

ANTI- CORRUPTION CHALLENGE

Pitch Event

World Bank-IMF Annual Meetings 2020

Summary Document



INNOVATION

Agenda

Wednesday, October 7, 2020

Time (all times EDT)	Topic
10:15am – 10:30am*	Welcome and Introductory Remarks <ul style="list-style-type: none">• Kristalina Georgieva – IMF Managing Director• Rhoda Weeks-Brown – IMF General Counsel• Tristan Walker – Head of IMF Innovation Lab
10:30am – 11:40am	Team Pitch Videos and Q&A <ul style="list-style-type: none">• <i>Team 1</i>: We Can Only Stop It, If we Understand It: Measuring Perceptions of Corruption through Gamification• <i>Team 2</i>: Improving Access to Laws and Regulations in Africa• <i>Team 3</i>: Public Procurement Corruption Risks: Harnessing Big Data for Better Fiscal Governance and Growth• <i>Team 4</i>: Harvesting Open Data for Early Detections of Conflicts of Interest in Public Procurement• <i>Team 5</i>: Joining the Dots with Public Officials: Cross-Matching Beneficial Ownership and Financial Disclosures Data to Identify Red Flags• <i>Team 6</i>: Enhancing Transparency in Wage Bill Practices: Leveraging Blockchain• <i>Team 7</i>: Optimizing the Detection of Beneficial Ownership of High-Risk Firms in Brazil• <i>Team 8</i>: Public Officials Risk Index (PORI): A Tool to Combat Corruption Using Disruptive Technologies
11:40 – 11:55	Public Vote & Judges Deliberate
11:55am – 12:00pm	Announcement of Winners and Closing Remarks <ul style="list-style-type: none">• Rhoda Weeks-Brown – IMF General Counsel
Watch the Live Stream: https://bit.ly/332LrDB	

*Times are approximate

About the Anti-Corruption Challenge

The [Challenge](#) aims to support the development of new and innovative approaches on the following theme:

How might we create behavioral change and increased transparency to enable good governance and tackle corruption in the public sector?

The Challenge, launched during the 2019 World Bank/IMF Annual Meetings, seeks collaborative project proposals from country authorities, civil society organizations (CSOs), and staff from the IMF and other International Financial Institutions on the following topics:

1. [Enhancing Governance in Public Finance: The Role of Data and Technology](#);
2. [Promoting Good Governance in Central Banks: The Role of Non-Executive Directors](#);
3. [Tackling Corruption: Financial Disclosure Systems for Public Officials](#);
4. [Fighting Money Laundering: The Use of Data for Financial Intelligence](#);
5. [Improving the Understanding of Risks of Corruption](#);
6. [Other solutions including use of open/big data in enhancing governance and fighting corruption.](#)

The Challenge topics are framed in the context of the IMF's Governance Framework. Information on the IMF's role in helping support good governance can be found in the factsheet on IMF and Good Governance.

Challenge Timeline:

Phase 1 - Oct 18 to Dec 20, 2019 Challenge opened for proposals

Phase 2 - Jan 2020 Submissions were shortlisted, and all staff of the IMF and World Bank were invited to review and join project teams via internal communications

Phase 3 - Feb 2020 Selection of 8 finalists

Phase 4 - Mar 2020 Virtual bootcamp training for finalist project teams, where ideas were refined, stakeholders mapped out, team and project charters were developed

Phase 5 - by Sep 2020 Solution development phase where project teams developed and de-risked their solutions. Teams were given limited seed funding from \$10,000 – 15,000.

Phase 6 - Oct 2020 Virtual Pitch Event where the top 4 teams will be selected for further support and seed funding

The top four pitches will receive seed funding and project support by the iLab and sponsors and will be accepted into the iLab Accelerator Program. Seed funding is typically provided on a “metered funding” basis up to \$50,000 (USD).

The accelerator program supports projects in completing a proof of concept to realize the proposed idea. On completion of the accelerator program, project teams will deliver a working proof of concept, final presentation, report and project deliverables including code and related documentation via open source.

Evaluation Criteria:

Only submissions from relevant organizations including country authorities, civil society organizations and international financial institutions (e.g. the IMF, the World Bank, the IFC etc.) will be accepted.

