Dipartimento del Tesoro

OECD BETTER POLICIES FOR BETTER LIVES

WORLD BANK GROUP

PDM NETWORK

# PDM NETWORK *Newsletter*

**Click the links below for more info:**

**>> PDM Network**

**>> Emerging Markets Weekly Newsletter**

**>> Bimonthly Newsletter**

Number 2/ March - April 2020

ISSN 2239-2033

This bimonthly newsletter lists all papers, reports, courses and other events about public debt management recently uploaded by the PDM Network Secretariat in the website **www.publicdebtnet.org**.
The documents considered most interesting by the PDM Network Secretariat are highlighted with a light grey background. The PDM Network bimonthly Newsletter is published on January, March, May, July, September and November. The PDM Network Secretariat welcomes cooperation on information published on the website. Thus, please feel free to **suggest any documents, news and events** relevant to public debt management issues by contacting the Secretariat at the following email: **publicdebtnet.dt@tesoro.it**.

## Contents



## Highlight

**OECD's note about Public Debt Management Responses to COVID-19**

OECD Directorate for Financial and Enterprise Affairs

In this note, OECD states that "The COVID-19 pandemic poses significant challenges for public debt management offices (DMOs). Some of these challenges include i) sudden and significant increases in borrowing needs; ii) volatile market conditions; iii) health and safety risks in workplaces; and iv) temporary mismatches in fiscal cash flows. Debt management preparedness to help respond to these operational, liquidity and funding challenges is critical for supporting both the efficacy of each government's emergency response and the smooth functioning of financial markets. This note will assist debt management offices worldwide in their consideration of appropriate measures to prepare and strengthen the capacity of their debt management operations to respond to these challenges". **Read more** **TAGS:** **OECD**; **Best Practices**; **Debt Policy**; **Structural policies**; **COVID-19**

## Special Focus

**Solarizing Peru - Supporting local currency debt market development**
World Bank
The Peruvian government partnered with the World Bank's Government Debt and Risk Management (GDRM) Program to improve the issuance framework for government securities, for lowering cost and risk of public borrowing, through building a deep and liquid domestic market. Jose Olivares, Director of Financial Markets at Peru's Economy and Finance Ministry, talks about their journey. **Read more** **TAGS:** **Debt Policy**; **Primary market**; **Sovereign debt market**; **Market Liquidity**; **Cost and Risk**; **World Bank**

**Fiscal Monitor, April 2020: Chapter 1: Policies to Support People During the COVID-19 Pandemic**
IMF
This report argues that fiscal policies are at the forefront of responding to the COVID-19 pandemic. Fiscal measures can save lives, protect the most-affected people and firms from the economic impact of the pandemic, and prevent the health crisis from turning into a deep long-lasting slump. A key priority is to fully accommodate spending on health and emergency services. Global coordination is for a universally low-cost vaccine and to support countries with limited health capacity. Large, temporary and targeted support is urgently needed for affected workers and firms until the emergency abates. As the shutdowns end, broad-based, coordinated fiscal stimulus—where financing conditions permit—will become more effective in fostering the recovery. **Read more** **TAGS:** **Debt and fiscal/monetary policies**; **Multilateral financing**; **Economic Forecasts**; **Debt Forecasts**; **Debt sustainability**; **Financial stability**; **COVID-19**

**Communiqué G20 Finance Ministers and Central Bank Governors Meeting 15 April 2020 [Virtual]**
Group of Twenty – G20
Our urgent collective priority is to overcome the COVID-19 pandemic and its intertwined health, social and economic impacts. We are determined to spare no effort, both individually and collectively, to protect lives, bring the pandemic under control, safeguard people's jobs and incomes, support the global economy during and after this phase and ensure the resilience of the financial system. **Read more** **TAGS:** **Debt crisis**; **Financial stability**; **Structural policies**; **Debt relief**; **COVID-19**

**Government support and the COVID-19 pandemic**
OECD
The economic consequences of the COVID-19 pandemic call for urgent policy responses to support households and firms alike, but how this support is designed will be critical in ensuring that it does not result in enduring global market distortions. Support packages that are time-limited, targeted, cash-based, and consistent with longer-term objectives are the basis for ensuring a sustainable recovery. Transparency of support packages is critical for public trust, but also once the crisis is over in order to foster accountability and enable governments to learn from what worked best.
**Read more** **TAGS:** **Debt crisis**; **Debt and fiscal/monetary policies**; **State aids**; **Transparency**; **Structural policies**; **Best Practices**; **COVID-19**

**World Bank Group Launches First Operations for COVID-19 (Coronavirus) Emergency Health Support, Strengthening Developing Country Responses**
World Bank

The World Bank's Board of Executive Directors today approved a first set of emergency support operations for developing countries around the world, using a dedicated, fast-track facility for COVID-19 (coronavirus) response. The first group of projects, amounting to $1.9 billion, will assist 25 countries, and new operations are moving forward in over 40 countries using the fast-track process. **Read more**
**TAGS: Multilateral financing; World Bank; COVID-19**

**Covid Economics: vetted and real-time papers**
CEPR – Centre for Economic Policy Research
CEPR has launched a new online peer-reviewed review to disseminate emerging scholarly work on the Covid-19 epidemic. Very quickly after the onset of the epidemic a large number of policy papers have been written by economic scholars, many of which have appeared on VoxEU. This has been enormously helpful to improve our understanding of policy options. The next step requires more formal investigations, based on explicit theory and/or empirical evidence. This is what Covid Economics: Vetted and Real-Time Papers aims to provide.
**Read more TAGS: Structural policies; Financial stability; Debt and fiscal/monetary policies; Cost and Risk; Financial Analysis; Financial stability; COVID-19**

# Documents

## Debt Policy

**Debt Management Responses to the Pandemic (2020)**
International Monetary Fund
This note aims to provide guidance on areas in which sovereign debt managers may need to respond to challenges stemming from the COVID-19 crisis. It provides some considerations for addressing strains in situations where a debt manager is faced with sharply increased government financing requirements and borrowing costs, and where sound judgment is needed to distinguish between temporary dislocations and permanent changes. Within these constraints, sovereign debt managers can help cushion a liquidity shock by minimizing near-term liquidity risk, meet rollover needs and support orderly functioning of primary and secondary government bond markets. The note presents a menu of actions that sovereign debt managers can consider in order to adapt to new circumstances. **TAGS: Debt Policy; Primary market; Secondary Markets; Market Liquidity; Cash Management**

**When is Debt Odious? A Theory of Repression and Growth Traps (2020)**
Viral V. Acharya, Raghuram G. Rajan, Jack Shim - New York University, University of Chicago
How is a developing country affected by its government's ability to borrow in international markets? The authors examine the dynamics of a country's growth, consumption, and sovereign debt, assuming that the government's objective is to maximize short-term, typically wasteful, expenditures. Sovereign debt can extend the government's effective horizon; the government's ability to borrow hinges on its convincing investors they will be repaid, which gives it a stake in the future. The lengthening of the government's effective horizon can incentivize it to adopt policies that result in higher steady-state household consumption than if it could not borrow.

However, access to borrowing does not always improve government behavior. In a developing country that saves little, the government may engage in repressive policies to enhance its debt capacity, which only ensures that successor governments repress as well. This leads to a "growth trap" where household steady-state consumption is lower than if the government had no access to debt. The authors argue that such a model can explain the well-known negative correlation between a developing economy's reliance on external financing and its economic growth. The authors also analyze the effects of instruments such as debt relief, a debt ceiling, and fiscal transfers in helping a developing economy emerge out of a growth trap, even when governed by a myopic, possibly rapacious, government. **TAGS:** Debt Policy; Debt and growth; Foreign Debt

**Going Fiscal? A Stylised Model With Fiscal Capacity and a Eurobond in the Eurozone (2020)**

Lorenzo Codogno, Paul van den Noord - London School of Economics, University of Amsterdam

The paper shows that the introduction a Eurobond together with fiscal capacity at the centre would produce macro-stabilisation benefits both for the 'core' and 'periphery' of the Eurozone and would also achieve a rebalancing of the policy mix away from monetary towards fiscal stimulus. To demonstrate these benefits, the authors trace the shock-responses in a stylised model of the economy of the Eurozone with a 'core' and a 'periphery' to see how it would behave under alternative conditions. Alongside standard demand and supply shocks, the authors include financial risk-premium shocks by explicitly modelling bond yields, bank lending and public debt dynamics. They replace national bonds with Eurobonds on banks' and ECB's balance sheets, and they introduce fiscal capacity at the centre with the power to adjust the aggregate fiscal stance. They conclude that had a Eurobond/fiscal capacity existed at the onset of the Great Financial Crisis, the recession would have been much more muted, and with much less need for unconventional monetary policy. **TAGS:** Debt Policy; Sovereign debt market; Financial Analysis; Debt and fiscal/monetary policies

## Cost and Risk

**Risk characteristics of covered bonds: monitoring beyond ratings (2020)**

Magdalena Grothe, Jana Zeyer - European Central Bank, Deutsche Bundesbank

This paper proposes a set of indicators relevant for the risk characteristics of covered bonds, as based on granular publicly available transparency data. The indicators capture various aspects of cash flow risks related to the issuer, the cover pool and the payment structure. They offer unified risk metrics for the European covered bond universe, which ensures comparability across covered bonds issued by different issuers and rated by different credit rating agencies. The availability of granular risk indicators adds to the overall transparency of the market in the context of risk monitoring. **TAGS:** Cost and Risk; Sovereign Credit Ratings; Transparency

## Primary Markets

**European Corona Solidarity Bonds (2020)**

Giuseppe Insalaco, Eric Schaanning - Independent, European Systemic Risk Board

The authors propose an additional funding tool for the collective effort against the COVID-19 pandemic and its economic fallout by issuing European Corona Solidarity Bonds (ECSBs) which are backed by revenues on a new EU-wide universal tax on financial assets, collected at the source.

