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PAPER ABSTRACTS

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THURSDAY, SEPTEMBER 10TH

9:30 SESSION 1 - FISCAL POLICY AND DEBT SUSTAINABILITY

From Stocks to Flows: A Historical Reassessment of Debt Sustainability

Barry Eichengreen, University of California, Berkeley; Maxime Menuet, Université Côte d'Azur; Gregory Donnat, University Côte d'Azur

We revisit fiscal sustainability through the lens of the government's budget constraint. What constrains fiscal policy is not the stock of outstanding liabilities per se, but the fiscal cost of servicing debt. Using two centuries of U.S. fiscal data (1800–2023) and a long-run panel of advanced economies, we show that primary surpluses are systematically more closely associated with debt-service burdens, while debt ratios lose explanatory power when debt service is taken into account. Fiscal responses intensify when financing conditions deteriorate, specifically when the interest-growth differential is positive. We rationalize these findings using a simple flow-based framework in which debt stabilization depends on the responsiveness of fiscal surpluses to financing pressures. The results suggest that fiscal sustainability depends less on debt thresholds than on financing regimes and governments' ability to absorb debt-service burdens

The Cost of Credibility: Fiscal Rules and Recession Risk During Consolidations

Leandro Andrian, Inter-American Development Bank; Cesar M. Rodriguez, Portland State University; Oscar M. Valencia, Inter-American Development Bank

In this paper, we argue that fiscal rules amplify recession risks during fiscal adjustments, but only under financial stress. We use a panel of about 100 countries from 1990 to 2023. Fiscal consolidations under stringent fiscal rule frameworks raise the probability of recession by 7.9 percentage points during high-spread episodes, four times the effect under more flexible arrangements (2.0 percentage points). Survival analysis shows that rules push higher-income emerging economies toward consolidation precisely in these high-stress periods. The amplification works through policy composition. Stringent rules prevent substitution toward less costly instruments, and governments are left reliant on spending cuts at precisely the moment when such cuts do the most damage. This elevated recession risk, local projections show, persists for 3-4 years, with no evidence of reversal. We rationalize these patterns with a simple theoretical framework. Fiscal rules are not counterproductive. The amplification we document reflects a distinction between rule quality and crisis-period optimality, particularly in first-generation rules that dominate our sample. For emerging economies exposed to sudden stops and volatile capital flows, our results imply that rule design matters as much as rule adoption, and escape clauses are not optional extras.

Fiscal Guardrails against Rising Debt and Looming Spending Pressures

Julien Acalin, IMF; Virginia Alonso, IMF; Clara Arroyo, IMF; W. Raphael Lam, IMF; Leonardo Martinez, IMF; Anh Dinh Minh Nguyen, IMF; Francisco Roch, IMF; Galen Sher, IMF; Alexandra Solovyeva, IMF

Many countries have adopted fiscal rules to foster fiscal discipline, but compliance has been mixed. Recent policy shifts and heightened policy uncertainty further intensify spending pressures and persistent debt challenges, underscoring the need for stronger fiscal guardrails. Results from a major update of IMF databases on fiscal rules and councils suggest that two-thirds of countries have revised their fiscal rules but deficits and debt continue to be well above countries' rule limits. Robust correction mechanisms, with predefined timelines and measures, could better guide the return to rule limits and reduce sovereign spreads. In addition, supportive fiscal institutions, such as independent fiscal councils, reinforce compliance. Finally, revisions to fiscal rules to meet spending pressures should be carefully designed to preserve their integrity and transparency.

Determinants of Spreads on European Supranational Debt: Towards a Genuine European Safe Asset?

Kalin Anev Janse, ESM, University of Amsterdam; Roel Beetsma, University of Amsterdam; Andy Li, University of Amsterdam

A genuine European safe asset would be an essential element of a well-functioning EU capital market needed to support EU growth. To shed light on a feasible path towards such an asset, this paper explores the determinants of yield spreads (relative to German bunds) on sovereign and supranational debt, the latter being the debt issued by the ESM, EIB and the EU itself. We deploy proprietary data from the European System of Central Banks (ESCB) on holdings of individual issuers for monetary policy purposes. We discipline the empirical analysis with a simple portfolio balance model, allowing for default and liquidity risk to affect the pay-off distribution. The empirical effects of outstanding debt (the supply-side), ESCB holdings (the demand-side), bond market and asset-specific volatility are quite well in line with the predictions derived from our portfolio balance model. Increases in ESCB holdings of supranational and high-rated sovereign debt push up their spreads, suggesting that the liquidity effect from a reduced free float dominates the reduced default risk. Further, the findings indicate that supranational debt competes with high-rated sovereign debt in investor portfolios, suggesting that the path towards a genuine European safe asset will at best be a slow one resulting from supranational debt gradually expanding its share in investor portfolios. The creation of a genuine European safe asset could be catalyzed through an increase in EU-level investments financed with an expansion of EU debt and backed by an enlarged EU budget with EU own resources.