The proposals will be ranked against the following for the final evaluation:

- The potential impact of proposal on governance or anti-corruption.
- The relevance to the Funds work (usefulness to IMF staff and country authorities when engaging in capacity development or surveillance work).
- The scale-ability of proposal (ability to be benefit multiple member countries).
- The feasibility of developing a proof of concept or pilot in 9-12 months.
- The team composition in terms of diverse skills, knowledge & readiness to facilitate solution development and implementation.
- Novelty or innovation of proposal.

Sponsors & Partners:

This challenge is organized by the IMF Innovation Lab (iLab) and Legal Department (LEG) in partnership with the Fiscal Affairs, Finance, Strategy, Policy and Review, Institute for Capacity Development, and Communications departments. This challenge is sponsored by the Swiss State Secretariat for Economic Affairs (SECO) and MIT-IBM Watson AI Lab is the technical partner.



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO

IBM Research

Panel of Judges



Jihad Azour, Director, Middle East and Central Asia Department, IMF



Vitor Gaspar, Director, Fiscal Affairs Department, IMF



Ceyla Pazarbasioglu, Director, Strategy, Policy and Review Department, IMF



Rhoda Weeks-Brown, General Counsel and Director, Legal Department, IMF (*Panel Chair*)



Alejandro Werner, Director, Western Hemisphere Department, IMF



Sean Hagan, Visiting Professor of Law, Georgetown



Warren Krafchick, Executive Director, International Budget Partnership



Paul Maassen, Chief of Country Support, Open Government Partnership



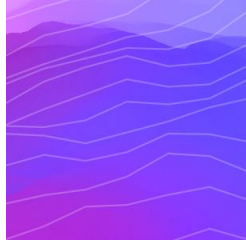
Ed Olowo-Okere, Global Director for the Governance Practice, World Bank



Rosmarie Schlup, Head, Macroeconomic Support Division, SECO
(*Sponsor*)



Mark Weber, Strategy and Operations Lead, MIT-IBM Watson AI Lab
(*Partner*)



Team 1: We Can Only Stop It, If We Understand It: Measuring Perceptions of Corruption through Gamification

Objective

Current methods to gather information about corruption, such as interviews and surveys, might be ineffective to extract truthful reports of behavior. The objective of this project is to use techniques from behavioral sciences, gamification techniques and technology to create an alternative way to gather data and consequently provide fresh insights into how individuals perceive or relate to different acts of corruption and based on the results make recommendations of mitigating measures aimed at preventing corruption.

Background

Corruption is rampant worldwide, and its costs are comparable to the gross domestic product of large economies. The problem seems insurmountable despite the growing attention it has received and in the face of seemingly robust legal frameworks at national and subnational levels to address corruption around the globe. This demonstrates that there can be a disconnect between behavior required by law (or policy) and the type of behavior observed in the real world.

Further, based on our interviews with “clients” as well as our own research we understand that there is a need for finding innovative ways to measure and assess individual attitudes and perceptions toward acts of corruption. Obtaining data to understand how individuals perceive corruption could lead to better tools to fight corruption, including more holistic, evidence-based mitigating measures for public sector organizations.

ANTI-CORRUPTION CHALLENGE

MEET THE TEAM:

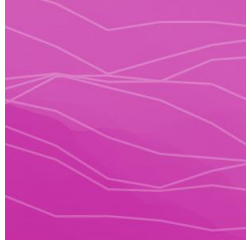
Alan Pereira Alan Dizioli Nils C. K'bis

Priscilla Toffano Zoe Rahwan

We Can Only Stop It, If We Understand It: Measuring Perceptions of Corruption Through Gamification

We use gamification techniques and behavioral science on a platform to gather valuable information on how individuals relate to different acts of corruption. The insights from this platform will inform the design of public policy, private and public sector oversight programs and capacity building projects.

WATCH THEIR PITCH - OCTOBER 7, 2020 10:15 AM EDT



Team 2: Improving Access to Laws and Regulations in Africa

Objective

As our research indicates that access to national laws and regulations is a serious challenge for officials, judges, citizens & the private sector in more than 50 African countries. Therefore, this project will develop a cloud-based *Database with Website and Mobile Application (DWMA)* that countries can use to support a free & open-access system to make the comprehensive and complete collection of national laws and regulations (in official version, reliably updated and easily searchable) available to all users. When officials, judges, citizens and the private sector lack effective access to national laws and regulations the ability to effectively combat corruption is severely undermined as are all areas of rule of law-based governance. We hope the DWMA will be considered for use by countries that are serious about improving the fight against corruption and governance by improving access to national laws and regulations for all.