To combat the pandemic, governments need to significantly increase spending. It is in the EU's shared interest that all governments (are able to) do all that is needed, act promptly and decisively. The required increases in public spending risk compromising the financial stability of indebted countries. This paper attempts to sketch one possible solution how to: - Generate a sufficient amount of funding to fight the economic COVID-19 fallout (500 billion – 2 trillion); - Quickly (likely operational in less than one month); - Without increasing sovereign debt levels (as these may become unsustainable for some heavily affected countries); - Without resorting to debt mutualisation (as a political agreement seems unlikely); - Without using monetary financing; - In a way that ideally could be perceived as "fair" or, at least, socially acceptable.
This note explains how the issuance of European Corona Solidarity Bonds (ECSBs), backed by revenues on a universal tax on financial assets, may achieve these goals. As EU-total financial wealth is in excess of 100 trillion euro, initial estimates of authors' proposal suggest that a 1 basis point annual tax would support an annual flow of 10 billion, which allows a 10-year issuance of 100 billion euro. Without leading to a significant distortion of markets, the scheme could realistically be scaled up to 1-2 trillion euro and be implemented as a complement to further fiscal, regulatory and monetary measures. **TAGS:** **Primary market**; **Debt crisis**; **COVID-19**

## Secondary Markets

**Fragility of Financial Markets: The Italian Debt Not-So-Flash Crash** **(2020)**
Maria Flora, Roberto Renò - University of Verona
Market inefficiency of flash-crash type is a new form of financial fragility which plagues economically central markets. The authors argue that this fragility is unambiguously signaled by explosive and fast-reverting trends. Using this intuition, they introduce a novel test for flash crash detection, and they apply it to a paradigmatic case study: the collapse of Italian sovereign bonds on May 29, 2018, triggered by political turmoil. Because of the misfunctioning of the secondary market in that week, they estimate that 450 million euros were transferred from Italian taxpayers to primary dealers. (Not-so-)Flash crashes can thus be a serious threat to financial stability. **TAGS:** **Secondary Markets**; **Financial stability**; **Primary dealers**

**Emerging market economy exchange rates and local currency bond markets amid the Covid-19 pandemic** **(2020)**
Boris Hofmann, Ilhyock Shim and Hyun Song Shin – BIS
Borrowing through domestic currency bonds has not insulated emerging market economies (EMEs) from the financial shock unleashed by Covid-19; EME local currency bond spreads spiked amid sharp currency depreciations and capital outflows. Portfolio investors face amplified losses as local currency spreads and exchange rates move in lockstep; their revised portfolio allocations in turn strengthen this correlation. EMEs with monetary policy frameworks that are equipped to address the feedback loop between exchange rate depreciation and capital outflows stand a better chance of weathering the financial fallout from the Covid-19 pandemic. To counter large stock adjustments in domestic bond markets, EME central banks may need to expand their toolkit to take on a "dealer of last resort" role; a number of them are already moving in this direction. **TAGS:** **Secondary Markets**; **Sovereign risk premia**; **COVID-19**

**On the future of securities settlement** **(2020)**
BIS

Innovative technologies, such as distributed ledgers, allow securities to be issued or represented in a new form known as digital tokens. Such "tokenisation" of securities will alter post-trade clearing and settlement, and could improve efficiency in some dimensions. But the fundamental trade-offs involving credit risk and liquidity remain in a tokenised world. To succeed, tokens will need to interoperate with account-based systems, at least in the interim. **TAGS:** **Secondary Markets**; **Trading platforms**; **Bond market development**

## Financial Analysis

**The effect of possible EU diversification requirements on the risk of banks' sovereign bond portfolios** **(2020)**

Ben Craig, Margherita Giuzio, Sandra Paterlini - Federal Reserve Bank of Cleveland, European Central Bank, University of Trento

Recent policy discussion includes the introduction of diversification requirements for sovereign bond portfolios of European banks. In this paper, the authors evaluate the possible effects of these constraints on risk and diversification in the sovereign bond portfolios of the major European banks. First, the authors capture the dependence structure of European countries' sovereign risks and identify the common factors driving European sovereign CDS spreads by means of an independent component analysis. The authors then analyse the risk and diversification in the sovereign bond portfolios of the largest European banks and discuss the role of "home bias", i.e. the tendency of banks to concentrate their sovereign bond holdings in their domicile country. Finally, they evaluate the effect of diversification requirements on the tail risk of sovereign bond portfolios. Under their assumptions about how banks rebalance their portfolio to respond to the new requirements, demanding that banks modify their holdings to increase their portfolio diversification may be ineffective in reducing portfolio risk, including tail risk. **TAGS:** **Financial Analysis**; **Sovereign debt exposure**; **Institutional Investors**; **Financial stability**

**Fiscal Deficit, Government Debt and Interest Rate: An Empirical Analysis for Sri Lanka** **(2020)**

K A Thamara Nilmini Senarathna - Central Bank of Sri Lanka

The study attempts to examine the effect of fiscal deficit and government debt on interest rates in Sri Lanka over the period of 1977–2018 by using Unrestricted Vector Auto Regression (UVAR) Analysis. The results reveal that there is no significant effect of fiscal deficit and government debt on interest rates. The study suggests that minimizing the intervention in determining interest rates through administrative arrangements and other controls which were exercised in the past and adopting corrective measures to develop a competitive and diversified government securities market, facilitates to identify significant relationship among aforementioned variables as the theory explains. The study can be further developed by eliminating the existing limitations of insufficient time series data to reflect actual behavior of both short term and long-term interest rate structure of the government securities market in Sri Lanka. **TAGS:** **Financial Analysis**; **Sovereign bonds yields**

**Quantitative easing and the price-liquidity trade-off** **(2020)**

Marien Ferdinandusse, Maximilian Freier, Annukka Ristiniem – ECB

The authors consider the effects of quantitative easing on liquidity and prices of bonds in a search and matching model. The model explicitly distinguishes between demand and supply effects of central bank asset purchases. Both are shown to lead to a decline in yields, while they have opposite effects on market liquidity. This results in a price-liquidity trade-off. Initially, liquidity improves in reaction to central bank demand. As the central bank buys and holds bonds, supply becomes scarcer and other buyers are crowded out. As a result, liquidity can fall below initial levels. The magnitude of the effects depend on the presence of preferred habitat investors. In markets with a higher share of these investors, bonds are scarcer and central bank asset purchases lower yields more. With a lower share of preferred habitat investors and a relatively illiquid market, central bank demand has a stronger positive effect on liquidity. The authors are the first to construct an index from bond holding data to measure the prevalence of preferred habitat investors in each euro area country. Subsequently, they calibrate the model to the euro area and show how yields and liquidity are affected by the European Central Banks asset purchase programme. **TAGS:** **Debt and fiscal/monetary policies**; **Financial Analysis**; **Market Liquidity; Sovereign bonds yields**

**An analysis of sovereign credit risk premia in the euro area: are they explained by local or global factors** **(2020)**

Sara Cecchetti - Bank of Italy

The dynamics of sovereign CDSs in some euro-area countries are studied, breaking them down into objective probability of default and risk premium; in addition, the relationship of these two components with some macroeconomic and financial factors is analysed. Finally, the difference between the values of CDSs stipulated under different contractual conditions (the ISDA basis) is used to determine the risk that the government bond may be redenominated in a different currency. Sovereign CDS prices show a high contribution of the risk premium and depend mainly on financial variables (in particular, the stock prices of credit companies). Between May and November 2018, the redenomination risk premium of Italian government bonds was approximately double the corresponding objective probability; in times of tension, the contribution of redenomination risk to the default risk is greater compared with other countries in the euro area. **TAGS:** **Financial Analysis**; **Sovereign CDS**; **Sovereign risk premia**

## Debt Crisis

**Anatomy of a Sovereign Debt Crisis: Machine Learning, Real-time Macro Fundamentals, and CDS Spreads** **(2020)**

Lucia Alessi, Pierluigi Balduzzi, Roberto Savona - European Commission, Boston College, University of Brescia

The authors use a machine-learning algorithm, the LASSO, to study the cross-sectional dependence of sovereign credit default swap (CDS) spreads on real-time, country-specific macro indicators during the different phases of the eurozone sovereign debt crisis. In contrast with the existing literature, they find that macro fundamentals played an important, albeit time-varying, role in explaining the cross-section of sovereign CDS spreads, with an average R2 of 98.5%. Moreover, they show how the cross-sectional regression coefficients help predict the VSTOXX volatility index, out of sample. **TAGS:** **Debt crisis**; **Sovereign CDS**

**Macroeconomic Policy Lessons for Greece from the Debt Crisis** **(2020)**

George Economides, Dimitris Papageorgiou, Apostolis Philippopoulos - Athens University of Economics and Business, Bank of Greece