13:30 SESSION 2A - SOVEREIGN DEBT RESTRUCTURING: CREDITORS, COORDINATION AND OFFICIAL SUPPORT

A Scandal in Bohemia – The Perils of Incestuous Sovereign Repos

Lee C. Buchheit, University of Edinburgh; Mitu Gulati, University of Virginia

Desperate times invite desperate measures. Sovereign borrowers facing liquidity challenges or looming debt crises are exquisitely vulnerable to Hail Mary transaction proposals that promise to delay the commencement of a debt restructuring or at least obscure the true state of the country's financial predicament.1 The problem with these financial transactions -- often launched on the cusp of a sovereign debt crisis -- is that while they may bring short-term benefits, they often do so at ruinous cost and risk. In this article, we examine an increasingly popular variant of the Hail Mary transaction, the sovereign repo.

The Macroeconomic Implications of Creditor Coordination in Sovereign Defaults*

Idoia Aguirre, Universidad Pública de Navarra; Gong Cheng, BIS; Aitor Erce, Universidad Pública de Navarra

Using readily available datasets on sovereign debt restructuring with major external creditors, we construct sequences of debt relief in which different creditors can take on leading or following roles in the provision of debt relief to sovereign debtors- a framework we refer to as debt relief games. We document systematic differences depending on the type of creditor that leads the game. By distinguishing between cases of coordinated and uncoordinated debt relief, we demonstrate that creditor coordination pays. Countries that receive coordinated debt relief from external creditors experience immediate improvements in economic growth and achieve superior short-term debt outcomes compared to those receiving uncoordinated unilateral relief. To further analyze creditor contributions to coordinated debt relief, we compute the Shapley Values of our debt relief games. Our findings show distinct patterns in creditor contributions to coordinated debt relief over time. Since the 2000s, China has emerged as key player in creditor coordination, frequently assuming both roles. However, its contributions tend to be more substantial when it provisions debt relief alone. In contrast, the Paris Club has significantly diminished its role in coordinated debt relief over the past decades. Notably, in the last decades the private sector has increased its participation in debt relief efforts. Moreover, our Shapley Value analysis indicates that taking a leading role in debt coordination pays little, which may discourage creditors from assuming such a position. These shifting dynamics underscore the growing challenges facing international debt relief coordination and emphasize the importance of exploring simultaneous debt restructurings.

Official Lending in Sovereign Crises

Aitor Erce, Universidad Pública de Navarra; Carlo Galli, Universidad Carlos III de Madrid; Emircan Yurdagul, Universidad Carlos III de Madrid

We study the role of IMF lending to sovereigns both during and outside debt restructuring episodes. We document that debt restructuring episodes featuring IMF involvement are prevalent, last longer, and deliver more debt relief than those without. We develop a quantitative sovereign default model with endogenous debt restructuring and IMF assistance, to match these facts and evaluate the macroeconomic and welfare implications of IMF intervention. Countries resort to the IMF when commitment to repay is more valuable than the state-contingency of private debt. A more generous IMF lowers equilibrium debt stocks but leads to more frequent and larger defaults, while the absence of IMF assistance supports higher debt levels with less frequent, milder defaults.

13:30 SESSION 2B - CLIMATE RISKS AND SOVEREIGN DEBT: VULNERABILITY AND RESILIENCE

Under Pressure: Sovereign Debt Challenges in a Warming World

Caterina Seghini, Banque de France; Stéphane Dees, Banque de France; Annabelle De Gaye, Banque de France

Climate change is already imposing significant economic costs on advanced economies, with extreme weather events disrupting supply chains, damaging infrastructure, and straining public finances. Adaptation spending is increasing but remains insufficient to ensure long-term resilience. There is a trade-off between allowing climate damages to occur, which induces economic losses and shrinks the fiscal base, or investing public funds in adaptation measures that buffer the impact of future damages but increase immediate fiscal costs. This paper explores this trade-off and contrasts it with emissions abatement strategies, which, while incurring short-term transition costs, aim to curb global warming and the associated long-term economic and financial risks. The results underscore the need for a balanced approach, integrating both adaptation and mitigation efforts, to ensure economic stability and sustainable public debt over the long run.

Kenya: Droughts and Debt. Do Climate Shocks Increase Domestic Borrowing Costs?

