







### PDM NETWORK Newsletter

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

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

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

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### **New Documents**

### Papers, Articles & Books

### **Primary Market**

Sovereign GDP-Linked Bonds (2016)

James Benford; Thomas Best; Mark Joy; Mark Kruger Bank of England; Bank of Canada

**Abstract:** While the idea of governments issuing financial instruments whose repayments are indexed to gross domestic product (GDP) is not new, the current global backdrop of high sovereign debt coupled with low interest rates and weak and uncertain nominal growth

prospects suggests the case for doing so may be especially strong now. This paper discusses the pros and cons of GDP-linked bonds, looks at when it might be most beneficial to issue, how investors might benefit, and possible ways of addressing the first-mover problem. The aim of this paper is to stimulate debate rather than provide answers.

A Taylor Rule for Public Debt (2016)

Costas Azariadis - Federal Reserve Banks

Abstract: Public debt is an important source of liquidity in economies facing shortages of private credit. It is also a bubble whose current price depends on expectations of what it will buy at future dates. In this article, the author studies how the government must balance the provision of sufficient liquidity against the risk of adverse expectations regarding future debt prices when private liquidity has dried up. The socially optimal balance is captured in a Taylor-like rule that sets a target for real public debt and expectations by overreacting manages deviations from the target value. Overreaction takes the form of manipulating budget surpluses to absorb excess debt or reverse liquidity shortages. Α budget surplus (deficit) equivalent to an income tax (subsidy) on investors that restrains (raises) their demand for liquid assets.

## Foreign holders of Italian government debt securities: new evidence (2016)

Valerio Della Corte; Stefano Federico - Bank of Italy

Abstract: Drawing on data Eurosystem's Securities **Holdings** recent Statistics (SHS) and the IMF's Coordinated Portfolio Investment Survey (CPIS), the paper provides a detailed breakdown of foreign holders of Italian government securities by sector and geographical area. The authors estimate that euro-area investors held more than 60 per cent of the Italian general government securities held by non-residents at the end of 2015; the sector in the euro area holding the largest share was 'other financial intermediaries' (predominantly non-money market funds), followed by banks and the insurance industry and pension funds. The authors also show that foreign demand for Italian government debt was mainly driven by euro-area countries in 2014, while in 2015 it mostly reflected purchases made by investors outside the euro area.

## **Does governing law affect bond** spreads ? (2016)

Dilip Ratha; Supriyo De; Sergio Kurlat - World Bank

**Abstract:** Controlling for bond and issuer characteristics, bond spreads are expected to be equal across different legal jurisdictions, and differences are expected to disappear through arbitrage. However, an analysis of 435 U.S. issued dollar-denominated bonds by emerging market sovereigns during 1990-2015 reveals that after the financial crisis of 2008, the launch spread of sovereign bonds issued under U.K. law has been higher than those issued under U.S. law, by 130 basis points for BB+ bonds and 175 basis points for B- bonds. This effect was not significant for investment grade bonds. On average, bonds issued under U.K. law

had weaker ratings and shorter tenors postcrisis. The post-crisis impact of governing law on sovereign bond spreads is not explained by collective action clauses, or first-time bond issuances. Instead, the difference seems to be related to the perception that U.S. law offers stronger investor protection, and that the investor base for bonds issued under U.S. law is larger than that for bonds issued under U.K. law. The difference in spreads persists in the secondary market even after 180 days, perhaps because of the lack of liquidity, as investors tend to buy and hold these more attractive bonds on a longer term basis.

### **Secondary Market**

## BTP futures and cash relationships: a high frequency data analysis (2016)

Onofrio Panzarino; Francesco Potente; Alfonso Puorro -Bank of Italy

**Abstract:** The paper analyses the interactions between the 'cash' market (MTS Cash) and the futures market (Eurex) of Italian government bonds in terms of liquidity, price correlation and volatility. Based on daily data, the growth of the Eurex market seems to support the tightening of the bid-ask spread of MTS Cash, all things being equal, thus confirming a healthy and efficient link between cash and futures markets. Against this backdrop, a high frequency analysis highlights some episodes of partial divergence between price developments of futures and cash markets, which might be related to differences in the microstructures of the two markets. The futures market is order driven while the cash market is quote driven; furthermore different types of participants are active in each market. At higher frequencies, episodes of unidirectional propagation of volatility shocks from BTP futures to the MTS Cash market materialize, with potential spillovers on cash market liquidity conditions. In this regard, it is also important to consider the role played by High Frequency Traders, whose activity in futures markets may well contribute to explaining the peculiarities in price dynamics highlighted by high frequency data.

## How Has Sovereign Bond Market Liquidity Changed? An Illiquidity Spillover Analysis (2016)

Michael Schneider; Fabrizio Lillo; Loriana Pelizzon -Scuola Normale Superiore, Pisa; Goethe University Frankfurt

**Abstract:** Amid increasing regulation, structural changes of the market and Quantitative Easing as well as extremely low yields, concerns about the market liquidity of the Eurozone sovereign debt markets have been raised. We aim to quantify illiquidity risks, especially such related to liquidity dry-ups, and illiquidity spillover across maturities by examining the reaction to

illiquidity shocks at high frequencies in two ways: a) the regular response to shocks using a variance decomposition and, b) the response to shocks in the extremes by detecting illiquidity shocks and modeling those as multivariate Hawkes processes. The authors find that: a) market liquidity is more fragile and less predictable when an asset is very illiquid and, b) the response to shocks in the extremes is structurally different from the regular response. In 2015 long-term bonds are less liquid and the medium-term bonds are liquid, although the authors observe that in the extremes the medium-term bonds are increasingly driven by illiquidity spillover from the long-term titles.

### **Issuing in Foreign Currency**

### On the Determinants of External Debt in Nigeria (2016)

Ibrahim Mohammed Adamu - University of Malaya

Abstract: This paper investigates determinants of external debt in Nigeria from 1970 through 2013 using Autoregressive Distributed Lag (ARDL) approach. The empirical results indicate that oil price, debt service and gross domestic savings play a significant role in determining external debt in Nigeria. The study also found an evidence that the exchange rate and fiscal deficit contributes to external debt build-up. The paper advocates for reviving of non-resource tradable sectors and appropriate fiscal policy that will curtail the high spending effect and subside unnecessary expenditures.

### **Legal Issues and Conventions**

## Debts, Human Rights, and the Rule of Law: Advocating a Fair and Efficient Sovereign Insolvency (2015)

Kunibert Raffer - University of Vienna

Abstract: Court decisions against Argentina, and the recent Resolution of the UN's General Assembly (GA) forcefully recalled a well-known glaring gap in the international financial architecture and the limits of the contractual approach. Demanding debt reductions, the newly elected Greek government raised again the issue of insolvency. So far, official claims have been reduced quietly already, while that official haircuts would impossible, e.g., by lowering interest rates, deferring debt service or cancelling the EFSF guarantee fee. The UN-Resolution demanded the elaboration of 'a multilateral legal framework for sovereign debt restructuring processes' (GA 2014). Regretting the absence of appropriate mechanisms, the Human Rights Council spoke of the 'unjust nature of the current system, which directly affects the enjoyment of human rights in debtor States' (HRC 2014, p.3). If debtor states can no longer finance their obligations under human rights law, people are denied basic human rights. Unlike under any civilized municipal law, debtor protection continues to be refused to the poorest by those creditor governments safeguarding debtor protection at home. All domestic legal systems have established insolvency as the only economically efficient and fair solution. Historical record and the fact that no one wants to abolish it, prove this solution right.

### Too Little, Too Late - The Quest to Resolve Sovereign Debt Crises (2016)

Martin Guzman, José Antonio Ocampo, and Joseph E. Stiglitz - Columbia University

Abstract: The current approach to resolving sovereign debt crises does not work: sovereign debt restructurings come too late and address too little. Though unresolved debt crises impose enormous costs on societies, many recent restructurings have not been deep enough to provide the conditions for economic recovery (as illustrated by the Greek debt restructuring of 2012). And if the debtor decides not to accept the terms demanded by the creditors, finalizing a restructuring can be slowed by legal challenges (as illustrated by the recent case of Argentina, deemed as "the trial of the century"). A fresh start for distressed debtors is a basic principle of a well-functioning market economy, yet there is no international bankruptcy framework for sovereign debts. While this problem is not new, the United Nations and the global community are now willing to do something about it. Providing guidance for those who intend to take up reform, this book assesses the relative merits of various debt-restructuring proposals, especially in relation to the main deficiencies of the current nonsystem. With contributions by leading academics and practitioners, Too Little, Too Late reflects the overwhelming consensus among specialists on the need to find workable solutions.

