TRANSPARENCY INTERNATIONAL
Global Health

NAVIGATING CORRUPTION AND PROMOTING TRANSPARENCY: LESSONS FROM THE COVID-19 PANDEMIC FOR FUTURE GLOBAL HEALTH EMERGENCIES

Transparency International (TI) is the world's leading non-governmental anticorruption organisation, addressing corruption in its many forms through a network of more than 100 national chapters worldwide.

Transparency International Global Health's overall goal is to improve global health and healthcare outcomes for the benefit of all people, of all ages. It aims to achieve this by reducing corruption and promoting transparency, integrity and accountability within the pharmaceutical and healthcare sectors.

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EXECUTIVE SUMMARY

This report explores the challenges and impact posed by corruption and transparency issues in health emergencies. In examining these challenges, the report makes a series of policy recommendations designed to ensure more robust, efficient, and equitable responses to future health emergencies.

The report draws upon research and data analysis of the global response to the COVID-19 pandemic conducted by Transparency International Global Health Programme and partners over four, distinct but interconnected areas: emergency international financing, public procurement, vaccine purchasing, and petty corruption in national vaccine deployment. A summary of findings is presented below.

1. Lessons for Future Emergencies: International Financing

The rapid and vast financial disbursements made in response to the COVID-19 pandemic, significantly increased the potential for corruption, especially in high risk environments. This occurred alongside issues in governance of international financing for health including limited transparency, inconsistent anti-corruption measures, and weak information flows. In part to address this, anti-corruption measures were integrated into some financing agreements made by the IMF. However, adherence was patchy, and the impact of measures is unclear.

Effective anti-corruption provisions in all International Emergency Financing Agreements: Anti-corruption provisions should be extended to all International Financial Institution (IFI) agreements, especially to those for emergency funding. IFIs should ensure adherence to anti-corruption provisions and provide direct support in this regard.

Mainstream anti-corruption and transparency into internal operations of IFIs: This should include embracing digital transformation for transparency as well as embedding transparent governance mechanisms in the maturation of the newly developed Pandemic Fund.

2. Lessons for Future Emergencies: Public Procurement

The COVID-19 crisis brought to light pervasive corruption in public procurement, affecting nation s regardless of income and corruption control levels. The urgency to acquire goods in disrupted markets led to a rise in corruption risks, with governments deviating from standard procurement practices. Emergency legislation and policies largely proved inadequate to handle these evolving risks. The report shows that heightened corruption risk was not only evident in the emergency COVID-19 specific procurements, but risks spread into general health and non-health procurement. In Europe, 18 months on from 1st February 2020, corruption risks remained higher than pre-pandemic levels, indicating a sustained deterioration of corruption control.

Proactively improve resilience to crises: This should include limiting of spend during emergencies to necessary levels via pre-emptive stockpiling and the development of guidance on spend. Emergency policy options should be specific on timelines and eligible products and based on prior Corruption Risk Assessments (CRA).

Enable Retroactive Investigations and Longitudinal Monitoring: This includes the mainstreaming of comprehensive audits and reviews, whilst maintaining adequate record keeping and transparent publication.

3. Lessons for Future Emergencies: Buying of COVID-19 Vaccines

Global power imbalances during the pandemic resulted in opacity and inequitable distribution in the public procurement of COVID-19 vaccines. With an imbalance between global demand and available supply, manufacturers had oligopoly powers, which led to confidentiality clauses, geopolitical competition, and circumvention of standard, transparent procedures. This secrecy appeared to create a domino effect of confidentiality clauses and opaque deals, with buyers agreeing to ever more conditions in order to secure access.

Mitigate (global) drivers for opacity in global emergencies: We must redefine public interest in the context of a global crises, as well as working towards the standardization of emergency procurement, the use of collective action amongst nation states and the methods to reduce structural resistance to Freedom of Information Requests.

Establish good practices for contract disclosure in emergencies: This includes the introduction of minimum standards for contract disclosure and open contracting in global governance mechanisms and strengthened whistleblower protection.

4. Lessons for Future Emergencies: COVID-19 Vaccine Deployment

The initial imbalance between supply and demand for vaccines led to heightened corruption risks at the beginning of the global vaccine rollout, with bribery and issuance of fake vaccination certificates emerging as the most common in some settings. Inherent problems within health systems, insufficient record-keeping and data management, and stretched healthcare worker capacity further exacerbated corruption risks. Fear of retaliation and lack of knowledge on how to report corruption cases also discouraged individuals from reporting incidents of corruption.

Mitigate supply-side drivers for petty corruption. This involves ensuring minimum standards and working conditions for frontline health staff.

Ensure adequate monitoring of key goods such as vaccines. This includes the maximization of transparency in distribution to guard against illicit diversion and improve equitable allocation, as well as the inclusion of third-party monitoring and contextually sensitive whistleblowing.

The report brings the inadequacy of emergency preparedness frameworks across countries and sectors during the COVID-19 pandemic into sharp relief. Our findings underscore the integral role of integrity, accountability, and transparency in the effective management of health emergencies. Simply put, health systems and emergency preparedness frameworks will not work unless anti-corruption measures are fully integrated.

Our research demonstrates the impact throughout the pandemic of weak global governance structures, and of power imbalances between nations. Both are intrinsically connected to corruption and opacity. Issues were brought to a fore in the public procurement of COVID-19 vaccines, where buying of, access to vaccines were dominated by a select group of wealthy nations. Opacity around vaccine contracts, along with resource misallocation compounded the scale of these disparities, slowed access to vaccines for lower income countries. These findings highlight the pressing need to address these imbalances and to promote equity in access and allocation during emergency situations.

The report contains implications for both health and anti-corruption communities, revealing misconceptions and gaps in our understanding of corruption risks during health

emergencies. One such implication is that some corruption risks, especially petty corruption like widespread bribery for vaccines, may have been overemphasized prior to the pandemic and the release of COVID-19 vaccines. Instead, in many areas, uptake of vaccines was unexpectedly low which seemingly limited bribery. Bribes for falsified vaccine certificates emerged as a more mainstream issue, perhaps driven by lack of supply, and/or vaccine hesitancy. These highlight the need for future health emergency responses to incorporate continuous monitoring and to constantly reassess and adapt assumptions based on real-world evidence and evolving situations.

The potentially corrupt situations involving vast sums of money in regions including Europe and North America - traditionally perceived by some as immune to such issues - demonstrates that corruption, particularly in the context of public procurement, is a multifaceted problem of global concern.

In conclusion, the report emphasises the pressing need for national governments and international bodies to address corruption risks proactively and to incorporate transparency and accountability measures into emergency response frameworks, and into health systems more broadly.

With the pandemic still fresh in memories, there is a political window of opportunity to shape policy reforms that address the drivers of corruption, and to promote strong national and international governance frameworks.
By doing so we will pave the way for more resilient, transparent, and equitable health systems, better equipped to manage future health emergencies and to deliver health for all.

To achieve this, we urge a thorough re-evaluation of corruption risks and approaches in all countries, regardless of their socio-economic status. This will enhance preparedness for future crises, strengthen health systems, and support the achievement of Sustainable Development Goal (SDG)-3.

INTRODUCTION

Corruption in the health sector not only threatens the efficacy and fairness of health service provision but also erodes the fabric of societal trust and resilience, crucial during times of crises.

Corruption takes diverse forms including- embezzlement of public funds, bribes to access health services, falsified clinical results, the sale of substandard medications, undue influences from powerful sectors such as the pharmaceutical industry, and procurement corruption.

Annual global health expenditure is approximately US$9 trillion, of which approximately 6.19 per cent – nearly US$560 billion – is lost to fraud and corruption (Wright, 2023). A stark illustration of this issue comes from Uganda, where corruption in the health sector was estimated to consume the equivalent of 25 percent of the country's 2019 health budget (Fazekas et al, 2022). The report details corruption related to staff absenteeism, theft or embezzlement of medicines and equipment, as well as in procurement. The prevention of these corrupt practices would significantly increase revenues available, improving service coverage, one of the primary pillars of Universal Health Coverage (UHC).

Corruption in health, however, is not only a fiscal issue. It has a human cost, with the most vulnerable often bearing the brunt. Millions worldwide face having to bribe to access care, or are denied healthcare due to favouritism. Women, constituting two thirds of those accessing health services are especially affected. This is further exacerbated by the fact that globally, a higher proportion of those living below the poverty line tend to be women.

To achieve Universal Health Coverage and other key United Nations Sustainable Development Goals, corruption must be eradicated. Without significant strides in combating health sector corruption, billions intended for global care will continue to be squandered, culminating in preventable morbidity, mortality, and an unnecessary economic burden.

Corruption's toll on healthcare systems, as outlined, becomes even more pronounced during global health emergencies, as has been seen during the COVID-19 pandemic. The pandemic highlighted the importance of preparedness, resilience, and transparency. As the world continues to grapple with the ongoing challenges posed by the pandemic, it is crucial to evaluate and learn from the experiences and lessons gained thus far for future emergencies.

The Transparency International Global Health Programme (TIGH) has been monitoring and investigating corruption and transparency in the COVID-19 response. This report is a compendium bringing brings together learnings and recommendations from TIGH's work and associated research over the past three years. This report aims to:

1. Better prepare the global community, and national governments for future emergencies.
2. Provide a comprehensive resource to inform future programming, and policy decisions.

In compiling this report, we have drawn primarily on several studies commissioned, assisted, or carried out by TI's Global Health programme along with other chapters in the movement, which form the backbone of our analysis:

1. Mapping Freedom of Information Requests for The Publication Of Covid-19

Vaccine Supply Contracts; Chiamaka Ojiako, and Uchechukwu Ngwaba; March 2023

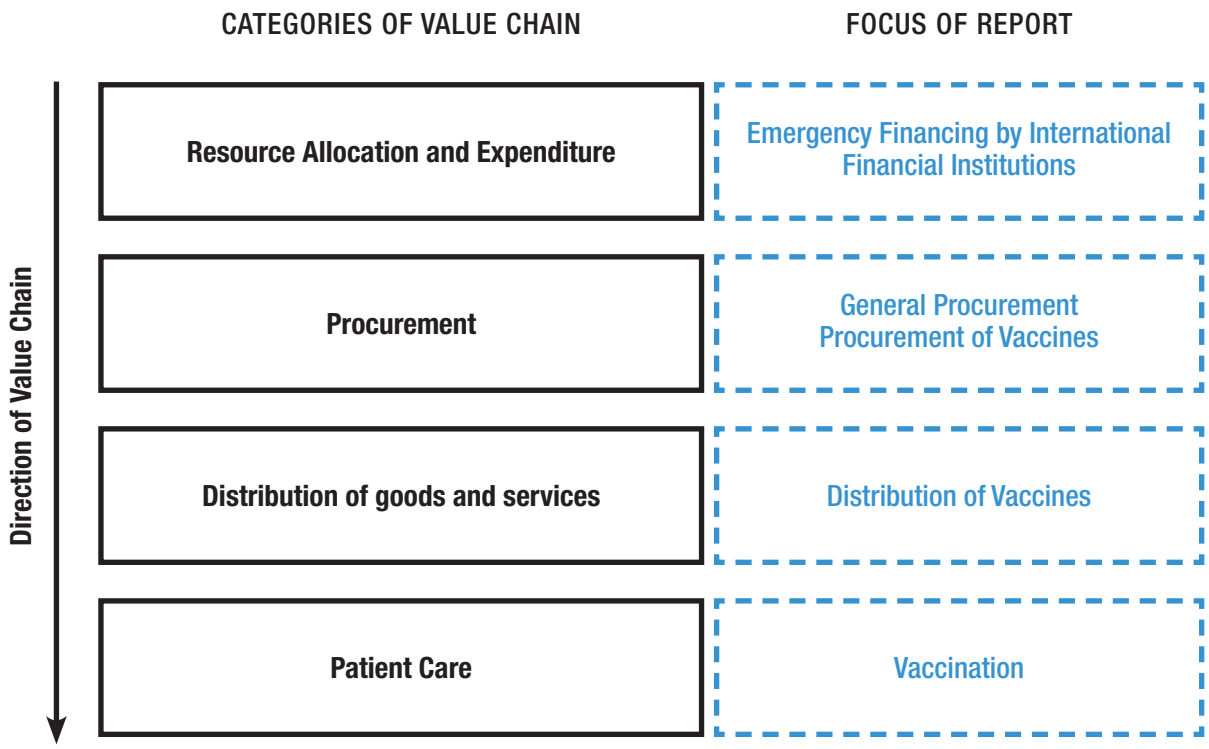
2. Corruption risks in the public procurement of Health-related products in Europe, Mihály Fazekas, Alfredo Hernández Sánchez, Aly Abdou, Daniel Kofrán, May 2023
3. Openness and Transparency in Covid-19 Financing, Vaccine Procurement and Deployment: A Comparative Analysis from Selected African Countries; David Olusegun Sotola, Hafte Gebrihet, Yazidu Ustarz, & Moses Nyangu; March 2023
4. Corruption risks in the procurement and distribution of COVID-19 vaccines in Nigeria; Obinna Onwujekwe, Charles Orjiakor, Prince Agwu, Pamela Ogbozor, Ifunanya Agu, Dina Balabanova and Jillian Kohler
5. A Scoping Review of Governance Challenges in International Health Financing Lessons for The Pandemic Preparedness and Response Financial Intermediary Fund; Natalie Rhodes, Garrett Wallace Brown and Tom Wright; August 2022
6. For Whose Benefit? Transparency in the Development and procurement of COVID-19 Vaccines; Transparency analysis in 39 vaccine contracts against COVID-19 in the world, and joint TIGH and Transparencia Mexicana updates; Tom Wright, Natalie Rhodes, Paola Palacios; 2021, 2022, 2022
7. Track and Trace: Identifying Corruption Risks in UK Public Procurement for the COVID-19 Pandemic; Steve Goodrich, Tom Wright, Rose Whiffen, Teddy Marks; 2021

While this report also incorporates findings from an extensive literature review, analysis of European procurement data, and a large collection of news media sourced through our AI tool, AIMON, it is not intended to provide an exhaustive summary of corruption learnings during the COVID-19 pandemic[1]. Rather, these additional sources serve to contextualize and supplement our core findings and recommendations.

This report is organized into four sections, focusing on various aspects of corruption and transparency in the global response to COVID-19. We focus on critical points along the value chain from resource allocation to service delivery. This starts with emergency international financing, then addressing issues in public procurement and COVID-19 vaccine procurement, before finally assessing corruption in national vaccine deployment. Each section examines specific risks and manifestations of corruption in these areas, followed by a policy analysis that provides recommendations for improving transparency, anti-corruption measures, and overall resilience in the face of future global emergencies. Although a theoretical link can be inferred between the identified risks and observed manifestations of corruption, the exact strength of this relationship remains uncertain. It is important to note that these sections do not encompass all possible areas of risk; instead, they constitute a record of the areas TIGH have specifically focused on, and believe important, from 2020 to 2023.

This is detailed in the following diagram.

1 full details of our methodology can be found in Annex 1



This report is a resource for policymakers, practitioners, and the broader public to help understand and address the complex issues surrounding corruption and transparency in the context of global health emergencies. By learning from the experiences of the COVID-19 pandemic and implementing the recommendations set forth in this report, we can work towards creating more prepared, resilient, and transparent health systems to face the challenges of future emergencies.

LESSONS FOR FUTURE EMERGENCIES: INTERNATIONAL FINANCING

Key Findings

Vast, rapid financial disbursement created corruption risk: The urgency of the COVID-19 pandemic and its extensive impact led to International Financial Institutions (IFIs) such as the International Monetary Fund (IMF) and the World Bank (WB) disbursing enormous sums rapidly, often to high-risk contexts, basing lending risk, and mitigation measures on previous experience during national or regional emergencies.

Current global health finance infrastructure poses risks for emergency financing: The existing global health finance infrastructure has governance issues including a lack of transparency and inconsistent anti-corruption policies. This poses a challenge to the effective functioning of emergency financing. These issues, which include poor information flows, unclear decision-making, inadequate independent oversight, and ambiguous involvement of private sector actors, can undermine trust, policy effectiveness, and the ability to monitor and evaluate programs.

Emerging adoption of anti-corruption measures in international financing agreements: In response to the above risks, the IMF introduced anti-corruption articles in some COVID-19 financing agreements, placing new transparency and traceability responsibilities on recipient governments. These measures include requirements for auditing, transparency in financial reporting, procurement, and beneficial ownership.