This paper first searches for the drivers of the Greek depression in the aftermath of the 2007-8 global crisis and in turn looks for engines of sustained growth. The authors use a micro-founded macroeconomic model calibrated to Greece. Authors' simulations show that the adopted adjustment program (namely, the fiscal austerity mix combined with the fiscal and monetary bailouts by the EU, ECB and IMF), jointly with the observed deterioration in institutional quality (specifically, in the degree of protection of property rights) can explain most (around 22% of GDP) of the cumulative loss in GDP in the data (around 24% of GDP) between 2009 and 2016. In particular, the adjustment program can explain a fall of around 12%, while the deterioration in property rights accounts for another 10%. Counterfactual simulations, on the other hand, show that the cumulative output loss could have been around 9% only, if the country had followed a different fiscal policy mix; if the degree of product marker liberalization was closer to that in the core euro zone countries; and, above all, if institutional quality in Greece had simply remained at its pre-crisis level. On the other hand, they show that, in the absence of the official fiscal bailouts, the depression would be much deeper, while the accommodative role played by the quantitative policies of the ECB has been vital to the Greek economy. **TAGS:** **Debt crisis**; **Debt and recession**; **Debt and fiscal/monetary policies**

## Institutional and Organizational Framework

**The EU Fiscal, Economic and Monetary Policy Response to the COVID-19 Crisis** **(2020)**

Paul Dermine, Menelaos Markakis - Maastricht University, Erasmus University Rotterdam

In this contribution, the authors assess the main measures, already taken or currently contemplated by the EU, in reaction to the COVID-19 crisis to mitigate its impact on Eurozone economies. The discussion begins with the recent monetary policy decisions taken by the ECB (1). The focus then shifts to the strategy deployed on the economic and fiscal side. The authors analyze (2) the coordination of national fiscal responses and their accommodation under the rules of the Stability and Growth Pact, (3) the role of the European Stability Mechanism, and (4) joint debt instruments. **TAGS:** **Debt and fiscal/monetary policies**; **Debt crisis**; **COVID-19**

**How has the macroeconomic imbalances procedure worked in practice to improve the resilience of the euro area?** **(2020)**

Agnès Bénassy-Quéré, Guntram B. - Paris School of Economics, Bruegel

This paper shows how the Macroeconomic Imbalances Procedure (MIP) could be streamlined and its underlying conceptual framework clarified. Implementation of the country-specific recommendations is low; their internal consistency is sometimes missing; despite past reforms, the MIP remains largely a country by-country approach running the risk of aggravating the deflationary bias in the euro area. The authors recommend to streamline the scoreboard around a few meaningful indicators, involve national macro-prudential and productivity councils, better connect the various recommendations, simplify the language and further involve the Commission into national policy discussions. This document was prepared for the Economic Governance Support Unit at the request of the ECON Committee. **TAGS:** **Debt and fiscal/monetary policies**; **International and Macroprudential Regulations**; **Debt sustainability**

## International and Macroprudential Regulations

**Post-crisis international financial regulatory reforms: a primer** **(2020)**

BIS

The authors review the bank and CCP international regulatory reforms implemented after the Great Financial Crisis (GFC). The reforms have sought to bolster financial stability through both improved and new standards. The authors ground the review on a unified analytical framework. The key notion is "shock-absorbing capacity". The framework allows us to discuss both individual "trees" (standards) and how they come together to shape the regulatory "forest". **TAGS:** **International and Macroprudential Regulations; Financial stability**

## Debt Restructuring

**Costs of Sovereign Defaults: Restructuring Strategies and the Credit-Investment Channel (2020)**

Tamon Asonuma, Marcos Chamon, Aitor Erce, Akira Sasahara - International Monetary Fund, European Union, University of Idaho

Sovereign debt restructurings are associated with declines in GDP, investment, private sector credit and capital flows. The transmission channels and associated output and banking sector costs depend on whether the restructuring takes place preemptively, without missing payments to creditors, or after a default has occurred. Post-default restructurings are associated with larger declines in GDP, investment, private sector credit and capital inflows than preemptive restructurings. The adverse effects from a restructuring are stronger in countries with larger banking sectors, consistent with a “credit-investment channel”. **TAGS: Debt Restructuring; Sovereign defaults**

**Necessity in the Time of Corona (2020)**

Michael Chen, Charlie Fendrych, Andres Paciuc - Duke University

Like clockwork, Argentina is once again faced with restructuring its sovereign debt. A quick resolution to the latest episode in this saga is in everyone’s favor, but a certain pandemic gripping the globe has complicated things. Now is not the time to restructure: creditors are at their most tight-fisted, and accurate economic projections are nearly impossible. The necessity doctrine provides a potential avenue for Argentina to defer debt payments and postpone its restructuring until it weathers the COVID-19 crisis. **TAGS: Debt Restructuring; Debt crisis; Sovereign immunity; US governing law; COVID-19**

**Tracing Iraqi Sovereign Debt through defaults and restructuring (2019)**

Simon Hinrichsen – London School of Economics

In 1979 Iraq was a net creditor to the world, due to its large oil reserves and lack of external debt. Fifteen years later, its government debt-to-GDP was over 1,000%. At the time of the U.S. invasion in 2003, Iraq was saddled with around $130 billion in external debt that needed to be restructured. How does a country incur so much debt, so fast, and how does it get out of it? In answering this question, the paper makes two key contributions. First, the author reconstructs the build-up of Iraqi debt through the 1980s and 1990s using mainly secondary sources. This paper is the first to create a debt series going back to 1979. The rise in Iraqi indebtedness was a consequence of global geopolitical trends in the 1980s where political lending trumped solvency concerns. Second, through primary sources and interviews with key actors involved, the author uses oral history to tell the story the Iraqi restructuring. It was one of the largest in history, yet no clear and detailed historical account exists. The restructuring was permeated by politics to inflict harsh terms on creditors at the Paris Club, at a time when creditor-friendly restructurings were the norm. In going for a politically expedient deal, however, the restructuring missed an opportunity to enshrine a doctrine of odious debt in international law. **TAGS:** **Debt Restructuring**; **Sovereign defaults**; **Sovereign debt litigation**

## Macroeconomic Analysis

**An Empirical Analysis of Long-Term Brazilian Interest Rates** **(2020)**

Tanweer Akram, Syed Al-Helal Uddin - General Motors, College of Saint Benedict

This paper empirically models the dynamics of Brazilian government bond (BGB) yields based on monthly macroeconomic data in the context of the evolution of Brazil's key macroeconomic variables. The results show that the current short-term interest rate has a decisive influence on BGBs' long-term interest rates after controlling for various key macroeconomic variables, such as inflation and industrial production or economic activity. These findings support John Maynard Keynes's claim that the central bank's actions influence the long-term interest rate on government bonds mainly through the short-term interest rate. These findings have important policy implications for Brazil. This paper relates the findings of the estimated models to ongoing debates in fiscal and monetary policies. **TAGS:** **Sovereign bonds yields**; **Financial Analysis**; **Debt and fiscal/monetary policies**

**Indebted Demand** **(2020)**

Atif Mian, Ludwig Straub, Amir Sufi - Princeton University, Harvard University, Chicago Booth

The authors propose a theory of indebted demand, capturing the idea that large debt burdens by households and governments lower aggregate demand, and thus natural interest rates. At the core of the theory is the simple yet under-appreciated observation that borrowers and savers differ in their marginal propensities to save out of permanent income. Embedding this insight in a two-agent overlapping-generations model, the authors find that recent trends in income inequality and financial liberalization lead to indebted household demand, pushing down natural interest rates. Moreover, popular expansionary policies—such as accommodative monetary policy and deficit spending—generate a debt-financed short-run boom at the expense of indebted demand in the future. When demand is sufficiently indebted, the economy gets stuck in a debt-driven liquidity trap, or debt trap. Escaping a debt trap requires consideration of less standard macroeconomic policies, such as those focused on redistribution or those reducing the structural sources of high inequality. **TAGS:** **Debt and growth**; **Debt and fiscal/monetary policies**; **Sovereign bonds yields**

**Inequality, Taxation, and Sovereign Default Risk** **(2020)**

Minjie Deng - University of Rochester

This paper studies the impact of income inequality on sovereign spreads under elastic labor and endogenous taxation. The author first documents that high pre-tax income inequality is associated with high spreads both across countries and across U.S. states. Then the author develops a sovereign default model with endogenous progressive taxation and heterogeneous labor in productivity and migration cost. The government chooses the optimal combination of tax and debt, considering their interaction. Progressive taxes redistribute income but discourage labor supply and induce emigration, eroding the tax base and the government's ability to repay debt. Default risk increases sovereign spreads and borrowing costs. Thus, the government faces a trade-off between redistribution and spreads. In more unequal economies, the government opts for more redistribution and higher spreads. With the model parameterized to state-level data, the author finds that income inequality is an important determinant of spreads, generating 20 percent higher spreads compared with a model without income inequality. In a recession, more unequal economies suffer a larger increase in spreads. **TAGS:** **Sovereign risk premia**; **Sovereign defaults**; **Debt and fiscal/monetary policies**

