3 Measuring corruption

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INTRODUCTION

Corruption, defined as 'the abuse of entrusted power for private gain', is not a recent phenomenon. The study of corruption, however, its frequency and forms, causes and consequences, has expanded dramatically in the past 15 years. Why is this so? Since the 1990s, there has been a growing awareness of the relevance of corruption to economic and social development – and this has gone hand in hand with emergence of empirical research on corruption. The growing evidence on corruption and its impact has in turn increased interest in corruption among policymakers, development practitioners and academics alike.

The focus on corruption research has ranged from questions of definition, to measurement, to the analysis of the relationship between corruption and relevant social, political and economic phenomena, such as human rights, media freedom, democracy, economic development, social inequality, foreign investment and the like (Lambsdorff, 2005; Treisman, 2007; Pellegrini & Gerlagh, 2008). More evidence, and a growing awareness of the need to measure and understand corruption, has led to a vastly more sophisticated set of tools and approaches to assessing corruption. With the emergence of these new methods, it is important to take stock of results: research has overwhelmingly proved the hypothesis that corruption has a negative impact on people and on markets. Corruption, research shows, regardless of method, is a negative sum game.

This chapter provides an overview of recent developments in the field of measuring corruption. In line with the overall policy-oriented focus of the handbook, it focuses on those tools and methodological approaches that have emerged from both academic research and anti-corruption practitioners as they aim to provide data which is useful for policy. Other methods for analysing corruption, such as in-depth case studies, sociopsychological tests of corrupt behaviour, institutional approaches to explaining corruption, or anthropological inquires into cultures of corruption, offer rich detail and cutting-edge theoretical models but are of more limited utility for policy. They therefore remain outside the scope of our review.

STUDYING CORRUPTION: METHODS ON THE ROAD TO UNDERSTANDING

Corruption is by definition a clandestine activity, making it hard to measure. This has led researchers to seek proxies, most often now understood as perceptions of corruption, and to establish the presence of antitodes, those factors most likely to prevent corruption from occurring. Here, the ‘inputs’ of transparency, accountability and integrity and other elements of good governance have come to be seen as key factors in preventing the ‘output’ of corruption. Clearly, the rise of these concepts, which is reflected in Figure 3.1, is closely related to the ascendance of the good governance agenda on development policy over the last decade.

As a contribution to advancing knowledge on corruption and good governance, a first generation of corruption-measurement tools emerged in the 1990s, which gave us the big picture about corruption, measuring corruption at aggregate level. A second generation then offered more actionable indicators, providing assessments that better pointed to patterns of corruption and corruption risk. Now a third generation of corruption measurement tools has come to the fore. These offer us targeted, bottom-up, actor-focused and locally-owned findlings about corruption and its causes – and they make the explanation of corruption both richer and more specific, but also more complicated.

Similar reviews of the methodologies for evaluating corruption have been undertaken over the past half-decade (Kahinš, 2005; Heller, 2009; UNDP, 2008). On the whole, these earlier reviews addressed the issues of cross-country comparisons, input vs. output dimensions of corruption and aggregate vs actionable indicators. In short, they include both first-and
second-generation corruption-research methods. In our work as anti-
corruption practitioners, we have noticed a trend towards a new gen-
eration of tools, which we feel is important to recognize as a distinct category
of corruption measurement. This new or third generation of corruption
measurement tools often focus on a single country, use highly disaggre-
gated indicators, mixed-method research designs and other innovative
features.2

Ultimately, a mix of corruption measurement methodologies is required
so that researchers of many stripes can engage in the field, and policy-
makers can have a diverse array of data and analysis at their disposal with
which to make more informed decisions about how to apply resources to
prevent and redress corruption. Civil society activists working to address
corruption can also benefit from the methodological mix, by using high-
level rankings to create peer pressure, cross-country evaluations to distil
best practices and complex participatory assessments to engage with other
anti-corruption actors on joint diagnosis and action.

FIRST GENERATION MEASUREMENT TOOLS:
PUTTING CORRUPTION ON THE MAP

Following in the footsteps of the launch of the UN’s Human Development
Index in 1990, the 1990s saw a proliferation of similar cross-country
indices. These indices focused on a range of political, social and economic
issues, such as democracy, peace, or women’s empowerment, and their
main purpose was to raise awareness about an issue among policy-makers.
By ranking countries, such indices stimulated (re)action by governments of
those countries that ranked poorly. Headline indices also provided
insight for donors, investors and concerned citizens about the relative
standing of their country of interest versus others.