Alex Dryden, SOAS University of London; Yoan Raih, Finance for Development Lab; Niccolò Rescia, Global Sovereign Advisory; Ulrich Volz, SOAS University of London

This paper examines whether the relationship between climate shocks and domestic sovereign borrowing costs is stable within a single emerging-market debt market. Using monthly Kenyan data from 2000 to 2024, we estimate local projections for droughts and floods, including a distributed-lag specification designed to capture prolonged drought exposure. Benchmark estimates show that drought exposure is followed by a gradual and economically sizeable increase in Treasury bill rates. However, this response is substantially attenuated after conditioning on macro-financial conditions, is much smaller when droughts are measured using affected-population intensity, and is highly sensitive to the inclusion of individual drought episodes. Flood-onset estimates also display sizeable movements in short-term borrowing costs, but these are not reproduced by alternative measures of flood intensity. The results therefore do not support a stable average effect of climate shocks on domestic borrowing costs. Instead, they point to an episode-dependent relationship in which climate shocks can coincide with substantial financial stress, but do not generate a uniform repricing response across events. The findings highlight the importance of examining event heterogeneity and macro-financial context when assessing climate risks in domestic bond markets in Low- and Middle-Income Countries. The empirical framework developed in the paper may therefore be useful as a practical diagnostic tool for debt managers and central banks. Because it relies on a relatively small set of climate-event, domestic market, and macro-financial indicators, it can be readily applied in other economies to assess the sensitivity of domestic borrowing costs to climate shocks and to examine in greater detail the circumstances surrounding episodes of particularly pronounced financial stress.

Risk-Neutral Pricing of Climate Resilient Debt Clauses and Structures (CRDC/CRDS)*

Ulf G. Erlandsson, Anthropocene Fixed Income Institute (AFII); Jonas David, Anthropocene Fixed Income Institute (AFII)

With increasing frequency of climate-related physical risk events affecting credit quality of sovereigns, Climate Resilient Debt Clauses (CRDCs) have been suggested as a means to alleviate financial pressures from affected nations. This paper represents such clauses in risk-neutral pricing framework, using pricing models for coupon stepbonds, to determine 'fair-value' of CRDCs. A key feature of the model is that it allows a calibration of size of coupon reductions vis-a-vis expected credit deterioration in absence or presence of such reductions. We develop an open-source pricing tool to allow stakeholders to analyze potential costs and benefits of CRDCs with a large number of parameters, recognizing that assumptions around event frequency, and credit deterioration and -mitigation post-event assumptions are key in determining the value of CRDCs. We provide an empirical example, showing how Jamaica could achieved similar cash flows benefits through a Climate Resilient Debt Structure (CRDS) compared to the catastrophe bonds triggered after hurricane Melissa in 2025.

15:30 SESSION 3A - SUSTAINABLE DEBT INSTRUMENTS AND POLICY DESIGN

The Sovereign Greenium: Big Promise but Small Price Effect

Ugo Panizza, Geneva Graduate Institute; Beatrice Weder di Mauro, Geneva Graduate Institute; Shuyang Shi, Geneva Graduate Institute; Mitu Gulati, University of Virginia

This paper investigates the existence, magnitude and drivers of the sovereign greenium: the yield discount on sovereign and quasi-sovereign green bonds relative to conventional bonds. Using a dataset of 332 matched pairs of green and conventional bonds issued between 2014 and 2023 by sovereigns, sovereign-backed agencies, and multilateral development institutions, we analyze secondary-market pricing to capture both cross-sectional and time-varying heterogeneity. We find a small but statistically significant greenium, averaging about 2 basis points for advanced economies and nearly 13 basis points for emerging markets. The greenium is larger for lower-rated issuers and increases when climate transition risks become more salient or when issuers are more vulnerable to climate change. Interaction effects indicate that global awareness of transition risks and domestic climate vulnerability jointly amplify the greenium. While green sovereign bonds trade at lower yields, the resulting fiscal savings are economically modest relative to total interest expenditures. A novel analysis of bond documentation shows that sovereign green bonds contain no binding commitments regarding environmental outcomes, suggesting that the observed greenium reflects symbolic rather than contractual sustainability value.

Public Sector Green Bonds: legacy, issuance strategies and cost

Francesco Baldi, University of Bologna; Giovanni Ferri, Università LUMSA

Though public sector issuers were essential in the emergence of green bonds – by conceiving them and playing a stewardship role – and still cover above one third of the market, green bonds issued by public sector institutions are under-studied. To value that legacy and promise, we concentrate on the issuance strategies and the cost of issuing for public sector entities (Supranationals, Sovereigns, Local Governments), investigating the factors which drive the performance of their green bonds. We measure performance in two innovative ways by identifying: i) across issuer types, which issuance strategies pursue general- rather than local-goals in the destination of the green bond proceeds, so broadening the green impact; ii) which factors reduce the cost of funding. Based on a sample of 279 green bonds, our econometric analysis reaches two main sets of results. First, in terms of strategies, issues more likely target general-goals if they either come from Supranationals or have a more concentrated use of proceeds. Second, our evidence on the cost of funding reveals that the yields on green bonds required by investors are lower when the use of proceeds is more concentrated or the issue size is larger while a penalty (higher yields) occurs when they are issued by a Local Government. This penalty for a Local Government is shown to decrease when its own Sovereign exercises a stewardship role by starting to issue green bonds. Among other results, our robustness analyses uncover that, after the introduction of the EU's Green Deal and Green Taxonomy, the cost of funding has a relative drop within European green bonds for the issuers more exposed to greenwashing risks (Local Governments). Implications can be drawn for policy makers towards optimizing the structure of the green bond market and the associated issuance strategies.

