the 21st Century to understand how such a diverse region ended up with fiscal deficits across the board in 2016. Chapter 2 goes back to the 1960s and assesses the cyclical properties of fiscal policies. LAC, like most developing countries and in contrast with most developed economies, exhibited procyclical fiscal policies. Good news arrived in the 2000s: one in three economies became countercyclical, which helped improve credit ratings. Yet fiscal policy is complicated by our inability to know if current economic conditions are temporary or permanent. **The report argues for a prudent stance that would err on the side of saving too much during upswings and perhaps borrowing too little during downturns.**

Global Report on Islamic Finance: Islamic Finance - A Catalyst for Shared Prosperity? **(2017)**

World Bank

Income inequality has increased considerably in the aftermath of the financial crisis of 2007–08 to the extent that one percent of global population possess almost half of the global assets. Whereas the development community is unanimous to tackle growing inequality and imbalance in the distribution of wealth, there is a difference of opinion as to the approaches to achieve this goal. **This report presents a perspective from Islamic finance on how shared prosperity can be enhanced.** The theoretical framework for economic development by Islamic economics and finance is based on four fundamental pillars: (i) an institutional framework and public policy oriented to the development objectives of Islam; (ii) prudent governance and accountable leadership; (iii) promotion of the economic and financial system based on risk sharing; and (iv) financial and social inclusion for all, promoting development, growth, and shared prosperity. **There is evidence that Islamic finance is experiencing high growth with the banking sector leading the way.** Several countries are working seriously towards developing standards, regulation and legal frameworks for the development of Islamic finance. **However, there are a number of aspects where policy interventions or improvements in policy effectiveness are needed to develop Islamic finance to promote shared prosperity.** Without the enabling environment, Islamic finance may not be able to attain the potential expected of it. With adequate policy interventions and enabling financial infrastructure, Islamic finance could become a catalyst for alleviating poverty and inclusive prosperity. The key findings of the report include a need for sound regulatory framework for Islamic financial institutions due to the obvious differences from the conventional banks, harmonizing of Shariah standards and more discourse related to the underlying mechanism of Islamic financial products. Islamic capital markets both equity and Sukuk (Islamic bonds) are vital for the development of Islamic financial markets. Finally, instruments of Islamic social finance and redistribution could contribute further to enhance the shared prosperity.

Is monetary policy less effective when interest rates are persistently low? (2017)

Claudio Borio, Boris Hofmann - Bank for International Settlements

Is monetary policy less effective in boosting aggregate demand and output during periods of persistently low interest rates? This paper reviews the reasons why this might be the case and the corresponding empirical evidence. Transmission could be weaker for two main reasons: (i) headwinds, which would typically arise in the wake of balance sheet recessions, when interest rates are low; and (ii) inherent non-linearities, which would kick in when interest rates are persistently low and would dampen their impact on spending. **Authors' review of the evidence suggests that headwinds during the recovery from balance-sheet recessions tend to reduce monetary policy effectiveness.** At the same time, there is also evidence of inherent non-linearities. That said, disentangling the two types of effect is very hard, not least given the limited extant work on this issue. In addition, there appears to be an independent role for nominal rates in the transmission process, regardless of the level of real (inflation-adjusted) rates.

Multilateral Financing

Does Greece Need More Official Debt Relief? If So, How Much? (2017)

Jeromin Zettelmeyer, Eike Kreplin, Ugo Panizza - Peter G. Peterson Institute for International Economics, Federal Ministry for Economic Affairs and Energy, Graduate Institute of International and Development Studies (IHEID)

Creditor countries and international organizations continue to disagree whether Greece should receive additional official debt relief, and if so how much. This paper first shows that these disagreements can be attributed to competing assumptions about Greece's future capacity to repay, particularly about economic growth and the fiscal primary balance. It next evaluates the plausibility of alternative primary balance assumptions using international evidence about fiscal adjustment experiences. **It concludes that primary balance paths required to make Greece's debt sustainable are not plausible and that Greece will therefore require additional debt relief.** Finally, the paper shows that the debt relief measures suggested by the Eurogroup in May 2016 (albeit with significant caveats on whether they will in fact be granted or not) could be sufficient to address Greece's sustainability problem, provided the Eurogroup is prepared to accept both very long maturity extensions on European Financial Stability Facility (EFSF) debt (to 2080 and beyond) and interest deferrals that could lead to a large rise in EFSF exposure to Greece before it begins to decline. If the