## European financial stability and integration review 2020

European Commission

The annual European Financial Stability and Integration Review examines recent economic and financial developments, and their impact on financial stability and integration in the EU. In addition to a description of general macroeconomic and financial-sector developments, this year's issue combines different perspectives on the structural change that is taking place in the financial system, focusing on the banking sector in particular. Although the banking sector has continued to repair its balance sheet over the last decade, profitability has remained low, and many banks are seeking to change their business model. The cyclical factors that determined developments in 2019 made this change more challenging. [...]**TAGS:** **Financial stability**

## Public debt expansions and the dynamics of the household borrowing constraint (2020)

António Antunes and Valerio Ercolani - Bank of Italy

The authors study the effect of expansionary fiscal policies (transfers to households or purchases of goods and services from the private sector) on the household borrowing constraint, and how the shift in such a constraint influences reactions to the policies. The authors use a macroeconomic model with flexible prices, calibrated for the United States, within which households, that differ by wealth and productivity, are constrained by the maximum quantity they can borrow. Expansionary fiscal policies tighten the borrowing limit because of a higher interest rate due to the issuance of public debt. The constrained households must deleverage while the richer ones, though farther from the constraint, increase their level of precautionary saving. This depresses both credit and consumption but stimulates labor supply, which in turn amplifies the output multiplier. **TAGS:** **Debt and fiscal/monetary policies**; **Debt and growth**

## Covid-19 and Economic Analysis: a Review of the Debate (2020)

G. Caracciolo, F. Cingano, V. Ercolani, G. Ferrero, F. Hassan, A. Papetti and P. Tommasino - Bank of Italy

This newsletter aims at providing an overview of relevant, covid-19 related economic issues as discussed in the current literature. It therefore draws as much on traditional working papers as on (respected) online publications, blogs, etc. This issue mostly focuses on research linking the evolution of the pandemic to macroeconomic outcomes, largely resorting to the intuitions provided by a very new set of quantitative micro-founded models, studying the joint dynamics of health-related and economic variables (so-called SIR macro model). The authors aim at highlighting the mechanisms leading to "V" of "U" like type of virus-induced recessions, vs those implying more persistent output losses (Section 2). Within this class of models, it is also possible to frame crucial normative issues, with a view to understand what polices best address the vital trade-off between protecting health and preserving the economy (Section 3). Finally, attention is devoted to works studying the role of macroeconomic policies and of the financial sector in contrasting the crisis (Section 4). **TAGS:** **Debt and fiscal/monetary policies**; **Financial stability**; **COVID-19**

## Economic Policies

**A fiscal capacity for the euro area: lessons from existing fiscal-federal systems** (2020)
Pablo Burriel, Panagiotis Chronis, Maximilian Freier, Sebastian Hauptmeier, Lukas Reiss, Dan Stegarescu, Stefan Van Parys - Banco de España, Bank of Greece, European Central Bank, Öesterreichische Nationalbank, Deutsche Bundesbank, Banque Nationale de Belgique
After the financial and economic crisis in Europe, a broad consensus has emerged that a stronger fiscal dimension may be needed to complete the architecture of Economic and Monetary Union (EMU). This paper analyses the performance of interregional transfers in existing fiscal-federal systems, notably in Austria, Belgium, Germany, Spain and the United States, and aims to draw lessons for the design of a euro area fiscal instrument. The empirical risk-sharing analysis in this paper suggests that effective cross-regional stabilisation of asymmetric shocks tends to work via direct cash transfers to households, such as unemployment benefits, which are financed out of cyclical central government taxes and social security contributions. This would suggest that a euro area budgetary instrument for stabilisation should be designed as a tool that enhances the automatic stabilisation capacity in the single currency area. At the same time, it seems important that a prospective central stabilisation instrument for the euro area would be integrated in an overall fiscal policy framework that ensures proper incentives for national policymakers. **TAGS:** Debt and fiscal/monetary policies; Subnational debt

**Sustainability of Fiscal Policy and the Effects of Public Debt in the United States** (2020)
Andrew Schmid – Independent
Since the mid-2000s, the United States has amassed increasingly high levels of public debt. Motivated by the potential long-run economic effects of said debt, this paper reconciles the economic literature surrounding the effects of public debt on economic growth to identify a level at which public debt adversely effects economic growth. This paper explores two avenues for these adverse effects to occur: (i) a general slowing of economic growth and (ii) a sovereign debt crisis. Prior research indicates that public debt in excess of 90 to 100 percent of GDP will suppress economic growth through a non-linear response. These adverse effects ultimately culminate in a sovereign debt crisis, which is estimated to occur at different debt levels for different countries. Generally, this threshold is in the range of 150 to 250 percent of GDP, and the United States has an estimated threshold of 160 percent of GDP. Finally, this paper concludes that the U.S. is likely experiencing adverse, but minor, economic effects from its public debt and that it is unlikely to experience a debt crisis soon. **TAGS:** Debt and fiscal/monetary policies; Debt and growth; Debt sustainability; Debt crisis

**Fiscal Situation of India in the Time of COVID-19** (2020)
Anuragh Balajee, Shekhar Tomar, Gautham Udupa - CAFRAL, Indian School of Business
COVID-19 pandemic, a health crisis, has rattled the global economy. In this situation, the Indian government has announced a fiscal package worth INR 1.7 trillion, but there are arguments for even more spending. Using data from a cross-section of countries, the authors first estimate the relationship between fiscal spending and COVID-19 spread, economic stringency, and macroeconomic factors. Authors' estimates suggest that India can spend 2.2-4.8 percent of its Gross Domestic Product (GDP), based on the global benchmark. Accounting for tax

and output shortfall due to the pandemic, the authors project the fiscal deficit of the central government can be as high as 8.4 percent, in the most pessimistic case, while 3.7 percent in a relatively optimistic case. They finally argue that subsidy rationalization is the way forward to fund the much-needed health expenditures and transfers while maintaining the fiscal discipline. **TAGS: Debt and fiscal/monetary policies**; **Debt sustainability**; **COVID-19**

**Macroeconomic effects of Covid-19: an early review (2020)**

BIS

The Covid-19 pandemic is not only the most serious global health crisis since the 1918 Great Influenza (Spanish flu), but is set to become one of the most economically costly pandemics in recent history. Experience with past epidemics provides some insights into the various channels through which economic costs could arise, in the short as well as longer term. At the same time, Covid-19 differs from previous episodes in several important ways. Notably, the globally synchronised lockdowns and trauma of financial markets reinforce one another into an unprecedented economic sudden stop. For these reasons, the Covid-19 global recession is unique. However, past epidemics can shed light on transmission channels to the economy, especially when stringent containment policies are not in place. This Bulletin provides an early review of empirical studies on the economic costs of epidemics. The authors first review studies on past epidemics, and then turn to the latest quantitative estimates of Covid-19's impact on global growth. **TAGS: Debt and growth**; **Economic Forecasts**; **Debt and fiscal/monetary policies**; **COVID-19**

**Policy steps to address the Corona Crisis (2020)**

IMF

Monitoring, containing and mitigating the effects of the corona virus are top priorities. Timely and decisive actions by health authorities, central banks, fiscal, regulatory and supervisory authorities can help contain the virus outbreak and offset the economic impact of the pandemic. Central banks must support demand and confidence by preventing a tightening of financial conditions, lowering borrowing costs for households and firms, and ensuring market liquidity. Fiscal policy must step up to provide sizable support to the most affected people and firms, including in hard-to-reach informal sectors. Regulatory and supervisory responses must aim to preserve financial stability and banking system soundness while sustaining economic activity. **TAGS: Debt and fiscal/monetary policies**; **International and Macroprudential Regulations**; **Financial stability; COVID-19**

## Multilateral Financing

**Enhancing the Emergency Financing Toolkit - Responding To The COVID-19 Pandemic (2020)**

IMF

The COVID-19 pandemic is taking a human toll and has unleashed a series of shocks on the Fund's entire membership, creating severe disruption in the global economic and financial system. As a result, many emerging market and developing country (EMDC) members face urgent and unprecedented financing needs, creating significant immediate demand for Fund resources. In order to respond to members' large and urgent financing needs, the paper proposes to enhance the Fund's emergency financing toolkit, through a temporary increase in access limits for both the Rapid Financing Instrument (RFI), available to all members, and the Rapid Credit Facility (RCF), available to Poverty Reduction Growth Trust-eligible members only. It is proposed to increase these access limits for a proposed period of six months, which may be extended by the Executive Board. A companion Board paper sets out proposals to accelerate Board consideration of member requests for financing under the RCF and RFI, completion of reviews and requests for changes in access in existing arrangements, and requests for grant assistance under the Catastrophe Containment and Relief Trust. **TAGS:** **Debt and fiscal/monetary policies**; **Multilateral financing**; **COVID-19**

## Reports

### 2020

**Statistical release: BIS global liquidity indicators at end-December 2019**

BIS

US dollar credit to non-bank borrowers outside the United States grew by 6% in 2019, to reach $12.2 trillion at end-2019. The annual growth rate of euro-denominated credit outside the euro area slowed to 6%, while that of yen-denominated credit outside Japan turned negative (–1%). In 2019, euro-denominated credit overtook US dollar-denominated credit as the largest stock of foreign currency credit to emerging Europe. The debt securities share in US dollar credit outside the United States has risen considerably over the past decade across a number of major borrowing regions. **TAGS:** **Market Liquidity**