Issues with compliance and monitoring: Despite the implementation of these anti-corruption measures, there have been issues with compliance, as seen in the government of Uganda's agreement with the IMF. However, the IMF (and in this instance the Ugandan government) has taken active steps to monitor and address non-compliance, resulting in improved adherence over time.

Significant advancement of governance of IFI provided funds with caveats: The IMF's approach signifies a major step forward in IFI governance, setting the stage for improved integrity in future emergencies and better governance in recipient countries.

However, these measures have only been included in about 76% of IMF's COVID-19 agreements, and other IFIs have yet to adopt similar mechanisms, posing a corruption risk.

Summary of Policy Recommendations

Effective anti-corruption provisions in all international emergency financing agreements. Anti-corruption provisions should be extended to all International Financial Institution (IFI) agreements, especially to those for emergency funding. IFIs should ensure

adherence to anti-corruption provisions and provide direct support in this regard.

Mainstream anti-corruption and transparency into internal operations of IFIs. This should include the embracing of digital transformation for transparency as well as the embedding of transparent governance mechanisms in the maturation of the newly developed Pandemic Fund.

International emergency financial assistance plays a crucial role in mitigating the impact of unprecedented global crises, such as the COVID-19 pandemic. By providing targeted financial support to countries grappling with the pandemic, these emergency measures enable governments to bridge crucial funding gaps that may otherwise hinder their ability to effectively combat the virus and protect vulnerable populations. In addition to bolstering public health infrastructure and facilitating the rapid distribution of essential medical supplies, such assistance enables governments to implement critical social welfare programmes aimed at safeguarding the well-being of at-risk citizens.

Yet, experiences have demonstrated that when a large amount of financial resources are directed towards emergency settings, it can lead to increased incidents of fraud and corruption. This can severely undermine the effectiveness of the funding intentions, with a particularly harmful impact on the most vulnerable groups.

In many instances, emergency financial assistance is provided to countries with weak governance, anti-corruption and regulatory frameworks. The absence of robust systems and institutions to monitor and regulate the flow of funds can create opportunities for corruption and misappropriation. In the rush to provide aid, proper checks and balances may be compromised, making it easier for corrupt actors to take advantage of the situation. This lack of oversight can result in funds being misappropriated, either through embezzlement, fraud, or other illicit activities. In such cases, emergency financial assistance can become a tool for political manipulation, with powerful individuals or groups seeking to control the distribution of funds to further their interests.

Emergency financial assistance often involves multiple stakeholders, including international organizations, governments, and non-governmental organizations (NGOs). The complexity of aid delivery can create opportunities for corruption and misappropriation at various stages of the process, and responsibility for oversight can be confusing. (Brown et al., 2022)

In the remainder of this section, we will first explore the corruption risks associated with the massive influx of complex funding in international emergency financing for COVID-19, specifically focusing on International Financial Institutions (IFIs), which have played a critical role in international emergency financing. Next, we will delve into the various manifestations of corruption. Subsequently, we will examine policy options that could mitigate these risks, such as incorporating transparency provisions in credit agreements and promoting adherence to these provisions.

CORRUPTION RISKS

Disbursement of large sums of money into an unknown, high-risk context

The COVID-19 pandemic has posed unprecedented challenges to the global community, necessitating urgent and coordinated efforts to mitigate its impact on public health, economies, and societies worldwide. As a result, IFIs including the International Monetary Fund (IMF) and the World Bank (WB), played a crucial role in providing financial assistance to countries grappling with the health crisis.

However, the enormity of the funds and the speedy disbursement may have created corruption risks. In 2020, the IMF made available about US$1 trillion in lending capacity to member countries (IMF, 2021a), while the WB pledged US$160 billion in financial support over a 15-month period from April 2020 to help countries respond to the pandemic and bolster their economic recovery (World Bank, 2020a). In Kenya and South Africa, IFI support represented 69% and 49% of COVID-19 budgets respectively. The World Bank, African Development Bank (AfDB), and European Union (EU) also provided COVID-19 support to these countries. (Olusegun Sotola et al., 2023)

Table 1: IMF and World Bank COVID-19 financing in selected countries

	IMF: Instrument & sum	World Bank
Ethiopia	Rapid Financing Instrument $411 million	$207 million
Ghana	Rapid Financing Instrument $1 billion	$430 million
Kenya	Rapid Financing Instrument, Rapid Credit Facility and Extended Credit Facility $3.083 billion	$130 million
Nigeria	Rapid Financing Instrument $3.4 billion	$400 million
Senegal	Rapid Financing Instrument, Rapid Credit Facility and Extended Credit Facility $1.05 billion	$134 million
South Africa	Rapid Financing Instrument $4.3billion	$480 million

Source : Olusegun Sotola et al., 2023

Furthermore, the highly complex and broad nature of the pandemic meant that financial assistance was channelled through many different countries, with some receiving assistance from different funds or IFIs, adding significant layers of complexity to the process. For instance, this led to a significant surge in requests for emergency financing, with the IMF approving 90 requests for RCF/RFI financing to 78 members, totalling over US$110 billion, between March 2020 and December 2021 (Rossi et al., 2023).

Additionally, IFIs were well-experienced in dealing with health emergencies that were either domestically or regionally contained, but not in responding to pandemics. Hence, their risk management approach to financial emergency assistance was geared to domestic and regional emergency responses, which required fewer governance measures and less of a systematic coordination than the pandemic emergency funding (Rossi et al., 2023).

Lastly, the countries in need of financial assistance in emergencies are also often countries with higher levels of perceived corruption. IMF data on COVID-19 financial assistance reveals that countries in the worst performing third of the Corruption Perception Index (CPI) are nearly four times more likely to receive lending.[2] Over half of the total IMF funding was allocated to these countries. While this observation may not be surprising, and it is not meant to imply that funding should be withheld from low-scoring countries, it does highlight the inherent corruption risks and mitigating factors that need to be put into place for these funds to be used as intended.

2 Calculation using data from the 2022 Corruption Perception Index and the IMF COVID Lending Tracker ($p < 0.001$)

The COVID-19 pandemic required IFIs to rapidly disburse vast amounts of financial aid to numerous organizations and countries – many with weak anti-corruption governance and high levels of perceived corruption – against the backdrop of a situation they had little experience in. The unprecedented scale and scope of this emergency, coupled with the immense demand for resources and settings with insufficient governance measures, underscore the heightened corruption risk that IFIs were confronted with.

THE CASE OF THE PANDEMIC FUND: LEARNING FROM PAST GOVERNANCE CHALLENGES

The Pandemic Fund (PF), launched in September 2022, is a pioneering financing mechanism dedicated to providing long-term funding for strengthening pandemic preparedness and response (PPR) in low- and middle-income countries (LMICs) at regional, national, and global levels. The PF represents a significant shift in addressing global health emergencies and presents a vital opportunity for mitigating corruption in future health crises.

However, the current global health finance infrastructure, marked by governance issues such as lack of institutional and policy transparency, raises concerns for the PF. Poor information flows, inconsistent transparency of organizational governance and decision-making, lack of independent oversight from third parties and unclear involvement of private sector actors have historically undermined trust and policy effectiveness in International Financial Institutions (IFIs). Additionally, inconsistent anti-corruption policies in global health financing have hindered the ability to monitor and evaluate programmes, posing a potential threat to the PF's mandate.

To address these challenges and ensure its success, the PF must learn from previous experiences and adopt robust governance measures that promote transparency, accountability, and anti-corruption policies (detailed in the Policy Recommendations section below). By doing so, the PF will be better equipped to respond effectively to global threats, disburse funds efficiently, and foster trust among stakeholders, ultimately maximizing its impact on global health preparedness and response in the face of future pandemics.

Source: Brown et al., 2022

The use of anti-corruption measures in COVID-19 financing agreements as a mechanism for reducing risk

In part as a response to the above risk, the IMF introduced anti-corruption articles in some COVID-19 financing agreements which placed new responsibilities on recipient governments to ensure transparency and traceability. These generally revolved around auditing, transparency in financial reporting, procurement, and beneficial ownership – which make it possible to varying degrees to track where money is being allocated. For example the anti-corruption clauses in one agreement for financial assistance included the following commitments:

> **"Publish costs of procured products and services; validate delivery of products and services; publish names of companies awarded contracts; publish beneficial ownership information of companies receiving COVID-19 procurement contracts; conduct COVID-19 specific audit and publish results". (Transparency International, 2020)**

Initially, concerns arose from inconsistent adherence to such provisions (IMF, 2021b). For instance, in Uganda's agreement with the IMF Rapid Credit Facility, the government committed to publishing procurement documentation and conducting independent audits of COVID-19 expenditures. While some attempts at transparency have been made, details on beneficial ownership – specifically required in the agreement – were not provided, and publication of procurement contracts seemed to cease, at least temporarily, without explanation in November 2021 (Ministry of Finance, Planning and Economic Development, n.d.). Only approximately 6% of the budget designated for COVID-19 response was disclosed on the Government Procurement Portal, with 95% of the disclosed funds directly granted to suppliers (CABRI, 2021). The contractually agreed upon recourse should these commitments be unfulfilled remains unclear, as does whether such action has taken place (IMF, 2020).

Whilst these worries still persist in certain countries, recent reports from the IMF suggest that they have not only been publicly monitoring adherence to such provisions, but actively working to redress country-level institutional and administrative gaps that prohibit adherence (Kincaid et al., 2023). Uganda has implemented a circular explaining procedure and collection template to enable procurement officers to easily collect the beneficial ownership information in a standardised way, receiving technical assistance from IMF staff. The initiative started with COVID-19-related procurement contracts which were published from January 2022. (IMF, 2022)

Furthermore, IMF staff have monitored members' implementation of commitments and released country-specific reports in 2021 and 2022, further showing improvement. According to these monitors, as of May 2022, around two-thirds of members had fulfilled their obligations regarding procurement contract information publication and pandemic-related spending reporting. Meanwhile, approximately half of the commitments to audit pandemic-related spending and sharing the results online had been implemented thus far. (Rossi et al., 2023)

The IMF's adoption of anti-corruption provisions, active monitoring, and ongoing engagement with countries to address shortcomings signify a significant advancement in IFI governance. This approach sets the stage for better integrity in future emergencies and overall improvement in the governance of recipient countries.

Although the IMF's efforts are commendable, it should be noted that these provisions have only been included in about 76% of its COVID-19 agreements (Rossi et al., 2023), and concerns

still remain around adherence. Additionally, it is important to emphasize the vast gap that exists in IFI governance, as other institutions have yet to adopt similar mechanisms. This discrepancy poses a considerable corruption risk, underscoring the urgent need for more comprehensive and transparent measures across the board.

MANIFESTATIONS OF CORRUPTION

Of the reported cases of alleged corruption in international emergency financing, many concentrate on **embezzlement or misappropriation** of the funding – either by high-level politicians or by administrative agents made responsible for its coordination. Examples include:

- On May 19, an audit summary from Cameroon's Supreme Court investigative body, the Chambres des Comptes, revealed widespread corruption and mismanagement of 180 billion CFA (US$333 million) in COVID-19 response funds until December 31, 2020. The audit suggested launching 10 legal cases for potential criminal violations. (IMF, 2021b)
- In Uganda, the prevalent utilization of supplementary budgets, primarily financed by loans (Tonny Abet, 2021), has generated apprehension due to their deviation from standard procedures and increased susceptibility to misappropriation. These budgets have exhibited a lack of transparency and accountability, creating opportunities for the irregular allocation of funds, such as 10 billion shillings to MPs' personal accounts (CABRI, 2021). Moreover, they have facilitated the promotion of non-COVID-19 agendas, exemplified by the higher allocation of resources to the security sector compared with the health sector.
- According to a report from the Malawian ombudsman in 2020, the committee responsible for coordinating the COVID-19 response had allocated nearly 80% of its funds to staff allowances and benefits. (CABRI, 2021)
- In October 2020, the Tunisian Financial Intelligence Unit (CTAF) uncovered a scheme involving a man is who allegedly misused COVID-19 aid funds by funnelling TND 7 million (US$2.5 million) from a foreign consulate through shell and family-owned companies. Using fraudulent invoices and obscure contracts, he spent only 15% of the funds on their intended purpose, leaving the rest in personal and related business accounts. The CTAF initiated preventive measures by freezing associated accounts and collaborating with foreign financial intelligence units for further investigation. (FATF, 2020)

Such occurrences can significantly undermine public health efforts by diverting resources away from testing, vaccination, and treatment. Without these and other cases of corruption, deaths could have been prevented and the impact of the crisis especially on vulnerable populations could have been reduced.

It is however crucial to recognize that the reported instances may not provide a comprehensive understanding of the full scale of the issue. One of the primary reasons behind this discrepancy lies in the incredibly complex nature of aid flows, which, for one recipient country, will often involve many lenders, a multitude of actors and organizations at various stages of the process (World Bank, 2022). Consequently, this complexity creates ample opportunities for small-scale corrupt activities to occur, in for example procurement, which may not be readily apparent or traceable back to the original source of funding.

POLICY RECOMMENDATIONS

Effective anti-corruption provisions in IFI agreements

Extend transparency and anti-corruption provisions to all IFI agreements, especially to those for emergency funding. The inclusion of transparency and anti-corruption provisions in IMF agreements (Rossi et al., 2023) demonstrates that such measures are encouraging. Based on TIGH experience and evidence collected going forward, agreements made by IFIs should be based on the following:

1. Inclusion of robust and contextually sensitive, evidence-based anti-corruption provisions which should be specific, concrete and timebound to enable adequate monitoring and limit circumvention.
2. The types of anti-corruption provisions should be based on discussion with experts and citizen groups in-country or on prior Corruption Risk Assessments (CRA).
3. Open and competitive procurement methods for goods and services funded by emergency mechanisms. Information on contracts and suppliers should be publicly accessible, traceable and released at a minimum within 90 days of the signing of the contract – preferably on a national platform but on an IFI portal if necessary.
4. Periodic reporting to the IFI of financial flows based on set interoperable templates from receipt to expenditure broken down by set categories of expenditure as well as by amount received, disbursed and remaining balances.
5. Independent oversight bodies and supreme audit institutions should be employed to scrutinize emergency-related expenditures and to identify and report any irregularities or instances of corruption.
6. Recipient governments should collaborate with civil society organizations to establish/improve mechanisms for public scrutiny, monitor funds and report suspected corruption.
7. IFIs should adopt the existing transparency standards exemplified by the IMF Rapid Credit Facility. In these cases, IMF assistance is provided in exchange for meeting structural benchmarks aimed at enhancing public financial management (PFM) and procurement systems. (Rahman, 2021)

Ensure adherence to transparency and anti-corruption provisions and provide support where possible. Failure to ensure adherence to anti-corruption provisions undermines the ability to detect and deter corrupt activities and misappropriations whilst emboldening corrupt actors. Research into the IMF approach shows that whilst adherence can be inconsistent, longer-term support and dedicated resources within IFIs can be an effective approach.

1. IFIs should routinely report publicly at least every 12 months on the adherence to anti-corruption, accountability, and transparency commitments or fund a non-governmental organization (NGO) group to do this for them.
2. IFIs should ensure that there is resource guaranteed within their structures for monitoring adherence to anti-corruption provisions and for identifying and working iteratively on administrative and governance barriers to adherence.
3. IFIs, as part of emergency financing agreements, should ensure that there are robust investigation mechanisms if there is failure to adhere to clauses. What constitutes failure to adhere, as well as

agreed upon recourse measures, should be published.

4. Where corruption is considered high-risk either by CRA or similar risk assessments, IFIs should consider the funding and utilisation of third-party monitoring for trusted non-governmental groups in the initial agreements.

Mainstream anti-corruption and transparency into internal operations

Embrace digital transformation for transparency. Aid flows are complex, multi-faceted and hard to trace – especially in chaotic and rapidly changing emergency settings. IFIs should leverage technology to reduce the burden on recipient governments, NGOs, and other stakeholders by providing streamlined processes and infrastructure for accessible data publication.

1. The publication of the breakdown of which funds are going to which departments at the initial stages of the disbursement.
2. IFIs must release any agreements with implementing countries within 30 days of the signature and without redaction.
3. Data on financial flows must be released by IFIs in an open data format, showing how it is spent in-country to ensure it is used in the way originally intended.
4. Data transparently released by the IFIs should be accessible on one central platform that is developed with an intuitive interface, easily searchable, and with well-organized datasets, as well as compatibility with assistive technologies for users with disabilities.
5. In cases where misappropriation of funds is uncovered, this information needs to be made publicly available. This is necessary to ensure accountability and transparency and de-incentivise further corruption, which is essential for retaining donor and investor trust.