# Inclusion of enhanced contractual provisions in international sovereign bond contracts (2016) G20

**Abstract:** This briefing reports on the inclusion of enhanced contractual provisions in international sovereign bonds from October 1, 2014 (when the IMF endorsed the key features of these provisions) through March 15, 2016, and provides an update on the outstanding stock. The IMF Executive Board endorsed in October 2014 the inclusion of key features of enhanced pari passu provisions and collective action clauses (CACs) in new international sovereign bonds. In September 2015, the IMF published a progress report on the inclusion of

the enhanced clauses in international sovereign bonds as of July 2015. This briefing provides a further update on the inclusion of the enhanced clauses and on the outstanding stock of international sovereign bonds.[...]

### Of Progressive Property and Public Debt (2016)

Christopher K. Odinet - Southern University Law Center

Abstract: Debt is property, and, because of this, property law has a lot to say about how debts are resolved. Indeed, property law is deeply woven into the fabric of the bankruptcy process — a fact that has been woefully neglected by many scholars. The ability to provide debtors with relief and the ability of creditors to demand protections from discharge or diminished payments are both concepts that are intimately tied to property law. However, despite the doctrinal workings of property law in this context, from a theoretical standpoint property law has been underutilized. This is particularly true, as this Article asserts, in the public insolvency context — when governments go broke. Instead of being relegated to a mere mechanical (and normatively side-lined) status, I argue that property theory, particularly that arising out of the progressive property movement, has much to say about public debt crises and the resolution of the different interests at play between debtors and creditors. In order to contextualize this argument, I use the Puerto Rican debt crisis as a lens through which to understand how progressive property theory should be used to reform the way property law has been interpreted in the context of public debt emergencies.

## On Some Recent Proposals of Public Debt Restructuring in the Eurozone (2016)

Ernesto Longobardi; Antonio Pedone - University of Bari; Università "la Sapienza" di Roma

Abstract: This paper considers the issue of sovereign debts in the Eurozone. The reasons for the reduction of public debt, which are quite strong in the present circumstances of slow growth, are briefly discussed with reference to EMU countries. Then the different possible strategies to reduce the public debt/GDP ratio while avoiding any form of debt restructuring are considered. The choice to cut public debt by means of a violent and unexpected upsurge of inflation, which in the past has often been the preferred solution, is not viable today in the Union. On the other side, alternative option for reducing the public debt by means of extraordinary finance instruments, such as wealth taxes, privatization of public companies and sale of public assets can assure only limited results. Thus the policy presently adopted in the

EU, relying on the progressive accumulation of surpluses in the general government's primary budget (the austerity solution), seems to be the only practicable exit. However the alternative of restructuring has been investigated with growing attention in the last few years. [...]

### A Mechanism to Regulate Sovereign Debt Restructuring in the Euro Area (2016)

Jochen Andritzky, Désirée I. Christofzik, Lars P. Feld, Uwe Scheuering - German Council of Economic Experts Wiesbaden Germany

Abstract: To make the no-bailout clause credible and enhance the effectiveness of crisis assistance, a consistent institutional and legal framework is needed to ensure that private creditors contribute to crisis resolution. Getting activated as part of ESM crisis assistance, the authors propose a two-stage mechanism that allows to postpone the fateful distinction between liquidity and solvency crises: At the onset of a ESM programme, the framework demands an immediate maturity extension if the debt burden is high, followed by deeper debt restructuring if post-crises debt proves unsustainable. The mechanism is easily implemented by amending ESM guidelines and compelling countries to issue debt with Creditor Participation Clauses (CPCs). As debt is rolled over, the mechanism gradually phases in, leaving countries time to reduce debt. Given that private sector in-volvement reduces financing needs, the ESM could provide longer programmes and more time for reforms.

## Are Bondholders Investors? Sovereign Debt and Investment Arbitration after Poatová (2016)

Pietro Ortolani - Max Planck Institute Luxembourg

**Abstract:** As a result of the 2010 sovereign debt crisis and the subsequent restructuring operations, bondholders have pursued different dispute resolution strategies. Litigation before US courts has proved to be a viable option, as demonstrated by Argentine cases. State court litigation, however, is not the only available forum: in some cases, bondholders have commenced arbitration proceedings against the issuing State. Arbitral case-law so far seemed to be consistent in concluding that the holders of sovereign bonds issued by the host State qualify as investors and thus have standing to bring investment treaty-based claims. The recent Poštová award, however, casts doubts as to whether holders of sovereign bonds qualify as investors for the purposes of international investment law. This article illustrates the main problems revolving around the qualification of sovereign bond as investments for the purposes of international investment law. The article summarises the relevant legal framework and the solutions adopted by arbitral case-law so far. Subsequently, the contents of the Poštová decision are addressed in detail and the consequences of this decision are scrutinised.

### Pari Passu at the Beginning? England, 1677 (2016)

Pablo Triana - ESADE Business School

**Abstract:** The famous Bankers Annuities granted to creditors of Charles II in 1677 contained a covenant that seems to make a clear promise of pro-rata payments to similarlysituated lenders. While the two Latin words are not actually to be found in the evidence I was able to unearth, modern-day observers of sovereign debt legalese may be able to recognize in this 17th century England covenant a pledge of inter-creditor equality similar to what these days would be known as a ratablepayments pari passu clause. Given the crucial role that these Annuities had in the pioneering development of a liquid modern government bond market in England (then as now a leading financial center), it could be asserted that a desire for strong payment equality for holders of sovereign debt would have been present at the very beginning. In that sense, this could be one of the very earliest (the earliest?) samples such inter-creditor equality covenant pertaining to an advanced modern national debt system. Such specter of primeval ratability may be a sharp contrast to the efforts of so many relevant actors today to erase any notion of pro-rata payments from sovereign debt land.

## Sovereign Debt Restructuring after Argentina (2016)

Arturo C. Porzecanski - American University

Abstract: Sovereign debt restructurings may experience marginal changes as a result of recent modifications in contractual terms being incorporated into new bond issues, but for the most part they will likely resemble what has generally worked so well in recent decades to the satisfaction of most governments and private creditors. The statutory reforms that have been proposed to date are highly unlikely to gain traction for a variety of reasons, including the prospect that they would have been stymied when confronted with a rogue sovereign debtor such as Argentina.

The Sovereign Default Problem in the Eurozone - Why Limited Liability Resulted in Excessive Debt Accumulation and How Insurance Can Counteract (2016)

Nadjeschda Katharina Arnold - Center for Economic Studies (CES) at the University of Munich

**Abstract:** The thesis analyses the sovereign default problem in the Eurozone in two parts. Part I explains why limited liability may have resulted in excessive debt accumulation: A commitment problem of the European Monetary Union to no bailouts may have banished interest rate risk premiums inducing its member states to ignore a part of their original repayment obligation in their debt decision. Part II shows how insurance can restore optimal incentives of debt accumulation by replacing the interest rate risk premiums with insurance premiums.

### An Analysis of Argentina's 2001 Default Resolution (2016)

Martin Guzman - Columbia University

**Abstract:** Argentina's 2001 default was followed by a complex debt restructuring that included a long legal dispute with so-called "vulture funds" and other holdout creditors. The full resolution of the sovereign default took almost 15 years. This paper examines the whole restructuring process. It describes the strategies followed by the debtor and the bondholders, the domestic implications of the restructuring and the characteristics of the legal disputes. It also analyzes the implications of the default resolution for the functioning of sovereign lending markets.

### **Risk Management Models**

### <u>Credit Rating Determinants for</u> <u>European Countries</u> (2016)

Patrycja Chodnicka-Jaworska - University of Warsaw

Abstract: The purpose of this article is to analyse factors that can influence on the European country's credit rating. The analysis was performed according to the level of economic development in accordance with the division proposed by the World Bank. There were applied static and dynamic panel data models. There were used data from the World Bank database and the database of Thomson Reuters for the years 2002-2012. The full sample was divided into subsamples due to the level of economic development. As dependent variables were used long- and short-term issuer credit ratings given by Standard & Poor's and Moody's Investor Services. Ratings were decomposed linearly on numeric variables. As dependent variables the authors macroeconomic data, such as GDP per capita, real GDP growth, inflation, fiscal deficit, current account balance, external debt to GDP, foreign reserves. The authors also analysed how the previous credit rating notes and communication effect between credit rating agencies influence on the current country's standing.

# Credit Risk Contagion Before and During the Euro Area Sovereign Debt Crisis: Evidence from Central Europe (2016)

Kristyna Ters; Jörg Urban - University of Basel; Bank for International Settlements (BIS)

Abstract: In this paper the authors examine whether sovereign credit risk shocks emanating from the GIIPS countries had an effect on central European countries such as the Czech Republic, Hungary, Poland and Slovakia (the Visegrad group). In addition to the GIIPS and Visegrad group countries the authors also include Austria, France and Germany as control countries in our dataset. The authors analyse 30-minute intraday credit default swaps (CDS) data prior to the crisis period (2008-Oct. 2009) and during the crisis period (Oct. 2009-2011) which enables us to analyse changes in the dynamics of sovereign risk contagion between these two datasets. By using a panel VAR methodology the authors find comovement effects in the Visegrad group countries as they have been only marginally affected by the turmoil in the peripheral countries during the sovereign debt crisis. In contrast, the authors find strong contagion effects between the GIIPS countries in our sample. In addition, the authors study the effects of the four economic adjustment programmes by the Troika in the period from 2010 until 2011. Even though these bailouts have been essential for the GIIPS countries in terms of reducing contagion risk across the euro area, our analysis shows, that they did not have an effect for the Visegrad group countries.