Eurogroup wishes to avoid the latter, it will become necessary to either (1) extend the scope of the debt restructuring, (2) lower the interest rates charged by the EFSF significantly below current predictions, or (3) extend European Stability Mechanism (ESM) financing beyond 2018 and delay Greece's return to capital markets for a protracted period.

Reports

Will risks derail the economy?

OECD

Global GDP growth in this Interim Economic Outlook is projected to pick up modestly to around 3½ per cent in 2018, from just under 3% in 2016, boosted by fiscal initiatives in the major economies. The forecast is broadly unchanged since November 2016. Confidence has improved, but consumption, investment, trade and productivity are far from strong, with growth slow by past norms and higher inequality. Disconnect between financial markets and fundamentals, potential market volatility, financial vulnerabilities and policy uncertainties could, however, derail the modest recovery.

Main Economic Indicators, Volume 2017 Issue 5

OECD

The monthly Main Economic Indicators (MEI) presents comparative statistics that provide an overview of recent international economic developments for the 35 OECD countries, the euro zone and a number of non-member economies.

BIS Statistical Bulletin - March 2017

Bank for International Settlements

The statistics published by the BIS are a unique source of information about the structure of and activity in the global financial system. They are compiled in cooperation with central banks and other national authorities and are designed to inform analysis of financial stability, international monetary spillovers and global liquidity. Some BIS statistics, in particular those on international banking, securities markets and derivatives activity, are part of special collections under the auspices of BIS-hosted committees of central banks. Other BIS statistics draw on national data but incorporate assumptions and estimations by BIS statisticians to construct specific measures, such as global liquidity indicators, aggregate credit figures, debt service ratios and effective exchange rates.

National Accounts of OECD Countries, Volume 2016 Issue 2: Detailed Tables

OECD

The National Accounts of OECD Countries, Detailed Tables includes, in addition to main aggregates, final consumption expenditure of households by purpose, simplified accounts for three main sectors: general government, corporations and households.

[National Accounts of OECD Countries, General Government Accounts 2016]

OECD

The 2016 edition of National Accounts of OECD Countries, General Government Accounts is an annual publication, dedicated to government finance which is based on the System of National Accounts 2008 (SNA 2008) for all countries except Chile, Japan and Turkey (SNA 1993).

[OECD Journal: Financial Market Trends, Volume 2016 Issue 2]

OECD

The articles in Financial Market Trends focus on trends, structural issues and developments in financial markets and the financial sector.

[Brazil Monthly Debt Report - February 2017]

Brazilian National Treasury

The Brazilian National Treasury has released the Federal Public Debt Monthly Report for February 2017. The main points announced: 1. Primary Market Transactions - Federal Public Debt (FPD) issuances reached BRL 75.64 billion, while redemptions corresponded to BRL 17.65 billion, resulting in net issuances of BRL 57.99 billion. Of the total net issuances, BRL 58.27 billion refers to net issuances of Domestic Federal Public Debt and BRL 0.28 billion refers to net redemptions of External Federal Public Debt. 2. Outstanding debt, profile and maturity structure - The February results and the limits outlined in the Review of Annual Borrowing Plan 2017 are as follows:[..]

[Cyprus economy Newsletter 03/2017]

Cyprus Public Debt Management Office - Ministry of Economy and Finance

This Newsletter provides the latest economic developments in Cyprus.