Transition Linkers*

Ulf G. Erlandsson, Anthropocene Fixed Income Institute (AFII)

This paper introduces a novel financial instrument, called the transition linker: a sovereign bond which allows investors to hedge risky asset return correlation with national progress on the energy transition. Transition linkers share similarities with inflation-linked bonds, convertible bonds, and other performance-linked debt instruments. Their defining feature is a coupon rate that adjusts in steps depending on whether the issuing country meets, exceeds, or falls short of its externally committed decarbonisation targets. We demonstrate how transition linkers can play a key role in asset allocation under the hypothesis that unsuccessful energy transitions could lead to lower or more volatile returns on risky assets. At the same time, the linker provides cost-of-capital incentives for the issuer (the government) to generate policies that increase the transition likelihood. These bonds also offer a mechanism for deriving real-time probabilities of achieving transition targets, delivering valuable insights to investors, policymakers, and the public. The paper develops a pricing approach for transition linkers and discusses various structural implementations to accommodate traditional mainstream fixed income books and analyses a hypothetical transition linker format for Japan.

15:30 SESSION 3B - SOVEREIGN DEBT PRIMARY MARKETS: THE RELEVANCE OF ISSUANCE MECHANISMS AND INVESTOR RELATIONS

Sovereign Investor Relations: A Guide for Debt Managers

Andre Proite, World Bank; Hakan Yavuz, World Bank

Sovereign Investor Relations (SIR) is increasingly central to how governments manage market access, borrowing costs, and periods of financial stress. Yet the investor's community want more than transparency: sovereign issuers face diverse investors with different mandates, risk tolerances, and information needs. This paper presents a practical guide on how to undertake SIR. Targeted at frontier and emerging market economies, it outlines scalable institutional settings - from lean focal points to formal Investor Relations Units - and practical guidance on staffing, communication tools, crisis engagement, and interactions with credit rating agencies. Drawing on country experience, the paper shows how well-designed SIR can reduce information asymmetries, strengthen credibility, and support more resilient access to capital markets, while complementing - rather than substituting for - sound macroeconomic policies, governance practices, and debt sustainability.

Are Hedge Funds a Hedge for Increasing Government Debt Issuance? Evidence from Government of Canada Bond Auctions

Adam Epp, Bank of Canada; Jeffrey Gao, Bank of Canada

Government of Canada (GoC) bond issuance increased rapidly after 2019 without a corresponding expansion in traditional sources of demand. Over this period, hedge funds became increasingly active participants at GoC bond auctions. We explain how hedge funds' volume-based business models make them responsive to higher issuance, and show that they are more willing than other investor types to purchase bonds at lower auction yields. Together, these characteristics help explain both the growth in hedge fund auction allocations and the continued strength of GoC auction performance. However, hedge fund participation depends heavily on repo financing and dealer balance sheet capacity. Rising funding costs may be limiting further growth in hedge fund participation, while greater reliance on hedge funds may increase investor base vulnerabilities during periods of market stress. These findings highlight the importance of maintaining a resilient investor base and efficient funding market infrastructure as sovereign borrowing needs continue to grow.

Overpriced Treasury Auctions

José Miguel Cardoso-Costa, Banco de Portugal; José Afonso Faias, Universidade Católica Portuguesa; Patrick M. Herb, Northern Arizona University; Mark Wu, Roger Williams University

We document pervasive overpricing in euro area Treasury auctions, challenging the conventional underpricing paradigm. Using a comprehensive 25-year panel covering 22 advanced economies, we show that overpricing is systematically higher in countries that rely more heavily on syndicated issuance. Leveraging a unique dataset of Portuguese auctions from 2004 to 2024 that tracks bidders, we find evidence suggesting that overpricing reflects rational, incentive-compatible behavior driven by the design of the primary dealership system, in particular remuneration through syndication fees. Dealers bid more aggressively when future issuance opportunities are most valuable. Our findings connect short-run auction losses to long-run cumulative profits, linking micro-level bidding behavior to macro-level institutional design.

9:00 SESSION 4 - SOVEREIGN BOND MARKET LIQUIDITY: THE INTERPLAY BETWEEN PRIMARY DEALERS AND INVESTORS

Decoding Sovereign Bond Market Liquidity: The Primacy of Bond over Dealer Characteristics

Caspar Helmus, Deutsche Bundesbank; Gabor Pinter, BIS; Kathi Schlepper, Deutsche Bundesbank; Andreas Schrimpf, BIS

We study the relative importance of intermediary-level and bond-level determinants of sovereign bond liquidity using a unique non-anonymous dataset that encompasses dealer responses to request-for-quotes in the German Bund market. Bond-level characteristics such as residual maturity and repo specialness explain almost ten times more of the variation in transaction costs than dealer-level variables, and their importance amplifies during the COVID-19 turmoil. While dealer constraints become more binding in strained market conditions and generate international spillovers, with U.S. dealers transmitting balance-sheet stress into Bund liquidity, bond-specific characteristics remain by far the predominant driver of liquidity even in periods of severe market stress. Extending the analysis to dealer-client transactions using MiFIR data, we show that the primacy of bond-level heterogeneity generalizes beyond the dealer-central bank segment of bond markets.