### **Derivatives**

## Why Do Investors Buy Sovereign Default Insurance? (2016)

Patrick Augustin; Valeri Sokolovski; Marti G. Subrahmanyam - McGill University; Stockholm School of Economics; New York University

Abstract: In this paper the authors provide a comprehensive analysis of the determinants of trading in the sovereign credit default swaps (CDS) market, using weekly data for singlename sovereign CDS from October 2008 to September 2015. The authors describe the anatomy of the sovereign CDS market, derive a law of motion for gross positions and their components, and identify the key factors that drive the cross-sectional and time-series properties of trading volume and net notional amounts outstanding. While a single principal component accounts for 54 percent of the variation in sovereign CDS spreads, the largest common factor explains only 7 percent of the variation in sovereign CDS net notional amounts outstanding. Moreover, unlike for CDS spreads, common global factors explain very little of the variation in sovereign CDS trading net notional amounts outstanding, suggesting that it is driven primarily by idiosyncratic country risk. The authors analyze several local and regional channels that may explain the trading in sovereign CDS: (a) country-specific credit risk shocks, including changes in a country's credit rating and related outlook changes, (b) the announcement and issuance of domestic and international debt, (c) macroeconomic sentiment derived conventional and unconventional monetary policy, macro-economic news and shocks, and (d) regulatory channels, such as changes in bank capital adequacy requirements. All our findings suggest that sovereign CDS are more likely used for hedging than for speculative purposes.

### Institutional Arrangements for Debt Management

## Where states and markets meet: the financialisation of sovereign debt management (2016)

Florian Fastenrath, Michael Schwan & Christine Trampusch - Cologne Center for Comparative Politics, University of Cologne, Köln, Germany

Financial markets indispensable role in the management of sovereign debt, that is, the mechanics of how and from whom governments borrow. This paper suggests a novel, two-dimensional concept to measure the financialisation of sovereign debt management (SDM): (1) the reliance on financial markets as a governance mechanism and (2) the adoption of a sensemaking framework grounded in financial economics. The authors split this concept into nine indicators and apply it to data from 23 OECD countries between 1980 and 2010. Our predominant analysis illustrates the commonalities across countries, but at the same time, country-specific differences. The authors interpret them as two sides of the same coin in the light of an overarching trend of increasing alignment to financial markets. This article is not only one of the first cross-national as well as longitudinal studies of the dynamics in SDM; it also reveals that the relationship between finance and governments in the SDM is by no means one-sided.

### <u>Greece's Sovereign Debt Past, Present</u> <u>and Future</u> (2016)

Theodossis G. Tompras – Independent

**Abstract:** The Greek debt restructuring of 2012 holds a historic place in the world, for more than one reasons, positive, but also negative. During the PSI securities totaling €199.2bn participated or 96.9% of the securities that

were eligible and led to short-term EFSF bonds issuance worth  $\[ \] 29.7 \, \text{bn}$  and new long-term bonds worth  $\[ \] 62.4 \, \text{bn}$ . As a result Greek sovereign debt decreased by  $\[ \] 107 \, \text{bn}$  or about 52%. In this context, the PSI reorganization of 2012 was largely organized and executed, successfully. [...]

### Sovereign Debt Restructuring, National Development and Human Rights (2016)

Julieta Rossi – Independent

**Abstract:** Julieta Rossi describes how the Néstor Kirchner administration (Argentina) negotiated one of the most important debt swaps in the history of international finance. However, a court judgment in the United States of America, which held that the vulture funds could expect full repayment, undermined the sovereign agreement that had been reached with the majority of other creditors. This article examines how this decision led to international condemnation that the property rights of a few - the creditors - could be held to be more important than the rights of the many - those populations predominantly, though exclusively, in the Global South. These people's economic, social and cultural rights would likely negatively impacted by the financial instability of their respective countries if countries are forced to exhaust all resources to pay off their sovereign debt. Key resolutions have subsequently been adopted by the U.N. General Assembly and the Human Rights Council on the issue. Here Rossi examines the Principles Sovereign Basic on Debt Restructuring Processes, which constitute the main guidelines upon which the multilateral regulatory framework must be based. She calls on countries in the Global South to double their efforts to advance their own agenda on the creation of a more just, democratic and equitable international order that truly benefits its peoples and protects the sovereign equality of states.

## Accounting, Transparency and Accountability

### Can Statistical Capacity Building Help Reduce Procyclical Fiscal Policy in Developing Countries? (2016)

Mr. Sampawende J Tapsoba ; Mr. Robert C York ; Neree C.G.M. Noumon – IMF

**Abstract:** Few papers have attempted to assess the role of "capacity," especially in the area of macroeconomic statistics. Consequently, the authors make an attempt to advance this literature through the construction of a "statistical capacity building index," and then test its explanatory power on the cyclicality of government spending. Using panel data from

62 developing countries, the authors find evidence that improvements in this index are associated with less procyclicality of government spending over the period 1990–2012; with the significance of this relationship dependent upon the quality of administrative and technical capacity of budgetary institutions.

## Coordination with Other Policies and Operations

## Why Are Interest Rates So Low? Causes and Implications (2016)

Stanley Fischer - Vice Chairman at the U.S. Federal Reserve

**Abstract:** Notwithstanding the increase in the federal funds rate last December, the federal funds rate remains at a very low level. Policy rates of many other major central banks are lower still--even negative in some cases, even in countries long famous for their conservative monetary policies. Long-term interest rates in many countries are also remarkably low, suggesting that participants in financial markets expect policy rates to remain depressed for years to come. My main objective today will be to present a quantitative assessment of some possible factors behind low interest rates--and also of factors that could contribute to higher interest rates in the future.[...]

### Fragmented Politics and Public Debt (2016)

Érnesto Crivelli ; Sanjeev Gupta ; Carlos Mulas-Granados ; Carolina Correa-Caro - International Monetary Fund

Abstract: In this paper, the authors study the impact of fragmented politics on public debt—in particular, between two consecutive legislative elections. Using data for 92 advanced and developing countries during 1975-2015, the authors find a positive association between political fragmentation and public debt changes. Corruption magnifies the effects; with higher perceived corruption, political fragmentation has a bigger sway on debt increases. The influence of political fragmentation on debt dynamics is somewhat asymmetric, with larger and more significant effects during periods of debt reduction. Establishment of fiscal councils helps attenuate the negative impact of political fragmentation on public debt dynamics.

### <u>Institutions, public debt and growth in Europe</u> (2016)

Klaus Masuch, Edmund Moshammer, Beatrice Pierluigi - European Central Bank

**Abstract:** This paper shows that initial crosscountry institutional differences can explain to a substantial extent the relative GDP performance of European countries since 1995, after controlling for the initial level of GDP per capita

and government debt. It shows that improving the quality of institutions could lead to significantly higher per capita GDP. It also shows that an initial government debt level above a threshold (e.g. 60-70%) coupled with institutional quality below the EU average tends be associated with particularly poor subsequent real growth performance during this period. Interestingly, the detrimental effect of high debt levels seems cushioned by the presence of very sound institutions. This might be because good institutions help to alleviate the debt problem in various ways, e.g. by ensuring sufficient fiscal consolidation in the longer-run, allowing for better use promoting government expenditures and sustainable growth, social fairness and more efficient tax administration. The results are confirmed across a large sample of countries, also including OECD countries outside Europe. The empirical findings on the importance of institutions are robust to various measures of growth, different output measures institutional indicators, different sample sizes, different country groupings and to the inclusion of additional control variables. Overall, the results tend to support the call for structural reforms in general and reforms enhancing the of public administration regulation, the rule of law and the fight against rent-seeking and corruption in particular.

### Policy spillovers and synergies in a monetary union (2016)

Óscar Arce, Samuel Hurtado, Carlos Thomas - Banco de España

Abstract: In this paper the authors provide a general equilibrium framework for analyzing the effects of supply and demand side policies, and the potential synergies between them, in an asymmetric monetary union that faces a liquidity trap and a slow deleveraging process in its 'periphery'. The authors find that the joint implementation of pro-competition structural reforms in the periphery, a fiscal expansion in the core, and forward guidance about the future path of nominal interest rates produces positive synergies between the three policies: forward guidance re-inforces the expansionary effects of country-specific policies, and the latter in turn improve the effectiveness of forward guidance. Our results provide a case for complementing current unconventional monetary stimuli in the euro area with national efforts on the structural reform and fiscal fronts.