[East Asia and Pacific Economic Update, April 2017 : Sustaining Resilience]

World Bank

The region's growth outlook for 2017-19 remains broadly positive. China's growth moderation and rebalancing are expected to continue. In the region's other large developing economies, growth is projected to pick up slightly. Poverty has continued to decline in most countries and is projected to fall further. Global and regional vulnerabilities place a premium on macroeconomic prudence. Mobilizing additional revenues will create space for measures to support growth and foster inclusion. Some smaller commodity-exporting economies need to focus on lowering threats to fiscal solvency. Much of the region may need to adjust accommodative monetary policies. In China, reforms of the corporate sector, including restructuring of SOEs, and measures to bring credit growth under control are critical to reducing vulnerabilities. Elsewhere in the region, improvements in financial supervision and prudential regulation will be required. Developing EAP could benefit significantly from improving the quality of public spending, deepening regional integration, and reducing the agricultural sector's increasingly adverse environmental footprint.

[JGB Newsletter - April 2017]

Ministry of Finance, Japan

The Ministry of Finance Japan publishes monthly Newsletter about the Japanese Government Bonds. The newsletter April 2017 is now available to view online. Contents: Details of Auctions from Apr. 2017; New Tax exemption measures about Repurchase/Resale Agreements for Foreign Corporations FY 2017 Tax Reform; Breakdown by JGBs (including T-Bills) Holders (end of Dec.2016);

On March 8, Mr. Ichikawa, Deputy Director-General of the Financial Bureau, attended panel discussions at the Japan Securities Summit 2017 in London, co-hosted by the Japan Securities Dealers Association and International Capital Market Association. The topic was "Japan: its challenges and potential."

ECB Annual Report 2016

European Central Bank

2016 was in many ways a difficult year, but it was also marked by signs of progress. Though the year began shrouded in economic uncertainty, it ended with the economy on its firmest footing since the crisis. Yet as economic uncertainty subsided, political uncertainty increased. We faced a series of geopolitical events that will shape our policy landscape for years to come. This year's Annual Report describes how the ECB navigated these choppy waters. […]

World Economic Outlook, April 2017: Gaining Momentum?

International Monetary Fund

Global economic activity is picking up with a long-awaited cyclical recovery in investment, manufacturing, and trade, according to Chapter 1 of this World Economic Outlook. World growth is expected to rise from 3.1 percent in 2016 to 3.5 percent in 2017 and 3.6 percent in 2018. Stronger activity, expectations of more robust global demand, reduced deflationary pressures, and optimistic financial markets are all upside developments. But structural impediments to a stronger recovery and a balance of risks that remains tilted to the downside, especially over the medium term, remain important challenges. Chapter 2 examines how changes in external conditions may affect the pace of income convergence between advanced and emerging market and developing economies. Chapter 3 looks at the trend in the declining share of income that goes to labor and the root causes. **Overall, this report stresses the need for credible strategies in advanced economies and emerging market and developing ones to tackle a number of common challenges in an integrated global economy.**

Update on the Financing of the Fund's Concessional Assistance and Debt Relief to Low-Income Countries

International Monetary Fund

Poverty Reduction and Growth Trust (PRGT)-related policies following the 2015 enhancement of the financial safety net for LICs, while options to better assist countries confronting sudden balance of payments needs due to large natural disasters are under consideration. Demand for PRGT resources has increased. Demand for concessional resources has exceeded historical averages in recent years, mainly in response to sustained low commodity prices and deteriorated global financial market conditions. Demand is expected to reach new highs in 2017 and longer-term estimates have been raised.

Ructions in the repo markets - monetary easing or regulatory squeezing?

Speech by Yves Mersch – ECB

There is no doubt that European repo markets today are operating in unprecedented territory. In the past year we have faced the extraordinary situation of collateralised transactions taking place well below the ECB's deposit rate, and not just for the highest-rated issuers. There are increasing signs that this is indicative of market stress. Though market depth remains relatively stable and the bid offer spreads are not a major liquidity restriction, the decreased average ticket size seems reflective of collateral scarcity in some market segments. If one looks at the distribution of trades taking place by rates towards the end of last year, while German collateral usually traded at around -70 bps, it traded at -4.88% at year-end, reflecting increased demand for “special” German bonds (while overall turnover declined about 50%). In a “special” the repo contract specifies a particular bond to be exchanged for cash, rather than the specification of a broad collateral class such as ‘German government bond’. As a result, specials tend to trade at lower interest rates.[...]