Cross-Market Liquidity Trade-Offs in Sovereign Bond Markets: Evidence from Dealer-Fund Interactions

Eleonora Iachini, Bank of Italy

This paper analyses how interactions between primary dealers and mutual funds influence liquidity conditions in government bond markets. Using a unique dataset that combines high-frequency electronic quotes with detailed OTC transactions, the study reveals a liquidity trade-off between markets: when dealers increase OTC trading with mutual funds, their contribution to electronic market liquidity decreases, while inter-dealer trading improves market functioning. The paper develops a theoretical framework that extends a standard dealer model, allowing bid-ask spreads to reflect portfolio risk management and customer relationship considerations, while inventory positions primarily influence profit determination. It also examines how monetary policy interventions, including the ECB's PSPP and PEPP, influence this trade-off. The research findings identify a previously overlooked mechanism linking dealer-fund interactions, market structure, and liquidity provision across trading platforms, with implications for liquidity risk assessment, investor dynamics, and sovereign bond market resilience.

International Mutual Fund Trading and Spillovers to Local-currency Bond Markets in Emerging Economies

Atsuyoshi Morozumi, University of Nottingham; Michael Bleaney, University of Nottingham; Arif Sulistiono, Ministry of Finance, Indonesia

This paper examines how international mutual fund trading affects emerging market local-currency (LC) government bond markets, highlighting non-linear effects conditional on global market conditions. To this aim, we employ a Threshold Vector Autoregression approach, exploiting daily transaction-level data for Indonesian LC government bonds over the 2008-2025 period. We find that an increase in international mutual fund net sales of Indonesian Rupiah government bonds, typically driven by a surge in redemption demands from end-investors, induces a sharp rise in bond yields. This effect is highly non-linear: it is markedly stronger when global risk aversion or US monetary policy uncertainty is elevated. This result indicates that the presence of international mutual funds transmits adverse shifts in global factors into heightened local yield volatility. In contrast, trading by other international investors, such as insurance companies and pension funds, exerts no such destabilising effect.

Who is derisking whom? The Distributional Politics of Debt Management Offices' Instruments in the Design of the Primary Dealer System

Luca Kokol, Hamburg Institute for Social Research; Jens van't Klooster, University of Amsterdam

This paper studies how Debt Management Offices (DMOs) manage the trade-off between risks and costs in the design of the Primary Dealer (PD) System. By comparing the PD Systems of Germany, France, Italy and the Netherlands, it provides a theoretical framework to analyse DMOs' policy choices based on their usage of different instruments. We distinguish between four types of instruments through which DMOs can steer private investment to decrease their exposure to refinancing and liquidity risk. A conventional way to shape market structure is by setting the regulatory framework of the Primary Dealer System, which allows DMOs to reduce their risk exposure at no cost by outsourcing it to PDs. However, to make a PD status appealing, DMOs can assume fractions of PDs' exposure to market risk to enhance their profitability. Firstly, DMOs can do backstop derisking of PDs, enhancing market liquidity in situations of crisis, which decreases DMOs' risk at no additional cost. Secondly, through compensatory derisking of PDs, DMOs reduce their own risk exposure by increasing costs in the short run. Thirdly, through regulatory derisking of PDs, DMOs accept a higher risk exposure while reducing costs. This framework outlines the complex and interwoven distribution of risk and cost between PDs and DMOs and helps to evaluate DMOs' policy choices in managing this trade-off.

11:30 SESSION 5A - GLOBAL FINANCIAL RISKS: SPILLOVERS AND SOVEREIGN MARKET IMPACTS

Decomposing Global Fear: Expected Uncertainty, Risk Aversion, and Sovereign Spreads in Emerging Market Economies

Reina Kawai Eskimez, World Bank; Dana Vorisek, World Bank

We decompose the square of VIX into expected uncertainty (UC) and risk aversion (RA) following Bekaert, Hoerova, and Lo Duca (2013) and trace their effects on EMBI sovereign spreads of 77 emerging economies over 1993-2024. UC is the central driver of EMBI spread dynamics, widening by 30 basis points over 24 months, while the response to RA is short-lived and dissipates within five months. State-dependent local projections reveal UC transmission is amplified twofold for high-debt, low-reserve economies. Global push factors matter, but their damage depends critically on domestic financial conditions.