---

**What's the Fed doing in response to the COVID-19 crisis? What more could it do?**

Jeffrey Cheng, Dave Skidmore, David Wessel - The Brookings Institution, Board of Governors of the Federal Reserve System

The coronavirus crisis has escalated sharply in the United States, with stay-at-home orders in a growing number of states, following school closures, event cancellations, restaurant and bar closures, and mandatory work-from-home policies. A recession, likely a severe one, is inevitable. The Federal Reserve has stepped in, saying, "The coronavirus pandemic is causing tremendous hardship across the United States and around the world… While great uncertainty remains, it has become clear that our economy will face severe disruptions… [T]he Federal Reserve is using its full range of authorities to provide powerful support for the flow of credit to American families and businesses." **TAGS:** **Debt and fiscal/monetary policies; COVID-19**

---

**April 2020 Global Debt Monitor: COVID-19 lights a fuse**

IIF

Global debt across all sectors rose by over $10 trillion in 2019, topping $255 trillion. At over 322% of GDP, global debt is now 40 percentage points ($87 trillion) higher than at the onset of the 2008 financial crisis—a sobering realization as governments worldwide gear up to fight the pandemic. FX debt in EMs now exceeds $5.3 trillion. Excluding China, FX debt makes up 20% of EM debt outside the financial sector. Over $20 trillion of global bonds and loans come due through end-2020; $4.3 trillion of that in EMs. Emerging markets will need to refinance $730 billion in FX debt through end-2020. **TAGS:** **Debt Statistics**; **Debt Forecasts**; **Foreign Debt**; **COVID-19**

---

**Covid-19 and inter-generational equity**

Michael Keating - Australian National University

The increase in public debt in response to Covid-19 will not result in an unacceptable debt burden on young people. Instead, anyone seriously concerned about inter-generational equity would support action to reduce climate change and to improve the availability of housing. [...]**TAGS: Debt sustainability; COVID-19**

---

**Debt relief for pain relief: public finances and COVID-19 in low-income countries**

Nick Wilkinson - Country Programme, IGC London Hub

As public health systems and economies grind to a halt, it is becoming increasingly clear that the impact of COVID-19 will reverberate throughout the global economy for years to come. Prior to this emergency, multilateral organisations were already warning that debt sustainability in low-income countries was deteriorating. Now, the World Bank and IMF have called on bilateral creditors to support debt relief. This is urgently needed as low-income countries are at an immediate risk of a debt crisis whilst simultaneously facing an urgent need to support public health needs and their economy. The COVID-19 pandemic is a global challenge which requires international cooperation and coordination. **TAGS: Debt relief**; **Multilateral financing**; **COVID-19**

---

**Debt restructuring in the time of COVID-19: Private and official agreements**

Silvia Marchesi, Tania Masi - University of Milano Bicocca

As a consequence of the COVID-19 crisis, which will hit certain countries particularly hard (including those with official creditors), there may be a wave of debt restructuring over the next few years. This column argues that the specific characteristics of sovereign debt re-negotiations are important. In particular, it focuses on the link between sovereign restructurings and ratings, an issue that is of relevance but that has not received enough attention in recent research. **TAGS: Debt Restructuring**; **Sovereign Credit Ratings; COVID-19**

---

**Government Securities Market Figures 1th Quarter 2020**

Agence UMOA-Titres

Quarterly statistics as of 1th quarter 2020 on public debt and government securities market of WAEMU countries (Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, Togo). **TAGS: Debt Statistics**; **Primary market**

---

**Government Securities Market Figures 4th Quarter 2019**

**Agence UMOA-Titres**

Quarterly statistics as of 4th quarter 2019 on public debt and government securities market of WAEMU countries (Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, Togo). **TAGS: Debt Statistics**; **Primary market**

---

**Here are the biggest economic challenges we face over the next 10 years**

World Economic Forum

Since the financial crisis of 2008, the world has been drifting towards a perfect storm of financial, political, socioeconomic, and environmental risks, writes Nouriel Roubini. From massive increases in fiscal deficits as high as 10% of GDP or more, to worsening relations between China and the US, here are 10 economic factors pointing to financial trouble ahead, according to the economist.[...] **TAGS: Economic Forecasts**; **Debt sustainability**; **Financial stability; COVID-19**

---

**International spillovers of quantitative easing**

Marcin Kolasa, Grzegorz Wesołowski - Narodowy Bank Polski

Several major central banks announced new rounds of massive asset purchases following the outbreak of the Covid-19 pandemic. This policy instrument seems to have performed well for economies that have been implementing it since the Global Crisis, but its spillover impact on external countries has remained a bone of contention within the policy debate. Using previous episodes of quantitative easing as a guideline, this column analyses its international spillovers, showing that they are qualitatively and quantitatively different from the impact of changing short-term rates by the major central banks. **TAGS:** **Debt and fiscal/monetary policies**

---

**Maturity, seniority and size: make sure the ESM's pandemic crisis support is fit for purpose!**

Giancarlo Corsetti, Aitor Erce - University of Cambridge, European Investment Bank

The Eurogroup recently agreed to provide support during the Covid crisis through a dedicated European Stability Mechanism credit line. A discussion is playing out in European capitals, most intensely in Rome and Madrid, regarding the usefulness of tapping these credit lines. While the final details are still pending, this column evaluates the conditions that seem to be currently on the table. As these programmes provide very little interest savings, designing them in such a way that would not trigger disruptions in the bond markets of borrowing countries is key. To this end, the ESM should consider waiving its seniority and engaging with countries using longer maturity structures. **TAGS:** **Market Liquidity**; **International and Macroprudential Regulations**; **Financial stability; COVID-19**

---

**Nepal needs total Debt cancellation to face the Covid-19 crisis**

Praman Adhikari – CATDM

The devastation caused by the coronavirus pandemic is a serious threat which has brought our civilisation and economies at the brink of collapse. The current crisis in every sector of our lives has revealed how weak our system is when it comes to fighting back and containing the spread of the virus. As we are observing the devastation of the pandemic in Europe, China and the United States of America, the gradual increment of active cases in South Asian countries is very much alarming especially, considering the public health care system and infrastructure of the eight countries of the region. […]**TAGS:** **Debt sustainability;** **Debt and growth**; **Debt Restructuring**; **COVID-19**; **Debt relief**

---

**The EU recovery fund: an opportunity for change**

Massimo Motta, Martin Peitz - Universitat Pompeu Fabra, University of Mannheim

The European Commission has been asked to develop a proposal for a new recovery fund of more than €1 trillion. Given the substantial support needed by most sectors in the present circumstances, it is crucial to identify the ones which are most important to proper functioning of the EU economies. Based on the principle of subsidiarity, this column formulates two general criteria to identify these sectors: those for which (i) the volume of cross-border trade within the EU is large, or (ii) externalities across member states are important. Support schemes should be oriented towards the future and not try to preserve the status quo ante. **TAGS:** **Structural policies**; **Financial stability;** **COVID-19**

---

**The European repo market and the COVID-19 crisis**

ICMA Group

As the crisis accelerated, and as countries went into lockdown, in the first two weeks of March, repo market activity increased, driven partly by flows out of risk assets into the safety of short-term secured markets as well as collateral transformation to meet margin requirements or to cover fund outflows (see Figures 1 and 3). The flight to quality was most felt in German general collateral (GC), which richened in the third week of March by as much as 20bp to precrisis levels (see Figures 1 and 2), while Italian GC saw some minor cheapening, of between 5-8bp (see Figures 1 and 4), which seems to be partly off the back of hedge funds unwinding leveraged long BTP exposures. **TAGS:** **Repo market; COVID-19**

---

**Economic Views: COVID-19 and frontier market Funding**

IIF

We examine external funding needs in some frontier markets. Relative to GDP, funding needs are lower than the EM average, but buffers in the form of reserve assets are significantly weaker. Egypt and Nigeria are vulnerable to a reversal in portfolio flows. Nigeria could see severe reserve losses in downside scenarios. **TAGS:** **Debt Policy**; **Financial stability**; **Debt sustainability**; **Foreign Debt; COVID-19**

---

**Global Macro views: COVID-19 and EM policy space**

IIF

The COVID-19 shock has prompted a historic policy response in the US. Fiscal stimulus will likely take government debt from 80 to 110 percent of GDP. Meanwhile, unprecedented Fed easing is helping keep Treasury yields at low levels. What makes this policy space possible is the Dollar, which tends to appreciate in crises, giving policy makers confidence that foreign demand for US assets remains solid for now. […] **TAGS:** **Debt and fiscal/monetary policies**; **Economic Forecasts**; **Sovereign bonds yields**; **COVID-19**

---

**A proposal for a Covid Credit Line**

Agnès Bénassy-Quéré, Arnoud Boot, and others - University of Paris 1 Panthéon-Sorbonne, University of Amsterdam, and others

It is in the interest of every EU member state that countries in the Union hit by the coronavirus are able to take the necessary measures to control the pandemic and deal with the economic consequences without being constrained, and to do so very quickly. This column proposes a Covid credit line in the European Stability Mechanism, with allocation across member states proportionate to the severity of the public health and economic challenges encountered. […] **TAGS:** **Debt and fiscal/monetary policies; COVID-19**