Background

Preliminary results of a recent survey assessing access to national laws in all African countries indicate that free & effective access to national laws - including by officials, judges, the public, firms & civil society - is not available in the large majority of African countries. Our data indicates that free & open access to the complete collection of national laws (official versions, reliably updated & easily searchable) is available in fewer than 5 of 48 Sub-Saharan African countries.

Therefore, we believe implementation of a cloud-based, free and open-access database containing the complete collection of national laws and regulations (in official versions that are reliably updated) that is easily searchable, can improve the capacity of citizens and the private sector to hold corrupt officials accountable, as well as provide officials and judges the most critical tool needed to carry out their official functions.

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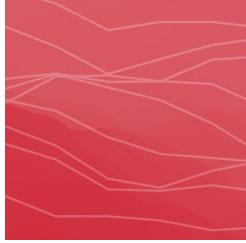
Improving Access to Laws and Regulations in Africa

MEET THE TEAM:

 Cari Votava	 Elizabeth Ebeka
 Amitabha Mukherjee	 Antonio Hyman
 Cecilia Marian	 Rebecca Obare
 Pratheep Ponraj	 Donald Mphande

The project will enhance efforts to combat corruption in Africa more effectively by improving public access to law and regulations. A comprehensive online database of the official versions of national law and regulations - free, reliably updated, and searchable - can provide citizens and officials the tools to hold governments accountable.

WATCH THEIR PITCH - OCTOBER 7, 2020 10:15 AM EDT



Team 3: Public Procurement Corruption Risks: Harnessing Big Data for Better Fiscal Governance and Growth

Objective

Our goal is to create a policy-oriented global intelligence tool that identifies vulnerabilities to corruption in public procurement, and their financial cost. This will entail the creation of a user-friendly dashboard, (using the Tableau platform) that enable users to quickly identify the highest vulnerabilities to corruption and/or the highest costs for public finances. The tool would be based on objective data (e.g., percentage of procurement contracts awarded through non-competitive, emergency procedures) to enable discussions on actionable policies (e.g., increasing the share of competitive auctions could lead to savings of x% of GDP). Furthermore, the tool would enable a constructive dialogue between IMF staff and country authorities, as we would apply a high degree of transparency: data would be downloadable, and the tool would come with notes outlining the methodology used and the policy context. As a result, the tool will support more granular and actionable policy recommendations by the IMF and the World Bank on public procurement governance, while promoting a constructive dialogue with their membership on broader governance issues.

Background

In accordance with the Guidance Note from 1997 on “The Role of the IMF in Governance Issues”, the IMF has recently reviewed and decided to further strengthen its measurement and policy reform approach to corruption and weak governance more broadly (IMF, 2017). This work has led to the adoption of the Framework for Enhanced Fund Engagement with Governance (IMF, 2018). These policy papers have also been supported by more granular analytics, notably the Fiscal Monitor on Curbing Corruption (IMF, 2019) which emphasizes the importance of fiscal transparency, independent external oversight, effective internal controls and the integrity of processes. Our evidence-based analysis and recommendations would feed into the IMF’s work on strengthening independent oversight and transparency.

ANTI-CORRUPTION CHALLENGE

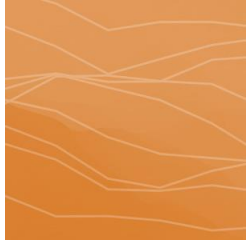
Public Procurement Corruption Risks: Harnessing Big Data for Better Fiscal Governance and Growth

MEET THE TEAM:

- Bence Toth
- Johannes Wachs
- Mihaly Fazekas
- Alan Whitworth
- Agnes Czibik
- Liz David-Barrett
- Olivier Basdevant

Our intelligence tool uses big data analytics and peer-reviewed methods to identify corruption risks in micro-level public procurement processes and estimate their impact on prices. The user-friendly portal allows policy-makers to explore how different policy scenarios could generate macro-level efficiency savings.

