

ECA RESEARCH NOTES

Office of the Chief Economist

EUROPE AND CENTRAL ASIA

Data, Digitalization, and Governance

April 2021



Hi Everyone,

This month, we hosted the World Bank Group/IMF Spring Meetings and holding them virtually (again) meant they were spread over the whole month of April. We launched our Spring ECA Economic Update in time for the Meetings, and disseminated it through media, social media, and in meetings and panels with policy makers and researchers.

We are all keenly aware of the continuing pandemic and its human and economic impact. Not only are the poor and the vulnerable disproportionately affected, but, where there is recovery, it also tends to be unequal – mostly benefiting skilled workers in the formal economy, and men. The challenge over the next several years will be how to promote a more equal and inclusive recovery.

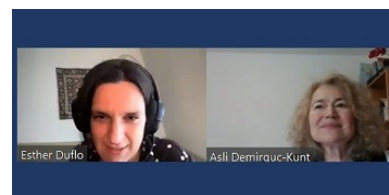
The immediate concern of policymakers has of course been to protect the lives and livelihoods of the most vulnerable. To that end, governments have been focused on health systems, improved social protection, and temporary support measures. Beyond the immediate support to people and firms, there is also a need to tackle more structural issues since support cannot continue indefinitely and many of our countries face debt sustainability issues.

So, in our Update for Europe and Central Asia, we identified a number of long-term priority areas for our region and did a deep dive into one of them: how to improve government quality and citizen trust. We believe this is key to successful recovery. After all, the success of measures such as mobility restrictions, deployment of vaccination programs, providing relief packages, and devising ways for virtual learning for millions of school children, all depend on the quality of governance. Among the different ways to improve governance, we believe data and digitalization hold promise. You can read more about all this in our Update and in the round-up of papers included below.

Hope you take the time for a break this spring and rest.

Happy Reading!

Asli



Esther Duflo and Asli Demirgüç-Kunt at the Frontiers Forum



Asli Demirgüç-Kunt at the Foundation for Economic and Industrial Research - IOBE panel

FEATURE STORY



Data, Digitalization, and Governance Europe and Central Asia Economic Update, Spring 2021

Digital technology offers the potential to increase efficiency, transparency, responsiveness, and citizen trust, directly impacting the quality of government. Across the world, the quality of government is increasingly informed by the extent to which governments harness digital tools and technologies to optimize management, service delivery, and overall state capacity. Technology and data are also key for fostering collaboration between governments and civil society to improve public sector efficiency and service delivery. The COVID-19 pandemic has made particularly salient the opportunities for fostering digitization and highlighted the costs associated with delaying the public sector modernization.

Press Release

Report

Interview

 [Opening-up Trajectories and Economic Recovery: Lessons after the First Wave of the COVID-19 Pandemic](#)

Asli Demirgüç-Kunt, Michael Lokshin, and Iván Torre, *World Bank Policy Research Working Paper 9480* – November 2020

This paper analyzes the reopening process of countries in Europe and Central Asia after the first wave of the COVID-19 pandemic, provides evidence on the effects of different reopening trajectories on economic recovery, and also sheds light on the role that trust in government institutions plays in this process. The analysis finds that a higher level of trust in government is associated with increased economic activity among countries that carried out a gradual reopening of their economies. The results also indicate that countries that adopted a gradual, staged reopening experienced stronger economic recovery compared with the countries that rushed into lifting the restrictive measures before the pandemic was under control.

 [Why Do Firms Pay Bribes? Evidence on the Demand and Supply Sides of Corruption in Developing Countries](#)

Bernard Gauthier, Jonathan Goyette, Wilfried Kouamé, *World Bank Policy Research Working Paper 9441* – October 2020

This paper empirically examines the demand and supply sides of bribery using World Bank Enterprise Survey data on 18,005 firms in 75 developing countries. It assesses the determinants of firms' bribe paying behavior and examines how bribe behavior affects two main sectors where corruption is rampant: taxation and government contracts. The results show that corruption in tax administration tends to be mainly a demand-side phenomenon. While in public procurement, on the contrary, that corruption is a supply-side phenomenon, with bribe transactions generally initiated by firms to secure public contracts.

 [Political Dividends of Digital Participatory Governance: Evidence from Moscow Pothole Management](#)

Nisan Gorgulu, Gulnaz Sharafutdinova, Jevgenijs Steinbuks, *World Bank Policy Research Working Paper 9445* – October 2020

This study focuses on the potential linkage between road quality based on citizens' complaints and electoral outcomes in two rounds of Moscow mayoral elections in 2013 and 2018. The results indicate that greater use of digital technologies results in an increased number of votes and a higher margin of victory for the incumbent. The authors highlight digital technologies' role as a tool to create participatory governance mechanisms and convey to the public an image of a transparent, responsive, and capable government.

 [Data Transparency and Long-Run Growth](#)

Asif Mohammed Islam and Daniel Lederman, *World Bank Policy Research Working Paper 9493* – December 2020

The authors explore the effects of data transparency on long-run growth for a sample of mostly developing economies. Data transparency is defined as the timely production of credible statistics as measured by the Statistical Capacity Index. The results show that data transparency has a positive effect on real gross domestic product per capita, implying a statistically significant impact on transitional growth to a higher potential level of gross domestic product per capita.