Advances in Sovereign Debt Management in Oecd Countries

Fatos Koc – OECD

An important global trend in recent decades is the emphasis on more autonomy for the execution of debt management policies by debt management offices (DMO). DMOs in almost all OECD countries undertake functions other than PDM (for example, cash management, fund management, administration of state guarantees, including PPPs). It is international good practice to create committees for consultation or co-ordination between DMOs, CBs and fiscal authorities on public debt policy. It is generally accepted that operational responsibility within the DMO should be separated between the front (FO) and back office (BO). In addition, a number of key functions, particularly for risk management, may be situated in a separate middle office (MO).

Report from the Commission to the European Parliament and the Council on the International Treatment of Central Banks and Public Entities Managing Public Debt with regard to OTC Derivatives Transactions

EU Commission

The Regulation on OTC derivatives, central counterparties and trade repositories (EMIR) of 4 July 2012 requires, inter alia, the central clearing of all standardised OTC derivatives contracts, the reporting of all derivatives contracts to trade repositories and the implementation of risk-mitigation techniques for those trades which are not centrally cleared. According to Article 1(4) of EMIR, the Union’s central banks and Union public bodies charged with or intervening in the management of public debt are exempted from EMIR and are therefore not subject to these obligations. Under Article 1(6) of EMIR, the European Commission is empowered to amend the list of exempted entities by way of a Delegated Act if it concludes, after analysing the international treatment of central banks and of public bodies managing public debt in other jurisdictions’ legal frameworks and informing the European Parliament and the Council of the results, that the exemption of the monetary responsibilities of those third-country central banks from the clearing and reporting obligation is necessary. […]

A call for uniform sovereign exposure limits

Dion Bongaerts, Dirk Schoenmaker - Erasmus University Rotterdam, Bruegel

Banks’ sovereign bond holdings were at the heart of the euro-sovereign crisis. The concentration of domestic bonds created a vicious cycle between governments and banks. There are several proposals to end this link, including concentration limits on southern European bonds. We argue for a uniform limit to reduce flight-to-quality effects on northern European bonds. Such a uniform limit would also be more acceptable politically.

Financial Stability Report, No. 1 - 2017

Bank of Italy

Global economic growth reduces the risks to financial stability, but economic policy uncertainty remains high. The timing and implementation of the announced fiscal expansion in the United States are not yet known. Risks could derive from a widespread adoption of measures restricting trade. An abrupt adjustment of China's rapid credit expansion could affect growth and international financial markets.

Post-Programme Surveillance Report - Portugal, Autumn 2016

European Commission

Staff from the European Commission (EC), in liaison with the European Central Bank (ECB), undertook the fifth post-programme surveillance (PPS) mission to Portugal between 29 November and 7 December 2016. The mission was coordinated with the IMF's post-programme monitoring (PPM) mission. The European Stability Mechanism (ESM) participated in the meetings on aspects related to its own Early Warning System.

Post-Programme Surveillance Report - Ireland, Autumn 2016

European Commission

Staff from the European Commission, in liaison with the European Central Bank (ECB), undertook the sixth PPS review mission for Ireland from 29 November to 2 December 2016. The mission was coordinated with the International Monetary Fund's (IMF) post-programme monitoring (PPM) mission. The European Stability Mechanism (ESM) participated in the meetings on aspects related to its own Early Warning System.

Quantitative and Qualitative Monetary Easing with Yield Curve Control: After Half a Year since Its Introduction

Haruhiko Kuroda

Half a year has passed since the Bank introduced "Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control" in September 2016. This new framework has been working smoothly. Today, looking back at developments in the global economy and the global financial markets since 2015, I would like to explain the background to and thinking behind the adoption of the new policy framework, following the introduction of a negative interest rate. Then, I would like to talk about the current situation of and outlook for Japan's economy, as well as the Bank's stance on monetary policy going forward.

