

## Impact case study (REF3)

<b>Institution:</b> University of Sussex		
<b>Unit of Assessment:</b> 25 – Area Studies		
<b>Title of case study:</b> Curbing corruption in public procurement and aid		
<b>Period when the underpinning research was undertaken:</b> 2013 – 2020		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>	<b>Role(s) (e.g. job title):</b>	<b>Period(s) employed by submitting HEI:</b>
Elizabeth Dávid-Barrett	Professor of Governance and Integrity	Oct 2014 – present
Olli Hellmann	Senior Lecturer in Politics	Sep 2013 – Jun 2019
<b>Period when the claimed impact occurred:</b> 2015 – 2020		
<b>Is this case study continued from a case study submitted in 2014?</b> N		
<b>1. Summary of the impact</b>		
<p>Research on public procurement by Dávid-Barrett and Hellmann has helped international donors, national governments and civil society organisations to build new systems for monitoring corruption risks in public procurement. This has enhanced their capacity to identify corruption risks and made public spending – both international aid and budget spending – more efficient and accountable. Given that corruption in public procurement wastes public money, leads to poor service delivery, and excludes good companies from markets, hindering economic development, the wider impact of this research is likely to include improved competition for government contracts and better public service delivery. World Bank lending covers more than 100 countries, meaning that improved monitoring of how this aid is spent has extensive significance and reach.</p>		
<b>2. Underpinning research</b>		
<p>Up to 50% of public spending in developing countries, and on average 29% in OECD countries, is spent through public procurement. The process is complex with many opportunities for manipulation, and the OECD estimates that 20-30% of the value of projects is lost to corruption (OECD, 2016, 'Preventing Corruption in Public Procurement'), meaning that goods and services procured are often poor-quality, dangerous, or entirely fail to reach the intended beneficiaries. Corruption in public procurement also undermines confidence in government and excludes good companies from markets. However, it is difficult to identify where in the procurement process corruption occurs, and hence trace it back to individual perpetrators or institutional weaknesses.</p> <p>The Curbing Corruption in Procurement project, a flagship programme of the Centre for the Study of Corruption at the University of Sussex, has been funded through three consecutive grants since 2016 from the Anti-Corruption Evidence programme, an initiative of the UK Department for International Development (DFID, recently merged into the Foreign and Commonwealth Development Office, FCDO).</p> <p>The research design was informed by Dávid-Barrett's work on which aspects of the public procurement process are most vulnerable to corruption ([R1], and work undertaken prior to joining Sussex) and Hellmann's research on corruption and institutional controls in developing countries [R2 and R3], and builds on a methodology developed by co-investigator and co-author Mihaly Fazekas (Central European University). For the first DFID-funded research project, Dávid-Barrett, Hellmann and Fazekas played equal roles in the research design and each took the lead on one of the three core components of the work (regulatory analysis, case study research, quantitative analysis, respectively), leading to a paper jointly co-authored by the three (and two postdoc) researchers [R5]. Dávid-Barrett and Fazekas in the meantime worked together on analysing corruption in public procurement in Hungary and the United Kingdom,</p>		

equally contributing to one publication [R4]; and then co-designed a second DFID-funded project, with Dávid-Barrett taking the lead on qualitative research and Fazekas on the quantitative analysis; they equally contributed to one publication [R6].

The research demonstrates how big data analytics can be used to identify corruption risks in public procurement and provides an evidence base about which reforms are most effective in reducing corruption risks in this important area of public spending. It consists of detailed work to: collate and clean very large datasets (>500,000 contracts); develop and test red flags or proxy 'corruption risk indicators'; analyse changes in public procurement rules and practices; understand the dynamics of corruption in public procurement in different contexts through case studies; and undertake statistical analysis to test the impact of reforms on the distribution and scale of corruption risks across >100 countries.

The key findings are that:

1. One specific type of corruption in public procurement, partisan favouritism – whereby a political party in office abuses its power to allocate contracts to its favoured allies – flourishes in conditions where politicians are able to capture and dominate the institutions responsible for (a) implementing and (b) monitoring procurement processes [R4].
2. Corruption risks in public procurement are greater in countries where political regimes have shorter time horizons and weaker state capacity [R5].
3. Donor efforts to curb corruption by increasing oversight and transparency are effective in reducing some corruption risks in procurement [R5], and are particularly valuable in countries with low state capacity. This suggests that donors can control aid in weak state-capacity countries by substituting their own controls for the lack of local controls.
4. Reforms that focus only on specific parts of the process risk displacing corruption to other – less-regulated – parts of the procurement process, reducing the overall impact. It is therefore necessary to design reform in a comprehensive way and to tailor indicators to political context to capture local nuances in corruption techniques [R6].