---

**Covid Perpetual Eurobonds: jointly guaranteed and supported by the ECB**

Francesco Giavazzi and Guido Tabellini - Bocconi University

This war-like shock will require very large fiscal support. Its financing cost should be distributed over several generations. This can be achieved by issuing irredeemable or very long maturity Eurobonds. They should be backed by the ECB to keep the financing burden low. This column argues that no institutional or legal constraints prevent this policy response. Prompt action is critical since allowing one crisis to morph into many could disrupt the European project, with far-reaching and unpredictable political implications. **TAGS:** **Primary market**; **Debt policy; Sovereign debt market**; **COVID-19**

---

**African Economic Outlook 2020**

African Development Bank Group

Africa's economic outlook continues to brighten. Its real GDP growth, estimated at 3.4 percent for 2019, is projected to accelerate to 3.9 percent in 2020 and to 4.1 percent in 2021. Leading the way are six economies among the world's 10 fastest growers: Rwanda, Ethiopia, Côte d'Ivoire, Ghana, Tanzania, and Benin. Growth's fundamentals are also improving, with a gradual shift from private consumption toward investment and exports. [...] **TAGS:** **Debt and fiscal/monetary policies**; **Debt and growth**; **Financial stability**; **Economic Forecasts**

---

**The corona spreads**

Rui Esteves, Nathan Sussman - The Graduate Institute, Geneva

After an initial lull, financial markets reacted with a vengeance to the COVID-19 pandemic. Comparisons with 2008 are inevitable, but the ultimate impact on markets is still unclear. This column argues that the spread of the pandemic has little explanatory power over financial stress. Markets reacted as in any international financial crisis by penalising emerging economies (and countries without credible monetary anchors), exposing age-old vulnerabilities. This finding highlights the need for credible, but flexible, sovereign currencies and the need to build up liquidity reserves. **TAGS:** **Debt crisis**; **Sovereign bonds yields**; **Market Liquidity**; **Sovereign risk premia; COVID-19**

---

**The European response to the Covid-19 crisis: a pragmatic proposal to break the impasse**

Roberto Perotti - Bocconi University

In response to the pandemic, several proposals have been advanced to mobilise large amounts at the European level, mostly to address the needs of periphery countries. This column argues that because these proposals do not take into account the preoccupations of core countries, the outcome is likely to be general disappointment and recriminations. It offers an alternative proposal, based on the notion that periphery countries are much better equipped to make it on their own than is commonly thought, with a little help from the ECB. **TAGS:** **Debt and fiscal/monetary policies**; **COVID-19**

---

**Initial impact of COVID-19 on European Capital Markets**

ISDA

AFME has published a new research note on the “Initial impact of COVID-19 on Europe’s capital markets”. The report analyses the significant impact that Covid-19 has had across all major capital markets sectors including: equities (IPOs and secondary), fixed income primary and secondary (sovereigns, corporates, securitisation, high yield, leveraged finance), FX, derivatives, and banks. The report also highlights AFME’s initiatives to support markets during the COVID-19 crisis. **TAGS:** **Financial Analysis**; **Secondary Markets**; **COVID-19**

---

**The impact of the COVID-19 crisis on the equilibrium interest rate**

Gavin Goy, Jan Willem van den End - De Nederlandsche Bank

The lockdown of economies during the COVID-19 crisis creates conditions in which private sector demand may fall unboundedly while precautionary savings increase. This column argues that the crisis will push down the equilibrium real interest rate further, which has been trending down since the 1980s. However, higher government spending to combat the crisis could counter this trend. The overall effect on the equilibrium interest rate will depend partly on the extent to which the increasing public debt can provide the private sector with a safe asset for holding precautionary savings. **TAGS:** **Financial Analysis**; **Sovereign bonds yields**; **COVID-19**

---

**Why the G20’s decision to suspend debt repayments matters during COVID-19**

The One Campaign

Why is debt relief so important? As nations grapple with COVID-19 and its economic impacts, leaders should not have to make the impossible choice between using funds to support their citizens or to repay their outstanding debt. **TAGS:** **TAGS:** **Debt relief**; **Multilateral financing; COVID-19**

---

**[Factbox 4/17/20: Latin America moves to mitigate impact of COVID-19](#)**
Jo Bruni, Daniel Bases - LatinFinance.com
Latin American central bankers and regulators have put into action a series of measures aimed at blunting the impact of the coronavirus, COVID-19, as the threat to their citizens and economies grows severe. These emerging market nations have moved, alongside their developed market peers, to increase local market liquidity, cut interest rates and begin addressing the expected surge in bankruptcies that come as a result of empty restaurants, aircraft and shopping malls, to name just a few of the COVID-19 consequences. […]**TAGS:** **Debt and fiscal/monetary policies**; **Market Liquidity**; **COVID-19**

---

**Negative interest rate policy in the post COVID-19 world**
Andrew Lilley, Kenneth Rogoff - Harvard Business School
In the aftermath of the Global Crisis, conventional monetary policy has been constrained by low interest rates in many major economies. This has spurred debates on the possibility of introducing negative interest rates in the monetary policy toolkit. This column uses evidence from the US to show that not only do the markets expect the low interest rates to persist into the future, but they also expect the use of negative interest rates down the line. […] **TAGS:** **Debt and fiscal/monetary policies**; **Sovereign bonds yields**; **COVID-19**

---

**The coronavirus crisis is no 2008**
Jon Danielsson, Robert Macrae, Dimitri Vayanos, Jean-Pierre Zigrand - LSE London School of Economics
Many comparisons have been made between the coronavirus crisis and the global systemic crisis in 2008. This column argues that seen through the lens of exogenous and endogenous risk, these two crises are quite different. Coronavirus is unlikely to cause a global systemic crisis, and the policy response should be different. **TAGS:** **Financial stability**; **Financial Analysis; COVID-19**

---

**The coronavirus shock to financial stability**
Enrico Perotti - Amsterdam Business School
Years of quantitative easing by the ECB have suppressed sovereign yields to historic lows. This has contributed to a shadow banking boom, as market participants invested heavily in various private asset constructions. This column argues that the coronavirus shock poses a serious liquidity risk for the shadow banking sector, where significant funding has been extended on the basis of cash flow rather than real collateral. Avoiding financial panic is key, and will require liquidity support as well as targeted fiscal measures. **TAGS:** **Financial stability**; **Market Liquidity**; **COVID-19**

---

**Italian debt is sustainable**
Olivier Blanchard - Fred Bergsten Senior Fellow
As European leaders debate issues surrounding a massive financial rescue of Italy, let me make a strong statement. Even with Italy’s fiscal response to coronavirus, Italian debt is sustainable. The European Stability Mechanism (ESM), established in the wake of the last European debt crisis a decade ago, should come to this conclusion. Germany should accept it, Italy should be willing to enter a program, and the European Central Bank (ECB) should be willing to use its Outright Monetary Transactions (OMT) bond-purchasing vehicle, while interim measures are taken until OMT is ready to be used.[…] **TAGS:** **Debt sustainability**; **Financial stability; Debt and fiscal/monetary policies**

---

**After its COVID-19 emergency, Europe should issue joint recovery bonds**

Jacob Funk Kirkegaard - PIIE Peterson Institute for International Economics

As exceptional as efforts by the European Central Bank (ECB) and European states have been at the onset of the COVID-19 pandemic, it is not too soon to think beyond the crisis. The ECB has waived its self-imposed restriction on the amount of bonds it can buy from each member state in its Pandemic Emergency Purchase Program (PEPP), signaling that it has the eurozone's back for the duration of the emergency. European leaders must now ensure that the same solidarity is adopted for the long-term economic recovery. Europe's symmetric crisis must not turn into an(other) asymmetric recovery. **TAGS:** **Structural policies**; **Sovereign bond market**; **Primary market**; **Debt and fiscal/monetary policies; COVID-19**

---

**China confronts major risk of Debt Crisis on the Belt and Road due to pandemic**

Nick Crawford, David Gordon - The Diplomat

Debt distress along the Belt and Road will be a serious threat to China's own financial sustainability and to the operations of Chinese companies overseas. The COVID-19 pandemic threatens to cause a wave of economic crises along China's Belt and Road Initiative (BRI). With several BRI countries already facing high external debt and likely to be hit hard by the pandemic, Beijing is poised to confront multiple, simultaneous debt crises in countries where it is heavily invested.[...] **TAGS: Debt crisis; Debt sustainability**; **COVID-19**

---

**Putting Swiss public debt to good use**

Cédric Tille - Graduate Institute, Geneva and CEPR

The adoption of a debt brake rule in the late 1990s has led to a reduction of Swiss government debt. In fact, Switzerland seems to have a problem of too little debt. This column argues that instead of reducing its debt level further, which in the current configuration amounts to investing at a negative interest rate, Switzerland has several more appealing options. **TAGS: Debt and fiscal/monetary policies; COVID-19**

---

**Doing more with less: How the IMF should respond to an emerging markets crisis**

Tobias Krahnke - Economist, Deutsche Bundesbank

Fears of a next wave of emerging market debt crises recently sparked a renewed debate about the adequacy of IMF resources and its toolkit. This column argues that the issue is not whether the IMF has sufficient resources for large-scale financial assistance to all of its members in need, but that such assistance would ultimately be counterproductive and could, in fact, exacerbate the risk of liquidity crises morphing into solvency crises. […] **TAGS: Multilateral financing**; **Sovereign defaults**