Ensure transparent governance in the maturation of the Pandemic Fund. The Pandemic Fund (PF) presents a significant opportunity to strengthen the integrity of global health security to respond to future outbreaks. Alongside the previously suggested recommendations, the following additions can play a pivotal role in shaping an IFI in its early operational phases.

1. The PF must incorporate specific indicators related to corruption prevention, detection, and response to strengthen the framework's ability to address corruption and uphold transparency and accountability. This is necessary to track progress.
2. The PF must make the annual reports on progress and results, which the Implementation Entities (IEs) are mandated to deliver annually to the Secretariat, public. These reports must include financial data on budget and actual spending, and any identified misappropriation.

LESSONS FOR FUTURE EMERGENCIES: PUBLIC PROCUREMENT

Key Findings

Pervasive corruption regardless of countries' income status: The number of reports of corruption in public procurement suggests it was rampant during COVID-19, affecting nations regardless of income and corruption control levels.

Volatile and chaotic markets: The urgent need to spend vast sums to acquire goods led to a steep rise in corruption risks in health procurement due to heightened demand, disrupted supply chains, and insufficient stockpile preparedness. This chaotic market environment was marked by severe competition, irregular practices, off-the-books transactions, and advanced payments.

General departure from public procurement norms: As the virus spread, there was a notable deviation from standard procurement practices. While the global sanctioning of direct contracting was the most visible change, there were other potential corruption indicators that appeared to rise, such as inexperienced bidders or single-bidder open procedures. Although these shifts may be a response to a rapidly changing market, they also inherently amplify the risk of corruption.

Inadequate and poorly executed emergency legislation: We found that emergency legislation and policies largely proved inadequate, failing to tackle these evolving and widespread risks during the pandemic. These often lacked specificity in time periods and eligible products for emergency procedures, enabling unexpected permeation of risk; or were extended to surprising sectors such as construction.

Corruption risk increased in unexpected areas: Quantitative research into European procurement data revealed an unexpected spillover in risk from the expected rise in the acquisition of urgently needed goods.

> In Europe, increased corruption risk permeated not just in the buying of specific COVID-19 products, but into general health and non-health procurement in 24 and 13 out of the 29 countries studied, respectively.

Sustained deterioration of corruption control: Corruption risks surged during the pandemic and have in some instances remained high far after the initial onset of the pandemic, signalling potentially weakened control systems which necessitates continuous monitoring.

> Corruption risks in Europe remained at a higher level than the pre-pandemic period even 18 months after February 2020

Summary of Policy Recommendations

Improve resilience to crises proactively. This should include the limiting of spending during emergencies to necessary levels via

pre-emptive stockpiling and the development of guidance on spending during emergencies. Emergency policy options should be specific in terms of timelines and eligible products and based on prior Corruption Risk Assessments (CRA).

Enable retroactive investigations and longitudinal monitoring. This includes the mainstreaming of comprehensive audits and reviews, whilst maintaining adequate record keeping and transparent publication.

Procurement in health refers to the process of acquiring goods, services, or infrastructure works needed to provide healthcare to individuals or communities. It is an essential part of the overall health system and plays a crucial role in ensuring the availability of high-quality and cost-effective healthcare services.

Health procurement is particularly susceptible to corruption due to the magnitude of finances involved, the complexity of the procurement processes, the vast range of goods and services required, and the high degree of specialization and technical knowledge needed to evaluate products and suppliers. This can take a variety of forms such as bribes or kickbacks, collusion or bid rigging (Kohler and Wright, 2020). Some studies suggest that up to 25% of public procurement spending can be lost to corruption, severely diminishing the resources available for quality healthcare. (UNODC, 2013).

These corruption risks can be amplified during health emergencies for several reasons:

- A rapid surge in demand may strain procurement systems, as staff and resources become insufficient to handle the increased workload. This can lead to shortcuts in due diligence, circumventing standard procedures, and potentially overlooking red flags in the procurement process. (Schultz and Søreide, 2008)
- This urgency may force decision-makers to bypass usual checks and balances, use non-open tendering or relax criteria for suppliers, creating opportunities for unscrupulous actors to exploit the situation. (Schultz and Søreide, 2008) Furthermore, such haste accompanying emergency procurement processes can reduce transparency, making it difficult for oversight bodies, the public, and the media to scrutinize contracts and monitor the allocation of resources and expenditure. (Wright et al., 2021)
- Increased demand for products can lead to unethical practices among procurement officials and suppliers, such as bribery, favouritism, and price manipulation. High competition can drive prices up and make it easier to hide corruption. (Schultz and Søreide, 2008) Unethical actors may exploit this through price gouging or forming cartels, pushing officials towards corruption. (RECORD, 2020)
- A sudden increase in demand for specific, previously unknown or newly-developed products may lead to new, inexperienced suppliers entering the market, eager to capitalize on the opportunity in terms of profit and higher levels of discretion. This can result in procurement officials dealing with unvetted suppliers who may not adhere to ethical business practices, increasing the risk of corruption and substandard goods. (Schultz and Søreide, 2008)

In this section, we focus on three key aspects of procurement corruption in the context of COVID-19. First, we examine the corruption risks associated with COVID-19 procurement, highlighting the immense pressure to acquire goods, the departure from standard open procedures and the persistence of corruption risk beyond the initial outbreak and in unexpected areas. Second, we explore the manifestations of corruption in procurement by analysing media data to gain insights into the observable forms of corruption and synthesizing these findings with the identified risks to uncover any additional learnings. Finally, we draw on these

insights, along with supplementary research, to propose a set of policy recommendations aimed at safeguarding against corruption in future pandemics and enhancing the resilience and integrity of procurement processes.

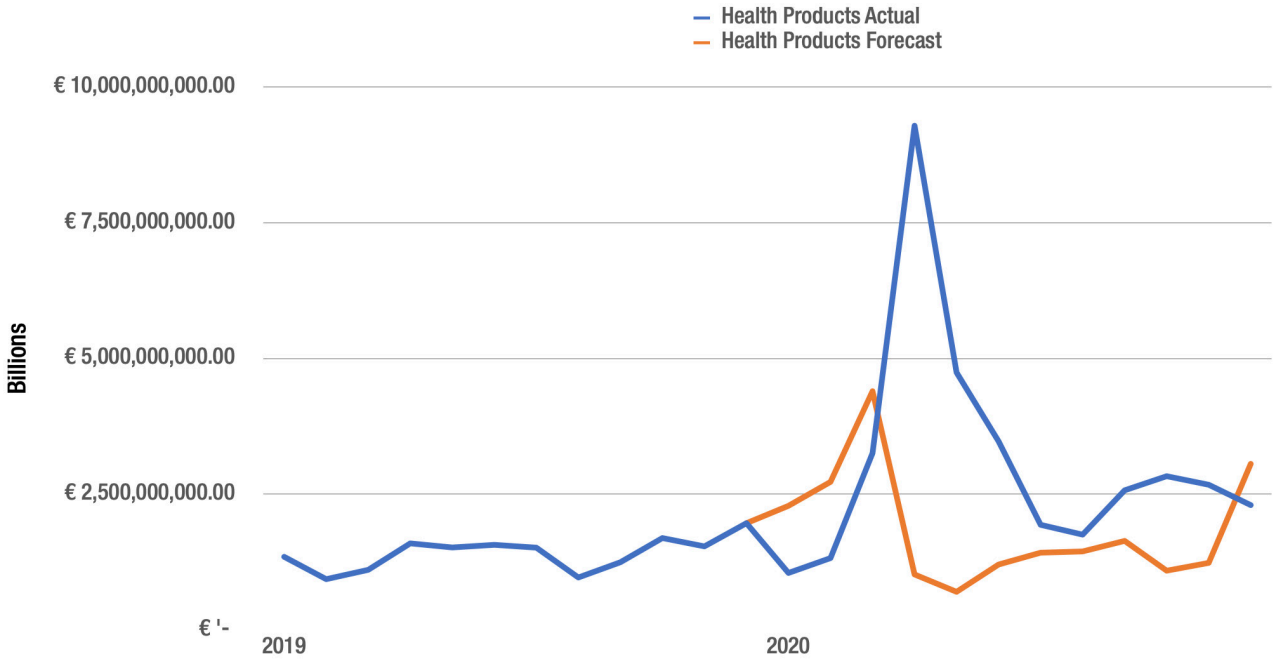
CORRUPTION RISKS

Intensified pressure to acquire goods

In the early stages of the COVID-19 pandemic, the world faced an unprecedented public health crisis that caught many nations off-guard. As the highly contagious virus spread at an alarming rate, healthcare systems worldwide were suddenly confronted with a dire need for essential supplies and equipment. The surge in demand for certain medical products exposed the vulnerabilities in global procurement processes, as well as the lack of preparedness to handle such a large-scale emergency.

Using European procurement data covering 33 countries, we illustrate in Figure 1 the actual spend on health products during the initial stages of the pandemic compared with predictive forecasts based on six years of historical data.[3] This prediction enables us to establish a standard procurement trajectory, reflecting normal market conditions. Comparing this predictive standard with the actual spending, you can see a massive increase in health product purchases across Europe during the early months of the pandemic. This trend was observed globally, as reported by the World Health Organization (WHO, 2021a).

Figure 1. Actual spend on healthcare products vs forecasted. Europe 2019-2020.



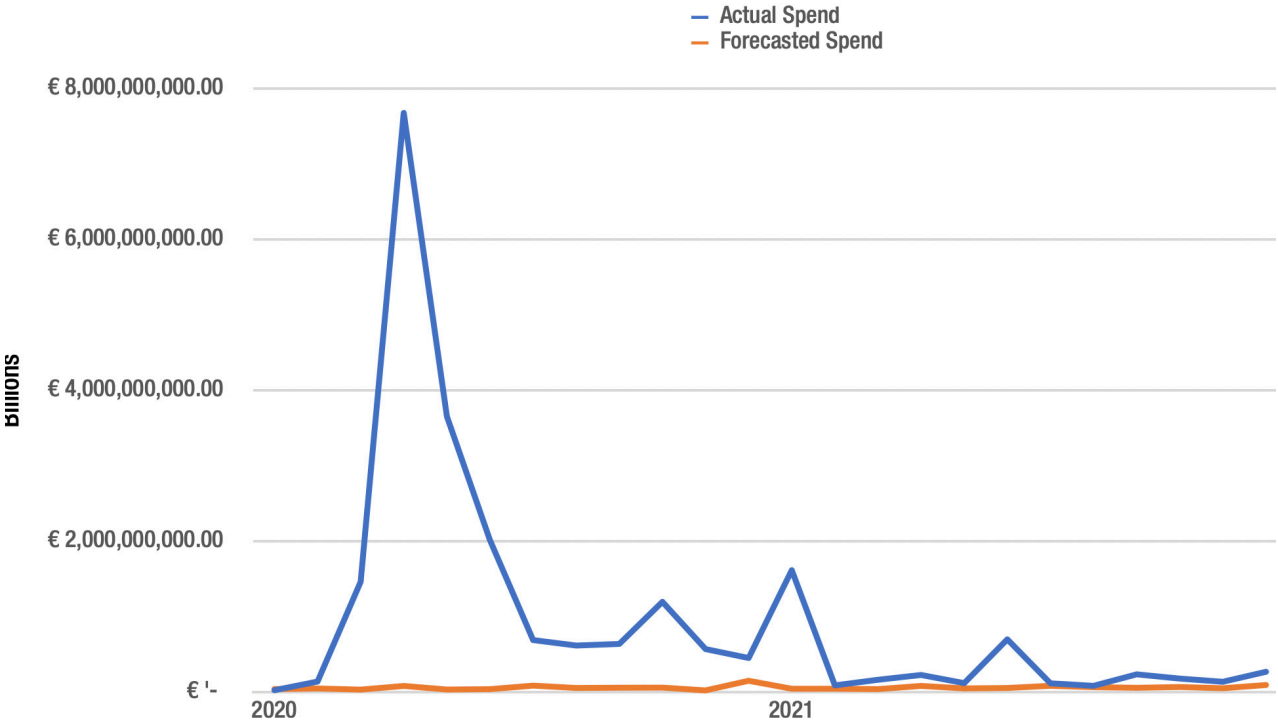
Source: opentender.eu

In April, there was a significant upsurge in the purchase of health products in Europe, with a nine-fold increase in spend compared with the predictions. A staggering 91-fold escalation was observed specifically in the acquisition of COVID-19-related products, highlighting the profound impact of the pandemic on procurement. As implied in Figure 2, throughout 2020 to 2022 the

3 For more information on this forecasting model, and the data, see the methodology section.

emergence of new COVID-19 strains and the introduction of novel products, such as various testing kits, created a volatile procurement landscape for governments worldwide. This trend, evident in the stark contrasts between the actual and forecasted procurement data, highlights the recurrent pressures faced by governments to adapt and respond promptly to these unpredictable market fluctuations.

Figure 2. Actual spend on COVID-19 specific products vs forecasted. Europe 2020-2021



Source: opentender.eu

The intensified pressure to acquire goods during the COVID-19 pandemic significantly magnified corruption risks in health procurement. Demand for similar products and services surged, while supply chain disruptions created challenges for public buyers. Procuring necessary items became difficult, even with emergency procedures. Insufficient stockpile preparedness led to increased rivalry for supplies, reversing public and private-sector bargaining power. Contracting authorities and private institutions competed for products from a limited number of affected companies. These factors intensified rivalry among public agencies, leading to irregular practices in a chaotic market. Off-the-books transactions, price volatility, and significant advanced payments were common, potentially shifting risks where buyers corrupted vendors to secure essential goods and services. (OECD, 2020)

General departure from conventional procurement practices

During the initial phase of the COVID-19 crisis, the focus was on managing the emergency response and providing immediate relief to affected communities. This stage demanded swift procurement and infrastructure actions to minimize harm to individuals and public safety. (OECD, 2020) This was generally characterized by a shift from open and standard procurement methods. For instance:

- In India, the government authorized the utilization of a truncated process, which allowed for procurement from a select group

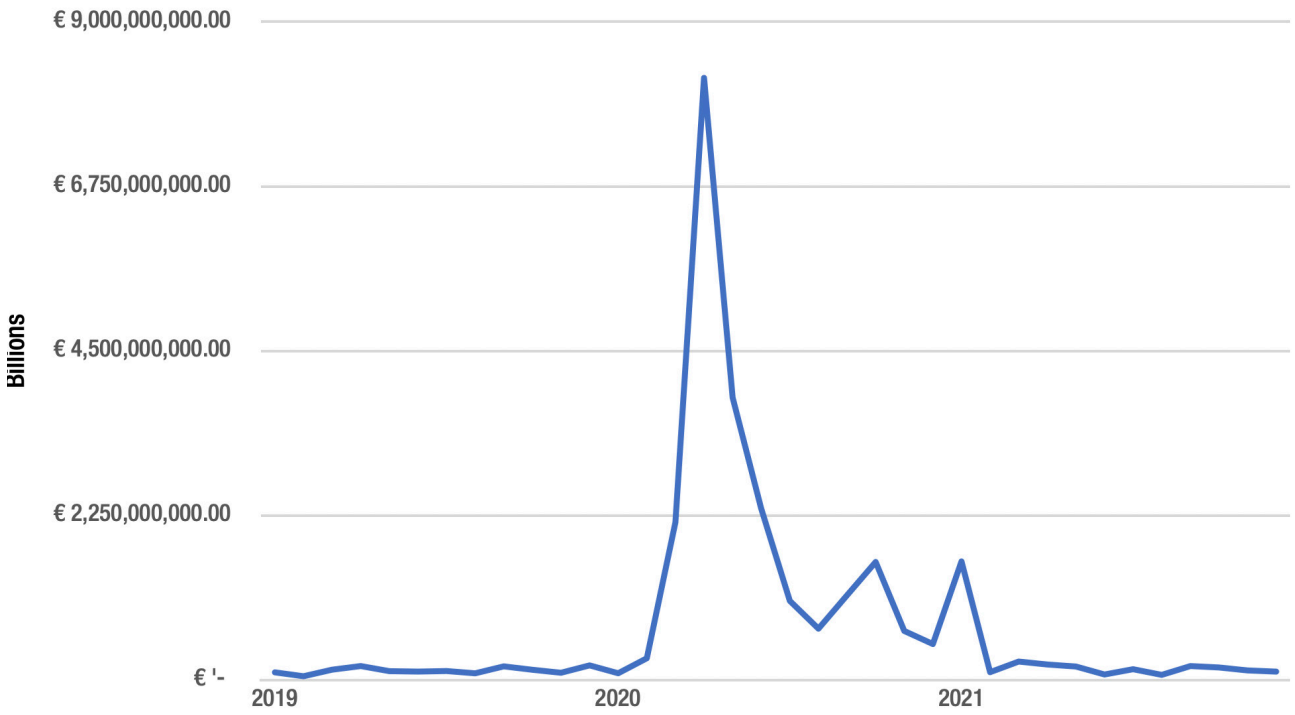
of suppliers without the need for public advertisement and competitive bidding, to accelerate the acquisition of critical medical equipment and supplies. (Department of Expenditure, 2020)

- In Brazil, the government enacted emergency legislation (Law 13,979/2020) that allowed for direct contracting and expedited procurement processes to quickly secure COVID-19-related goods and services, bypassing the standard public bidding procedures. (DLA Piper, 2021)
- In Korea, public entities that did not have an electronic evaluation system were able to use the e-ordering system of the central purchasing body, the Public Procurement Service (PPS). (OECD, 2020)
- In Algeria, Angola, Cameroon, Chad, Comoros, Eswatini, Gambia, Morocco, and South Africa, the contractual procurement process for COVID-19-related goods, services, and works was streamlined. Benin, Cameroon, Gabon, Gambia, Mozambique, Seychelles, Sudan, and Togo established dedicated committees, units, or ministries to concentrate on COVID-19 procurement decisions and resource allocation. (CABRI, 2021)

Whilst the types of changes were diverse, a major theme across all regions was the allowing of direct awards or de facto direct awards across all major COVID-19-related products such as PPE. For example, the UK National Audit Office (NAO) found over 8,600 new COVID-19-related contracts, worth £17.3 billion, were awarded, of which £10.5 billion were awarded without competitive tender processes. (National Audit Office, 2020).