The European Central Bank's monetary policy - past and present

Speech by Peter Praet - European Central Bank

In recent years it has been often said that the ECB has become the "only game in town" for stabilising the euro area economy. As governments have had to consolidate their fiscal positions, there has been an unprecedented onus on monetary policy to support aggregate demand. The ECB has responded to this challenge and acted decisively to secure price stability in face of an economic and financial crisis unparalleled in post-war history.

Spring 2017 Economic Forecast

European Commission

The European economy has entered its fifth year of recovery, which is now reaching all EU Member States. This is expected to continue at a largely steady pace this year and next. In its Spring Forecast, the European Commission expects euro area GDP growth of 1.7% in 2017 and 1.8% in 2018 (1.6% and 1.8% in the Winter Forecast). GDP growth in the EU as a whole is expected to remain constant at 1.9% in both years (1.8% in both years in the Winter Forecast).

News

The **What's new** area of the PDM Network site proposes ***a daily selection of news on public debt management*** from online newspapers and info providers, as well as ***the most recent documents and reports*** uploaded on the website. Subscribers also receive the weekly newsletter ***Emerging Sovereign Debt Markets News*** drafted by the PDM Secretariat and based on ***Thomson Reuters ©*** information services.

Events and Courses

10 Apr - 12 May 2017; Web Based
Fundamentals of Risk Management (2017)

10 Apr - 12 May 2017; Web Based
Principles of Central Bank Reserve Management (2017)

10 Apr - 12 May 2017; Web Based
Governance of Public Finance (2017)

10 - 21 April 2017; Washington, USA
2017 International Borrowing and Debt Management

12 April 2017; Online Webinar – World Bank
Managing Fiscal Risks from Public Private Partnerships (PPPs)

17 – 19 April 2017; Web Based
Advanced Risk Management (2017)

17 – 21 April 2017; Washington, USA
2017 International borrowing & debt management - applications & recent developments

17 – 28 April 2017; Nairobi, Kenya
Public Debt Management Training
21 April 2017; Preston Auditorium, World Bank
Boosting Revenues, Driving Development: Why Taxes Are Critical for Growth

21 April 2017; Atrium, World Bank
De-risking for Private Investors

21 April 2017; JB-1080, World Bank
State of the Africa Region

24 Apr - 26 May 2017; Web Based
Essentials of Banking Regulation and Basel III (2017)

25 – 28 April 2017; Windsor,UK
Strategic Planning: Delivering Change and Meeting Objectives

02 - 05 May 2017; Windsor,UK
Macro-prudential Policy: Implementing the Financial Stability Mandate

03 - 05 May 2017; Luxembourg
ICMA Annual General Meeting & Conference 2017

01 – 02 June 2017; London, UK
ICMA Workshop: Professional Repo and Collateral Management

01 – 02 June 2017; CEFG, Barcelona
7th CEFG Group Meeting on Budgeting policies & practices and fiscal issues

07 – 09 June 2017; Melbourne, Australia
Understanding Treasury Management 2017

14 – 15 June 2017; London, UK
Liquidity Risk Management for the Buy Side

21 – 22 June 2017; Sydney, Australia
Understanding Treasury Management 2017

10 – 14 July 2017; Frankfurt, Germany
Financial stability, systemic risk and macro prudential policy

20 – 21 July 2017; London, UK
The global borrowers and bond investors forum

04 – 06 October 2017; Barcelona, Spain
International Treasury & Cash Management

23 October 2017; Singapore
Integrated Financial Management Systems: Strategy & Implementation

15 – 17 November 2017; Brussels, Belgium
Securities Operations Foundation Qualification (SOFQ)

16 – 17 November 2017; Budapest, Hungary
8th Annual Financial Market Liquidity Conference

Some Figures

As at 25th May 2017, the number of total resources of the PDM Network website is 7,673 (news, documents, reports and events). This newsletter is sent to 598 Subscribers from emerging and advanced countries.