---

**IIF letter to IMF, World Bank, OECD and Paris Club on Debt of LICs**

IIF

With global debt levels at record highs, sovereign borrowers are increasingly vulnerable to market disruptions. The sharp increase in credit spreads in recent weeks has pushed borrowing costs to their highest levels since the 2008-09 financial crisis—a serious barrier to market access for many emerging market economies. As global commodity prices hit their lowest levels in almost 50 years and oil market turbulence continues, many low-income and developing countries (LIDCs) are seeing export revenues plummet, while the strength of the U.S. dollar poses additional refinancing challenges. […] **TAGS: Debt crisis**; **Debt sustainability**; **Multilateral financing**; **Debt relief; COVID-19**

---

**Ghana's rising Public Debt: causes and implications**

GoldStreetsBusiness.com

Unsustainability of the public debt. One major problem of Ghana's rising public debt has to do with its sustainability, both currently and in the medium-term. In 2015 when Ghana signed up to a three-year IMF Extended Credit Facility program for an amount of $918 million, the Fund's debt sustainability analysis classified the country as at 'high risk of debt distress on account of the level of the public debt. Four years later, the country's debt situation had not improved. […]**TAGS:** **Debt crisis**; **Debt sustainability**

---

**The longer-run economic consequences of pandemics**

Òscar Jordà, Sanjay R. Singh, Alan M. Taylor - Federal Reserve Bank of San Francisco and UC Davis, University of California

The COVID-19 pandemic is having immediately visible effects on economic activity. The rapid contraction in economic activity, the collapse of trade, and the dramatic increase in the unemployment rate are without precedent. However, pandemics also have less well-understood, longer-run effects on the natural rate of interest – a critical economic barometer and policy marker. […]**TAGS:** **Economic Forecasts; COVID-19**

---

**Economic policy and financial market expectations during COVID-19**

Stephanie Ettmeier, Chi Hyun Kim, Alexander Kriwoluzky - Freie Universität Berlin, DIW Berlin

The ongoing COVID-19 pandemic in Europe is severe and spreads economic uncertainty. This column explores the evolution of financial market participants' expectations during the COVID-19 pandemic, estimating yield curves of bonds in France, Germany, Italy, and Spain. The authors carry out an event study to investigate the potential impact of European fiscal and monetary policy measures on these yields. The results suggest that policy measures must be large and coordinated on the European level, and that fiscal and monetary policy must act jointly to fight the pandemic's negative economic consequences. […] **TAGS:** **Financial Analysis**; **Financial stability**; **Debt and fiscal/monetary policies**; **Economic Forecasts; COVID-19**

---

**The ESM can finance the COVID fight now**

Aitor Erce, Antonio Garcia Pascual, Ramon Marimon - Independent research advisor for the European Investment Bank, Johns Hopkins University, European University Institute

Member states are currently debating how to finance the fight against COVID-19. As time is pressing, practical and readily implementable solutions are needed now. Using the ESM to provide the funds needed is a reasonable and workable way forward. Italy, Spain and other states would benefit from using the ESM access to AAA funding to reinforce their debt dynamics: a combination of loan size, maturity and interest rates would strengthen debt sustainability. **TAGS:** **Debt sustainability**; **Financial stability**; **International and Macroprudential Regulations**; **COVID-19**

---

**Policy responses to covid-19**

IMF

This policy tracker summarizes the key economic responses governments are taking to limit the human and economic impact of the COVID-19 pandemic. The tracker includes 193 economies. **TAGS:** **Structural policies**; **Financial stability**; **COVID-19**

---

**Green, social and sustainability bond issuance to hit record $400 billion in 2020**

Moody's Investor Service

We expect green, social and sustainability bond issuance will hit a combined record of $400 billion in 2020, up 24% from the previous record of $323 billion achieved in 2019. Continued growth and diversification of these markets will be accompanied by innovation in new labels and structures, particularly with respect to transition bonds and sustainability-linked bonds and loans. A heightened focus on climate action by governments and the financial sector will drive further growth and innovation. **TAGS: Primary market**; **Bond market development**

---

**Call for immediate cancellation of developing country debt payment**

Zak Sufee - Jubilee Debt

Statement from over 150 global civil society organisations calls for immediate cancellation of debt payments, including to private lenders. The emergency cancellation should be followed by a process to reduce debts to a sustainable level following the Covid-19 crisis. **TAGS: Multilateral financing; COVID-19; Debt relief**

---

**Letter to governments of the G20 nations**

Erik Berglöf, Gordon Brown, Jeremy Farrar - London School of Economics, United Nations Special Envoy for Global Education, Wellcome

The gravity and urgency of the entwined COVID-19 public health and economic crises must be reflected in an unprecedented response. In this letter world leaders, leading global health experts and economists outline what is needed. The two crises require urgent specific measures that can be agreed on with speed and at scale. Both require world leaders to commit to funding far beyond the current capacity of our existing international institutions. [...] **TAGS: Financial stability; Multilateral financing; COVID-19; Debt relief**

---

**Intergovernmental relations: how the global crisis led to further decentralization**

Luiz de Mello, João Tovar Jalles - OECD, University of Lisbon

The global financial and economic crisis has affected economies and societies, including in the ways governments allocate fiscal, financial, policy and political responsibilities among the different layers of administration. This column describes how, in particular, the crisis was associated with an increase in the subnational shares of general government spending and revenue, which are conventional quantitative gauges of fiscal decentralisation. Effects on subnational authority over politics, policy and fiscal-financial management are more nuanced. **TAGS: Debt crisis**; **Subnational debt**

---

**COVID, Fed swaps and the IMF as lender of last resort**

Eduardo Levy Yeyati - Dean, School of Government, Universidad Torcuato Di Tella

Dollar shortages and the real consequences of the COVID pandemic may lead to the next wave of emerging market debt crises. This column argues that Fed swaps mitigate this shortage only for a few selected countries, and traditional international financial institutions' products are ill-designed to assist an emerging market facing a sudden stop. As a broker between central banks and emerging economies, the IMF has a unique opportunity to complete the international financial architecture and fill the lender of last resort role that has long eluded it. **TAGS: Structural policies**; **Financial stability; COVID-19**

---

**World Economic situation and prospects: April 2020**

United Nations

Governments are considering and rolling out large stimulus packages to avert a sharp downturn of their economies which could potentially plunge the global economy into a deep recession. In the worst-case scenario, the world economy could contract by 0.9 per cent in 2020 (Figure 1). "Urgent and bold policy measures are needed, not only to contain the pandemic and save lives, but also to protect the most vulnerable in our societies from economic ruin and to sustain economic growth and financial stability," stressed Under-Secretary-General for Economic and Social Affairs Liu Zhenmin. **TAGS:** **Financial stability**; **Economic Forecasts; COVID-19**

---

**COVID-19 Market updates: market data & commentary**

ICMA Group

During the ongoing market volatility and disruptions arising from the global Covid-19 pandemic, ICMA intends to monitor closely and document market performance over this period. In particular with focus on the European IG credit and sovereign bond secondary markets and the European repo market (sovereign and credit). Recording and analysing markets during this time will likely prove invaluable in assessing and informing ongoing and future regulatory roll-outs and policy initiatives. This could be instrumental in delaying, and possibly revising, regulation (e.g. SFTR, CSDR, FRTB). **TAGS:** **Secondary Markets**; **Primary market**

---

**ESMA Risk Dashboard Risk up-date - April 2020**

ESMA

We are up-dating our risk assessment in light of the COVID-19 pandemic. The pandemic, in combination with the valuation risks to which we had alerted in ESMA's previous risk assessments, has led to massive equity market corrections since mid-February, driven by a sharp deterioration in the outlook for consumers, businesses and of the economic environment. Corporate bond, government bond markets and a number of investment funds show signs of stress.[...] **TAGS:** **Financial Analysis**; **Economic Forecasts**

---

**The dollar and international capital flows in the COVID-19 crisis**

Giancarlo Corsetti , Emile Marin - University of Cambridge

In crises, the dollar tends to appreciate – especially against emerging market currencies – and dollar liquidity becomes scarce. This column shows that today's events are following the historical pattern. Forex market turmoil is preceded by an inversion of the US yield curve as investors, anticipating tough times ahead, require relatively high short-term yields and an appreciation of relatively risky currencies until the disaster occurs. Then, the dollar appreciates sharply. Then, emerging markets suffer massive capital flight. What's new about the COVID-19 crisis is its scale and speed. **TAGS:** **Financial Analysis; COVID-19**

---

**COVID-19: Coronavirus-related Public Rating actions on Corporations and Sovereigns to date**

SP Global

Ratings is publishing a regularly updated list of rating actions we have taken globally on corporations and sovereigns (see list of article titles below) as well as summary table and support charts. These are public ratings where we mention the COVID-19 coronavirus as one factor or in combination with others. **TAGS:** **Sovereign Credit Ratings; COVID-19**

---

**Deep global recession in 2020 as Coronavirus crisis escalates**

Fitch Ratings

A deep global recession in 2020 is now Fitch Ratings' baseline forecast according to its latest update of its Global Economic Outlook (GEO) forecasts. The speed with which the coronavirus pandemic is evolving has necessitated another round of huge cuts to our GDP forecasts. We now expect world economic activity to decline by 1.9% in 2020 with US, eurozone and UK GDP down by 3.3%, 4.2% and 3.9%, respectively.[...] **TAGS:** **Economic Forecasts**