### 3. References to the research

- R1. Fazekas, M. and Dávid-Barrett, E. (2015) Corruption Risks in UK Public Procurement and New Anti-Corruption Tools. Government Transparency Institute.  
<http://www.govtransparency.eu/index.php/2015/11/10/corruption-risks-in-uk-public-procurement-and-new-anti-corruption-tools/>
- R2. Hellmann, O. (2014) Electoral Reform in Asia: Institutional Engineering against 'Money Politics'. *Japanese Journal of Political Science*, 15(2): 275-298.  
<https://doi.org/10.1017/S1468109914000073>
- R3. Hellmann, O. (2017) The historical origins of corruption in the developing world: a comparative analysis of East Asia. *Crime, Law and Social Change*, 68: 145–165.  
<https://doi.org/10.1007/s10611-016-9679-6>
- R4. Dávid-Barrett, E. & Fazekas, M. (2019) Grand corruption and government change: an analysis of partisan favoritism in public procurement (2020) *European Journal on Criminal Policy and Research*, 26: 411–430. <https://doi.org/10.1007/s10610-019-09416-4>
- R5. Dávid-Barrett, E., Fazekas, M., Hellmann, O., Mark, L. & McCorley, C. (2020) Controlling Corruption in Development Aid: New Evidence from Contract-Level Data. *Studies in Comparative International Development*, 55: 481–515. <https://doi.org/10.1007/s12116-020-09315-4>
- R6. Dávid-Barrett, E. and Fazekas, M. (2020) Anti-Corruption in Aid-funded Procurement: Is Corruption Reduced or Merely Displaced? *World Development*, 132: 1-13.  
<https://doi.org/10.1016/j.worlddev.2020.105000>

### Indicators of research quality – Grants and Prizes

- (i) British Academy/DFID Anti-Corruption Evidence Programme (competitive and peer-reviewed) Curbing corruption in development aid-funded procurement, PI: Hellmann, 01/16-12/17, £398,275.

- (ii) British Academy/DFID Anti-Corruption Evidence Programme (competitive and peer-reviewed) Curbing corruption in public procurement. PI: Dávid-Barrett, 01/18-12/19, total £350,000 (£262,447 to Sussex).
- (iii) Global Integrity/DFID Anti-Corruption Evidence Programme (Red Flags Impact Extension) PI: Dávid-Barrett, 10/19-06/21, total £124,000 (£109,900 to Sussex).

Winner of the *IMF Anti-Corruption Challenge* competition, for Public Procurement Corruption Risks: harnessing big data for better fiscal governance and growth, October 2020. Dávid-Barrett was one member of a team of seven led by Fazekas. <https://www.imf.org/en/Topics/innovation-at-the-imf/imf-acc-event>

#### 4. Details of the impact

This research developed tools for identifying patterns of corruption risk in large contract-level datasets and testing the impact of reforms, and has been used to combat corruption in three sectors: (1) international aid donors; (2) national governments; and (3) civil society organisations.

##### 1. Impact on understanding, learning and organisational practice of aid donors

The research team engaged heavily with donors throughout the research, e.g. presenting the method and findings at internal workshops with the FCDO (formerly DFID), the World Bank, and the Inter-American Development Bank (IDB), to:

- a) inform their own practices and rules about disbursing aid and monitoring procurement; and
- b) provide evidence to support their advocacy work with national governments to help them collect and publish better quality procurement data and introduce better monitoring systems.

This work has fundamentally changed the approach of the World Bank, particularly its Solutions and Innovations in Procurement (SIP) team, which works to identify risks in Bank-financed contracts and to assist governments in improving their own risk management. In a testimonial which cites R4, R5 and R6 as particularly useful, [text removed for publication] [S1]. One example of this is the Bank's work in Tanzania. In August 2017, the Bank's country office in Dar es Salaam co-organised an event with the Sussex research team, the Tanzanian Public Procurement Regulatory Authority (PPRA) and the Tanzanian Prevention and Combatting of Corruption Board [S2]. The workshop raised awareness on the part of the 25-30 government, civil society and private sector participants of how big data analytics can identify corruption risks in public procurement, and urged the government to improve its procurement data infrastructure based on a set of policy recommendations which Dávid-Barrett co-authored.

[text removed for publication] [S3].

Commenting on the wider utility of the research, [text removed for publication] [S3].

##### 2. Impact on public policy and practice at national and international statutory bodies Council of Europe

In March 2016, Dávid-Barrett spoke at the Council of Europe Congress of Local and Regional Authorities' session and subsequently wrote a policy paper with recommendations. The Governance Committee of the Congress wrote in a testimonial dated April 2017 that:

'As a result of the recommendations, we would expect to see our members develop new measures to tackle corruption risks in this area. They will also feed into our work on transparency and open government and the revision of the Congress Code of conduct for local officials and elected representatives. In the longer term, we expect these changes to better protect our members from corruption and hence lead to a reduction in corruption in this high-risk area' [S4].