Assessments of corruption were part of this trend. Here, TI’s Corruption
Perception Index (CPI) and the World Bank’s Governance Indicators
(WBGI), which includes a ‘Control of Corruption’ dimension, are the two
most noteworthy examples. The CPI and WBGI, which started in 1994
and 1996 respectively, rely on largely the same methodological
approach of using existing cross-national data sources, such as expert ratings,
public opinion polls and surveys among business people, to generate a
composite indicator of the extent of perceived corruption in a country. By
combining a large number of individual sources, these aggregate measures
limit the potential measurement error and bias in any one of them, partic-
ularly since these measures rely on broad perception-based indicators.
Ultimately, these indicators quantify a generalised ‘corruption syndrome’,
measuring as they do a country’s overall perceived corruption levels via a
single score.

Perception-based corruption indices have received significant scrutiny
and a fair share of criticism, with concerns ranging from their lack of
conceptual precision (Oman & Arndt, 2006), lack of transparency of data
(de Maria, 2008), the problematic validity of underlying data sources,
choices about aggregation and weighting (Hawken & Munck, 2011),
potential interdependence of sources (Knack, 2006), to their sole reliance
of perception-based measures (Andersson & Heywood, 2009).

Despite these criticisms, the CPI and WBGI have been important for
putting corruption on the agenda of both global policymakers and the
social science research community alike (Lamboldt, 2006). The CPI’s
most relevant impact has been to press governments and their partners
in concrete anti-corruption reforms by highlighting the seriousness
of the ‘corruption challenge’ for their country. The WBGI’s specific
contribution has been to offer a multi-dimensional view of governance,
allowing the comparison of a country’s perceived levels of corruption
to other areas of governance (e.g. the extent to which its citizens have a
voice in public affairs). In addition, the WBGI indicator offers a measure
of corruption which is comparable over time and can therefore be used
to identify countries which have improved or respectively deteriorated
in their control of corruption.

SECOND GENERATION CORRUPTION
MEASUREMENT TOOLS: BENCHMARKING
ACROSS TIME AND SPACE

In the early 2000s, when the fight against corruption – as part of the larger
good governance agenda – had been firmly established as a priority for
both the public and private sector, new measures were required which
helped to benchmark progress over time as well as to enable comparisons
with peers. At the same time, these new measurement methods aimed to
better understand how corruption works and what could be done to stop
it.

Two main types of ‘second generation’ tools were developed to address
these concerns. One set of new tools sought to go beyond perception-based
expert measures to examine the actual experience of people exposed to
corruption. While facing a number of measurement challenges, such as recall
effects and social desirability issues, such ‘victimization surveys’ were able
to reveal the overall extent of bribery, and were often representative at
country level. Further, with appropriate stratification, they could be used
to look at the extent of bribery in terms of income level and gender of the bribe-payer. Such surveys were generally conducted as public opinion polls, but there are also examples of specialized ‘exit polls’ at hospitals as well as business surveys.

Prominent examples are the International Crime Victim Survey (ICVS) and Transparency International’s Global Corruption Barometer. The ICVS is co-ordinated by the Dutch Ministry of Justice in conjunction with the United Nations Inter-regional Crime and Justice Research Institute (UNICRI). It includes questions on the respondent’s experience with a range of crimes, including corruption. More than 70 countries were surveyed in the latest round of surveys in 2004/5. The ICVS is implemented at non-regular intervals. TI’s Global Corruption Barometer examines the views and experiences of citizens with regard to a range of corruption issues, from satisfaction with government efforts to fight corruption, willingness to report corruption, and frequency of bribery as experienced across a range of public services. The Global Corruption Barometer is based on a public opinion survey that is implemented in approximately 60–80 countries on a bi-annual basis. Both of these tools not only enable corruption experience to be assessed, but provide ample data for comparisons across time and space.