## The Real Effect of Financial Reform: Evidence from Public Debt Market (2016)

Xian Gu - Central University of Finance and Economics (CUFE)

**Abstract:** In this paper, the authors examine the real effect of financial reform on cost of debt and debt characteristics. To address endogeneity concerns, the authors explore the in bond exogenous variation market liberalization generated by a quasi-experiment, China's Bond Issuance Reform in January 2015, which substantially alters the issuance system in the corporate bond market. Employing a difference-in-difference method, the authors mainly find the Reform reduces the cost of bond by approximately 52.4% and further raises the public debt over bank loans and lengthens the debt maturity, which may help to reduce the exposure to liquidity shock during economic downturns and simultaneously not pose additional risks of higher debt burden. The paper sheds lights for policymakers who aim to alleviate financial constraints and boost real growth through capital market liberalization.

## <u>Poes debt relief improve child health?</u> <u>evidence from cross-country microdata</u> (2016)

Anna Welander - Lund University School of Economics and Management

**Abstract:** This paper analyzes the effects of a multilateral debt relief program on child health. The International Monetary Fund and the World Bank launched the Heavily Indebted Poor Countries Initiative in the late 1990s to reduce the debt burdens of poor countries, and explicitly linked the initiative to the aim of poverty reduction and social targets. As a result, debt-servicing costs have gone down by an average 1.8 percentage points of gross domestic product in Heavily Indebted Poor Countries. However, the social effects of debt relief are not well known. The paper employs micro data on infant mortality from 56 countryspecific Demographic and Health Surveys to investigate the effects of the Heavily Indebted Poor Countries Initiative on child health. The retrospective fertility structure of the data allows for analysis using the within-mother variation in the probability of survival of babies before and after different stages of the initiative. The results suggest that after a debtridden country enters the program, which is conditional on reform and pro-development policies, and receives interim debt relief, the probability of infant mortality goes down by about 0.5 percentage point. This translates into about 3,000 fewer infant deaths in an average Heavily Indebted Poor Country. The findings are particularly strong for infants born to poor mothers and mothers living in rural areas, and are driven by access to vaccines early in life and during pregnancy. There are no child health effects from graduating from the program and receiving full debt relief.

### **Monetary Policy**

### Stability, equity and monetary policy (2016)

Mario Draghi - President of the ECB

Abstract: The most salient feature of the landscape facing monetary policy today is the low level of nominal and real yields everywhere. Among the G7, three countries currently have negative yielding 5-year bonds - Germany, France and Japan - representing 14% of world GDP. And that proportion rises to 22% if we include bonds yielding less than 1%. Some observers see this as an artificial state generated by the policies of central banks - and argue that it threatens not only economic and financial stability, but social equity too. So what I would like to discuss in my remarks today is why interest rates are so low, and what the implications of those low rates really are. My focus will be in particular on the distributional effects of monetary policy.

### The challenge of low real interest rates for monetary policy (2016)

Vítor Constâncio - Vice-President of the ECB

**Abstract:** Low interest rates are prevailing in advanced economies where a third of public debt is in negative territory and deposit facility policy rates are negative in several of them. Over the past decades, across major advanced economies both short- and long-term interest rates have experienced a significant decline and are currently at historical lows. [...]

## Impact of the asset purchase programme on euro area government bond yields using market news (2016)

Roberto A. De Santis - European Central Bank

**Abstract:** Assessing the impact of the Asset Purchase Programme (APP) by the European Central Bank (ECB) on euro area sovereign yields is challenging, because the monetary policy announcement in January 2015 was already implicitly communicated to the market in the second half of 2014. Therefore, to identify the APP for the euro area, the authors rely upon Bloomberg news on euro area APP. The econometric results suggest that the impact of APP on euro area long-term sovereign yields sizeable, albeit the programme announced at a time of low financial distress. Most of the impact took place before the purchases took place with the vulnerable countries benefiting most.

## Net debt supply shocks in the euro area and the implications for QE (2016)

Tobias Blattner, Michael A. S. Joyce - European Central Bank **Abstract:** This paper examines how shocks to the net supply of government bonds affect the euro area term structure of interest rates and the wider macroeconomy. To measure net debt supply the authors construct a new free-float measure, which adjusts total government debt of the four largest euro area economies for foreign official holdings and the maturity of the outstanding stock of debt. Using a small macrofinance BVAR model, the authors estimate that the ECB's government bond purchases, as announced on 22 January 2015, reduced euro area 10-year bond yields, on average, by around 30bps in 2015 through the so-called duration channel. The impact on the output gap and inflation in 2016 is of the order of 0.2ppt and 0.3ppt respectively. Our estimates are likely to underestimate the overall impact of the ECB's purchases on interest rates and inflation, as they exclude effects on credit risk and monetary policy expectations that may have compressed interest rates even further.

### The ECB's asset purchase programme: an early assessment (2016)

Philippe Andrade, Johannes Breckenfelder, Fiorella De Fiore, Peter Karadi, Oreste Tristani - European Central Bank

**Abstract:** This paper analyses the effects of the European Central Bank's expanded asset purchase programme (APP) on yields and on the macroeconomy, and sheds some light on its transmission channels. It shows, first, that the January 2015 announcement of the programme has significantly and persistently reduced sovereign yields on long-term bonds and raised the share prices of banks that held more sovereign bonds in their portfolios. This evidence is consistent with versions of the portfolio rebalancing channel acting through the removal of duration risk and the relaxation of leverage constraints for financial intermediaries. It then presents a stylised macroeconomic model that incorporates the aforementioned transmission channels. The model suggests that the macroeconomic impact of the programme can be expected to be sizable.

## Global macroeconomic effects of exiting from unconventional monetary policy (2016)

Pietro Cova; Patrizio Pagano; Massimiliano Pisani -Bank of Italy; The World Bank

Abstract: This paper evaluates the international macroeconomic spillovers from the expanded Eurosystem's Asset Purchase Programme (APP) under alternative assumptions as regards (i) the unwinding of the asset positions accumulated under the APP and (ii) the normalization of the US monetary policy stance. The authors simulate a dynamic general

equilibrium model of the world economy, calibrated to the Euro area (EA), the US, China, Japan, and the 'rest of the world' (RW). Our results are as follows. First, APP expansionary spillovers are dampened if the Eurosystem brings forward the unwinding of its bond holdings because of the lower increase in EA aggregate demand and, therefore, EA imports. The RW is the region most affected because it has the greatest trade integration with the EA. Second, if the US monetary authority announces that it will hold the policy rate constant for a shorter period of time - which dampens the increase in US aggregate demand and, therefore, US imports from the EA - then US spillovers to the EA, while still expansionary, as in the case of a slower normalization of the monetary policy stance, are more modest.

## Fiscal Policy and Budget Management

## Fading Ricardian Equivalence in Ageing Japan (2016)

Ikuo Saito - International Monetary Fund

Abstract: Japan seems to be turning less Ricardian, a trend set to continue. First, the discount wedge seems to have risen, suggesting that consumers have become more myopic. Second, some evidence points to the possibility that an increasing number of households are liquidity constrained. If these developments continue, the impact of fiscal policy on the economy will gradually rise. While this will facilitate using fiscal policy to manage the economic cycle, it also calls for starting fiscal consolidation soon and in a gradual and steady manner, given the unsustainable public debt and the likely increasing challenges in funding the government's rising domestically.

### **<u>Debt Stability Under Entitlement</u>** <u>Spending</u> (2016)

Floriana Cerniglia; Enzo Dia; Andrew J. Hughes Hallett - University of Milan, Bicocca; George Mason University

Abstract: Economists have traditionally used a simple rule that restricts primary deficits to less than a threshold given by the interest rate growth rate differential and existing debt level to judge fiscal sustainability. This rule derives from a single period application of the government's budget constraint. It does not allow for the predictable dynamic effects of spending liabilities, such as entitlement spending. In this paper, the authors derive the equivalent dynamic rule for this case. It still depends on the interest growth rate differential, but now includes a restriction on spending growth in relation to income growth. Several new results emerge. Debt remains stable; but the rate of convergence to stability varies with different parameters. And the growth in spending has to be less than a damping factor that controls convergence. This puts a limit on spending growth. To penalize the use of unpopular taxes further limits debt and the incentive to use debt finance.

Does it Pay to Fulfill the Maastricht
Convergence Criteria? Reflections on
the Public Debt and Growth Nexus for
Selected European Economies (2016)
Bettina Bökemeier; Christiane Clemens - Bielefeld
University

**Abstract:** This paper empirically studies whether it pays off (in terms of economic growth) to fulfill the convergence criteria on the public budget and participation in the Eurozone. The analysis is based on data of European economies with a special focus on twelve Eurozone members and a control group of six non-Euro countries for the years from 1970 to 2014. The results show that growth is higher if the debt to GDP ratio is below 60% compared to values above it. Moreover, a comparison with European economies outside the Euro-zone shows higher growth values for Euro-members than for the control group. Regression estimations reveal a negative relationship between the two variables for the Euro-group. For the control group the relationship is not statistically significant.