**QE is not helicopter money - and yet it is useful**

David Miles - Professor of Financial Economics, Imperial College Business School

In response to the current economic crisis, central banks have embarked on operations to purchase huge quantities of government bonds. Accusations that these policies amount to 'printing money' or 'helicopter drops' are unfounded and misleading. This column argues that the asset purchase operations undertaken when interest rates are very low can help greatly in stabilising the economy. These actions allow governments to issue long-term bonds, incur low effective costs in the near horizon, and avoid volatile financial markets. **TAGS: Debt and fiscal/monetary policies**; **Financial stability**; **Structural policies**

---

**5 Principles on uses and misuses of Debt Relief to address the Coronavirus Pandemic**

Scott Morris - Center for Global Development - Director of the US Development Policy Initiative, Co-Director of Sustainable

Debt relief for low-income countries (LICs) is on the table of measures to consider for coronavirus response. But we should recognize that the current crisis is different from the past when it comes to a major, multi-country debt relief effort, and it's important to think through where debt relief makes sense and where it doesn't as a response to this pandemic. The imperative right now is to get cash to LICs as quickly as possible. […] **TAGS: Debt relief**; **Debt sustainability; Multilateral financing; COVID-19**

---

**ECB needs to finance coronavirus budget deficits**

Paul De Grauwe - CEPS Associate Senior Research Fellow

The coronavirus pandemic has triggered a combined negative supply and demand shock of unprecedented intensity. Both are having a significant impact on the production of goods and services, and because everyone's income ultimately derives from production, household incomes are quickly falling. With many economies already in a downward spiral and heading toward recession, the danger is that the downturn will become a self-perpetuating and ever-deepening rout. […]**TAGS: Debt and fiscal/monetary policies**; **Financial stability; COVID-19**

---

**Coronavirus will hit African economies hard**

Richard Li - How we Made It In Africa. Africa Business Insight

While the number of COVID-19 cases in China is on the decline, there has been a drastic increase globally and various governments are scrambling to put together contingency plans to contain the coronavirus spread within their respective territories. The immediate fallout of this viral outbreak is the slowing down of global economic activities. To make matters worse, failing to control and contain this coronavirus can potentially lead to a global recession. **TAGS: Economic Forecasts; COVID-19**

---

## News

**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

**Please note that, starting from this issue, the following list will contain only events yet to be held at the date of the newsletter, in chronological order.** Due to current coronavirus pandemic, many events have been cancelled or postponed, therefore we decided to maintain in the website only confirmed events, according to information contained in their original pages. We have employed maximum care to update this information, but we apologise in advance if some mistakes still remain. We suggest to regularly visit the "**Events**" section of our website, since the Secretariat adds regularly new events in advance to their dates and deadlines.

**31 May – 1 June 2020; IDC TOURS LLC, Japan, IDC Herzliya, Israel**
**Annual conference in Financial Economics research**

**2 June 2020; Information Management Network USA, Online**
**Webinar : understanding China's Bond Market in depth**

**2 – 3 June 2020; Ljubljana, Slovenia**
**Emerging Markets Conference Board Conference 2020**

**8 – 12 June 2020; NACVA USA, Online**
**Essentials of financial litigation**

**16 – 17 June 2020; GlobalCapital & Euromoney Conference, London, United Kingdom**
**The Global Borrowers & Bond Investors forum - Virtual 2020**

**17 – 19 June 2020; University of Milano-Bicocca, Italy**
**Conference on Forecasting Financial Markets**

**17 - 19 June 2020; 10times.com, Kisumu, Kenya**
**Annual Debt Management Seminar**

**23 June 2020; GFCMediaGroup.com, Online**
**Bonds, Loans and Sukuk 24**

**29 June – 24 July 2020; UNITAR, Web Based**
**Fundamentals of Capital Market Development and Regulation (for AGFUND MFIs, 2020)**

**13 July - 7 August 2020; UNITAR, Web Based**
**Fundamentals of the Financial System (AGFUND eCourse 2020)**

**17 – 18 July 2020; Conference Series LLC Ltd Web Metrics, Online**
**7th International Conference on Big Data Analysis and Data Mining - Webinar**

**27 July – 21 August 2020; UNITAR, Web Based**
**Negotiation of Financial Transactions (AGFUND eCourse 2020)**

**2 September 2020; The Global Borrowers & Investors Forum - Asia 2020, Singapore**
**The Global Borrowers & Investors Forum - Asia 2020**

**2 – 4 September 2020; Climate Bonds Initiative, London**
**Green Transition – Opportunity of the Decade**

3 - 4 September 2020; The World Bank, Washington, DC
[Annual Bank Conference on Development Economics 2020: Global Unrest]

7 – 8 September 2020; European University Institute, Georgetown University, the Graduate Institute of Geneva, Florence (Italy)
[Call for Papers: 4th Interdisciplinary Sovereign Debt Research and Management Conference (DebtCon4)]

8 September 2020; GFC Media Group UK, Nairobi Kenya
[Bonds Loans and Sukuk Kenya Conference Nairobi]

15 September 2020; afme, London, United Kingdom
[15th Annual European Leveraged Finance Conference]

15 September 2020; Global Capital & Euromoney Conference, Paris, France
[The GlobalCapital sustainable and responsible Capital Markets Forum 2020]

15 September 2020; Global Capital – Euromoney Conference, Beijing, China
[The China Debt Capital Markets summit 2020]

16 – 18 September 2020; Banque de France, Banque de France, Paris
[Unconventional monetary policies]

21 September – 16 October 2020; UNITAR, Web Based
[Global Financial Governance (2020)]

24 – 25 September 2020; Bank of England and the CEPR, Switzerland
[Call for papers: workshop on "financial innovation: implications for competition, regulation, and monetary policy"]

24 – 25 September 2020, Canadian Derivatives Institute, Montreal Canada
[Canadian Derivatives Institute Annual Conference]

5 – 9 October 2020; International Law Institute, Washington, D.C., USA
[2020 Capital Markets: foundations of development and regulation]

5 – 7 October 2020; SEACEN-BoJ-FSI, Sri Lanka
[Course on Financial Crisis Planning, Management, and Recovery]

7 – 9 October 2020; EUI, EUI Premises, Florence
[Sovereign Debt Restructuring]

18 – 22 October 2020; IMF, Kuwait City, Kuwait
[Strengthening Budget Institutions (SBI)]

26 – 27 October 2020; EABCN, Paris.
[Empirical Advances in Monetary Policy]

26 – 30 October 2020; SEACEN, Cambodia
[Federal Reserve Course on Liquidity Risk Measurement, Management, and Regulation]

5 – 6 November 2020; IMF, Washington,D.C.
[Call for Papers: 21st Jacques Polak Annual Research Conference]

5 November 2020; Financial Risk and Stability Network, ESMT Berlin
[Financial Stability Conference]

9 – 11 November 2020; Euromoney, London UK
[Debt Capital Markets]

16 – 20 November 2020; Banque de France, Paris, France

[Financial stability and macroprudential policies of central banks]

18 – 19 November 2020; IMF, Washington, D.C.
[8th IMF Statistical Forum: Measuring the Economics of a Pandemic]

26 – 27 November 2020; Corvinus University of Budapest, Hungary
[11th Annual Financial Market Liquidity Conference]

30 November – 1 December 2020; BIS, Ottawa Canada
[Eighth joint BIS, World Bank, Bank of Canada, Banca d'Italia public investors conference]

1 – 4 December 2020; Futures Industry Association USA, The St. Regis Singapore
[FIA Asia Derivatives Conference]

31 December 2020 – 2 January 2021; EUI, Florence, Italy
[Regulatory Treatment of Sovereign Exposures and Safe Assets Academy]

1 – 3 January 2021; EUI Premises, Florence, Italy
[MiFID II/ MiFIR: Evolution and Revolution]

# PDM Network in Figures

At 20th May 2020, total documents and reports available on the PDM Network website were 7,793. Events and News uploaded on the website since January 2019 were respectively 456 and 6,935. This newsletter is sent to 913 Subscribers from emerging and advanced countries.

## Special Thanks

The PDM Secretariat is grateful to Banu Turhan Kayaalp (World Bank), Fatos Koc (OECD), Tanweer Akram (Thrivent), Abdoul-Aziz Halidou (Umoa Titres), Jonasson Thordur (IMF) for information on new documents and reports.

# Our Subscribers

*Please note that subscription is intended for individuals only and does not entail any support to PDM Network activities by the Institutions the Subscribers work for. Individuals who subscribed to the PDM Network belong to a worldwide range of Institutions, including the following:*

*Asian Development Bank, African Development Bank, African Forum and Network on Debt and Development, Association of International Wealth Management of India, Association of Finance Officers (AFO), 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, Ca' Foscari University, 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 Antigua and Barbuda, Government of Saint Lucia, Government of Sindh, Graduate School of International Development (Nagoya University), Greek Central Bank, Greek DMA, Greek MoF, Grenada Ministry of Finance, Guyana Ministry of Finance, 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, Israeli Ministry of Finance, 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 Economist Intelligence Unit, 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 Navarra, 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 Trieste, 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.*