Special Thanks

The PDM Secretariat is grateful to Brazil, Cyprus and Japan DMOs for information on new reports.

Our Subscribers

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Asian Development Bank, African Development Bank, African Forum and Network on Debt and Development, Association of International Wealth Management of India, Aix-Marseille School of Economics, AKK Government Debt Management Agency, Albanian MoF, Angolan Mof, Argentine MoF, Argentinian Ministry of Economy of the Province of Buenos Aires, Asian Development Bank, Association for Financial Markets in Europe, Athens University of Economics & Business, Austrian Central Bank, Austrian DMA, Autonomous Sinking Fund of Cameroon, Azerbaijan Ministry of Finance, Bangladeshi Ministry of Finance, Bank For International Settlements, Bank of Italy, Bank Of Korea, Bank Of Zambia, Barclays Capital, BE Berlin Economics GmbH, Belgian Central Bank, Belgian DMA, Belgrade Banking Academy, Bosnia and Herzegovina - Federal Ministry of Finance, Brazilian Court of Audit, Brazilian MoF, Bukar Abba Ibrahim University, Bulgarian MoF, Burkina Faso MoF, Cameroonian Ministry of Finance, Canadian Government, Capitad, Cardiff Business School, Cass Business School, Cbonds Group, Center for Natural Resource Studies, Central Bank of Guinea, Central Bank of Kenya, Central Bank of Nepal, Central Bank of Sudan, Centre Virtuel de la Connaissance sur l'Europe, CfC Stanbic Kenya Bank, CNRS, Centre national de la recherche scientifique, Colombian MHCP, Columbia Business School, Commonwealth Secretariat, Community Investors Development Agency, Congolese Ministry of Finance, Budget and Public Portfolio, Crown Agents, Cypriot Central Bank, Cypriot MoF, Czech Central Bank, Czech MoF, Danish Central Bank, Danish Mof, Debt Relief International, Deloitte, Dubai International Financial Centre, Dominican MOF, Dubai Government, Dubai MoF, Dutch Central Bank, Dutch DMA, Dutch Mof, Eastern Caribbean Central Bank, Econviews, Egyptian Mof, Embassy Of Turkey, Office Of Economic Affairs, Esthonian MoF, Ethiopian Mof, Euromoney, EBRD, European Central Bank, European Commission, Exchange Data International Limited, Ernst & Young, Federal Department of Foreign Affairs, Federal Reserve Bank of Chicago, Fiji Mof, Finnish MoF, Fiscal Council of Romania, French Central Bank, French DMA, French MoF, FTI, GEFIN - State Finance Managers Group, Georgean Mof, German Central Bank, German Finance Agency, German Institute for Economic Research, German Jubilee Campaign, Ghanaian Central Bank, Ghanaian Mof, Global Action for Africa's Development, Governance Commission For Government-Owned & Controlled Corporations, Government of Sindh, Greek Central Bank, Greek DMA, Greek MoF, Harvard University, Hong Kong Monetary Authority, HSBC, Hungarian DMA, Hungarian National Bank, Inter-American Development Bank, Icelandic Central Bank, Icelandic DMA, International Finance Corporation, Illinois Institute of Technology, IMF-International Monetary Fund, Indian NIPF, Indian Reserve Bank, *Indonesian Central Bank, Indonesian MoF, Innovative Development Strategies Pvt. Ltd., Instituto superior de economia e gestao, Intesa Sanpaolo S.p.A., INTOSAI, Irish NTMA, International Social-Economic Development for Africa, Israeli Central Bank, Italian MoF, Italian Senate, CRIEP, ITAM, Japan Bank for International Cooperation, Japanese MoF, JCVP Consulting, Jordanian Central bank, Jordanian MoF, Johannesburg Stock Exchange Limited, Jubilee Germany, Kenyan Central Bank, Kenyan MoF, Korea Bond Pricing, Latvian DMO, Lebanese MoF, Lesotho Central Bank, Linus Capital, Lisbon School of Economics & Management, Lithuanian MoF, Lithuanian