Using Europe-wide procurement data from opentender.eu it is possible to illustrate some of the changes in procurement from 2019-2022 by illustrating changes in contract level indicators or “red flags for corruption”. Figure 3 shows that in Europe, the value of direct awards increased hugely during the onset of the pandemic, with follow-up aftershocks perhaps due to pressure to tap into new diagnostic markets or because of new strains or outbreaks. Similar trends were noted in Nigeria (Onwujekwe et al., forthcoming), and in a cross-country study of Ethiopia, Ghana, Kenya, Nigeria, Senegal, and South Africa (Olusegun Sotola et al., 2023).

Figure 3. Use of direct awards by value of health product contracts. Europe 2019– 2022



Source: opentender.eu

Direct procurements can be a necessary tool in emergency situations, as they enable a swift response to pressing needs by bypassing the time-consuming competitive bidding process. However, this expedited approach inherently carries a significant corruption risk. The lack of transparency and competitive scrutiny in direct procurement can create opportunities for favouritism, collusion, and inflated pricing, thereby undermining the integrity of the procurement process.

Furthermore, in the early stages of the pandemic there was seemingly a sharp increase in the use of suppliers who were less than a year old. For example, in the UK, it was found that 14 companies incorporated in 2020 received contracts worth £620 million of which £255 million went to those less than 60 days old (Wright et al., 2021). Such evidence is supported by European procurement data (Figure 4,) which shows that this trend was not isolated to one country or just 2020. This trend may be attributed to the unprecedented urgency to secure health products, which may have led governments and organizations to overlook standard procurement practices in order to expedite the procurement process. Whatever the rationale, awarding contracts to newly-incorporated suppliers without a proven track record in the healthcare sector increases the likelihood of malfeasance and delivery of inferior goods. (Wright et al., 2021)

Figure 4. Value of health product contracts to suppliers less than a year old. Europe 2019– 2022

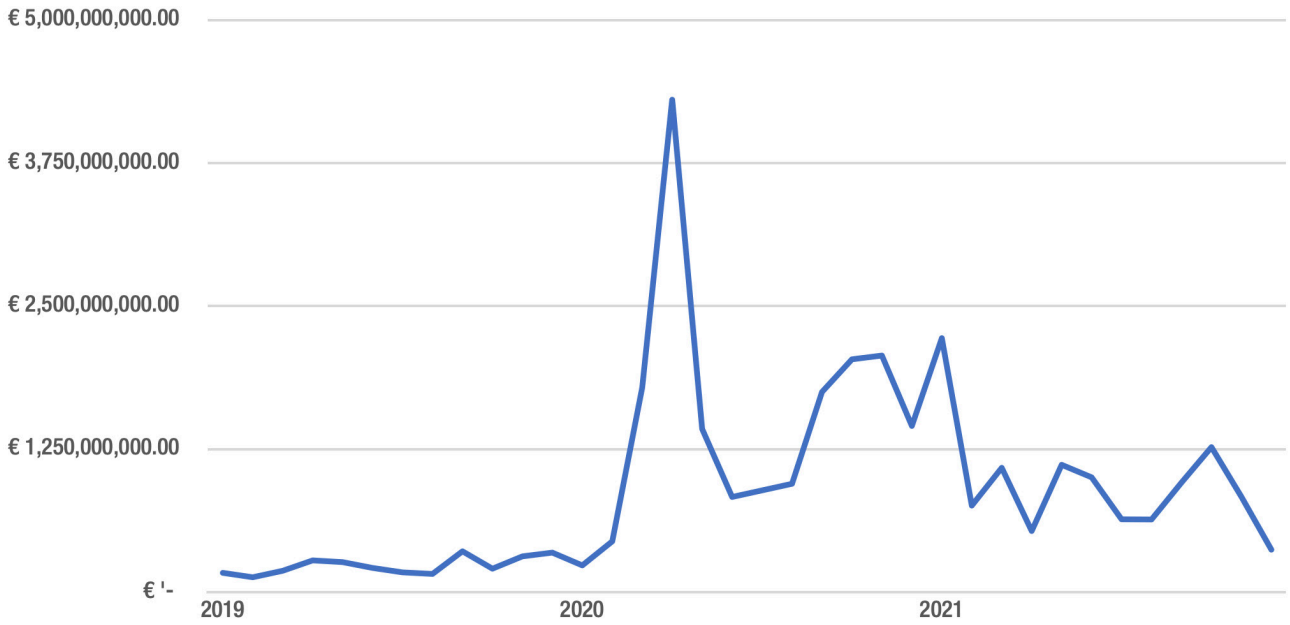
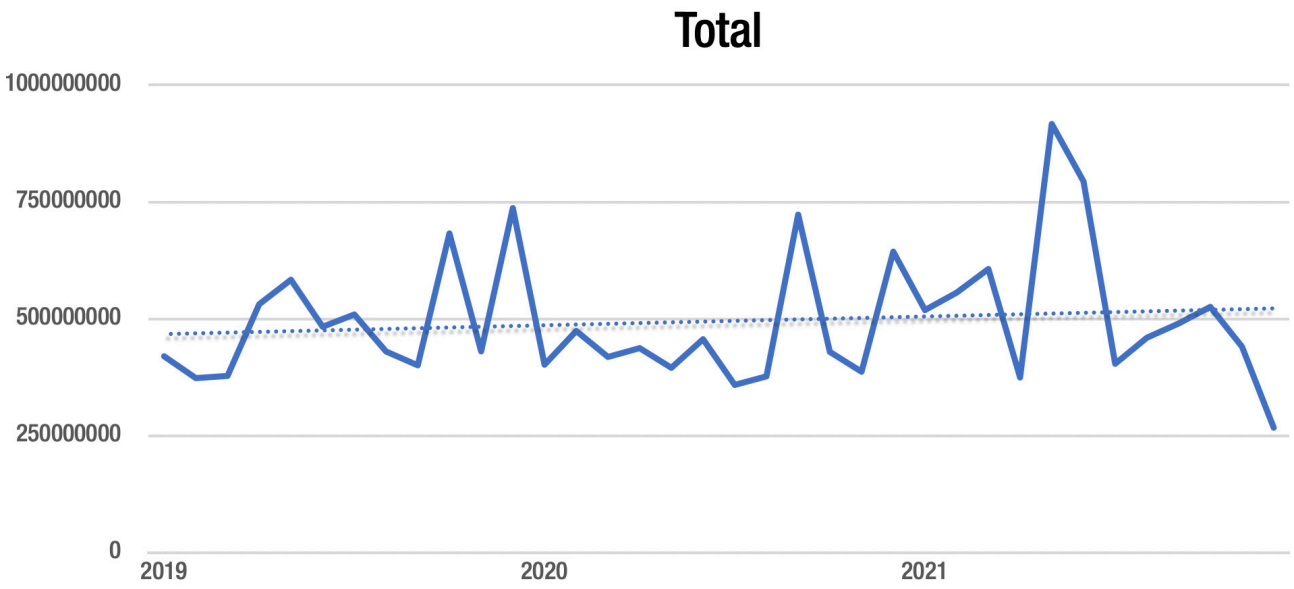


Figure 3. Source: opentender.eu

Moreover, the rise in open procurements (as evidenced in figure x below) with one single bidder, after the period characterized by direct contracting in the first six months of 2020, exacerbates these risks. Single-bidder procurements inherently lack the competitive pressure that is characteristic of transparent and competitive bidding processes. This absence of competition can lead to inflated prices, collusion between suppliers and procurement officials, and a higher probability of corruption. (Oosthoek, 2022) Furthermore, single-bidder procurements can compromise the quality of the procured goods and services, as suppliers may not be subject to the same scrutiny and quality assurance measures as they would be in a competitive bidding environment. (Deloitte, 2021)

Figure 5. Value of health product contracts (euros) where there was a single bidder in an open process. Europe 2019– 2022



Source: opentender.eu

Hence, it can be inferred that as more funds were allocated to the healthcare sector, governments increasingly relied not only on direct awards but also on suppliers with limited experience. As the use of direct procurement gradually decreased, there were instances of open tenders with only one bidder, which became more prominent. These trends, particularly the reliance on inexperienced suppliers and the shift away from direct procurements, were observed both in terms of average contract value and as a percentage of total expenditure of the product groups. However, the total value of the contracts was used to highlight the significant deviation from the norm and the immense pressure on management systems to effectively deal with changing risks.

Identifying these risks becomes challenging in situations where comprehensive datasets, similar to those available in Europe, are unavailable. Nonetheless, this analysis serves as a crucial reminder of the need to monitor risks associated with procurement processes over time, and beyond solely direct procurement. This is essential to protect public interests, ensure transparency and accountability, and ultimately mitigate corruption risks.

Unanticipated extension of corruption risk beyond expected products and timeframes

Work funded by TIGH and conducted by the Government Transparency Institute (GTI) has further shown the heightened corruption risk observed for COVID-19-related products was in fact not limited to these, and did not recede after the initial outbreak. The indicators of the research cover, directly or indirectly, many of the risks in emergency procurement detailed in the introduction to this section, including measures for openness of and competition in bidding, transparency, and supplier suitability.

Utilizing this methodology, the GTI team was able to generate a unified corruption score, the Corruption Risk Index (CRI), for each contract during a specified time frame (18 months preceding and succeeding February 2020), while also facilitating disaggregation into distinct product categories, namely COVID-19-related,

health-related, and general procurement. A histogram of the results is detailed in figure 6 below.

Figure 6: Histogram of CRI scores disaggregated by product class

Source: Fazekas et al., 2023

As expected, there was a significant rise in corruption risk, particularly for COVID-19 products, in the early stages of the pandemic as direct procedures were used to urgently acquire goods. Nonetheless, the escalation of corruption risks was not limited to COVID-19-specific products but also extended to general healthcare procurement in 24 of the 27 countries examined. Additionally, 13 of these countries experienced a further spread of corruption risks from healthcare to non-health-related procurement, such as road construction.

Moreover, even 18 months after the initial outbreak in February 2020, analyses across Europe demonstrate that corruption risks persisted at elevated levels relative to before the pandemic. Given that deviations from standard procedures are typically justified by "urgent necessity" or "unanticipated circumstances", this analysis raises questions regarding the rationale for straying from conventional practices, especially in non-health procurement, well beyond the timeframe that can be deemed justifiably unexpected or urgent. Consequently, this suggests a sustained deterioration of corruption control measures in the post-pandemic landscape. (Fazekas et al., 2023)

The reasons for these unexpected manifestations of risk are likely varied and potentially justifiable in some instances. Nonetheless, these findings

provoke intriguing inquiries, relevant even beyond the European context. For instance, one area to explore is habituation or learned behaviours, the process where individuals or organizations grow accustomed to certain practices due to repeated exposure. As a result, these practices may persist even after a crisis has passed, leading to lasting changes in procurement processes. Our research did not uncover substantial literature on this effect, possibly because modern emergencies, unlike COVID-19, have been more self-contained and short-lived.

While habituation will not fully explain the persistence of risk and spillover effects, further examination is necessary to increase resilience in future emergencies and to potentially identify and mitigate existing suboptimal practices.

MANIFESTATIONS OF CORRUPTION

Our review of media databases found a number of reports implying that when expedited procurement processes were used, **corrupt favouritism or nepotism** could have played a role in the award of contracts. One notable instance:

- In the UK, allegations of corruption in procurement during the pandemic were widespread. The Good Law Project, a non-profit organization, brought legal action against the government, accusing it of failing to disclose details of contracts awarded to private companies for the supply of PPE. It was later revealed that procurement had gone through a "VIP" lane where politicians from the ruling party could "fast-track" businesses, some of which were associated with government officials. The allegations raised concerns about conflicts of interest and lack of transparency in the procurement process. (Good Law Project, 2022)

A substantial proportion of the corruption events discuss risks related to **supplier fraud and/or negligence** in the selling non-existent or faulty products. Supplier fraud in terms of procurement can be defined as the act of a supplier engaging in deceitful or fraudulent behaviour during the procurement process to gain an unfair advantage or financial benefit.

- In the United States, several individuals were charged with attempting to defraud the government by selling counterfeit or non-existent personal protective equipment (PPE) to federal agencies. In one case, a man from Georgia was accused of trying to sell US$750 million worth of non-existent PPE to the Department of Veterans Affairs. (US Department of Justice, 2020)
- In the UK, six companies, including four from the secretive "VIP"-lane, supplied unusable COVID-19 tests worth £246m, according to a Freedom of Information Request. The Department of Health and Social Care currently holds COVID-19 tests worth £279m, of which £246m will go to waste. The UK government's pandemic-related procurement has previously generated significant waste, with PPE losses rising to £14.9bn. The annual accounts for 2021-22 revealed a further £6bn write-down in connection with PPE and other inventory. (Good Law Project, 2023)
- In South Africa, several corruption scandals emerged in relation to the procurement of PPE for frontline healthcare workers. One high-profile case involved the Gauteng Provincial Government, where overpricing and corruption allegations led to the suspension of several officials, including the top-level health official. ("South African corruption watchdog probes COVID-19 tenders," 2020)

Throughout the COVID-19 pandemic, there have been reports related to the risks of **profiteering and price-gouging** in the procurement of medical products. Profiteering and price-gouging can be defined as the act of exploiting the

demand for essential medical products, such as drugs, vaccines, or medical equipment, to charge excessively high prices and generate excessive profits. Two significant examples include:

- Bolivia's Health Minister, Marcelo Navajas, was arrested for allegedly purchasing 170 ventilators from Spain at an inflated price of US$27,683 each, while the actual cost was a quarter of that amount. The devices were not suitable for intensive care units as they were designed for use in ambulances. The Inter-American Development Bank (IDB) financed the purchase and discovered the apparent overpricing during an audit. (DW, 2020)
- CivicHive, an NGO working on good governance in Nigeria, discovered data from the Bureau of Public Procurement which revealed that the Federal Ministry of Health had spent N37.06m (US$96,000) on 1,808 regular face masks, paying approximately US$53 per mask. (Schipani et al., 2020)

While clustering corrupt acts by type of corruption can be helpful, corruption cuts across categorizations and power structures. Further, one type of corruption can motivate the occurrence of another: for example, many of the reports detailed that **kickbacks and bribery** led to further corrupt acts such as favouritism. However, it might not be that straightforward: favouritism can also be incentivised by social norms, opportunity, systemic corruption, and structural and governance weaknesses. Hence, corruption trends must be looked at from a more holistic viewpoint than those present in individual articles.