The second set of tools focuses on integrity, transparency and accountability issues as they assess anti-corruption systems, standards and practices of countries, i.e. the ‘inputs’ of the corruption equation. These tools have resulted in the emergence of a large and still-growing ensemble of disaggregated indicators, which unpack the corruption syndrome into a number of key components that are viewed as critical as a bulwark against corruption (e.g. budget processes, public financial management, integrity mechanisms, business practices). The focus of second generation tools is on assessing the extent to which anti-corruption provisions and practices exist, that is, whether the appropriate inputs, such as a transparent budget process, a strong anti-corruption system and solid financial management practices, are in place to prevent corruption from occurring. These tools usually examine both the existing legal framework (that is, what is on the books, in terms of law or regulation) as well as how the framework is implemented in practice.

Examples include the Global Integrity Index, the Open Budget Index, Public Expenditure and Financial Accountability Framework (PEFA) and the Promoting Revenue Transparency Companies Report. The Global Integrity Index, which started in 2004, uses more than 300 indicators to examine the most relevant aspects of a country’s anti-corruption system, both in law as well as in practice. The indicators include quantitative scores (which are summarized in a number of key dimensions and an overall rating for the country), as well as brief qualitative comments by an in-country expert. Data is currently available for 104 mainly developing and transitioning countries. More recently, Global Integrity has begun to adapt the tool to subnational as well as sectoral contexts. The Open Budget Index, available since 2006, surveys countries’ budget practices with regard to their transparency and accountability. It is based on a detailed questionnaire administered by in-country civil society organizations and researchers in close to 100 countries. It has shown that installing a transparent budget process can be achieved by a dedicated government rather quickly and with limited capacity and resource requirements, as the example of top-performing South Africa and much-improving Mongolia and Liberia indicate.

Co-ordinated by the World Bank, the Public Expenditure and Financial Accountability Framework (PEFA) is another example of a tool that assesses a component of the corruption prevention system, examining the performance of the public budgeting and accounting systems throughout the entire budget cycle via a range of indicators. Data is collected by World Bank teams in collaboration with experts from the government being assessed. The PEFA framework is rolled out on an ongoing basis at country level, with no attempt to standardize data collection across countries. As a consequence, there are no comparative reports on the PEFA results. As a final example of this approach to business practices, Transparency International’s Promoting Revenue Transparency Companies Report, with two editions thus far (2008 and 2011), analyses more than 40 of the world’s major oil and gas companies according to the extent of their reporting on organizational and financial matters, their country by country reporting, as well as the scope of their anti-corruption programmes.

**WHAT DOES THE LEAP MEAN? LOOKING AT FIRST AND SECOND GENERATION TOOLS TOGETHER**

Second generation corruption measurement tools make it possible to investigate the extent to which people’s experiences align with their perceptions as well as with the perceptions of the experts. In other words, they enable us to test the reliability of first-generation corruption-measurement tools. The results are mixed, but generally positive.

The question of how expert perceptions of corruption, people’s experiences with bribery and the anti-corruption measures of a country aligned, was crucial for establishing the validity of each of these indicators as well as for understanding the inter-linkages among various forms of corruption.
and between them and a government’s anti-corruption efforts. In Table 3.1 we report the most recent results from the key perception indicator (CPI 2010), experience measure (GCB 2010) and input measure (Global Integrity Index, GII).

The results indicate overall strong correlations among these measures, although they are far from perfect. Figure 3.2 depicts the country scores on the CPI and Global Integrity Index with the size of each ‘country circle’ indicating the percentage of citizens who paid a bribe for a public service over the last 12 months, taken from the GCB. Whereas the countries in the upper right-hand corner (i.e. countries with low levels of perceived corruption and strong anti-corruption systems) are also ‘low bribery’ countries, the situation at the bottom left of the figure (i.e. high levels of perceived corruption, weak anti-corruption systems) is less straightforward. Here, we find not only countries with a high percentage of reported bribery, but also countries where bribery is much less common than their high levels of perceived corruption and rather weak integrity systems would suggest, such as Venezuela, Morocco and China. Similarly, Pakistan and Romania exhibit more bribery than one would expect based on the relative strength of their anti-corruption systems.