In October 2017, the Congress published Dávid-Barrett's policy paper and passed a resolution urging its members – local and regional governments in 47 countries – to take action to improve the transparency of data about public procurement [S5].

### UK Government

In December 2017, the Cabinet Office published its National Anti-Corruption Plan [S6], which cites this research [R1, R4 and R5]; an endorsement (dated 6 Dec 2019) from the Head of the Government's Joint Anti-Corruption Unit confirms:

'your research on corruption in public procurement and transparency/open data has informed the work of my unit and was a key factor behind procurement being selected as one of six top priorities for action within the government's 2017-22 UK Anti-Corruption Strategy ... [The research is] relevant and important to the UK and other societies as we seek to secure good value and effective infrastructure and services that meet the needs of citizens' [S7].

### Public Procurement Regulators in Jamaica and Uganda

The FCDO was sufficiently confident in the research that it provided additional funding to the research team to work with regulators (including public procurement and law enforcement agencies) in two countries – Jamaica and Uganda – to develop an online tool to assist their work. This interactive portal allows regulators to analyse their own procurement data, helping them to spot systemic corruption risks as well as high-risk individual transactions, and hence informing policy change and investigation of cases. The research team has co-hosted workshops with the Integrity Commission of Jamaica (ICJ) (January 2020) [S8] and the Ugandan Public Procurement and Disposal of Assets Authority (PPDA) (November 2020) on Analysing Procurement Data for Corruption Risks, to ensure that the tool is adapted to their needs and to help them to integrate it into their work [S9].

### 3. Impact on understanding, learning and watchdog activity of civil society

The research has provided a new method for civil society organisations to collect evidence of corruption risks in public procurement, which they can use to advocate for reform and hold governments to account. This is particularly valuable in developing countries, where civil society is often weak vis-à-vis government. The clearest example of impact relates to the African Maths Initiative (AMI), a Kenya-based non-governmental organisation which works on improving Maths education in Africa. The AMI transferred the team's methodology into their open-source user-friendly software package, R-Instat (a front-end to R), making it possible for a wide range of users to use these analytical tools and the 'red flag' method for identifying corruption risk in procurement processes. As AMI disseminates R-Instat to students and data scientists as part of their work to improve data literacy and statistical skills throughout Africa, the method is being showcased as a practical application of statistical analysis helping to raise awareness about the importance of evidence in policy-making [S10.1 and S10.2]. The CEO of AMI writes:

'One of the major problems with current mathematics and statistics education across Africa, and the world, is the lack of real world context and therefore motivation of students to engage in the subject. [...] Our work with Dr. Dávid-Barrett has widened the areas of applications that we now introduce to students, and we believe this increases student engagement, motivation and interest in using data for development challenges. [...] We have seen first-hand how students become motivated when they can connect what they study with real world problems they care about' [S10.1].

Dávid-Barrett also worked with AMI to organise workshops for Maths students, civil society activists and researchers in Tanzania (March 2017) [S10.3], Ghana (May 2018) [S10.4, S10.5] and Uganda (October 2018, co-organised with the Maths Department of Makerere University) [S10.6]. One participant at the Ghana workshop organised by the African Institute for Mathematical Sciences said 'it has made me feel something could be done to spot and stop corruption once the information on procurement is made available' [S10.5]. In Ghana, the media reported on the event, framing it as part of a wider campaign asking the government to improve transparency by passing a Right to Information Bill [S11].

**5. Sources to corroborate the impact**

- S1. [text removed for publication]
- S2. Tanzania workshop on 17 Aug 2017 and list of invited participants
- S3. [text removed for publication]
- S4. Letter from Secretary to Council of Europe Congress of Local and Regional Authorities, 3 April 2017.
- S5. Resolution passed by Council of Europe Congress of Local and Regional Authorities, 19 October 2017.
- S6. UK National Anti-Corruption Plan 2017-22.
- S7. Letter from Head of UK Joint Anti-Corruption Unit, 6 December 2019.
- S8. Jamaica workshop on 29-30 January 2020, agenda
- S9. Opentender Uganda portal <https://ug.opentender.eu/>
- S10. African Maths Initiative Resources:
  - S10.1 Letter from African Maths Initiative;
  - S10.2. YouTube video demonstrating use of R-Instat to analyse procurement:  
<https://www.youtube.com/watch?v=tRZtkEaqPSs>;
  - S10.3 Tanzania workshop poster, 24 March 2017
  - S10.4 Ghana workshop on 3-4 May 2018, agenda
  - S10.5 Ghana workshop on 3-4 May 2018, feedback
  - S10.6 Uganda Workshop on 13-14 October 2018, agenda
- S11. Ghana Web report, Parliament urged to pass RTI Bill to promote transparency, 7 May 2018  
<https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Parliament-urged-to-pass-RTI-Bill-to-promote-transparency-649657>