Yet, the sheer volume of procurement-related corruption that occurred globally during the pandemic demonstrates a general lack of preparedness of procurement systems for such an emergency. Risk management and integrity mechanisms were evidently not robust enough to absorb the heightened corruption risks during a pandemic, which led to huge amounts of public money being lost. Whilst this cannot be rectified retroactively for COVID-19, this section has illustrated the importance of improving emergency procurement guidelines and making procurement in general more resilient to shocks. A non-exhaustive set of recommendations to strengthen integrity, transparency, and accountability are detailed below, drawing on corruption risks identified in COVID-19 procurement practices.

POLICY RECOMMENDATIONS

Improve resilience to crises proactively

Limit emergency spending to necessary levels. Our research, combined with existing studies (Schultz and Søreide, 2008), reaffirms the notion that new spending and sudden spikes in market pressure, particularly during a crisis, indeed introduce heightened corruption risks. This matches with GTI research that suggests a statistical relationship between new spending policies and increases in CRI (Fazekas et al., 2023). Whilst increases in spending for future emergencies are unavoidable, governments can work proactively to decrease front-end load expenditure and guard against sharp shocks to the procurement system.

1. To ensure that risk does not reach critical levels, governments should, where possible, pre-emptively identify, buy and stockpile critical products such as PPE to guard against sudden market disruptions (Wright et al., 2021). In addition to decreasing the likelihood of integrity-related risks, strategic stockpiling can also minimize incentives for countries to impose export restrictions on medical products during emergencies. (OECD, 2020)
2. The amount of spending on certain products should be based on objective criteria and done in advance of any emergencies. Governments should provide detailed guidance on how to define appropriate buying levels in emergency contexts, considering factors such as staffing levels to operate equipment and the ability to distribute resources effectively. While dynamism is required in emergency settings, this guidance can serve as a benchmark for monitoring spending levels. (Fazekas et al., 2023)

Strengthen emergency procurement systems to guard against unexpected application. As previously shown, increases in corruption risk occurred outside expected procurements and was not limited to the initial stages of the pandemic. Indeed emergency procedures were sometimes used to justify truncated procedure in unexpected areas, for example an amendment in Poland which extended the emergency rules from mainly Covid-related products to both general health and all other product groups. (Fazekas et al., 2023)

Yet according to the CRI analysis, select countries (such as Denmark and Sweden) buck this trend and showed it was possible to procure whilst limiting corruption risk. To actualize this elsewhere in future emergencies, it is crucial to tackle legislative shortcomings in emergency procurement that lack defined time constraints or designated products. These gaps are prevalent across both Africa (Olusegun Sotola et al., 2023) and Europe (Fazekas et al., 2023). The lack of explicit guidelines may have inadvertently created ambiguities, potentially facilitating a gradual shift away from transparent and efficient contracting practices or even enabling corrupt activities – perhaps through habituation.

As such, it is essential that governments are required by emergency legislation at the onset of the emergency to abide by the following:

1. Emergency contracting should be an exception, limited exclusively to unforeseeable and immediate needs of extreme urgency until a more stable solution can be found.
2. It is necessary to evaluate the rationale behind using emergency contracting on a per-case basis and maintain a record of it for potential audits or legal disputes related to

procurement in the future. This record should be published in any transparency notices.

3. Precisely set out the criteria for the emergency situation to end from a procurement perspective. (Fazekas et al., 2023) A sunset clause should be implemented of up to 90 days meaning that the emergency situation should be reassessed and only if strictly necessary renewed. (Wright et al., 2021)
4. Specify which products are eligible for emergency procurement and truncated procedures, in order to reduce misapplication. (Fazekas et al., 2023)
5. Pre-emptively conduct and incorporate bribery and corruption risk assessments and mitigation strategies into procurement practices for crisis responses. (Wright et al., 2021). Such assessments can help identify potential bottlenecks or risk areas that can proactively be avoided, such as through the use of wholesalers. (OECD, 2020)

Enable retroactive investigations and longitudinal monitoring

Conduct comprehensive audits and reviews. Comprehensive reviews and audits play a critical role in ensuring the integrity of procurement processes, particularly after periods of elevated corruption risk. Audits provide a systematic and in-depth examination of procurement activities, contracts, and financial transactions to identify irregularities, inefficiencies, and corrupt practices. They help to hold those responsible accountable and recover misappropriated funds. Hence, the following should be included in emergency legislation on national and sub-national level:

1. A full statutory review should be conducted 12 months after the last declaration of emergency procurement to assess the compliance of procurement processes with emergency rules and to evaluate the effectiveness of disbursed emergency spending. (Wright et al., 2021)

Maintain adequate record-keeping and ensuring transparent information publication. The need for quick spending should not prevent public buyers from keeping adequate records of key decisions (e.g., grounds for selecting a company for direct award procedures) and transactions (e.g., contracts and payment records) (Fazekas et al., 2023). These records should be maintained and published. Yet, evidence from around the world suggests that such information is not released in a timely matter and sometimes not at all (CABRI, 2021; Wright et al., 2021). Emergency legislation should include provisions to prevent this during further health emergencies:

1. Records and data on key decisions and transactions should be maintained internally for later review and publication in an open data format. This should include but not be limited to: reports on contract execution, justification for use of emergency methods, unique identifiers for key entities, values, dates and justifications for emergency procedures.
2. Governments should commit to publishing procurement information transparently, even if this requires a certain delay due to the urgency of the situation. Specifying a reasonable timeframe within 90 days for the release of such information can help balance the need for expediency with the importance of transparency and accountability.

Mainstream transparency and anti-corruption into (health) procurement systems. To effectively combat corruption, it is crucial to develop targeted anti-corruption strategies that are specific to the health sector and emergency situations. Evidence suggests both in theory (Schultz and Søreide, 2008) and when applied to COVID-19 (Fazekas et al., 2023)

that the level of corruption in emergency settings is related to general strength of institutional corruption controls. Yet, evidence has shown that generic anti-corruption strategies are often ineffective and toothless in addressing sector-specific nuances (Sotola and Pillay, 2022). Thus, anti-corruption strategies should be mainstreamed into the health procurement sector.

Open contracting provides a framework for progress in this area, with a range of supporting tools, guides, evidence and communities to help implementation (Fazekas et al., 2020; Open Contracting Partnership, n.d.). By incorporating anti-corruption strategies into health sector procurement, governments can improve transparency and accountability, ultimately ensuring that emergency products are distributed equitably and efficiently (Olusegun Sotola et al., 2023). Four interlinked general pathways to achieve this include:

1. Ensure that the anti-corruption strategy for mainstreaming corruption is contextually sensitive and realistic, using tools such as **Corruption Risk Assessments** or **Open Contracting Guides** to prioritize approaches within a constrained budget. For example, legalistic or civil society-based approaches may be more impactful than using big data sets in contexts where computerized infrastructure is lacking.
2. The full procurement cycle should be made transparent, with open access to all procurement-related information. This includes the bidding process, selection criteria, contract details, implementation progress, and evaluation results. Digital platforms should be used to disseminate this information in near real-time to ensure that everyone, including the general public, can track and scrutinize the procurement processes.
3. Mechanisms that promote accountability at all levels need to be established. This involves setting up independent auditing systems and strengthening judicial capacity to prosecute corruption cases. Whistleblower protection policies should also be implemented to ensure that individuals who report corruption are not subject to retaliation.
4. Encourage and facilitate community participation in monitoring health procurement systems. The use of community monitoring systems can empower citizens to directly oversee the allocation and use of health resources in their communities, promoting social accountability and deterring corrupt behaviour. Training programmes should be set up to equip communities with the necessary skills to monitor procurement processes effectively.

LESSONS FOR FUTURE EMERGENCIES: BUYING OF COVID-19 VACCINES

Key Findings

Whilst the discussion on procurement applies to vaccine procurement, the third section emphasises the bringing to light the global power imbalances that often result in opacity and inequitable distribution. Key findings include:

Supply-demand imbalance: The early procurement phase for COVID-19 vaccines was marked by a significant mismatch between global demand and available supply, amplifying the discretionary power of select pharmaceutical firms and resource-rich countries.

Contractual confidentiality: Pharmaceutical companies, driven by the need to protect their commercial interests, reportedly insisted on confidentiality clauses in COVID-19 vaccine supply contracts, capitalizing on their enhanced bargaining power.

Geopolitical competition: The race for vaccine procurement fostered geopolitical competition, with predominantly Western, high-income nations securing bilateral agreements even before production started, which may have led to the circumvention of standard, transparent procedures.

Sacrifice of transparency: Countries, in their bid to secure swift and extensive vaccine deals, may have upheld confidentiality to preserve favourable relationships with these companies, granting politicians considerable discretion in resource allocation. The intense competition likely prompted other countries and organizations like COVAX to forgo transparency in securing scarce vaccine supplies.

Chain reaction of secrecy: The global supply-demand imbalance seems to have incited a domino effect of confidentiality clauses, opaque deals, and the bypassing of transparency norms, as countries and entities scrambled to secure limited vaccine supplies.

> Only 6% of 182 purchase agreements were made public through formal channels in a 2021 study.

Widespread contract redactions: Extensive redactions have been used in vaccine supply contracts, often hiding critical information such as contract value, unit price, and delivery schedules. These redactions are frequently justified by broad reasons like national security or the protection of commercial interests.

Limited success of Freedom of Information Requests: Freedom of Information Requests (FOIRs), intended to provide contract access in emergencies, had minimal success with COVID-19 supply contracts.

> Over three-quarters of the 17 FOIRs submitted by Transparency International Chapters and other civil society organizations were either rejected or are still under legal review.
>
> Of a broader set of 39 FOIRs, fewer than 6% were successful, with many responses heavily

redacted or partially denied. Only about 18% of the contracts were proactively published by the respective authorities, still with significant redactions.

Questionable commercial confidentiality: The practice of justifying procurement opacity with "commercial confidentiality" is dubious, as the public interest in transparency, particularly for publicly funded projects like COVID-19 vaccines, should supersede it.

Summary of Policy Recommendations

Mitigate (global) drivers for opacity in global emergencies. This includes the redefinition of public interest in the context of a global crises, as well as working towards the standardization of emergency procurement, the use of collective action amongst nation states, and ways to reduce structural resistance to Freedom of Information Requests.

Establish good practices for contract disclosure in emergencies. This includes the introduction of minimum standards for contract disclosure and open contracting in global governance mechanisms and strengthened whistleblower protection.

The development of COVID-19 vaccines marked a pivotal moment in the battle against the pandemic. As the most promising solution to curb the spread of the virus, procuring vaccines became a top priority for most governments and healthcare systems worldwide. Early into the pandemic, literature theorizing corruption risks in vaccine procurement largely reiterated well-established risks in procurement and emergency procurement that were demonstrated in the previous section (Rahman, 2021; UNODC, 2020).

Whilst these and much of the discussion above still applies, the unique nature of the COVID-19 vaccines and the unprecedented setting into which they were released created novel factors that impinged upon how these risks manifested. For instance, unprecedented global collaboration may have increased scrutiny and deterred corrupt practices, while the pandemic's urgency may have aligned stakeholder interests with public health outcomes. Additionally, the high visibility of vaccine procurement, amplified by media coverage, might have raised public awareness and vigilance, making it more difficult for corrupt individuals to act undetected. Moreover, the centralization of decision-making and procurement among a small group of stakeholders, along with a limited number of high-profile agreements, could have reduced the number of opportunities for corrupt practices to emerge.

Conversely, the highly politicized and heightened demand for vaccines may have led to the circumvention of normal, tried-and-tested procedures, resulting in amplified or unforeseen risks. Given the distinct challenges associated with procuring such a sought-after commodity, a separate section addressing specific corruption and transparency issues is warranted.

This section will explore the procurement and distribution of COVID-19 vaccines, with a focus on transparency concerns in procurement and corruption in distribution channels. We will examine the challenges encountered by the COVAX facility, a global initiative established to ensure equitable vaccine access, and analyse the measures implemented to address corruption and promote fair and transparent vaccine distribution and finally present policy recommendations for future emergencies.

CORRUPTION RISKS

Compromising procurement safeguards: balancing high demand with limited supply

The initial procurement phase for COVID-19 vaccines was characterized by the stark imbalance between global demand and the available supply. This placed a higher discretionary power in the hands of select pharmaceutical countries and resource-rich countries. It is widely acknowledged that pharmaceutical companies prefer to maintain the confidentiality of certain aspects, such as manufacturing capacity, to protect their market interests (Kenny, 2021). Recent studies suggest that pharmaceutical firms likely insisted on incorporating confidentiality clauses in COVID-19 vaccine supply contracts to safeguard their commercial interests, and they were able to do so as they were in a heightened position of power (Gorodensky et al., 2023; Ojiako and Ngwaba, 2023).

Consequently, countries aiming to achieve quick, continuous and expansive vaccines deals might also have been motivated to uphold opacity to preserve favourable relationships with these companies. This global situation is likely to have granted politicians and decision-makers significant discretion in resource allocation (Onwujekwe et al., forthcoming). Concurrently, geopolitical competition emerged as predominantly Western, high-income countries entered bilateral agreements with vaccine manufacturers even before production commenced (Agaba, 2021; Mlambo and Mlambo, 2022). This heightened pressure likely led to the circumvention of regular transparent processes in order to secure an advantage over competing nations (Olusegun Sotola et al., 2023).

The abandoning of standard procedure appears to have become the norm, beyond just the initial agreements. This is perhaps because other countries as well as entities like COVAX were drawn into the same competitive landscape, having to sacrifice transparency in the race to secure increasingly scarce vaccine supplies due to stockpiling. Indeed, COVAX and Sub-Saharan African countries ranked among the worst performers in terms of contractual transparency (Olusegun Sotola et al., 2023). Thus it seems that the global supply-demand imbalance triggered a chain reaction of confidentiality clauses, opaque deals as well as circumvention of transparent processes, as countries and entities raced to secure limited vaccine supplies.

The (un)openness of vaccine contracts: a global perspective

Lack of transparency, in this context particularly marked by confidential agreements and exclusive contracts between governments and vaccine manufacturers, can facilitate corruption by creating an environment where misconduct can thrive unnoticed. When procurement processes, pricing, and distribution details are not disclosed to the public, it becomes difficult to hold both public officials and private entities accountable for their actions. This opacity provides opportunities for corrupt individuals to engage in illicit activities such as bribery, embezzlement, and collusion without being easily detected or facing consequences. In essence, the absence of transparency undermines the integrity of vaccine procurement processes, allowing corruption to compromise the equitable distribution of vaccines and, ultimately, endanger public health.

Globally, COVID-19 vaccine contracts have been shrouded in secrecy. This manifests as a triple threat based on three compounding factors:

- **Lack of publicly released contracts** was common during the initial buying of vaccines. For example, a 2021 study of 182 purchase agreements for 12 different COVID-19 vaccines found that only 6% of agreements were publicly published through

formal channels (Wright and Rhodes, 2021). Whilst such figures have improved, perhaps because of a re-shifting of the demand-supply relationship, an updated version of this research still shows secrecy to be the dominant theme. In Sub-Saharan Africa, such opacity was particularly marked – as of 2022, no countries in a cross-country study had released their contracts. (Olusegun Sotola et al., 2023)

- **Redactions were extensively utilized.** A report by Transparencia Mexicana analysing 39 vaccine supply contracts from 15 countries and the European Union (EU) with different pharmaceutical companies in December 2021 showed that more than half (59%) of the obtained contracts did not even contain basic information on the entire contract value, or the unitary price paid for the vaccine. A further 15% only gave partial information. Almost three in four (74%) gave no information on delivery schedules. In most cases, redactions were justified with blanket explanations, such as protecting national security interests, or commercial and intellectual property interests of the manufacturers. (Wegener et al., 2022)
- Freedom of Information Requests (FOIRs) provide the window of access to contracts in times of emergency. **Yet for COVID-19 supply contracts, FOIRs have recorded limited success due to barriers which have either been legal, institutional, political or a combination of all of these.** Out of the 17 FOIRs submitted by Transparency International Chapters and other civil society organisations around the world, more than three quarters (13) were rejected or are still in ongoing legal procedures. (Wegener et al., 2022)

A broader study of 39 FOIRs found that fewer than 6% of FOIRs were successful, and even when the designated agencies published COVID-19 contracts, they were heavily redacted. Some of the requests were delivered and awaiting a response from the designated authority and in some instances the requests were ignored or partially denied. Only about 18% of the contracts were proactively published by the designated authorities, albeit heavily redacted.