 [The Use of Data Analytics Techniques to Assess the Functioning of a Government's Financial Management Information System](#)

Ali Hashim, Moritz Piatti-Fünfkirchen, Winston Cole, Ammar Naqvi, Akmal Minallah, Maun Prathna, and Sokbunthoeun So, *World Bank Policy Research Working Paper 8689* – January 2019

This paper explores the meaning of adequate use of financial management information systems (FMIS) and points to data analytics techniques that can shed light on how the use of FMIS systems affects expenditure data integrity and effectiveness of budget controls. This methodology is applied to Pakistan and Cambodia. Deploying data analytics techniques can help assess whether FMIS systems serve form or function. Judging a system by its use is informative about governments' revealed preferences in expenditure management.

 [From Theory to Practice: Open Government Data, Accountability, and Service Delivery](#)

Michael Christopher Jelenic, *World Bank Policy Research Working Paper 8873* – June 2019

Although some of the benefits of open data initiatives have been assessed in the past, it is often more difficult to evaluate their social and political impacts. This study explores, based on the evidence available, to what extent and for what reasons the use of open government data is associated with higher levels of accountability and improved service delivery in developing countries. Relying on data from 25 countries in Sub-Saharan Africa, the author finds a number of significant associations between open government data, accountability, and service delivery.

 [Technology, Taxation, and Corruption: Evidence from the Introduction of Electronic Tax Filing](#)

Oyebola Okunogbe and Victor Pouliquen, *World Bank Policy Research Working Paper 8452* – May 2018

This paper examines the impact of e-filing on compliance costs, tax payments, and bribe payments using experimental variation and data from Tajikistan firms. Among firms previously more likely to evade, e-filing doubles tax payments, likely by disrupting collusion with officials. The results indicate that e-filing reduces compliance costs and makes the distribution of tax payments across firms arguably more equitable.



[Hierarchy and Information](#)

Daniel Rogger and Ravi Somani, *World Bank Policy Research Working Paper 8644* – November 2018

The information that public officials use to make decisions determines the distribution of public resources and the efficacy of public policy. This paper develops a measurement framework for assessing the accuracy of a set of fundamental bureaucratic beliefs and provides experimental evidence on the possibility of 'evidence briefings' improving that accuracy. The errors of public officials are large, with 49 percent of officials making errors that are at least 50 percent of objective benchmark data. The provision of briefings reduces these errors, but in line with theoretical predictions, organizational incentives mediate their effectiveness.



[Effects of Public Sector Wages on Corruption: Wage Inequality Matters](#)

Asli Demirgüç-Kunt, Michael Lokshin, and Vladimir Kolchin, *World Bank Policy Research Working Paper 9441* – October 2020

Using a new country-level, panel data set, the authors argue that wage inequality in the public sector is an important determinant of the effectiveness of anti-corruption policies. Increasing the wages of public officials could help reduce corruption in countries with low public sector wage inequality. But it is opposite in countries where public sector wages are highly unequal. Combining increases in public sector wages with policies affecting the wage distribution could help policy makers design cost-effective programs to reduce corruption in their countries.

BLOGS



Digitalization and data can vastly improve public service delivery for citizens

Anna Bjerde & Asli Demirgüç-Kunt, *March 30, 2021*

Digital technology and the data revolution offer countries significant potential to increase public service efficiency and delivery, and to boost transparency and citizen trust. Better government also means better development outcomes, which is especially relevant for the emerging and developing economies of Europe and Central Asia, many of which are still transitioning to market-based economies.

[Read the blog »](#)



Four GovTech solutions to improve quality of government budget execution in a post-COVID-19 world

Srinivas Gurazada & Khuram Farooq, *March 25, 2021*

The recently released [2020 Global Report on Public Financial Management](#) (PFM) finds that countries do better in preparing their budgets than implementing them. While budgets are key political instruments of governments in power; effective budget execution is as important as preparing budgets that reflect the priorities of the government. As the World emerges out of the pandemic, a new wave of GovTech solutions implementation for PFM reforms are likely to gain momentum.

[Read the blog »](#)



Disruptive technologies can provide developing countries with a pathway to revamp their public procurement processes

Blandine Wu Chebili & Hunt La Cascia, *March 31, 2021*

New technologies have the potential to make a radical change in the way public organizations around the world procure and will likely benefit buyers as well as suppliers and citizens. A new [World Bank study](#) provides an overview of selected technologies identified as "disruptive" that could be useful to public procurement.

[Read the blog »](#)

CALENDAR OF EVENTS

- **May 20, 2021 at 10AM:** [2020 ECA Academy](#) event - Presentations of Winning Research
- **May 25, 2021 at 10AM:** ECA Governance Seminar "*Unlocking the Keys to a Resilient Recovery in ECA: Data, Digitalization, and Governance*"
- **June 16, 2021 at 10AM:** ECA Talk featuring **Ralph De Haas**, Director of Research at the European Bank for Reconstruction and Development (EBRD), on "*Firm-level Barriers on the Path to Net Zero*"

Check [ECA Lectures](#) and [ECA Talks](#) to learn more about our past and future events.

The ECA Research Notes newsletter is produced by the Europe and Central Asia (ECA) Chief Economist's Office. Please send comments, suggestions, and feedback to ECACEoffice@worldbank.org.

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