## Fiscal Competition and Public Debt (2016)

Eckhard Janeba; Maximilian Todtenhaupt - University of Mannheim; Centre for European Economic Research (ZEW)

Abstract: The implications of hiah indebtedness for strategic tax setting in internationally integrated capital markets have found little attention so far. The authors analyze when and how changes in initial debt levels affect the distribution of economic activity across space. When public borrowing is constrained, a rise in a country's initial debt level lowers investment in public infrastructure and makes tax setting more aggressive in that country, while the opposite occurs elsewhere. On net a country with higher initial debt becomes a less attractive location. Our model is consistent with the observation that highly indebted countries have decreased corporate tax rates over-proportionally. It sheds light on proposals to devolve taxing power to lower levels of governments which differ in initial debt levels.

### **Subnational Bond Markets**

### <u>Subnational debt management</u> <u>performance assessment (DeMPA)</u> <u>methodology</u> (2016)

World Bank Group

Abstract: Subnational debt levels in developing countries are becoming increasingly significant as central governments continue to decentralize responsibilities, revenue-raising authority, and borrowing rights to subnational governments1 (SNGs). The trend began in the 1990s and is now prevalent in developing countries with both federal and unitary political systems. The World Bank, in collaboration with other partners, has developed a global knowledge program on subnational fiscal reform and debt management. The program aims to strengthen developing countries' institutional to maintain subnational sustainability and prudent debt management alongside a stable macroeconomic framework; effective infrastructure finance to support growth; and capital development. A key component of this global knowledge program is the application of the Debt Management Performance Assessment (DeMPA) methodology for SNGs. [...]

## Regional Budgets: Debt Reductions Amid Austerity (2016)

Alexander Deryugin - Russian Presidential Academy of National Economy and Public Administration (RANEPA)

**Abstract:** In May–June 2016, there was an insignificant growth of regional revenues together with restraint of spending growth, which resulted in contraction of regions' public debt. Moreover, tight commercial loans were partially replaced by the budget loans. In the meantime, overall low income growth rates commenced since the turn of the year and restrictions on borrowings will not allow regions to achieve positive growth rates of budget spending in real terms and, thus, depart from the austerity policy.

### **Best Practices Publications**

## Leading practices for raising, managing, retiring and trading public debt (2016) [Downloadable]

Hans J. Blommestein - Vivid Economics, London, UK

**Abstract:** Recent reviews of possible shortcomings in existing international leading practices for raising, managing, retiring and trading public debt (such as those promulgated by the IMF, World Bank, OECD and UNCTAD) were in particular motivated by the (potential) impact of the huge borrowing challenges all over the world in the wake of the global crisis, leading to very high government debt to GDP

ratios as well as a strong rise in the issuance of contingent liabilities by many governments.[...]

## Public Debt in Macroeconomic Analysis

## 'Monstrous Moral Hybrids' and the Corrupting Quality of Public Debt (2016)

Giuseppe Eusepi; Richard E. Wagner - Sapienza University of Rome; George Mason University

**Abstract:** This is the penultimate version of the last of six chapters in a book titled Public Debt: An Illusion of Democratic Political Economy. This essay explores how public debt is a troubling practice for republican and democratic regimes because of its ability to corrupt the language and practice of political economy. For instance, the idea of contract is a perfectly good and sensible concept to apply to the private ordering of economic interaction. When that term is extended to public ordering outside the hypothetical construction of a cooperative state, it becomes a piece of ideology that obscures the role of public debt in promoting the interests of politically dominant groups within society.

### **Credit, commodities and currencies** (2016)

Jaime Caruana - Bank for International Settlements

Abstract: In December, the BIS highlighted the "uneasy calm" in financial markets in its Quarterly Review. As author entered 2016, the uneasy calm gave way to quite a turbulent start to the year in the financial markets. The global economy now finds itself at the centre of three major economic developments. The first is disappointing growth and downward revisions of projections, especially in emerging economies; the second is the large shifts in exchange rates, again especially for emerging market currencies against the US dollar; and the third is the sharp fall in commodity prices, hitting a number of commodity-exporting countries particularly hard, but at the same time providing a positive dividend to other economies. These three developments may appear unconnected at first sight. Indeed, there has been a tendency in recent commentaries on the global economy to see them as exogenous "shocks" that have come out of the blue, and as external "headwinds" buffeting the domestic economy against which domestic monetary and fiscal policy have to lean. However, when we take a step back and take in the larger picture, it becomes clear that these developments are connected; they share common factors. Rather than being separate exogenous "shocks", they are manifestations of a major realignment of economic and financial forces associated with the long-anticipated shift of global monetary forces. As such, recent developments are a part of a longer movie, which requires a longerterm, global perspective to spot the vulnerabilities facing financial markets and the global economy. Author would like to explore some aspects of this long-term perspective that emphasise commonalities, in a stylised and therefore oversimplified way [...]

# Europe's regulatory treatment of banks' sovereign exposures - how a flawed framework was put to use in the Irish financial crisis (2016)

Lars Frisell - Advisor at Central Bank of Ireland

Abstract: Shortly after the default of Lehman Brothers in 2008 several Irish banks faced acute funding problems. In order to avoid a systemic crisis the Irish government extended a wide-ranging guarantee to its banks. As credit losses mounted in tandem with deteriorating economic conditions, the solvency of the Irish State itself became threatened and eventually compelled Ireland to enter an EU-IMF Programme of Assistance. This paper discusses alternatives available to European regarding policymakers regulatory the treatment of banks' sovereign exposures in light of the Irish crisis. Of the various reform options, strict exposure limits seems to be the only regulation that would have materially affected Ireland's crisis management. However, it is doubtful whether consensus on reform can be achieved.[...]

### Bank exposures and sovereign stress transmission (2016)

Carlo Altavilla, Marco Pagano, Saverio Simonelli -European Central Bank; Università di Napoli Federico

Abstract: Using novel monthly data for 226 euro-area banks from 2007 to 2015, the authors investigate the determinants changes in banks' sovereign exposures and their effects during and after the euro crisis. First, the publicly owned, recently bailed out and less strongly capitalized banks reacted to sovereign stress by increasing their domestic sovereign holdings more than other banks, suggesting that their choices were affected both by moral suasion and by yield-seeking. Second, their exposures significantly amplified the transmission of risk from the sovereign and its impact on lending. This amplification of the impact on lending does not appear to arise from spurious correlation or reverse causality.

### Sovereign Risk, Currency Risk, and Corporate Balance Sheets (2016)

Wenxin Du; Jesse Schreger - Federal Reserve Board; Harvard Business School

**Abstract:** Nominal debt provides consumptionsmoothing benefits if it can be inflated away

during recessions. However, the authors document empirically that countries with more countercyclical inflation, where nominal debt provides better consumption smoothing, issue more foreign-currency debt. The authors propose that monetary policy credibility explains the currency composition of sovereign debt and nominal bond risks in the presence of risk-averse investors. In our model, low inflate credibility governments recessions, generating excessively countercyclical inflation in addition to the standard inflationary bias. With countercyclical inflation, investors require risk premia on nominal debt, making nominal debt issuance costly for low credibility governments. The authors provide empirical support for this mechanism, showing that countries with higher nominal bond-stock betas have significantly larger nominal bond risk premia and borrow less in local currency.

## **Highlights of global financial flows** (2016)

Bank for International Settlements - BIS

**Abstract:** The BIS, in cooperation with central banks and monetary authorities worldwide, compiles and disseminates data on activity in international financial markets. It uses these data to compile indicators of global liquidity conditions and early warning indicators of financial crisis risks. This chapter analyses recent trends in these indicators. It also summarises the latest data for international banking markets, available up to March 2016, and for international debt securities, available up to June 2016.

## How much income is used for debt payments? A new database for debt service ratios (2016)

Mathias Drehmann, Anamaria Illes, Mikael Juselius and Marjorie Santos – BIS

**Abstract:** Debt service ratios (DSRs) provide important information about the interactions between debt and the real economy, as they measure the amount of income used for interest payments and amortisations. Given this pivotal role, the BIS has started to produce and release aggregate DSRs for the total private non-financial sector for 32 countries from 1999 onwards. For the majority of countries, DSRs for the household and the non-financial corporate sectors are also available. This article explains the key concepts underlying the compilation of the new series and it shows that the DSRs are meaningful, even when derived from a relatively sparse set of aggregate data. A brief look at the evolution of DSRs in recent years highlights that they allow for a more comprehensive assessment of credit burdens than the credit-to-income ratio or simple measures of interest payments relative to income.