Status	Freedom of information Requests
Unsuccessful	52.94%
Not applicable	17.65%
Delivered	11.76%
Finished	5.88%
Successful	5.88%
Information not accessible	2.94%
Partially denied	2.94%

Source: Ojiako and Ngwaba, 2023

CASE OF COVAX: ACCOUNTABILITY AND TRANSPARENCY LOST IN SHIFTING GLOBAL POWER CURRENTS

The COVAX initiative, designed to ensure equitable access to COVID-19 vaccines worldwide, has faced challenges in maintaining accountability and transparency due to shifting global political currents and power imbalances.

Patent protection and the preference of manufacturers to create bilateral agreements resulted in a relative power gap for COVAX in negotiations. To secure deals with manufacturers, COVAX had to maintain secrecy around contracts, protecting stakeholder interests. Studies suggest that manufacturers used this context to negotiate the inclusion of confidentiality clauses in contracts to protect their commercial interests.

The complex accountability lines arising from the involvement of many countries and NGOs in COVAX made it difficult to establish clear-cut accountability. An interviewee in a related study

noted that the challenge lies in the intersections of decision-making, where responsibilities may become blurred. Another revealed that the power allocation within COVAX was not clearly defined, exacerbating the issue of accountability.

COVAX had to make political decisions to appease major country factions, leading to restricted information release and extensive use of non-disclosure agreements (NDAs). An international organization participant who worked with COVAX stated that while there were tools to enhance transparency within the organization, information regarding vaccine acquisition and distribution was not available to countries due to the politics behind it.

The limited transparency and accountability within COVAX have created significant challenges for recipient countries in planning and executing vaccination campaigns, leading to high vaccine wastage. The lack of public disclosure in the final contracts between governments and vaccine manufacturers has been identified as a key source of corruption risk, either as a mechanism to shield individual transactions from public scrutiny or to facilitate pricing opacity between different purchasing countries.

Sources: Gorodensky et al., 2023; Onwujekwe et al., forthcoming; Sung et al., 2021; Usman et al., 2023

The importance of international governance in guarding against a "race to the bottom" in global health

The COVID-19 pandemic has revealed what happens when there is a lack of international standards and guidelines in public health emergencies. When countries prioritize their own interests over global health concerns, they may adopt policies that benefit their own populations at the expense of others. The procurement of COVID-19 vaccines illustrates this issue, as it has led to a competitive environment where countries may lower their integrity standards to attract businesses or investments. This "race to the bottom" ultimately harms global health outcomes and hinders efforts to improve health and prevent disease spread across borders.

The lack of transparency in vaccine procurement has often been justified with "commercial confidentiality". However, this justification should only be valid if the benefits of confidentiality outweigh the public interest in transparency (Center for Global Development, 2014). In the case of COVID-19 vaccines, the public interest in transparency is paramount due to the global impact of the pandemic and the pressing need for equitable vaccine access. Consequently, the "commercial confidentiality" argument is questionable, as public interest in transparency and accountability in publicly-funded projects should take precedence.

The concept of "public interest" is often framed around national political structures. While stockpiling countries with incentives for opacity may have achieved a short-term "national" public good, this approach can lead to negative long-term consequences in global crisis situations. The interconnected nature of global health necessitates a broader perspective on public interest, which considers the potential impact of one country's actions on others.

The urgency of the pandemic may have also resulted in the abandonment of standard procurement procedures and an imbalance of power given to select individuals. Central procurement processes have proven effective in reducing unhealthy pricing and ensuring vaccine quality. Totally bypassing these established systems may result in suboptimal outcomes. (Steingrüber and Gadanya, 2021) Thus, it is crucial to find a balance between flexibility during emergencies and preserving effective procurement procedures.

Given these challenges, international guidance and agreements are essential to prevent a race to the bottom in global health. Establishing common

standards and guidelines can hold countries accountable to the global community and deter policies that compromise the health and well-being of others. The pandemic has shown that a unified, transparent approach to public health is vital for ensuring better outcomes for all.

MANIFESTATIONS OF CORRUPTION

Whilst corruption in vaccine contracting has been reported, the number and variety are limited to a handful of cases. The few alleged instances that have been reported in the buying process related to indications of **bribery, kickbacks or price-fixing**. Two are detailed below:

- In Brazil, President Jair Bolsonaro faced allegations of irregularities in a contract for the Covaxin vaccine developed by India's Bharat Biotech. A Brazilian Health Ministry official claimed to have received pressure to expedite the deal, which rose significantly from the expect $1.34 per dose to $15 and which involved an intermediary company. (BBC, n.d.; Fonseca and Stargardter, 2021)
- Luiz Paulo Dominguetti Pereira, a representative of Davati Medical Supply, alleged that Roberto Ferreira Dias, the Director of Logistics at Brazil's Ministry of Health, demanded a $1 per dose bribe during negotiations for 400 million doses of AstraZeneca's vaccine. According to Dominguetti, following the accusation, the Minister of Health, Marcelo Queiroga, dismissed Dias from his position. (Rezende, 2021)

The lack of transparency in vaccine deals and contracts may obscure the actual extent of corruption in the procurement process. Confidential agreements, non-disclosure clauses, and exclusive contracts between governments and vaccine manufacturers restrict public access to vital information on pricing, distribution, and negotiation details. Moreover, the centralization of decision-making and procurement within a small circle of stakeholders — enabled by the abandonment of standard procedures — can make it easier for corrupt actors to collude and hide their actions, given the reduced scrutiny and oversight from a wider range of stakeholders.

Consequently, corrupt practices may remain undetected, and the true scale of corruption in vaccine procurement could be underestimated. Until the global veil of secrecy surrounding vaccine purchases is lifted, we can never fully comprehend the extent of corruption or understand which decisions heighten or reduce risk.

POLICY RECOMMENDATIONS

Mitigate (global) drivers for opacity in global emergencies

Redefine public interest in the context of a global crises. In future, a clearly defined, consensus-based concept of public good in the context of global crises should be developed by WHO and incorporated into global governance instruments for preparedness.
This would serve as a reference point for national governments, international organizations, and other stakeholders to align their policies and actions with the global public good in crises.
By redefining public interest in this manner, nations would be encouraged to prioritize global cooperation and transparency over self-interest, ultimately benefiting the global community.

1. WHO should work on developing an influential redefinition of public interest and its appropriate application in crises;
2. and work towards establishing this in international agreements including the Pandemic Accord.

Develop standard procedure guidelines for emergency procurement. A lack of standardization across procurement procedures led to a race to the bottom in terms of abandoning normal procedures. To guard against this in future, WHO should develop guidance on standardized procurement procedures for states during emergencies.

1. International organizations including WHO should develop guidance for standardized procurement procedures for states during emergencies. This should:

a. Start with the assumption and recognize in outputs that:
   i. Existing systems and procedures should not be totally abandoned during an emergency outside of extreme circumstances to be defined by the procedure document.
   ii. Conducting Corruption Risk Assessments, either before or during emergencies, are imperative to safeguard integrity and ensure appropriate use of scarce resources.

b. Define acceptable deviations from standard procedures in crises. This should include definition of when it is appropriate to:
   i. Prioritize retroactive data publication as opposed to immediate.
   ii. Set up new negotiating bodies and corresponding appropriate transparency and accountability mechanisms.
   iii. Change timelines in terms of transparency, sunset clauses etc.

c. Work towards establishing aspects of these guidelines in international agreements such as the Pandemic Accord.

Use collective procurement action to address power asymmetries where possible. Procurements typically involve multiple actors with differing roles, making transparency crucial in ensuring accountability. The lack of publication of vaccine contracts can be attributed to the power dynamics of the vaccine market, where manufacturers hold significant bargaining power. It is therefore necessary to establish a system or framework that prevents companies from prioritizing their profits over public interests. Collective action may be an effective way to regulate pharmaceutical companies, particularly those with significant bargaining power, and ensure that vaccines are treated as a public good. This approach would serve to promote the common good and protect public health. (Olusegun Sotola et al., 2023)

1. States should develop pre-agreed protocols that set out how they will jointly procure goods and services in emergencies. These protocols should be based on a common understanding of the emergency and should take into account the specific needs and resources of each participating state. This will help ensure a coordinated and effective response and enable the participating states to pool their bargaining power.
2. States should establish a joint standing emergency negotiating body to respond to emergencies and negotiate on behalf of participating states. This body could be empowered to negotiate contracts, purchase goods and services, and coordinate the distribution of goods and services to affected populations.

Redress structural resistance to Freedom of Information Requests. According to multi-country research, three strategies were employed for carrying out FOIRs: legal, political, and media and institutional strategies (Ojiako and Ngwaba, 2023). Media and institutional strategies were the most effective in the current climate of secrecy, but all three strategies were used concurrently to achieve access to information objectives. The presence of strong government accountability institutions and a climate of activism around transparency in public procurement were key factors contributing to the success or failure of FOIRs for COVID-19 vaccine supply contracts. Thus, in order to ensure FOIRs as an effective mechanism during the next emergency, a mixture of global and national approaches is advised.

1. Governments should partner with media and institutional stakeholders to foster a culture of transparency and accountability, promoting routine information disclosure.
2. Governments should enact policies that safeguard and endorse activism advocating for transparency in public procurement, ensuring that these voices are valued and respected.
3. Promote the proactive release of information pertaining to public health emergencies, reducing the reliance on FOIRs and fostering transparency.
4. Integrate transparency and accountability training for government officials engaged in emergency response, highlighting the significance of information-sharing in crisis management.
5. Based on the UNICEF market dashboard (UNICEF, n.d.), WHO should establish a centralized repository or portal to access information related to public health emergencies during global crises, with regional bodies or national governments doing the same during localized emergencies. This approach will streamline access to information.

Source: Ojiako and Ngwaba, 2023

Establish good practices for contract disclosure in emergencies

Introduce minimum standards for contract disclosure. When a medical intervention needed for fighting a health emergency is in higher demand than supply, regionally or globally, there is an increased and critical need for transparent and open procurement. The vaccine inequity experienced in the COVID-19 pandemic has revealed the need for contract transparency when it comes to urgently-needed public goods in health emergencies.

To ensure that access to medical interventions is more equitable in future health emergencies, the Global Accord on Pandemic Preparedness and Response which is currently being drafted by World Health Assembly member states should stipulate the following:

1. Contracts or key data on contracts for purchases of emergency goods, services and works should be released in full and at maximum 90 days after conclusion of the

contract. Emergency procurement legislation should incorporate this guideline and be accordingly reviewed where necessary.

2. The released contracts should be transparent on key contractual terms and conditions, including the total price paid and the price per unit or dose of the product, clauses on liability and indemnification, procured quantity, delivery agreements, and provisions on what happens in case of cancellation of the agreement of either party.
3. Redactions should only occur if they can be justified on the grounds of public interest. Should this be the case, the decision-making process that led to the redaction needs to be clarified for each redacted part of the contract respectively. No blanket explanations, such as the protection of national security interests or commercial interests, should be given.
4. Contractual information needs to be published in an open data format so that it is easily accessible to the public. This means publication on a public server and without restrictions such as a password or firewall. Open data is essential to reduce the risk of market distortions in medicines pricing and ensure that the public can scrutinize the contracts.
5. Conditional disclosure of purchasing contracts when "push-funding" was provided for research and development of medical interventions. Advanced Purchase Agreements and "push-funding" were vital to the R&D process of the COVID-19 vaccine. However, governments have been scrutinized for not having mandated greater transparency already at this early stage of the vaccine cycle, despite the use of public money and agreeing to take on the developmental risks.

Establishment of a WHO pricing database. Governments should anonymously report prices for urgently needed public goods (medicines, vaccines, supplies) during health emergencies. Making pricing information accessible is vital to ensure that governments can make evidence-based decisions on how much to pay for a specific medical product. It ensures that no government is overpaying for a product and that lower-income countries can afford sufficient products. WHO should establish a pricing database like the WHO Market Information for Access to Vaccines (MI4A), in which the countries are not named but prices are categorized by region and income level, hence still protecting commercial confidentiality.

1. WHO should establish a pricing database for urgently needed public goods during health emergencies, allowing governments to anonymously report prices.

Strengthened whistleblower protection. Whistleblowing has been instrumental during the COVID-19 pandemic, as it has brought critical contract information to light. To ensure transparency and accountability in future pandemic preparedness and response efforts, it is essential to establish robust whistleblower protections and mechanisms.

2. Enhanced whistleblower protections and mechanisms must be integrated into pandemic preparedness and response planning, including in the accord, to promote transparency and accountability.

LESSONS FOR FUTURE EMERGENCIES: COVID-19 VACCINE DEPLOYMENT

Key Findings

Varying demand and supply drove corruption inconsistently: The initial imbalance between supply and demand for vaccines led to a surge in corruption risks at the beginning of the global vaccine rollout. This was exacerbated by lack of awareness of standard procedures and emerging preferences for certain vaccines, but mitigated in some instances because demand was much lower than anticipated in the initial phases of the rollout, following hesitancy and misinformation.

A 2021 survey of the COVID-19 vaccinated population of Uganda suggested that 10% of the population paid a bribe to receive a vaccination. This declined to 4% in a second survey conducted the following year.

Geographic hotspots for bribery for vaccination: Geographic hotspots of high prevalence of bribery for vaccines occurred, suggesting a recurrent burden on specific subsets of populations.

The research in Uganda indicates that in certain regions, bribery for vaccine access was especially prevalent. One district recorded a 25.8% bribery rate, and in some clinics this rate was even higher, with one clinic reporting a staggering 65%.

Fake vaccination certificates: Obtaining a vaccination certificate without being vaccinated emerged as a common corruption risk as restrictions for individuals without vaccination certificates became commonplace.

Analysis of news data suggested that by far the most common motivation for bribery in the period between November 2021 and April 2022 was to obtain a COVID-19 vaccine certificate without undergoing the vaccination (93% of all cases).

Existing health system challenges: Inherent problems within health systems, such as staff absenteeism, lack of transparency, and lack of patient knowledge, persisted as corruption risks in vaccine deployment.

Almost all users who bribed for access to the vaccine had bribed for healthcare services in the six months prior to the Ugandan survey, suggesting that bribery for vaccines is occurring alongside existing corruption risks, including geographic hotspots, in the health system.

Insufficient record-keeping and data management: The lack of transparency and documentation in vaccine distribution processes allowed for potential corruption and malpractice in vaccine administration. A backlog in data entry and limited staff to handle vaccination data resulted in delays in issuing immunization certificates and created an opportunity for petty corruption.

On-site monitoring of vaccination centres in hospitals by TI-Zambia established that 53% of facilities had a backlog in entering vaccine administration data.

Stretched healthcare worker capacity: The overwhelming workload, staff shortages, and insufficient salaries contributed to supply-side pressure for petty corruption. For example, a study in Nigeria found that vaccination staff were paid irregularly and had to cover part of the logistical costs themselves due to unclear funding structures, leading to them demanding informal payments in order to make up for their financial losses (Onwujekwe et al., forthcoming).

In Zambia, 52% of health workers interviewed stated that they had barely enough time to complete their duties.

Fear of reporting corruption and lack of public trust: Fear of retaliation and lack of knowledge of how to report corruption cases discouraged individuals from reporting corruption incidents. A general lack of trust in government institutions and healthcare systems, particularly in countries where corruption is perceived to be widespread, served as a catalyst for corrupt practices.

In Zambia, 23% of health workers interviewed indicated that it was not possible for staff to report incidents of corruption within the health facility without fear or risk of retaliation.

Summary of Policy Recommendations

Mitigate supply-side drivers for petty corruption. This involves ensuring minimum standards of working conditions for frontline health staff.

Ensure adequate monitoring of key goods such as vaccines. This includes the maximization of transparency in distribution to guard against illicit diversion and improve equitable allocation, as well as the inclusion of third-party monitoring and contextually sensitive whistleblowing.