Global Spillovers from U.S. Bond Supply Shocks

Danila Smirnov, IMF

I study spillovers from U.S. bond supply shocks, identified from yield moves around U.S. Treasury auction announcements. Using the shocks as instruments in daily and monthly local projections for AEs and EMs, I find pass through to global long rates. A debt expansion shock that raises the U.S. 10 year yield by 10 bps lifts foreign 10 year yields by roughly 7 bps within a few business days. Monthly aggregation shows contractionary real effects: U.S. industrial production falls up to 0.4 percent after eight months and foreign industrial production by a comparable amount, around 0.4 percent, with a more persistent profile. The foreign contraction reflects financial tightening, exchange rate depreciation, and weaker U.S. demand. Spillovers are heterogeneous: moving from the 25th to 75th percentile of foreign investor participation deepens IP decline by 0.5 pp. Results are robust to a demand side shock and consistent with benchmarks, highlighting U.S. bond supply as a key driver of global financial conditions and real activity, amplified by foreign investor participation and weak domestic fundamentals.

11:30 SESSION 5B - SECONDARY MARKET MECHANICS: THE ROLE OF MONETARY POLICY AND THE REPO SEGMENT

Elastic in Cash, Inelastic in Repo: The Role of Hedge Funds in the Treasury and Repo Markets

Loriana Pelizzon, Leibniz Institute for Financial Research SAFE; Andrea Poinelli, European Central Bank; Davide Tomio, Texas A&M University; Benoit Nguyen, European Central Bank; Tobias Linzert, European Central Bank

Sovereign bond markets are a cornerstone of the financial system, and their functioning is tightly linked to repo markets, where investors finance long positions and source bonds for short sales. We show theoretically and empirically that bond and repo prices are jointly determined in equilibrium. When demand in the cash bond market exceeds available supply, arbitrageurs accommodate excess demand by shorting bonds, generating demand for bond borrowing in repo markets. This demand generates a spread between policy and repo rate. In turn, an elastic supply of collateral on the repo market limits the impact of excess demand on bond prices. We provide evidence for this mechanism using novel regulatory data on repos backed by German sovereign bonds. We identify final borrowers and lenders of securities and estimate sector-specific price elasticities in the repo market. Repo collateral supply, dominated by the public sector, is highly elastic, whereas demand, driven primarily by hedge funds, is strongly inelastic. Hedge funds---the key arbitrageurs in practice---play a central role in the joint clearing of bond and repo markets and in the determination of prices on the two markets. Our results provide a unified framework linking demand pressures in sovereign bond markets to repo pricing, with implications for the pricing of safe assets and the design of monetary policy operations.

The Transmission of Monetary Policy Shocks in the Government Bond Secondary Market

Valentina Catapano, University of Padua; Luciano Greco, University of Padua; Eleonora Turato, University of Padua

Market liquidity constitutes a pivotal element for financial stability, ensuring that large volumes of bonds can be traded at low transaction costs. This paper aims to investigate the role of monetary policy in shaping the liquidity conditions of the Italian sovereign bond market. In particular, drawing inspiration from the work of Jarociński and Karadi (2020), the study examines how the distinction between information shocks and pure monetary policy shocks affects market liquidity within a structural vector autoregression (SVAR) framework. The empirical analysis is underpinned by an enriched dataset of high-frequency monetary policy surprises, complemented by granular liquidity measures constructed from proprietary data from MTS Italy—the regulated wholesale secondary market for Italian government bonds—which is the first electronic market in Europe. This paper sheds light on the complex interactions between central bank actions, investor expectations, and sovereign debt markets in the euro area. The findings aim to contribute to the design of effective monetary policy frameworks and to enhance the resilience of government bond market in times of heightened uncertainty.

14:10 SESSION 6A - TRANSPARENCY, GOVERNANCE, AND MARKET ACCESS

Does Transparency Reduce the African Premium? Evidence from Eurobond Issuances

Ghita Lamriki, FINACTU; Géraldine Mermoux, FINACTU; Denis Chemillier-Gendreau, FINACTU; Lossani Zina, FINACTU; André Nana, IDRAC Business School

African sovereign borrowers often face higher borrowing costs in international capital markets than other emerging market issuers, a phenomenon commonly referred to as the "African premium." While this differential has been widely documented, the institutional mechanisms through which information asymmetries affect sovereign risk pricing remain insufficiently explored. This paper investigates the extent to which sovereign debt transparency helps explain the magnitude of the African premium in international sovereign bond markets. The analysis relies on a dataset of 300 USD-denominated sovereign Eurobond issuances between 2001 and 2025, including 164 African issuances. Using a matched-sample approach, we first estimate the magnitude of the African premium relative to comparable emerging market bonds. Results suggest that African issuers pay on average approximately 90 basis points more than comparable sovereign borrowers after controlling for maturity and credit ratings. Focusing on the African subsample, we then examine whether differences in debt transparency explain variations in issuance spreads using a transparency index based on publicly available debt statistics. Relative to the lowest transparency category, issuers with higher transparency levels appear to pay approximately 60-80 basis points less, respectively. This pattern is consistent with the hypothesis that stronger debt reporting practices may contribute to lower borrowing costs by reducing informational asymmetries and improving the pricing of sovereign risk.