Issues faced by emerging market economies in the evolving international monetary and financial system: what has the global financial crisis revealed? (2016)

Luiz A Pereira da Silva - Deputy General Manager - Ris

**Abstract:** The tale of the Global Financial Crisis (GFC) can be related, in part, to a lack of local global discipline that a domestic macroeconomic framework and an international monetary and financial system (IMFS) are supposed to mutually contribute to enforcing. Both should send warnings of and alert to excessive imbalances and price risk more adequately, whether sovereign or private. They have proved insufficient. In addition, the GFC, and especially the post-Lehman unconventional monetary policies (UMP) in key Advanced Economies (AEs) added more complex challenges to the macro framework that Emerging Markets Economies (EMEs) were used to implementing under the rules of Bretton Woods 2 (BW2; see Dooley et al (2004)): managing the "impossible trinity" using their Inflation Targeting (IT) framework became more complicated due to large movements of capital and more volatility in asset prices including the exchange rate (ER).[...]

## Optimal Public Debt Consolidation with Distributional Conflicts (2016)

Roberta Cardani; Lorenzo Menna; Patrizio Tirelli -Università degli Studi di Milano-Bicocca

**Abstract:** In this paper, the authors adopt a Ramsey-optimal approach to the identification of debt reduction strategies, that is, the optimal policy mix for labor and capital income taxes, public expenditures and inflation designed to achieve an exogenous debt reduction path. Our model accounts for monopoly profits, limited asset market participation and asset holders' infrequent optimization of their portfolio composition between money holdings and other financial assets. The optimal policy envisages persistent reductions in public consumption and increases in taxes and inflation. Distributional conflicts arise between asset owners and the rest of the population. When asset holders interests are relatively less important in the planner's objective function, labor income taxes are drastically reduced whereas capital income taxes and inflation are increased. Just in this the consolidation has short term expansionary effects.

## The Burden of Public Debt in Neoclassical Growth Models: Do We Have to Worry About it? (2016)

István Dedák; Ákos Dombi - Eszterházy Károly University; Budapest University of Technology and Economics

Abstract: This paper investigates crowding-out effect of public debt and the related loss in the long-run output in the framework of neoclassical growth models. To accomplish this task, the authors incorporate government sector into three basic neoclassical models, which differ only in their assumptions about the consumption behavior of households. First, the authors consider the crowding-out effect of public debt in the Ramsey-Cass-Koopmans (RCK) model with the dynamic optimization and altruistic intergenerational links of households. Then, the authors drop the assumption intergenerational links in the Blanchard (1985) model and later the assumption of dynamic optimization as well in the Solow model. Our results show that, contrary to the RCK model, public debt reduces long-run output in the Blanchard model and the Solow model, although to a different extent: the crowding-out effect is marginal in the former, whereas it can be very large in the latter depending on the households' saving rate and the population growth rate. However, the authors demonstrate that under the conditions of developed countries, even the upper limit of the output loss triggered by public debt is moderate at best. This conclusion holds even if the output loss resulting from distortionary taxes is taken into account. Our main policy contribution is that according to the neoclassical growth models, the long-run burden of public debt around the current 90 percent average debt-to-GDP ratio seems to be of minor importance in the Eurozone.

## Budgeting and Public Debt within a System of Cooperative Democracy (2016)

Giuseppe Eusepi; Richard E. Wagner - Sapienza University of Rome; George Mason University

**Abstract:** This paper is the penultimate draft of the fourth of six chapters of a book titled Public Debt: An Illusion of Democratic Political Economy. This essay establishes an analytical benchmark of a democratic system in which political outcomes reflect genuine consensus among the participants. This benchmark traces to Antonio de Viti de Marco's construction of contrasting models of democratic action. The theory of a wholly cooperative democratic regime provides a benchmark against which to examine actual democratic processes and arrangements. In this respect, and looking ahead, de Viti recognized that democratic regimes were not passive reflectors of individual

preference orderings because they entailed relationships of domination-and-subordination.

## Coordinating Intergenerational Redistribution and the Repayment of Public Debt (2016)

Christoph March; Robert K. von Weizsäcker - TU Munich

**Abstract:** Is there a link between public debt and wealth inequality? Could government bondholders intra-generational use redistribution strategically to make repayment of debt politically viable? Using a two-generations game-theoretic model, the authors identify coordination and divide-andconquer as key factors. By coordinating their bond investments, the old generation may secure a majority favoring debt repayment. As a consequence, coordination mediates the impact of wealth inequality on public debt. Furthermore, ease of coordination offers another compelling reason why declining population growth fosters the accumulation of public debt. The authors test our model in a laboratory experiment and confirm the central predictions.

## Macroeconomics, Fiscal Policy, and Public Debt: Conflating Myth and Reality (2016)

Giuseppe Eusepi; Richard E. Wagner - Sapienza University of Rome; George Mason University

**Abstract:** This is the first of six chapters of the penultimate draft of a book titled Public Debt: An Illusion of Democratic Political Economy. The book's theme is an elaboration and refinement of the early 20th century orientation toward public debt that Antonio de Viti de Marco set forth. As the book's title asserts, public debt is a misnomer for a democratic scheme of political economy. To declare a democratic polity to be indebted is akin to observing a grin without a cat, to recall Dennis Robertson view of Keynes's liquidity preference theory. While the entire book develops this claim, this chapter explains how standard macro theories of various types are more myth than reality, and with the mythology obscuring the realities of the domination-subordination relationships suffuse democratic regimes. To provide an overview of the rest of the book, this essay ends with the book's Preface.

## Public Debt and Economic Growth: New Evidence of the Non-Linearity (2016)

Constant Fouopi Djiogap - University of Yaounde II

**Abstract:** The aim of this paper is to address the relationship between public debt and economic growth. The paper uses the PSTR model to a broad panel data set for 126

industrialized and developing countries over the period of 1964-2014. The authors divide the data set into four groups, namely, high income upper-middle-income countries, countries, lower middle-income and low-income countries. The authors have mainly addressed two aspects of this relationship: the threshold estimates for the whole sample, as well as for different subsamples, and some country-specific characteristics that can possibly affect the degree of sensitivity between public debt and growth. Our first-stage findings confirmed those in the literature that hold that the public debtgrowth relationship is nonlinear and our threshold estimates increase with the level of income.

## Public Debt within Systems of Monopolistic Democracy (2016)

Giuseppe Eusepi; Richard E. Wagner - Sapienza University of Rome; Richard E. Wagner

**Abstract:** This paper is the penultimate draft of the fifth of six chapters of a book titled Public Debt: An Illusion of Democratic Political Economy. This paper modifies the benchmark condition of a cooperative democracy to incorporate a realistic treatment of democracy where there exist islands of political power within a relatively passive sea of generally modest democratic participation. This essay explains that descriptions of democracy as entailing self-governance are typically mythical or ideological formulations that promote the purposes of those who work with such notions. Public debt becomes a form of shell game, the success of which depends on most people looking somewhere other than where the real action occurs, and which entails a shifting of cost from dominant to subordinate groups as covered by an ideology of self-governance.

## The Blind Side of Public Debt Spikes (2016)

Laura Jaramillo ; Carlos Mulas-Granados ; Elijah Kimani - International Monetary Fund

**Abstract:** What explains public debt spikes since the end of WWII? To answer this question, this paper identifies 179 debt spike episodes from 1945 to 2014 across advanced and developing countries. The authors find that debt spikes are not rare events and their probability increases with time. The authors then show that large public debt spikes are neither driven by high primary deficits nor by output declines but instead by sizable stockflow adjustments (SFAs). The authors also find that SFAs are poorly forecasted, which can affect debt sustainability analyses, and are associated with a higher probability of suffering non-declining debt paths in the aftermath of public debt spikes.

### The Output Costs of Hard and Soft Sovereign Default (2016)

Christoph Trebesch; Michael Zabel - University of Munich

**Abstract:** How costly are sovereign debt crises? In this paper the authors study output losses during sovereign default and debt renegotiation episodes since 1980. In contrast to previous work, the authors account for the severity of default and not only for its occurrence. Specifically, the authors distinguish between "hard" and "soft" defaults, using new data on debtor payment and negotiation behavior and on the size of haircuts towards private external creditors. The authors show

that hard defaults are associated with a much steeper drop in GDP, of up to ten percent, compared to soft defaults, and address concerns of reverse causality and omitted variable bias. The results question the standard assumption that defaults trigger fixed and lump-sum costs. Instead, our findings are consistent with models assuming proportional output costs of default.

### **Web Resources**

### **Primary Market**

#### EU bank investors split on sovereign capital charges

Fitch Ratings

Investors in EU bank bonds are divided about whether moves to change the prudential treatment of sovereign exposures would reduce systemic risk, says Fitch Ratings. its investor survey, conducted 18 May – 23 June 2016, showed that participants were evenly split on whether the introduction of capital requirements on sovereign exposures would reduce or increase systemic risk. A smaller number anticipate only limited impact.

#### Sovereign gold bonds scheme

NSE national stock exchange of India Ltd

The Fifth tranche of Sovereign Gold Bond scheme is open from 1st to 9th September, 2016. Sovereign Gold Bonds are Government securities denominated in multiples of gram(s) of gold. They are substitute for investment in physical gold. To buy the bond, investor has to pay the issue price in cash to an authorised SEBI Broker. On redemption, cash is deposited into the investor's registered bank account. These Bonds are issued by the Reserve Bank of India on behalf of the Government of India and are traded on stock exchange.