In the context of vaccine deployment, different forms of corruption, mostly petty corruption, can occur at different stages of the process, from allocation to delivery, administration, and certification. Petty corruption refers to the "everyday abuse of entrusted power by public officials in their interactions with ordinary citizens, who often are trying to access basic goods or services in places like hospitals, schools, police departments and other agencies" (Transparency International, n.d.). As it usually involves small-scale transactions at the level lower levels of government and in public services, petty corruption is distinguished from grand corruption, which refers to abuse of high-level power benefiting a few and causing serious harm to society. Petty corruption can have significant negative impacts on society, including reduced trust in government institutions and unequal access to public resources. In healthcare systems, petty corruption can take many forms, including bribery, embezzlement, nepotism, and favouritism. These practices have serious consequences for healthcare access and quality and can exacerbate health inequalities.

Vaccine deployment is subject to corruption risks throughout the entire process. Prominent forms of corruption in vaccine deployment include:

- **Bribery for vaccination access:** Officials and health workers may demand bribes from individuals in exchange for priority access to vaccines. This can lead to unequal access to vaccines and exacerbate existing health inequalities.
- **Embezzlement of vaccine funds:** Officials may siphon off funds intended for vaccine distribution for personal gain. This can lead to vaccine shortages and delays in vaccination programmes.

- **Favouritism in vaccine administration:** Health workers may administer vaccines to individuals in exchange for personal favours or bribes or because of social connections. This can lead to wastage of vaccines and undermine public trust in the vaccination process.
- **Theft and diversion.** COVID-19 vaccines are at higher risk of theft and diversion as there is low supply and high demand. Theft and diversion can occur during manufacturing, during transportation, or after vaccines have reached distribution sites such as public health facilities. Diversion occurs when vaccines are re-routed to non-target groups within a country or sold through exploitative transactions on the black market (UNODC, 2020). Manufacturing, transport, and health facilities staff may steal vaccines from inventory for resale, while consumers may try to bribe bureaucrats to acquire additional doses for resale on grey markets.

Sources: (GAVI, 2021, 2020; UNODC, 2020; Usman et al., 2023)

As these examples show, while corruption in vaccine deployment usually occurs at a smaller scale and involves interactions between lower-level public officials and citizens in vaccine distribution, it can nevertheless have serious consequences for healthcare access and quality, and can exacerbate health inequalities.

CORRUPTION RISKS

Supply-side and demand-side pressures for corruption are two perspectives used to explain the drivers of corruption in different societies. Supply-side pressures refer to the incentives and opportunities available to individuals in public positions who seek to engage in corrupt behaviour, in this case predominantly healthcare workers. These incentives and opportunities can include weak law enforcement, lack of transparency and accountability, and insufficient penalties for corrupt behaviour. Demand-side pressures, on the other hand, refer to the social and cultural factors that influence individuals, in this case healthcare system users, to engage in corrupt behaviour. These factors can include societal norms and values, a lack of trust in government institutions, and economic inequality (Kraay et al., 1999).

Supply-side drivers for petty corruption in vaccine distribution

At the onset of the global vaccine rollout, the limited supply of and high demand for vaccines created high corruption risks for a short period of time. Our Artificial Intelligence-based media monitoring database (AIMon) recorded the highest count of bribery-related reports at the end of 2021 and beginning of 2022. However, as vaccine supply increased globally and all regions of the world started to receive sufficient stocks, this bottleneck was minimized.

Based on our regional study of Sub-Saharan Africa, the shortage in vaccine supplies created short-term corruption risks until a number of vaccine sources were established. These sources included the COVAX and AVATT, independent procurement arrangements with manufacturers, and donations mainly from Europe and North America. There were also donations towards vaccines by private and philanthropic organizations and NGOs.

On the one hand, in the overall vaccine distribution, corruption opportunities appeared limited, as most countries have relatively robust vaccination policies and strategies in place and deployment followed a clear path. COVID-19 vaccination relies heavily on the existing routine immunization infrastructure, and Sub-Saharan Africa has considerable experience due to years of ongoing immunization against multiple diseases, especially for children. The critical vaccine rollout infrastructure therefore already

exists in many countries. For instance, Ghana's cold chain capacity – the ability to store and transport temperature-sensitive products – required minimal expansion to the existing cold chain infrastructure, in only 15 out of 228 districts in the country (Olusegun Sotola et al., 2023). In essence, the existence of an already available end-to-end supply and logistics system limits the corruption risks that otherwise could have cropped up.

On the other hand, existing systemic problems in health systems translate into corruption risks in vaccine deployment as well: staff absenteeism, lack of data transparency, and the lack of understanding of procedure. There are deployment challenges that essentially mirror the existing challenges in the rollout system. Since countries distributed COVID-19 vaccines through the existing health infrastructure for vaccinations, the corruption risks present in this system automatically applied to the COVID-19 vaccine rollout. For example, in Sub-Saharan Africa there is a difference between adult and childhood vaccination. Whilst most governments are experienced with immunizing children, this is less the case for the immunization of adults. This is especially relevant as vaccinations for adults have mainly been available at an extra cost, whilst the COVID-19 vaccine is administered at no cost. Using the same deployment infrastructure hence can create new problems and room for under-the-table dealings.

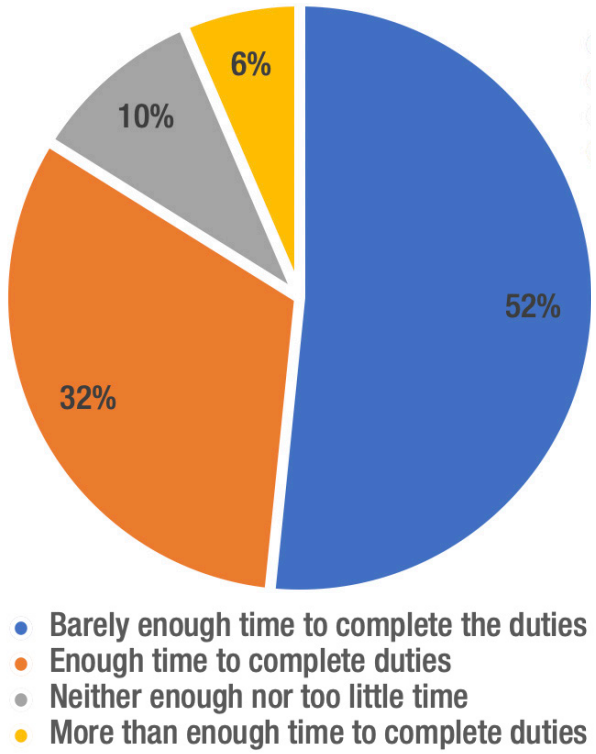
One systemic issue across many health systems is the lack of record-keeping and transparency in medicines documentation which is likely to apply to the COVID-19 vaccine distribution processes. The Zambian TI chapter undertook an assessment of the state of vaccine distribution and deployment in the six districts administering an on-site monitoring protocol to collect vaccine data from district health offices and 24 health facilities in urban, peri-urban, and rural settings. In terms of transparency considerations, the assessment found considerable inconsistencies in the records kept by health facilities on the vaccines received and administered. Some health facilities provided utilization statistics which were higher than the stock of vaccines received and/or allocated. This can open the door for corrupt behaviour by healthcare workers, as the risk of being detected (e.g. for embezzling vaccines or administering to relatives) is lower when the documentation trail is fragmented or insufficient. Documentation may even be falsified purposely to conceal corrupt behaviour.

A related pressure point on the documentation of the supply side of vaccines is the lack of data-management capacities. For example, Zambia experienced a large backlog in the entry of vaccination data into the official system, which led to vaccinated individuals not being able to receive their immunization certificates in a timely manner. The Zambian onsite monitoring established that 53% of facilities had a backlog (in September 2022), and interviews with health workers confirmed that there were often too few staff onsite to enter the vaccination data into the online systems so that vaccination certificates could be produced. This presented a significant pressure point for petty corruption to occur in the certification of vaccines, as the data systems could not maintain a transparent overview of vaccinated individuals. However, as in-country and international travel restrictions lessened and the backlog decreased, we can assume this risk to have diminished.

Lastly, the stretched capacity and insufficient remuneration of health workers is a key factor in the facilitation of petty corruption (Bruckner, 2019). A study in Nigeria found that vaccination staff were paid irregularly and had to cover part of the logistical costs themselves, due to unclear funding structures, leading to them demanding informal payments in order to make up for their financial losses (Onwujekwe et al., Forthcoming). Furthermore, staff shortages, exacerbated by frequent absenteeism, insufficient salaries, and heavy workloads (see Figures 3 and 4) are factors

contributing to a supply-side pressure to engage in petty corruption, e.g. to improve one's income or to compensate for high workloads. Interviews with health workers conducted in Zambia and Uganda confirmed their stretched capacity, as around half of respondents indicated high workloads and that they have barely enough time to complete their duties.

Figure 7: Workload ratings by health workers in Zambia based on interview data (n=31).



In addition, 12 out of 31 respondents in Zambia stated they had a supplementary job to support their income, and nearly half (15) of the respondents described the level of staffing as low or very low (in Uganda this proportion was 41%). This could hint at relatively high levels of staff absenteeism, which is common in low- and middle-income countries (Bruckner, 2019). Furthermore, 23% (n=30) of health workers surveyed indicated that it was not possible for staff to report incidents of corruption within the health facility without fear or risk of retaliation. Another factor revealed in the Nigerian study is that the recruitment of health workers for the vaccination rollout was mainly handled through informal channels, with adverts being neglected and recruitment based largely on nepotism and cronyism. This led to leadership remaining unchallenged and oversight being compromised. In addition, some health staff were pressured to hit daily vaccination quotas or were paid based on the number of vaccinations they administered in a day. This reinforced bribery for access to falsified vaccination cards, and led to health workers pressuring patients into getting vaccinated with false claims (Onwujekwe et al., Forthcoming).

High workload in combination with inadequate staffing levels, insufficient incomes, and a lack of corruption-reporting mechanisms is likely to affect the motivation and performance of health workers, leading to unprofessional and corrupt behaviours such as absenteeism, bribery, the diversion or illicit sale of medicines, substandard care for patients who do not pay bribes, and negligence, for example in the entering of vaccine data. This behaviour, coupled with weak governance systems where oversight and accountability are insufficient, ultimately hinders effective health service performance (Vian, 2020).

Demand-side drivers for petty corruption in vaccine distribution

From the perspectives of healthcare system users, there are drivers for engaging in corruption during the vaccine distribution that are specific to the COVID-19 pandemic, while another set of drivers relates to governance issues in health systems overall that also applied during the pandemic.

The COVID-19 pandemic as a global crisis that disrupted social and economic lives at an unprecedented scale brought about several distinctive and singular drivers for petty corruption. The limited supply of vaccines, which could not satisfy the initial demand during the beginning of the global rollout – combined with

restrictions upon individuals without vaccination certificates in attending public gatherings, professional meetings, or international travel – created a strong temporary driver for corruption, as the aforementioned cases of corruption for queue-jumping illustrate.

In addition, the fact that COVID-19 vaccines were developed by several manufacturers at the same time led to a situation where several vaccine types were available to healthcare system users, who could develop a preference for certain vaccine types based on efficacy, safety, and branding factors. For example, higher rates of efficacy were reported for some vaccines, such as the Pfizer-BioNTech and Moderna vaccines, than for others, such as the AstraZeneca and Johnson & Johnson vaccines. Reports of adverse events or safety concerns associated with a vaccine, such as concerns about rare blood clots associated with the AstraZeneca vaccines, directed people's preference towards other vaccines. Lastly, the fact that Johnson & Johnson offered a one-shot immunization while others required two shots led to a preference towards this type. As reports of bribery for choosing the vaccine type have illustrated, these factors played a role in creating a demand-side pressure for petty corruption.

Furthermore, it is important to be cognizant that communities often lack recognition of their entitlement to receive vaccinations free of cost, of what constitutes corruption, and of the recourse mechanisms available to report attempted bribery. For example, a village health worker in Uganda who observed an incident of corruption in which a health worker solicited bribes under the pretence of needing money to cover transport costs to the vaccination site stated that all persons present in the situation had not considered this a corrupt act and hence would not have reported it. Evidence shows this is a key driver in facilitating bribery, as it gives bribe-takers more discretion. This has also been reported for vaccination certificates: in Uganda, whilst the Ministry of Health has issued guidance on how to access digital vaccination certification which clearly states that the service is free of charge, this information did not appear to be widely known and allowed health workers or officials to claim "printing fees" and the like. Regarding reporting corruption cases, the survey in Zambia established that 72% of respondents indicated they could not report incidents of corruption without fear, 15% indicated that they did not know how or where to report corruption cases, and 5% indicated they feared reprisals when they report cases of corruption.

These factors specific to the pandemic are coupled with systemic issues such as a lack of public trust. The lack of public trust in government institutions and healthcare systems, particularly in countries where corruption is perceived to be widespread, may create a breeding ground for corrupt practices, as they are considered "normal" and necessary to navigate the broken system and solve immediate problems that people face. (Peiffer et al., 2021)

MANIFESTATIONS OF CORRUPTION

During the COVID-19 pandemic, it was widely feared that the aforementioned forms of petty corruption would occur extensively and exacerbate the crisis. However, what manifestations of petty corruption in the national COVID-19 vaccination programmes have we been able to observe in reality?

Due to the clandestine and complex nature of (petty) corruption, access to data and information on documented cases is very challenging and often difficult to uncover. It is likely that some types of corruption are generally under- or unreported. Acts of sexual corruption (sextortion) are even less likely to be reported, due to social and power structures that often stigmatize those who report or speak out about them.

One form of corruption in COVID-19 vaccine deployment is diversion and theft, for example:

- There are a few reported cases of theft of COVID-19 vaccines, such as health workers in Ghana stealing vaccines. This occurred in early 2021 when the country had just started the vaccine deployment priority groups.
- Reports from Sub-Saharan Africa mentioned the diversion of vaccines from North America and Europe to prioritize relatives and friends at the onset of the global vaccination rollout (Sotola, 2021). Other reported cases of theft of vaccines include criminal groups stealing expired vaccines to sell online (Miao, 2021).
- Informal arrangements occurred for private health facilities to access the vaccine, in which private hospitals obtained vaccine doses through individual and private arrangements with government hospital staff. Vaccinations, at the beginning at least, were not delivered to private facilities, so these colluded with public hospital staff to arrange for vaccines to be diverted to their sites (this includes private healthcare, but also businesses that wanted to vaccinate their employees) (Sotola, 2021).

Furthermore, at the beginning of national COVID-19 vaccine programmes, supply still lagged demand and countries had to prioritize at-risk groups. This allowed room for favouritism and nepotism, benefiting those with the right connections (UNODC, 2020; Rahman, 2021). For example:

- There has been reported nepotism and favouritism in vaccine distribution in Kenya, Canada, Peru, Argentina, Spain, Brazil, and Poland, where political leaders and wealthy individuals jumped the queue (Rahman, 2021). A participant in the study by Saeed et al. (2023) said: "Government stored a lot of Covid materials in warehouses instead of sharing with citizens and they were waiting to give them to their party loyalists or saving it to use it during campaigns to get votes. … [There was a] case where certain public official used it as a souvenir. She had her picture on the supplies and gave it to loyalists."
- According to a study conducted in Nigeria, some respondents admitted to giving preferential treatment to their friends and acquaintances during the vaccination process, particularly on days when there was high demand and long queues (Onwujekwe et al., Forthcoming).
- In a study conducted by TI Zambia, 7% of the people vaccinated indicated that they used personal connections to receive better vaccination services.

In addition to diversion and favouritism, petty corruption in the form of bribery to facilitate access to COVID-19 vaccines has been reported across the globe. Health professionals may demand bribes from patients to access COVID-19 vaccines before their official eligibility (Steingrüber et al., 2020), benefiting the wealthy and leaving the poor and vulnerable groups without access to these lifesaving vaccines. The study on vaccine deployment in Sub-Saharan Africa (Olusegun Sotola et al., 2023) finds different reasons for bribery in vaccine deployment, especially to get ahead of the queue or to speed up processes.

- One specific type of bribery in vaccine administration in Sub-Saharan Africa was related to the preference for vaccines from North America and Europe and single-dose vaccine types. For example, in Ethiopia patients were found to be willing to bribe to receive single doses like Johnson & Johnson (Sotola, 2021).
- In surveys conducted in 2021 by TI Zambia and TI Uganda, differing levels of bribery emerged. In Zambia, about 2% of those vaccinated indicated they had paid a bribe or an unofficial fee. In Uganda, 10% of

respondents indicated they had to pay a bribe to access the vaccine.