"De Facto" Barriers to EME Sovereign Capital Flows: Indices and Benchmarking

Mario Huzel, Sustainable Sovereign Debt Hub

In a changing environment for sovereign lending, non-bank private investors, who increasingly allocate capital through passive, benchmark-tracking strategies, have become the dominant marginal creditors to emerging market and developing country (EMDE) sovereigns. Their allocation decisions are often index-driven rather than directly fundamentals-driven, making index design a de facto determinant of sovereign capital access. Index inclusion creates automatic demand and lowers borrowing costs, insulating included borrowers from fundamentals-based market discipline. Yet, the same design choices also function as structural barriers that exclude the countries with the greatest financing needs, leaving them fully exposed to market discipline. Emerging climate- and biodiversity-linked index overlays offer one potential route to widen access, but risk reproducing the same exclusion dynamics under a different label unless borrowing countries help shape their design. Drawing on a simplified model of investor decision-making, this paper argues that index design could be treated as a policy variable that sovereign issuers, index providers and asset managers, and MDBs and DFIs can each help shape. How index architecture can best serve a diverse developing country borrower landscape deserves an explicit place on the development finance policy agenda.

Debt Management in a Volatile World: Economic Trade-offs, Legal Design, and Transparency

Paola Subacchi, Sciences Po; Rodrigo Olivares-Caminal, Queen Mary University of London

In an era of persistent macroeconomic and geopolitical uncertainty—with volatile interest rates, inflationary pressures, exchange-rate fluctuations, climate-related risks, and financial fragmentation—sovereign debt management faces challenges that go well beyond traditional cost-risk trade-offs. Debt outcomes increasingly depend not only on issuance strategies and macroeconomic policy, but also on the legal and institutional architecture that shapes incentives, information flows, and policy credibility. Well-designed legal mandates, robust transparency frameworks, and effective governance arrangements can play a critical role in reducing refinancing risk premia, supporting durable market access, and lowering the economic and social costs of debt distress and restructuring, particularly when shocks materialise.

The paper develops a unified analytical approach that bridges economic analysis of sovereign debt management under uncertainty with legal and institutional dimensions. It examines how debt managers adapt portfolio choices, such as maturity structure, currency composition, and liability management operations, in an environment where volatility is persistent rather than transitory. At the same time, it analyses the legal foundations that enable or constrain these choices, including borrowing authority, institutional mandates, disclosure requirements, oversight mechanisms, and contractual standards governing sovereign debt instruments.

The paper links these legal and institutional arrangements to measurable economic outcomes such as borrowing costs, maturity profiles, investor base diversification, and the likelihood of debt distress. A central question is whether, under prolonged uncertainty, stronger legal and institutional governance amplifies the effectiveness of economic risk-management tools. For example, can maturities be credibly extended, or liquidity buffers be built in the absence of trusted disclosure frameworks and clear legal mandate. By integrating economic and legal perspectives, the paper aims to provide policy-relevant insights for strengthening sovereign debt management in an increasingly volatile global environment.

14:10 SESSION 6B - DEBT MANAGEMENT STRATEGIES: MODELLING, INSTRUMENTS AND RISK MANAGEMENT

The Bank of Canada's Debt Modeling Framework

Nicolas Audet, Bank of Canada

The author introduces an enhanced Debt Modeling Framework supporting the reimplementation of Canada's Debt Strategy Model. The framework models debt issuance as a dynamic, state-contingent strategy that adapts to macroeconomic and financial conditions, improving the realism and cost-risk performance of sovereign debt management analysis relative to fixed-weight approaches. It also provides a modular architecture for alternative simulation engines, instruments, objectives, and optimization methods, with planned extensions aimed at enabling broader collaboration among public debt management model users and developers.

Benchmark Inflation-Linked Bonds and Sovereign Debt Management under Prolonged Uncertainty: Evidence from Brazil*

Daniel Cunha, IMF; Felipe Marinho, Banco Mercantill, Brazil; Gabriel Hegab, IMF; Giovana Craveiro, Tesouro Nacional, Brazil

This paper studies whether a benchmark market for inflation-linked bonds (ILBs) expands the sovereign issuance frontier when debt managers face persistent uncertainty, refinancing pressure, and segmented investor demand. We develop a dynamic benchmark-building model in which the Treasury allocates issuance across nominal fixed-rate, inflation-linked, and floating-rate debt while internalizing expected financing costs, refinancing risk, and the future liquidity benefits of benchmark depth. The model implies that ILB issuance rises when nominal-duration demand becomes more uncertainty-sensitive than indexed-duration demand and when repeated reopening lowers the liquidity wedge in the ILB segment. We test these predictions using new evidence from Brazil. The empirical analysis combines National Treasury auction history from 2000 to 2026, monthly federal debt issuance and redemption data from 2006 to 2026, and a comprehensive Banco Central do Brasil (BCB) secondary-market dataset covering 2003 to 2026. ILBs account for a modest share of accepted issuance, but they are the longest-duration instrument in the sample: their issuance-weighted maturity is 10.4 years, compared with 2.8 years for fixed-rate debt and 5.0 years for floating-rate debt. An interrupted time-series design around the start of NTN-B auctions in September 2003 indicates a sizeable increase in the ILB share of accepted issuance. In monthly regressions, a 10 percentage point increase in the lagged ILB share is associated with 0.37 additional years of average accepted maturity. Bond-level secondary-market results point to the same mechanism: larger benchmark stocks predict more trading, larger negotiated quantities, and more active trading days, with the strongest effects in the ILB segment. The evidence suggests that benchmark ILBs can widen the feasible cost-risk frontier of sovereign debt management when benchmark construction and domestic demand reinforce one another.