WATCH THEIR PITCH - OCTOBER 7, 2020 10:15 AM EDT



Team 4: Harvesting Open Data for Early Detections of Conflicts of Interest in Public Procurement

Objective

The objective of this project is to create a Minimum Viable Product (MVP) version of the proposal, i.e., to connect the public procurement, business and political financing datasets from two closely connected, small countries - Estonia and Latvia; develop use cases for data literacy trainings; and provide a roadmap to developing the full version of the proposal considering both local and international settings.

The long-term goal of this project is to harness open data for anti-corruption as well as develop data literacy and further the state of open data. We aim to increase transparency and detect fraud and corruption in public procurement (PP), which will lead to prevent misuse of public funds and improvements in social cohesion as well as increased trust between the civil society, governments, political parties, politicians as well as other civil society organizations.

Background

The proposal at large stems from the fact that although countries may experience lower levels of petty corruption, corruption is a crime that evolves, becomes more complex and crosses borders in order to hide its existence. To tackle this, the platform Opener is first piloted in small Baltic countries Estonia and Latvia. Both of these countries have seen an improvement in perceived levels of corruption in the public sector as per the CPI. However, this does not reflect corruption in the private sector. According to citizens, conflicts of interest, undue influence of private interests, lobbying and low level of trust in political parties are the most significant problems related to corruption in both countries. According to the European Union's Corruption Eurobarometer 470 (2017), 76% of Estonian residents agree or tend to agree that private interests have a very high impact on policy-making. In Latvia, 80% of the population agree or tend to agree with the same claim.

Above all, Estonia and Latvia are neighboring countries with well-connected economies and business networks. Some recent cases such as Oleg Ossinovski's provide a good reason to believe that connecting the datasets of Estonia and Latvia will uncover both relevant business networks as well as underline data compatibility issues. This in turn will aid in creating common data standards for political financing and public procurement and lay the groundwork for scaling the platform to a larger number of countries across the world.

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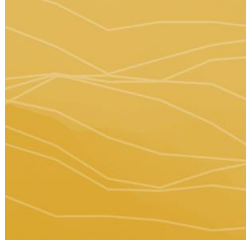
MEET THE TEAM:

 Carina Paju	 Nika Aleksejeva
 Andis Cirulis	 Liene Gatere
 Alice French	 Antonio Greco
 Sille Sepp	 Gerardo Una
 Mari-Liis Sööt	 Maarja-Leena Saar

Harvesting Open Data for Early Detection of Conflicts of Interest in Public Procurement

Our initiative focuses on cross-matching data on public procurement, political party financing and company ownership to increase transparency and accountability, by simultaneously increasing access to information, preventing corruption and improving data literacy.

WATCH THEIR PITCH - OCTOBER 7, 2020 10:15 AM EDT



Team 5: Joining the Dots with Public Officials: Cross-Matching Beneficial Ownership and Financial Disclosures Data to Identify Red Flags

Objective

The objective of the project “Joining the dots with politically exposed persons (PEPs)” is to enhance transparency related to beneficial ownership as well as to the interests and assets of public officials. More specifically, the goal is to support country authorities in enhancing the effectiveness of their Financial Disclosure (FD) systems and implementing beneficial ownership disclosures, while ultimately contributing to their wider anti-corruption framework. The project will achieve this by supporting users in systematically gathering, verifying and promoting the use for FD and Beneficial Ownership (BO) data for anti-corruption purposes, developing a system that cross-matches existing datasets and generates red-flags to identify politically exposed persons (PEPs).

Background

Hidden beneficial ownership of companies and lack of oversight of assets held by politically exposed persons are factors that exacerbate the risks of corruption and tax evasion. Many governments have recognized the problem and expressed the need for better beneficial ownership information and FD systems. That is why 53 countries have committed to publicly identify any PEPs holding ownership in oil, gas and/or mining projects through implementation of the EITI Standard. Some countries are already pushing beneficial ownership disclosures beyond the extractive industries and incorporate subcontractors and suppliers, companies buying or trading in natural resources or other sectors of the economy where there are high risks of corruption. The challenge is ensuring that these systems speak to each other and allow for sharing and cross-checking of information in a way that can identify and address corruption risks.