On the whole, whereas for high CPI scores, i.e. rather ‘clean’ countries, the results of the different measures correlate highly, this holds true to a lesser extent for countries with medium or low CPI scores. Here, one finds a number of outliers and anomalies, indicating that the ‘corruption syndrome’ comes in more shapes and forms than the ‘no corruption syndrome’. In addition, the emergence of second generation tools and their findings has allowed us to establish that experience of corruption is less common than one would expect when looking at perception-based data (Mishler & Rose, 2008; Olken, 2009). This does not call into question the relevance of corruption perception measures, not least since perceptions matter as they often serve to guide actual behaviour. However, the limitation of perception-based assessments should be acknowledged more clearly by their users – particularly in the policy community – and experience-based data should be seen as a crucial complement in advancing the collective knowledge on corruption.

A common limitation of first and second generations of corruption measurement tools has been the focus on either corruption or its antidote: integrity, accountability and transparency. Very few of these measurement tools combined both aspects, which was a challenge taken up by the next generation of tools.

THIRD GENERATION TOOLS: ASSESSING SPECIFIC CORRUPTION RISKS

While second generation tools have continued to expand over recent years, a new wave in corruption measurement is made up of a set of tools which focuses on capturing corruption risks within the context of a specific local setting. Many of these tools grew out of the findings of second generation research, meaning results of corruption measurement research pointed to a particular risk or vulnerability which merited further analysis. The
key purpose of third generation tools is to provide a comprehensive and nuanced assessment of corruption in a specific context, while the generation of comparative data across contexts is much less of a concern (Kaufmann & Kraay, 2008, p. 25). While these third generation tools feature different methodological approaches and have different content foci, they generally share the following underlying features:

- **Country ownership**: in response to the first and second generation measurement tools, which were largely owned by institutions operating at the international level, the third generation tools place a premium on country ownership, which should encompass the development of the research tool, its implementation, analysis and usage (OECD, 2008).

- **Participatory approaches**: since these approaches are often implemented with a specific policy or advocacy goal in mind, these measurement tools tend to rely on highly participatory approaches to collecting, validating and interpreting the evidence in the form of multi-stakeholder advisory groups, stakeholder surveys, validation workshops, or even user-generated data, such as community scorecards.

- **Process focus**: while most first and second generation tools focus on relatively static indicators, the third generation tools place an emphasis on examining the relevant actors and the ways they interact with each other in a given institutional setting. This allows for tracking dynamics and processes within a given corruption system. In turn, identifying such processes deepens the understanding of how corruption works and what needs to be done about it.

- **Triangulation of data types**: recognizing that, in the process of analysing specific corruption risks, different actors might have different but equally important perspectives to bring to the table, such approaches rely on various information sources which are often brought together via a process of triangulation. Public opinion surveys, key informant interviews, legal reviews, surveys of public sector officials or firms, and an analysis of official records are often combined to elucidate the complex ways in which actors and institutions interact with each other in a given governance context. This means that third generation indicators enable the rather rigid boundaries of ‘corruption vs anti-corruption’ research focus to be increasingly transcended. For example, there is trend in public service delivery assessments of combining user’s experiences with corruption with an analysis of the governance system of the respective sector.

- **Evidence-based advocacy intervention**: whereas first and second generation tools usually simply present their findings, the third generation tools are often applied within the context of a larger evidence-based advocacy context. In other words, the generation of the evidence by the respective tool is not the purpose in itself, but is the first step in a larger process to generate, interpret and use data to influence policy (Court & Young, 2006).

Given the sheer number of these tools, whose genesis is often in their second generation ‘parents’, makes it difficult to select examples. Rather than give a systematic overview of this new generation of measurements, we’ve decided to identify and present the main types of third generation tools based on the primary ‘unit of analysis’.

### Main Types of Third Generation Tools Based on Primary ‘Unit of Analysis’

#### Institutions
Based on the understanding that corruption requires holistic systems of closely intertwined governance institutions, which practice and promote integrity, several approaches seek to analyse the performance of these ‘integrity systems’, either at national level (Transparency International, 2010a; Head et al., 2008) or increasingly also at local level (Huberts et al., 2008; Transparencia Venezuela, 2004; Jachev & Bowser, 2008; CIET social audit). At national level, the focus on institutions assesses the respective roles of the main governance institutions vis-à-vis each other. At local level, this often involves the use of a comparative benchmarking approach to generate impetus among municipalities to strengthen their performance.