Efficient Sovereign Debt Buybacks

Adrien Wicht, University of Basel

This paper challenges the conventional view that debt buybacks are detrimental to sovereign borrowers. Using a model of strategic lending, I show that buybacks can be rationalized as part of an optimal contract between a sovereign borrower and foreign lenders. In particular, buybacks allow bonds to function like Arrow securities. This is because they take place in the secondary market, where only legacy lenders operate, granting them market power, as opposed to the primary market, where new entrants ensure competitive returns. This mechanism can substitute for or complement standard implementations based on debt restructurings. The model is supported by recent empirical evidence from Brazil, where the buyback premium can be attributed to both limited secondary market competition and reduced default risk. These findings offer insights into sovereign debt management and the implementation of optimal contracts.

16:00 SESSION 7A - INVESTOR STRUCTURE AND SOVEREIGN-BANK RISK LINKAGES

Investor Composition and Interest Rate of Government Debt*

Juyoung Yang, Korea Development Institute

This paper examines how investor heterogeneity shapes the sensitivity of interest rates to sovereign debt expansion, using South Korea as a representative case of market-based debt management. Following the methodology of the literature (Koijen and Yogo, 2019; Fang et al., 2025), I decompose sectoral demand into marginal debt absorption and yield elasticity. The empirical results reveal a critical divergence: while domestic insurance companies exhibit high absorption capacity, their yield-inelastic demand accounts for 65.6% of the total interest rate sensitivity to debt growth. In contrast, more price-elastic sectors, such as foreign investors and investment funds, serve as market stabilizers by mitigating yield shocks. These findings suggest that long-term fiscal sustainability depends not merely on the absolute volume of debt absorption, but on the elasticity of the aggregate creditor base.

The connectedness between sovereign risk and the banking sector

Gianluca Cafiso, Università di Catania; Giulia Rivolta, Università Cattolica del Sacro Cuore

This study examines the relationship between sovereign spreads and bank shares in terms of risk transmission, using a sample of the largest Italian banks over the period 2003–2023. Our objective is to quantify and compare volatility spillovers and to investigate whether bank-specific characteristics help to explain them. We perform a dynamic connectedness analysis based on the Bayesian estimation of a vector autoregression with time-varying parameters. Our results suggest that, with the exception of the period of the euro area debt crisis, banks tend to transmit more spillovers than they absorb. Moreover, these spillovers are related to factors such as capital adequacy and the composition of banks' portfolios.

16:00 SESSION 7B - SOVEREIGN DEFAULTS: TRANSMISSION CHANNELS AND COUNTRY EXPERIENCES

Sovereign Defaults, Bank Ownership, and Lending Outcomes

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Using data on up to 5,337 banks in 153 countries over 1996-2020, we show that the response of bank lending to sovereign default depends jointly on bank ownership and on the type of default. During external defaults, lending by foreign-owned banks falls sharply, consistent with flight-home behavior, while state-owned banks cut credit less than private domestic banks. Domestic defaults produce the opposite pattern. Foreign-owned banks sustain lending, shielded from the deposit outflows that hit their domestic peers, while state-owned banks suffer large increases in non-performing loans linked to their holdings of domestic sovereign bonds. Results on asset quality and deposit flows corroborate these mechanisms.

Sri Lanka’s Debt Crisis: A Crisis of Governance

Alex Dryden, SOAS University of London; Ulrich Volz, SOAS University of London

This paper examines the origins, evolution, and resolution efforts surrounding Sri Lanka’s 2022 sovereign debt default. Many defaults are triggered by sudden external shocks, but, in contrast, Sri Lanka’s crisis was largely the result of prolonged domestic policy failures, including chronic fiscal deficits, a narrow tax base, overreliance on external borrowing, and poor monetary management. These structural weaknesses were compounded by governance failures, including corruption, institutional fragility, and populist policymaking, which eroded public trust and investor confidence. Exogenous shocks such as the COVID-19 pandemic and commodity price surges exacerbated an already fragile macroeconomic position, ultimately leading to a depletion of foreign reserves, surging inflation, and widespread social unrest. The paper outlines the difficult path toward crisis resolution, including complex negotiations with bilateral and commercial creditors and an International Monetary Fund program featuring governance reforms and fiscal austerity. While recent reforms have brought a degree of macroeconomic stability, Sri Lanka’s recovery remains fragile, with the long-term success of its restructuring efforts contingent on sustained policy discipline, improved governance, and stronger resilience to external shocks.

** denotes a draft version*