### The explosion in Quasi-Sovereign Bond issuance is making analysts queasy

Tracy Alloway - Bloomberg

Sort-of sovereign bonds outstanding have outstripped emerging market government debt. At some \$600 billion, debt sold by state-supported companies in emerging markets ranging from China to Oman has surpassed the amount of emerging market government debt outstanding, according to a new note from Bank of America Merrill Lynch.[...]

### Green sovereign bonds: tactical moves on an emerging market

ParisTech Review

We already knew the greenback, here come the green bonds. This emerging security, whose yearly issuance still represents only 1% of the global bonds market, has the wind in its sails. Used primarily by institutions, large companies and local authorities, it has just entered the reference segment: sovereign bonds. [...]

### **Secondary Market**

### Emta Bulletin - 3rd Quarter 2016 - Volume 2016: No. 3

Emerging Markets Traders Association – EMTA

Contents: EMTA Annual Meeting Set for December 1, 2016; FX Currency & Derivatives Completed: Ruble FX Benchmark Transition; A Surprise New Benchmark for Malaysian Ringgit FX Transactions; Restatement of Annex A; Bond & Warrant Trading & Settlement 2016 Holiday Schedule.

### A deeper look at liquidity conditions in the treasury market

James Clark Gabriel Mann - Secretary for Federal Finance U.S. Treasury Department

Like nearly every other financial market, the Treasury market is in a state of transition. The structure of the Treasury market has evolved significantly over the past two decades, as described in the Joint Staff Report. Advancements in technology, and the associated growth in high-speed electronic trading, have contributed to changes in intermediation and the provision of liquidity in the Treasury market. Most notably, principal trading firms (PTFs) are increasingly prevalent and now account for the majority of trading and standing quotes in the

order book in both futures and the inter-dealer cash market. By contrast, bank dealers still account for a majority of secondary cash market trading overall, but they comprise well under half of the trading and quoting activity in the inter-dealer cash market. This post starts with a review of several traditional measures used to assess the state of liquidity in the Treasury market [...]

#### Long term government bond yields

Eurostat

Long term government bond yields are calculated as monthly averages (non-seasonally adjusted data). They refer to central government bond yields on the secondary market, gross of tax, with a residual maturity of around 10 years. Data are presented in raw form. Source: European Central Bank (ECB)

#### **Reactive carry trading**

Howard L. Simons - Rosewood Trading

While reflexive actions such as blinking or flinching can serve us well physically for the very reliable reason that something moving toward your eye can be dangerous, reflexive responses in markets often become self-fulfilling prophecies. These learned responses generally are born out of traumatic events in markets such as the 1987 stock market crash and the massive flight into Treasury bonds immediately following. These responses have become especially acute and distressingly more common in recent years as central banks undertake competitive devaluations of their currencies, add and remove quantitative easing just to see what is going to happen and governments become increasingly dependent on commercial banks holding dodgy sovereign debt blessed with the illusion it is risk-free. Add diminished liquidity to the mix and we have markets bouncing like a ping-pong ball in a risk-on/risk-off (RORO) world.[...]

### **Repo Market**

### **Examining changes in the Treasury Repo Market after the financial crisis**

James Clark Tom Katzenbach - U.S. Department of the Treasury

The Treasury repurchase (repo) market helps facilitate trading in the world's deepest, most liquid government securities market. Repos involve a party borrowing cash from another while posting Treasury securities as collateral and paying interest. Borrowing in the repo market takes place most commonly overnight, although a repo's term could be for any mutually agreed upon time, such as one week or one month. This post explores some of the ways in which the Treasury repo market, both in the tri-party and the bilateral segments, has changed over the past several years, including: (1) the volume of market activity, (2) the relative price of repo, and (3) direct repo trading without a dealer intermediary. Although this market has undergone a variety of changes since the financial crisis, the Treasury repo market continues to function well. [...]

#### **Multilateral Debt**

### 20 countries repaying the highest amounts of multilateral debt

WorldAtlas

Developing countries from around the world who owe debts to the World Bank and the International Monetary Fund have the legal obligation to repay these multilateral debts. Some of these debts have additional obligations from regional development banks and other intergovernmental and multilateral agencies. Debt service repayments include both the primary debt repayments and the interest payments of the particular year stipulated. China and India each repaid more than \$3 billion annually to multilateral and intergovernmental agencies in the most recent year of data compiled. The following figures are in USD of multilateral debt service payments as of 2014 from the World Bank's International Debt Statistics. [...]

### **Debt relief - overview**

The World Bank

The Heavily Indebted Poor Countries (HIPC) Initiative and the Multilateral Debt Relief Initiative (MDRI) are comprehensive approaches to reducing the external public debt of qualifying countries. Thirty-Six of the 39 countries eligible for debt relief under HIPC and MDRI have graduated from the programs. The Debt Reduction Facility (DRF) for IDA-only countries is an instrument that provides incentive for commercial creditors to participate in the debt relief initiative.[...]

### Debt relief under the heavily indebted poor countries (HIPC) initiative

IMF International Monetary Fund

The joint IMF-World Bank comprehensive approach to debt reduction is designed to ensure that no poor country faces a debt burden it cannot manage. To date, debt reduction packages under the HIPC Initiative have been approved for 36 countries, 30 of them in Africa, providing \$76 billion in debt-service relief over time. Three additional countries are eligible for HIPC Initiative assistance. [...]

### We can tackle climate change and national debt together

#### Deodat Maharaj - The Commonwealth

For many Caribbean leaders, the long walk down a village road after a violent storm to witness first-hand the devastation to infrastructure and to people's lives is a stark reality they are forced to face almost every year. Equally challenging is finding resources from tight budgets to keep rebuilding the same bridge, the same road, the same school; or worrying about how to relocate entire communities that may disappear under the steady rise of the seas. The Commonwealth's idea is an initiative to swap national debt for climate change action. This Multilateral Debt Swap for Climate Action proposal will involve an agreement between participating climate finance providers and debtor countries, to reduce their public debt in exchange for a commitment to use debt repayments to finance local climate change projects. [...]

### **Developing Domestic Bond Markets**

#### **Developing domestic capital markets**

Inter-agency task force on financing for development - United Nations

Domestic capital markets have an important role to play in mobilizing private capital to finance domestic development. By giving companies the ability to borrow domestically in local currencies, domestic capital markets can also reduce currency mismatches for borrowers, thus reducing systemic risks. At the same time, government bond markets create tools to manage macroeconomic and fiscal risk and provide important pricing benchmarks. However, the Addis Agenda also emphasizes that capital markets can increase risks in the real economy, for example, due to market herding and boom and bust cycles. The Addis Agenda stresses the importance of regulations aimed at reducing volatility and incentivizing longer term investment [...]

#### **Institutional Framework**

#### Vietnam: Building a Framework for Mobilizing Development

World Bank

Vietnam is revising its public debt law with the support of the WB Treasury GDRM Program to deliver a robust legal framework that supports efficient debt management and provides a foundation for investment.

### **Organization of Debt Management Offices**

#### **Best-in-Class: Serbias Solution for Improved Debt Management**

World Bank

Serbia partnered with WB Treasury GDRM Program to reorganize and train staff, improve coordination, consolidate borrowing functions for a best-in-class debt management operation ready to support the government in weathering financial shocks.

### **Accounting, Transparency and Accountability**

### **BIS Statistical Bulletin - September 2016**

Bank for International Settlements - BIS

The statistics published by the BIS are a unique source of information about the structure of and activity in the global financial system. They are compiled in cooperation with central banks and other national authorities and are designed to inform analysis of financial stability, international monetary spillovers and global liquidity.[...]

### **International Debt Statistics 2016**

The World Bank

International Debt Statistics (IDS) 2016 (formerly Global Development Finance) provides statistical tables showing the external debt of 125 developing countries that report public and publicly guaranteed external debt to the World Bank's Debtor Reporting System (DRS). [...]

### **DMOs Programmes and Reports**

#### Cyprus Quarterly Debt Bulletin No.22: 2nd Quarter 2016

Ciprus Ministry of Finance - Public Debt Management Office

Review of operations for the 2nd Quarter of 2016. New issues: - The weighted average yield in the 13-week Treasury Bill June auction increased to 0,89% compared to the March auction which was 0,58%. The bid-to-cover ratio in the June auction marginally decreased to 1,1 as compared to 1,2 of the March auction. In total the outstanding stock of Treasury Bills for the second quarter of 2016 declined by €20 million reaching €342 million compared to the first quarter of 2016. - The issuance of 6-year retail bonds continued with sales of €68 million over the quarter. Debt redemptions: In June domestic bonds totaling €34 million matured. Redemptions of short term debt during the quarter reached €362 million. Additionally loan amortisations for the second quarter of 2016 amounted to €38 million.