#### Laws and policies
As a consequence of the growing national and international attention to fighting corruption, a wide array of anti-corruption legislation and policies have been established. These range from comprehensive national anti-corruption strategies, to anti-corruption reforms agreed with regional bodies to fully-fledged international conventions, such as the United Nations Convention Against Corruption or the OECD Anti-Bribery Convention. Here, self-assessments as well as independent monitoring tools have been developed to assist governments and civil society in tracking progress in implementing laws, regulation and policies.
Subsystems and processes

Further corruption risk areas that have been the subject of third generation tools comprise subsystems and processes within the overall governance system. Here, specific attention has been paid to measuring those areas that are particularly prone to corruption risk. For the first such area, political financing, Transparency International developed a tool to assess the extent of transparency of political funding, which has since been adapted to both Southeast Asia, Sub-Saharan African and the Western Balkan context (Transparency International, 2007). In public procurement, the OECD has developed indicators which can be used by governments or external actors to assess procurement systems against international best practice standards (OECD, 2010). Finally, a subsystem often believed crucial to measuring the extent of corruption is that of public financial management. Here, Public Expenditure Tracking Systems have become a widely used approach to trace any ‘leakage’ in financial flows from origin to final output (Reinikka & Svensson, 2003; Savedoff, 2008).

Sectors

Yet another approach to unpacking corruption risks is related to sector-specific tools. Here, one needs to distinguish between tools applied in three kinds of sectors. The first are broad societal sectors, that is, public sector, civil society sector and the business sector, where either broad sectoral assessments (for example, the World Bank’s Doing Business programme) or comparative assessments of individual entities prevail (for example Transparency International 2009, One World Trust’s Global Accountability Report, TI Colombia’s Public Sector Index programme). The second type of sector is that of frontline public service delivery sectors, such as education or health, where the focus is often on corruption at the interface between public servants and users of these services (Chaudhury et al., 2006; Transparency International, 2010a). The third category focuses on other sectors at the interface of public and private actors, such as forestry (Kishor and Rosenbaum, 2003), land management (Burns et al., 2010) or transport (World Bank, 2009).

As their common features indicate, the implementation of third-generation corruption measurement tools is a significantly more complex undertaking than the application of the various indices of the first and second generation of tools. As the breadth of tools mentioned above indicates, third-generation research requires local capacity as well as an enabling political context, including a space for independent civil society, a certain degree of political will and a somewhat open system of public policymaking. Where these conditions are present, such tools can have a strong impact on bridging the gap between corruption research and policy. However, where these conditions are absent, implementation of such participatory multi-stakeholder approaches is likely to – at best – yield solid information without any policy uptake, and at worst jeopardize the credibility of the approach itself, as the ruling elites capture and ‘corrupt’ it.

CONCLUSION: CORRUPTION MEASUREMENT – LOOKING FORWARD

The presentation of the three generations of corruption measurement highlights the continuously evolving set of methodological approaches to measuring corruption. The generations complement each other in terms of purpose, outputs, target group, and approaches. Table 3.2 summarizes the key features of the three generations of measurement tools.

<table>
<thead>
<tr>
<th></th>
<th>Composite indicators (1st generation)</th>
<th>Comparative meso-level assessments (2nd generation)</th>
<th>Country specific multi-method assessments (3rd generation)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary purpose</strong></td>
<td>Awareness-raising, naming &amp; shaming</td>
<td>Benchmarking across time &amp; space</td>
<td>Diagnosis, recommendation &amp; policy/advocacy</td>
</tr>
<tr>
<td><strong>Main output</strong></td>
<td>Single ranking</td>
<td>Multiple rankings; comparative reports</td>
<td>In-depth corruption or governance assessment</td>
</tr>
<tr>
<td><strong>Level of aggregation</strong></td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Data</strong></td>
<td>Expert perceptions</td>
<td>Expert assessments or experiential surveys</td>
<td>Multiple data sources; focus on triangulation</td>
</tr>
<tr>
<td><strong>Primary unit of analysis</strong></td>
<td>Country</td>
<td>Governance system</td>
<td>institution, sector, policy, subsystem</td>
</tr>
<tr>
<td><strong>Main target group</strong></td>
<td>Senior government, international business leaders, media</td>
<td>International donors, business sectors</td>
<td>Donors in-country, local civil society, public officials,</td>
</tr>
<tr>
<td><strong>Ownership</strong></td>
<td>International institution</td>
<td>International institution, in cooperation with country partners</td>
<td>Country stakeholders, with technical support from international institution</td>
</tr>
</tbody>
</table>
Given the evolution of methodologies over the last 15 or so years, it is fair to conclude that the field of applied corruption research has become extremely innovative, wide in coverage, and better able to drill down into the black box of corruption. This all bodes well for research that is context specific and suited to understanding policy interventions, especially in their localized application.