National Audit Office, London Business School, Luxembourg MoF, MAK Azerbaijan Ltd, Malawian Reserve Bank; Maldives MoF, Maltese Central Bank, Maltese Treasury, Mauritius Ministry of Finance and Economic Development, MEFMI, Mexican MoF, Michele Robinson Consult, Ministry of Economy and Finance of Peru, Ministry of Economy and Public Finance of Bolivia, Ministry of Finance and Corporate Governance of Antigua, Ministry of Finance and Economic Development of Zimbabwe, Ministry Of Finance of Benin, Ministry Of Finance of Comores, Ministry of Finance of Saint Lucia, Ministry of Finance of St. Vincent and the Grenadines, Ministry Of Finance of Surimame, Ministry of Finance of the Russian Federation, Ministry Of Finance Trinidad and Tobago, Ministry of Foreign Affairs of Egypt, Ministry Of Public Finance of Guatemala, Moldovan Mof, Moody's Investors Service, Moroccan MoF, Mozambique Ministry of finance, Namibian MoF, National Bank of Abu Dhabi, National Chengchi University, New South Wales Treasury Corporation, Nicaraguans Ministry of Finance and Public Credit, Nigerian DMO, Central Bank of Norway, Norwegian MoF, OECD, NS&I Government Payment Services, Oliver Wyman, One2five advisory, Oxford Policy Management, Pakistani MoF, Papua NG Treasury, Paraguayan Ministry of Finance, Philippine Bureau of the Treasury, Philippines Ministry of Finance, Polish MoF, Portuguese Central Bank, Province of British Columbia, Republic of Macedonia MoF, Reykjavik Academy, Romanian Court of Accounts, Romanian MoF, Rothschild Group, Rwandan Mof, Sain Kitts & Nevis MoF, San Diego State University, The Superior Audit Office of Mexico, SCMHRD-MBA Symbiosis, Senegalese Mof, Serbian Mof, Setif University , Slovak DMA, Slovenian MoF, Solomon Island Central Bank, South African National Treasury, South Korean MoF, Southern African Development Bank, Sovereign Analytics llc, Spanish Central Bank, Spanish MoF, Sri Lanka Central Bank, Stanford University, Storkey & Co Limited, Sudan Central bank, Sun Yat-sen University , Suriname Debt Management Office, Swaziland's MoF, Swedish DMO, Tandem Global Partners, Tanzanian MoF, Tribunal de Contas da Uniao, Thai MOF, The American College of Greece, The Audit Board of The Republic of Indonesia, The George Washington University, The Government of Anguilla, The Gulf Bond and Sukuk Association, GBSA, The Milken Institute, The Ministry of Finance Grenada, The ONE Campaign, The People's Bank of China, The Pragma Corporation, The World Bank, Thrivent Financial, Timor-Leste MOF, Tudor Investment Corporation, Turkish Treasury, UK Central Bank, UK DMO, UN Department for Economic and Social Affairs, United Nations Conference on Trade and Development, Union Bank Of Nigeria, Universidad de los Andes, Universidad EAFIT, University "Dunarea de Jos" Galati, University of Antwerp, University of Bologna, University of Brussels, University of Campinas, University of Catania - Department of Economics and Business, University of Glasgow, University of London, Birkbeck, University of Maryland, University of Milan, University of Molise, University of Naples Federico II, University of Piraeus, University of Rome "Roma Tre", University of Rome La Sapienza, University of Rome Tor Vergata, University of Sussex, University of Tokyo, University of Tuzla, University of Varna, University of Vienna, University of Viterbo "La Tuscia", University of Zagreb, University of Zimbabwe, University of Zurich, Uruguayan MoF, US Treasury, Versed Professional Services, Vietnamese Mof, Walton College of Business, West African Monetary Union, World Bank Treasury, Wrightson ICAP, Zambia Revenue Authority, Zhongnan University of Economics and Law.*