### **Debt Management Report 2016**

Ministry of Finance Japan

Content: Part I, headed "F Y 2 0 1 6 Debt Management Policies," discusses the recent trends in the JGB market, as well as various latest policies, specifically in relation to the JGB Issuance Plan for this fiscal year. Particularly, the part has three new columns to describe "Quantitative and qualitative Monetary Easing with a Negative Interest Rate," "Widening of Negative Basis Swap Spread" and "Approach on Average Maturity of JGBs (Flow and Stock Bases)." Part II, headed "Framework," concerns itself with the fundamental mechanism of public debts and debt management policy in general. Lastly, Part III, the "Appendices," lists all materials that did not fit into the previous part; this section should be used with reference to Part II "Framework." [...]

#### Russia's public debt management in 2015-2016: challenges and opportunities

Russian Federation's Ministry of Finance

Managing Russian government debt in 2015: challenges, responses and results. Managing government debt in 2016: What is next?

### **Coordination with Other Policies and Operations**

### Fiscal monitor. Acting now, acting together

IMF International Monetary Fund

The weakening of the global recovery and concerns about the ability of policymakers to provide an adequate and swift policy response have clouded economic prospects. As a result, risks to the global economy (April 2016 World Economic Outlook) and financial systems (April 2016 Global Financial Stability Report) have substantially increased. In this difficult environment, fiscal policies must be prepared to respond promptly to support growth and reduce vulnerabilities. In emerging market and developing economies, tighter and more volatile global financial conditions could significantly increase the interest bill at a time when gross financing needs are rising.[...]

#### **Best Practices Publications**

### United Nations General Assembly adopts basic principles on sovereign debt restructuring

Unctad.org

A draft resolution on "Basic Principles on Sovereign Debt Restructuring Processes" (A/69/L.84) was adopted by the General Assembly of the United Nations in New York at its Sixty-Ninth Session on 10 September 2015, with 136 member States voting for, six against and 41 abstentions. UNCTAD, with over 40 years of experience on debt management and restructuring issues, served as secretariat for the negotiations among Members on the resolution.[...]

### **Public Debt in Macroeconomic Analysis**

### **Understanding the Impact of Negative Rates on Financial Institutions**

Capital Markets Monitor - September 2016

Negative interest rates—reflecting a range of factors including policy actions, market expectations of sustained slow growth and inflation, the shortage of high-quality liquid assets amid ongoing quantitative easing, and regulatory changes—present a challenging environment for financial institutions.

#### Federal budget in pictures

The Heritage Foundation

In 2016 the national debt exceeded \$19 trillion. Now, more than ever it's critical that citizens understand the nation's spending, taxes and debt. These powerful charts enable all Americans to better understand the federal budget and identify important areas of [...].

### **Public debt in Italy**

FocusEcononomics - Economic Forecasts from the World's Leading Economists

Italy's public debt measures how much the government of Italy owes to all public and private lenders. The Bank of Italy publishes monthly data for Italian public debt. FocusEconomics regularly publishes news on Italian public debt. The table below shows public debt data for Italy as a percentage of GDP. A more complete assessment of Italy's public debt can be found below [...]

### **National debt**

Just Facts

Comprehensive and meticulously documented facts about the U.S.A. national debt. Learning about various measures of the national debt, contributing factors, consequences, and more. [...]

### Regulations on banks' sovereign bond holdings: assessing the impact of potential changes

Victor Echevarria Icaza Francisco J. Valero López - Afi Independent consulting and training in economics, finance and technology

The increase in banks' public debt holdings has raised concerns from regulators over the current treatment of such holdings on banks' balance sheets. Potential changes to existing risk weightings and the introduction of limits on holdings could bring both positive and negative implications for sovereigns and banks and should be accompanied by further progress on banking union. [...]

### Treasury data reveals federal shortfall of \$614,000 per U.S. household

Just Fact Daily

Newly published data from the U.S. Treasury shows that the federal government has amassed \$76.4 trillion in debts, liabilities, and unfunded Social Security and Medicare obligations. This amounts to \$614,000 for every household in the U.S., a burden that equals 90% of the nation's private wealth, including the combined value of every American's assets in real estate, corporate stocks, small businesses, bonds, savings accounts, cash, and personal goods like automobiles and furniture [...]

#### **BIS Quarterly Review, September 2016**

Bank for International Settlements - BIS

Central banks reasserted their sway over financial markets in recent months, after two quarters punctuated by bouts of sharp volatility. Markets proved resilient to a number of potentially disruptive political developments. Nevertheless, questions lingered as to whether the configuration of asset prices accurately reflected the underlying risks. With global growth showing moderate but persistent signs of strengthening and supportive monetary policy, investors' risk appetite seemed to return during the period under review. As a result, volatility in financial markets subsided, commodity prices edged higher, corporate credit spreads narrowed, stock markets rallied and portfolio flows to emerging market economies (EMEs) resumed.[...]

### **Sovereign Default and Economic Performance in Oil-Producing Economies**

Maria A. Arias; Paulina Restrepo-Echavarria - Senior Research Associate; Economist

Swings in oil prices affect many decisions of oil-producing countries, such as how much oil to pump and how much to borrow or lend. These decisions in turn affect their rate of growth and the likelihood they will pay their debts. [...]

### **Network News**

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

### **Annual Reports & Guidelines**

go to the "Information Corner" on www.publicdebtnet.org

### **Events and Courses**

### **Newly uploaded**

17 October 2016; United Kingdom Treasury Management

7 November 2016; United Arab Emirates Results-Based Monitoring and Evaluation

8 – 9 November 2016; The Spencer Hotel, Dublin Understanding Treasury Management 14 November – 16 December 2016; Web Based Effective Public Debt Management (2016)

15 November 2016; Singapore 11th Asian bond markets summit

15 November 2016; One Bishops Square - London Derivatives Disputes - Litigating and arbitrating the ISDA Master Agreements

- 16 17 November 2016; London **Advanced Operational Risk Management**
- 17 November 2016; Kuala Lumpur Measuring Business Cycle Fluctuations: An **Alternative Precursor to Economic Crises**
- 18 November 2016; Global Financial Conference **Center - New York**
- An Update on CCP Resilience, Recovery and Resolution
- 21 November 2016; Hotel Four Seasons, Mumbai National conference Bond market: India's new financial order
- 29 November 2016; Four Seasons Hotel Mumbai Understanding the ISDA Master Agreements -Including the Buy-side Perspective
- 29 November 2 December 2016; Kuala Lumpur, Malaysia
- **Basel III: Implementing the New Global**
- 29 November 2 December 2016; Kuala Lumpur, Malaysia
- Business Continuity Planning and Operational **Risk Management for Central Banks**
- 30 November 2016; Four Seasons Hotel Mumbai **Understanding Collateral Arrangements and the** 2016 ISDA Variation Margin and Initial Margin **Credit Support Documents**

- 30 November 1 December 2016; Cape Town, **South Africa**
- 14th African capital markets conference
- 1 2 December 2016; ADBI office, Tokyo **ADBI annual conference 2016: the Implications of** ultra-low and negative interest rates for Asia
- 6 December 2016; Riyadh, Saudi Arabia CMA-World Bank International Conference: 'Sukuk Markets, Challenges & Opportunities'
- 5 7 December 2016; ART Rotana Hotel, Kingdom of Bahrain
- 23rd World Islamic banking conference
- 9 December 2016; One Bishops Square London MIFID II/Dodd-Frank: Approaching New Terrain -Trade Execution and Harmonization of Regulatory **Regimes**
- 14 December 2016; Yas Viceroy Abu Dhabi **Sovereign Investor Forum**
- 15 16 December 2016; Abidjan Ivory Coast Save the date AFMI annual 5th workshop
- 6-7 April 2017; NUS Business School Singapore Public Debt Markets, Government Expenditures and Fiscal Prudence
- 20 21 July 2017; London The global borrowers and bond investors forum

### **Previously signaled**

1 January - 31 December 2016; Several regional sites and online courses IMF International Monetary Fund Institute for **Capacity Development 2016 Training Catalog** 

### **Communication Corner**

Since 2002, the Italian Treasury - Public Debt Office has been organizing study visits and meetings for foreign delegations coming from emerging and less developed countries, aimed at sharing the Italian experience in sovereign debt management. For further info, please contact Publicdebtnet.dt@dt.tesoro.it

### REMINDER...

#### e-LEARNING COURSE MATERIALS

The PDM network website hosts materials from the e-learning course "ADVANCED RISK MANAGEMENT" organized by UNITAR thanks to the authorization of the author, Mr. Enrique Cosio-Pascal.

The four modules course is downloadable from the Reserved Area of the website in the Section "Learning Area". This course is oriented toward those economists and financial specialists that would be dealing with financial risk management issues.

### Some figures

As at 23<sup>rd</sup> November 2016, the number of total resources of the PDM Network website is 31,668 (of which 24,382 news, 3,443 documents and 2,953 web resources). This newsletter is sent to 625 Subscribers from emerging and advanced countries.

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