After a decade and a half of moving from aggregate towards more and more disaggregated data, however, a certain reversal of this trend might also be called for. Rather than a further dissection of corrupt transactions, the next research frontier might well lie in aggregating the many scattered stand-alone tools and approaches – by country, sector or other aggregation principle. The most pressing measurement gap may no longer be about how to best capture a specific context, but rather the opposite: how to ensure that lessons are learned that have some meaning beyond this specific context. Given the immense growth in applied research on corruption, investing research into the synthesis and integration of findings and approaches, e.g. by using systematic reviews, is likely to substantially further our collective knowledge.

While donor agencies (one of the main supporters of corruption research, particularly that carried out by civil society) may be supportive of such meta-studies and reviews, recent funding trends are not auspicious. The focus in funding for governance currently lies in measuring results and achieving value for money for donor interventions. This translates into an ever-growing pressure for practitioners to monitor, evaluate and thereby prove the impact of their work – a demand, which, if it is also able to advance collective knowledge on anti-corruption interventions, is very welcome.

Given that many of the measurement tools presented here are closely linked to the aid system (via aid funding or direct ownership by a donor), this trend among donors is likely to have a profound impact on what will be measured in terms of corruption – and what will not. For example, the current focus of third generation tools on process tracing and in-depth analysis, which comes somewhat at the expense of quantifiable indicators, is likely to be short-lived and could actually be reversed. While from an anti-corruption policy perspective there are still many gaps in terms of our understanding of complex corruption systems (for example in the form of policy or state capture, patronage, and other hidden power dynamics), the fact that these phenomena eschew easy quantifications is likely to place them at the bottom of most donor grant shortlists. Donors increasingly seem to want a 'simple problem with a simple solution' (Eiben, 2010). Corruption clearly does not fit the bill. There are no silver bullets for measuring corruption.

The next era of corruption researchers have a distinct challenge. How to advance the field – to study more accurately the hidden transactions that comprise corruption – while at the same time synthesizing the multitude of data already gathered. The real challenge therein, with all methods we have covered and with those to come, is to create a better understanding of corruption and its drivers, as well as the solutions that work to stop it. While these are not small tasks, one aspect leaves us particularly optimistic: a new generation of researchers is breaking new ground and picking up corruption as a substantial new area of study across a number of disciplines. The growing diversification of methods and approaches to studying corruption will create more noise in the field, making simple explanations moot. They will also serve as a powerful impetus to draw conclusions about corruption – its why's and wherefores – from many angles and approaches. Anything less will probably continue to be inadequate to the challenge.

NOTES

1. http://www.transparency.org/about_us
2. The present article draws on preliminary work undertaken within the context of Transparency International’s GATEway project, which seeks to take stock of the proliferating field of (anti-)corruption measurement tools and to assist researchers and practitioners in finding and using tools which are appropriate for their specific purpose. For more information, please visit www.transparency.org/gateway.
3. See, for example, the Business Environment and Enterprise Performance Surveys, available at http://www.uber.com/pages/research/economy/data/beeps.html
6. www.agidata.org
7. www.globalintegrity.org
8. www.internationalbudget.org
9. www.internationalbudget.org
11. http://www.transparency.org/policy_research/surveys_indices/
12. This is linked to the growing popularity of political economy approaches (Usborne, 2007; Fritz, et al., 2009).
13. See, for example, http://www.transparency.org/regional_pages/africa_middle_east/transparency_in_public_service_delivery
15. For example in the context of EC (pre-)accession negotiations (OSI-EUMAP 2002) or in form of the African Peer Review Mechanism (http://www.aprm-international.org/).
17. http://www.transparency.org/global_priorities/international_conventions/projects_conventions/oecd_convention
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