The project will develop an approach and tools to be piloted in two countries, Colombia and Myanmar. This will allow the team to identify possible challenges and learn from experience. On this basis, a scalable model will be developed for implementation in other countries. The piloting of the system in Colombia will be developed jointly by DL and EITI. The solution tested in Colombia will build on lessons learned from EITI implementation of BO transparency to date. The solution could serve both to support the cross-checking of FD and BO disclosures in the extractive industry and as a broader corruption indicator for the IMF.

ANTI-CORRUPTION CHALLENGE

MEET THE TEAM:

- C. Greene
- N. Alonso Murray
- I. Schjolberg
- A. Magnus
- F. Moreau
- G. Ordenes
- M. de los Santos
- C. Basilio
- R. Cruz
- A. Bertona

Joining the Dots with Public Officials: Cross-Matching Beneficial Ownership and Financial Disclosures Data to Identify Red Flags

This project identifies corruption risks associated with politically exposed persons. By combining public officials’ financial disclosures with beneficial ownership data and other public information, the system generates red flags signaling potential transparency issues, like conflict of interests and other risks.

WATCH THEIR PITCH - OCTOBER 7, 2020 10:15 AM EDT



Team 6: Enhancing Transparency in Wage Bill Practices: Leveraging Blockchain

Objective

This project aims to assist both Ministries of Public Administration and Finance in developing countries to reduce corrupt wage bill practices by leveraging a Blockchain solution.

During the period between April and October 2020, the team plans to develop a Minimum Viable Product (MVP). The MVP will identify key product capabilities, develop user stories, and perform several experiments to validate the main assumptions underlying this project.

Background

Blockchain has several distinctive features that make this technology a potent tool to fight against corruption. It provides an unprecedented level of security of the information and the integrity of the records the technology manages, guaranteeing the authenticity of this information. It reduces opportunities for the falsification of records and the risks associated with concentrating the management of data at a single point. It also helps overcome the silos in public entities that are usually reluctant to share information among themselves.

Blockchain provides a transparent and decentralized system to permanently record a sequence of transactions and can be a closed system or be open for public scrutiny depending on how the technology is implemented. A powerful concept it provides is tokenization, a way of digitally representing value – money, identity, and physical assets as digital tokens, and guarantees integrity of ownership of these tokens. It furthermore allows representation of complex real-world business logic, contractual terms and obligations, regulatory controls, and outcomes through “Smart Contracts”. Smart Contracts are programs that are securely deployed on a blockchain and manage transactions on the blockchain. Smart Contracts can be modelled to reflect real-world governance and permission mechanisms.

Thus, a blockchain creates an immutable trail of transactions, allowing for the full traceability of every transaction. There are three important value applications for Blockchain in combatting government corruption, which have already begun exploring this potential. These applications comprise verifying identity, registering assets, and tracking transactions. Blockchain’s decentralized nature and the immutability of its records make it a powerful tool in the fight against illicit trades and money laundering.

ANTI-CORRUPTION CHALLENGE

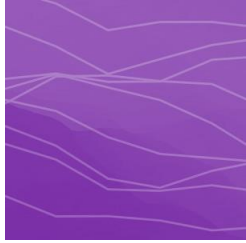
Team:

- INTERNATIONAL MONETARY FUND
- EY
- Vietnam (National Emblem)

Enhancing Transparency in Wage Bill Practices: Leveraging Blockchain

Our Blockchain solution mitigates wage bill vulnerabilities to corruption by obtaining timely and comprehensive employment data to support fiscal planning, and by strengthening auditing systems. We link officials' appointments to approved budgets by connecting different information sources into a shared ledger, providing officials a tamper-proof audit trail to address inconsistencies.

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Team 7: Optimizing the Detection of Beneficial Ownership of High-Risk Firms in Brazil

Objective

Creating a solid and actionable tool for automating and optimizing the detection of potential beneficial owners of high-risk firms in Brazil.

Background

Even though it is widely acknowledged that corruption and money laundering investigations require the intensive use of data analysis, most law enforcement agencies in Brazil currently have a low level of data analytics maturity. In this sense, investigations nationwide have been hindered by the following factors (a) they rely on spreadsheet-based analyses conducted manually; (b) these analyses are based on small samples of data; (c) existence of internal and external data silos; and (d) scarcity of data scientists.

The low level of data analytics maturity results in several negative consequences that directly hinder the investigative capabilities of law enforcement agencies.

(i) The current approach employed by most law enforcement agencies for detecting firms involved in corruption consists in relying on circumstantial evidence provided by whistleblowers or legal complaints delivered by citizens.

(ii) After a corruption or money laundering investigation starts the elaboration of legal evidences by teams of investigators consume hundreds of man-hours which are devoted to manual spread-sheet based analyses using small samples of data as well as paper-based analyses.

(iii) Corruption and money laundering frequently do not involve firms and individuals acting in an insulated environment.

In order to systematically solve these problems, it is necessary to use data science and operational research tools that allow integrating large datasets, developing algorithms, and creating decision support systems.

ANTI-CORRUPTION CHALLENGE

Optimizing the Detection of Beneficial Ownership of High-Risk Firms in Brazil

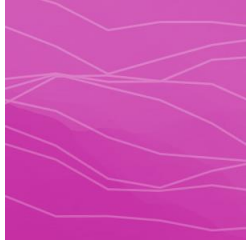
Our tool has two main objectives: optimizing the detection of public contractors owned by a straw man for perpetrating procurement and fraud; and detecting links between high-risk public contractors and firms associated with money-laundering activity carried out by violent OC groups. This tool will be used by Brazilian law enforcement agencies fighting corruption and ML.

WATCH THEIR PITCH - OCTOBER 7, 2020 10:15 AM EDT

Octavio Paulo Neto

Rafael Linhares

MINISTÉRIO PÚBLICO FEDERAL



Team 8: Public Officials Risk Index (PORI): A Tool to Combat Corruption Using Disruptive Technologies

Objective

This project provides tools to identify possible disproportionate assets and income and conflict of interest using the information in financial disclosure submitted by public officials, public procurements, and social media/web.

This project will facilitate authorities to use technology to identify possible corruption and conflict of interest, enabling them to carry on reviews and investigations efficiently. This will support the prevention, detection, and appropriate action by the government ensuring that the fund available from the government, international organizations, and NGOs are used for the purpose intended. This will increase citizen’s trust in the government.

Background

Public corruption in any form is the misuse of a public or government office for private gain. Its existence is an indication that something has gone wrong in the management of the government office. When public officials disclose their financial integrity, citizens are better equipped to assess if the government is working in their interest. In many countries, public officials are required to file periodic financial disclosure, which can be used for the prevention, detection, investigation, as well as prosecution of corrupt officials. Financial disclosure can promote accountability among public officials, reduce conflict of interest and increase citizen trust in public institutions.

While a well-functioning financial disclosure system exists in some countries, there are many countries where financial disclosure practices are either not standardized or are in a form that is difficult to use for due diligence purposes. This results in inconsistencies and inefficiencies in analyzing the data. Even in cases when data exists, information can be siloed across multiple systems, which impairs the capability of decision-makers to understand the holistic picture of a public official’s risk profile. Furthermore, most system do not provide for automatic verification of the data which makes verification of the data submitted by the public officials very difficult.

ANTI-CORRUPTION CHALLENGE

MEET THE TEAM:

- Anthony Burns
- Prashanti Dutta
- Suresh Yadav
- Sindhu Kumari
- Sandeep Sreekumar

Public Officials Risk Index (PORI): A Tool to Combat Corruption Using Disruptive Technologies

The project is a web-based, customizable, and integrated solution which facilitates prevention and detection, using technology, by providing risk index, dashboard analytics, conflict of interest risk flags, and social media alerts. It uses the information in financial disclosure, procurement, and social media, and enable automatic verifications of the information

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IMF Governance Resources

IMF, [Progress in Implementing the Framework For Enhanced Fund Engagement On Governance](#), July 2020

IMF, [“The Role of the Fund in Good Governance.”](#) December.1996

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IMF, [“A Strategy for IMF Engagement on Social Spending,”](#) SM/19/69., 2019

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Finance and Development Magazine. [Hidden Corners of the Global Economy](#) (various articles), September 2019.

IMF, [Working Paper No. 19/121](#): Macro-Fiscal Gains from Anti-Corruption Reforms in the Republic of Congo. June 2019.

IMF, [Working Paper No. 19/1](#): A Governance Dividend for Sub-Saharan Africa? January 2019