- In Uganda, bribery rates varied by district, with a few geographic hotspots of corruption emerging. The bribery rates for vaccine access were highest in Lira District (25.8%), and in some clinics, such as Butagaya and Kyanamira HCIII, the proportion of respondents who reported having had to pay a bribe or facilitation fee was 51% (n=37) and 65% (n=46), respectively, suggesting a recurrent burden on specific subsets of populations. (Wright et al., 2022).
- Almost all users who bribed for access to the vaccine had bribed for healthcare services in the 6 months prior to the survey, suggesting that bribery for vaccines is occurring alongside existing corruption risks, including geographic hotspots, in the health system.
- Looking at vaccine bribery from the perspective of health workers in Uganda, it appears to be relatively unusual but does occur, with 3 out of 30 interviewees (10%) indicating that they had been offered an informal payment in relation to the administration of the vaccine.

THE SOCIO-ECONOMIC IMPACT OF BRIBES FOR SERVICES

Based on analysis on the datasets in AIMon between November 2021 and April 2022, there was a significant variation in the monetary value of bribes related to falsified vaccination certificates, ranging from USD $7 to $5,316. Most cases fell within the USD $50-255 range, with a median value of USD $128 and a mean average of USD $218.

The impact of bribery for healthcare in Uganda was analysed using TIGH survey data on income level and value of bribes.[4] This data suggests that over 14% of those in the next income category above the international poverty line (earning between 82,000 and 98,000UGX per month) would fall below it due to the burden of healthcare bribery.

Approximately 10% of respondents reported engaging in healthcare-related bribery. From this, it can be inferred that an estimated 1.5% of the population, equating to a ballpark figure of around 700,000 individuals, could potentially face impoverishment due to the financial strain of healthcare bribery. However, other estimates, such as the Global Corruption Barometer, suggest that 31% of people experienced healthcare bribery in Uganda in the previous year, potentially pushing 4.5% of the population, or around 2 million people, into poverty.

While the range of these estimates is wide and their accuracy is imperfect, they serve as a useful initial step in highlighting the potential scale and impact of healthcare bribery on the risk of impoverishment.

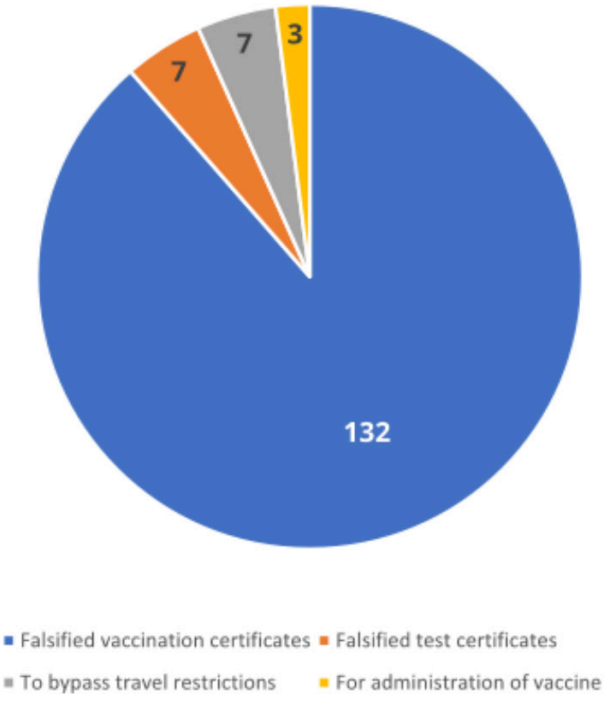
Moreover, bribery in vaccine deployment occurred not just to access the COVID-19 vaccines, but even more so to obtain a vaccine certificate, which has been described as the most widely known corruption in the distribution of COVID-19 vaccines, fuelled partly by vaccine hesitancy (Onwujekwe et al., Forthcoming). Distribution of our new data adds credence to this assertion; by far the most common motivation for bribery in the period between November 2021 and April 2022 was to obtain a vaccine certificate without undergoing vaccination (93% of all cases) (see Figure 8). In these cases, healthcare system users were approaching healthcare workers and offering them bribes in exchange for the fake certificates. For example:

- In Greece, investigations carried out by local health authorities in response to a wave of reports of irregular activities uncovered that petty bribery is widespread amongst the country's 2,000 vaccination centres.

4 Based on Purchasing Power Parity Conversion; World Bank Poverty Lines and Population Statistics

> According to the reports, between 200 to 300 doctors and nurses in 100 to 200 vaccination centres have accepted bribes of around USD $428 in exchange for issuing falsified vaccination certificates and injecting patients with water instead of the vaccine. (Wegener, 2022)

Figure 8: Motivation for soliciting or accepting bribes



TI's surveys in Uganda and Zambia show a slightly different picture. In Zambia only 2%, and in Uganda fewer than 1%, of respondents indicated that they paid for a (fake) vaccination certificate. Those who did pay predominantly paid a private company or a public health professional, and the main reasons behind the acquisition were to facilitate cross-border travel and to be able to go to work or school. Out of the health workers interviewed, 7% indicated being aware of informal payments in relation to the vaccine as well as to proof of vaccination. In our survey in Zambia, most of the vaccinated participants (99%) stated that they did not have to pay for a vaccination certificate. For the small proportion who did, the main reason for payment was to facilitate cross-border travel. However, in the surveys with unvaccinated individuals, nearly 10% of the respondents stated having a COVID-19 vaccine certificate as a reason for not wanting to get a vaccine, which indicates that they had most likely paid a bribe in order to obtain one.

In Nigeria, the primary irregularity was non-vaccinated individuals obtaining COVID-19 vaccination cards through unofficial fees. With vaccines mandatory for some situations like international travel, demand for these cards rose. Health workers, profiting from the situation, registered unvaccinated clients online, uploaded their data, and issued them cards without administering any vaccine doses (Onwujekwe et al., forthcoming).

REASSESSING CORRUPTION RISKS IN VACCINE DISTRIBUTION: INITIAL PREDICTIONS VS REALITY

Before the vaccine rollout, petty corruption like bribery for queue-jumping was seen as a major risk, with concerns about unequal access, theft, and diversion, especially in low- and middle-income countries with weak governance systems.

Whilst our findings in Zambia and Uganda show that petty corruption in vaccine deployment appears to mirror the existing corruption patterns in health systems, it appears to have a lower prevalence than expected. This finding is mirrored by a study conducted in Nigeria. Contrary to expectations, Sub-Saharan African countries for example appear to have benefited from already having an established vaccination infrastructure and vaccine management system. We also found that corruption risks differed between the initial and later stage of deployment, both in perception and manifestation.

The corruption risks that had been predicted in the earlier stages of the rollout, especially surrounding low availability of the vaccine, scarcity of resources,

and limited access, only partially materialized, and they decreased significantly over time as more vaccines became available. In the later stage, most of the corruption risks initially anticipated did not materialize, and new concerns emerged around the low uptake. Based on our findings as well as published research, the real risk, which had barely been anticipated, was vaccine hesitancy, which undermined the success of the rollout significantly and in turn created the unexpected corruption risk associated with issuing fake vaccine certificates.

Sources: Carcelen et al., 2022; Lawal et al., 2022; Onwujekwe et al., Forthcoming; Steingrüber et al., 2020

POLICY RECOMMENDATIONS

Maximize transparency in vaccine distribution to guard against illicit diversion and improve equitable allocation. Ideally, a sufficient supply of vaccines should reach the intended points of service delivery efficiently and be administered at no cost to the population, as well as the certification of the vaccination. However, as the above demonstrated, vaccines can be stolen before reaching their intended beneficiaries, or be diverted by connected elites (World Bank, 2020b).

Furthermore, record-keeping along the supply chain and at all health facilities helps to ensure adequate vaccine supplies and other related requirements that correspond at each level of distribution and reporting (Onwujekwe et al., Forthcoming). This can be facilitated by digital solutions providing a uniform register, and the designation of data-entry clerks with appropriate hardware and internet access in health facilities. Digital tools like track-and-trace systems (e.g., barcodes, QR codes) can be utilized to oversee the availability of vaccines (Saeed et al., 2023; UNODC, 2020). The adoption of QR codes for verifying vaccine certificates has proven beneficial during the pandemic.

1. Maximize transparency in vaccine allocation and distribution to ensure that diversion can be better identified through the cross-validation of different data sets. This can be done via:

a. The investment in and use of technology to track vaccine distribution (World Bank, 2021). This can include real-time monitoring, the use of GPS tracking and/or blockchain.

b. Governments should require all stakeholders involved in the vaccine supply chain to share data about vaccine distribution, including inventory levels, shipping and delivery schedules, and other relevant information. This, where possible, should be published by governments.

c. Governments should conduct regular audits of the vaccine supply chain to ensure that vaccines are being distributed as intended and that there are no discrepancies in inventory levels or distribution patterns.

d. Information on vaccination rates, disaggregated by geography and demographics, should be released by governments.

2. Governments should rely on WHO guidelines, including the WHO SAGE roadmap for prioritizing uses of COVID-19 vaccines in the context of limited supply and the WHO Concept for fair access and equitable allocation of COVID-19 health products (UNODC, 2020; WHO, 2021b, 2020). Implementing these guidelines can contribute to public trust and mitigate unfair allocation by simplifying the identification of individuals who exploit their roles to get preferential treatment (Mendoza et al., 2021; Saeed et al., 2023).

3. Dedicated oversight committees are another potential approach to combat corruption in the allocation of funds, procurement, and distribution of vaccines by monitoring and supervising emergency programmes (UNODC, 2020). These committees play a crucial role, particularly at the regional or local level, in enhancing public trust within communities and ensuring equitable distribution of COVID-19 vaccines within the country (Saeed et al., 2023; Wardak et al., 2021).

Mitigate supply-side drivers for petty corruption. As various studies emphasize, the challenges faced by healthcare workers

increase the likelihood of corruption, making it crucial to assess staffing standards and working conditions. An illustrative case from Nigeria demonstrates that the lack of certainty regarding timely payment is a significant concern that must be effectively addressed to alleviate the temptation to engage in irregular practices (Onwujekwe et al., Forthcoming).

4. Counter supply-side drivers for petty corruption by alleviating pressures on frontline health staff, including staffing and remuneration.

Involve civil society organisations in monitoring. CSOs can support government monitoring efforts, but this requires effective reporting channels to be readily available to the public (Saeed et al., 2023; UNODC, 2020). The public must also be educated and aware of risks of corruption in the vaccine process, which can be accomplished by information dissemination facilitated by CSOs (Usman et al., 2023).

5. Empower independent CSOs to support monitoring of vaccine deployment at national and subnational level and safeguard a minimum threshold of CSO involvement.

Improve gender- and contextually sensitive whistleblowing. This involves gender-sensitive whistleblower mechanisms and mechanisms for protection of whistleblowers to be part of all countries' "emergency preparedness plan", including but not limited to health workers supporting the response as well as the public. Ensure that all genders are able and feel safe reporting corruption or concerns through the use of diverse reporting mechanisms (e.g. anonymous SMS or tollfree reporting lines, centres with staff, or written submission).

This recommendation includes considering the needs of men and women who may want to be separated for religious or cultural reasons; women who are pregnant, have childcare or household commitments; as well as other gender, age, or socio-economic/professional groups. They may need particular support, e.g. flexible opening hours, translation services or outreach programmes. In addition, hesitancy can be addressed through community-based awareness raising and sensitization and adequate outreach in local languages, via traditional as well as online media, providing understandable but scientific information about COVID-19 vaccines.

6. To counter vaccine hesitancy and inaccessibility, ensure vaccine services are sensitive to the needs of the local population.
7. Install corruption reporting mechanisms to facilitate whistleblowing by health service users when experiencing corruption (or attempted corruption) during the vaccine administration process.

CONCLUSION

The COVID-19 pandemic demonstrated that corruption is not solely a problem of low-income countries, but a significant issue in emergencies for all, including seemingly 'well-governed' states that score high on Transparency International's Corruption Perceptions Index.

This underscores the importance of recognizing corruption as a multidimensional and international issue with interconnected drivers that become more apparent during times of crisis. As such, it is crucial for policymakers to account for these factors when preparing for future emergencies.

The report's finding set out how ill-equipped current national and global governance frameworks are to manage corruption in crises. A lack of proper preparedness and absence of integrity mechanisms within national frameworks – illustrated by the UK experience - allowed critical resources to be diverted. Similarly, in many instances, corruption was exacerbated by market, economic and global and national political power dynamics. This highlights the complex nature of corruption and the need for robust emergency frameworks and non-emergency anti-corruption mainstreaming to ensure that responses to future emergencies and pandemics are effective, care and resources are provided in an equitable manner, and lives are not lost.

Co-operation among international organizations, such as the United Nations, the World Health Organization, and the World Bank must be improved too. Coherent, harmonised standards and frameworks to deal with corruption in global health emergencies need to be put in place, alongside common guidelines and joint action to deter opportunistic behaviour, and support the exchange of best practices, knowledge, and resources.

Our research also suggests that some aspects of corruption during the pandemic were not accurately anticipated by anti-corruption researchers and institutions, including ourselves. For instance, bribery for vaccine access was emphasized as a significant risk (Kohler and Wright, 2020; UNODC, 2020), but our findings indicate that supply chain issues, lack of trust in vaccines, and lack of strong motivation to guard against COVID-19 may have mitigated this, and bribery was largely associated with existing weaknesses rather than being driven by a desire to get vaccinated. Conversely, bribery for vaccine certificates emerged as a more prevalent issue. Such findings emphasise the importance of continuous monitoring, of questioning assumptions, and of acknowledging the contextualized and multifaceted nature of corruption.

The report shows that the digital age presents both challenges and opportunities in the fight against corruption. In the case of the COVID-19 pandemic, the rapid spread of misinformation and disinformation has been a significant negative. However, digital tools and technologies, especially big data and artificial intelligence, have proven highly useful in promoting transparency, enhancing monitoring, and reducing opportunities for corrupt practices. The digitization of procurement and supply chains can reduce human interactions, reducing opportunities that give rise to corrupt practices, whilst also allowing real-time tracking of procurement transactions. Increased digitalisation of health

systems presents an opportunity here, as long as adequate safeguards are put in place with regard to data privacy and security.

Finally, the crucial role of civil society cannot be overlooked. The public's role in holding governments and institutions accountable is an essential component of a comprehensive strategy against corruption. Encouraging active citizen participation, promoting open dialogue, and protecting the freedom and rights of journalists and whistle-blowers are all fundamental to ensuring transparency and accountability in the management of future health emergencies.

It is imperative that states and international bodies take the issue of corruption seriously in the ongoing development of emergency frameworks and recognize the importance of mainstreaming transparency and accountability into both emergency and non-emergency systems. This is vital for ensuring global health security. A collective effort is needed for the next health emergency and it must be made to address the complex drivers of corruption and promote robust governance frameworks at both national and international levels. By learning from the experiences and challenges faced during the COVID-19 pandemic, we can work together to create a more resilient, transparent, and equitable global health system that is better prepared to confront the emergencies of the future and ultimately save lives.

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ANNEX 1. METHODOLOGY

This research report is a compilation of findings and learnings from various studies and projects funded and conducted by Transparency International Global Health (TIGH) over the last three years. The aim of this report is to provide a comprehensive understanding of corruption risks and transparency issues in four key areas:

1. International emergency finance
2. Procurement of COVID-19 related goods and services
3. Procurement of COVID-19 vaccines
4. Vaccine deployment in-country

Our analysis across these sections primarily relies on the following TIGH-funded or -associated research:

1. Mapping Freedom Of Information requests for the publication of Covid-19 vaccine supply contracts; Chiamaka Ojiako and Uchechukwu Ngwaba; March 2023
2. Corruption risks in the public procurement of health-related products in Europe, Mihály Fazekas, Alfredo Hernández Sánchez, Aly Abdou, and Daniel Kofrán; May 2023
3. Openness and transparency in Covid-19 financing, vaccine procurement and deployment: a comparative analysis from selected African countries; David Olusegun Sotola, Hafte Gebrihet, Yazidu Ustarz, and Moses Nyangu; March 2023
4. Corruption risks in the procurement and distribution of COVID-19 vaccines in Nigeria; Obinna Onwujekwe, Charles Orjiakor, Pamela Ogbozor, Ifunanya Agu, Prince Agwu, and Jillian Kohler; forthcoming
5. A scoping review of governance challenges in international health financing: lessons for the Pandemic Preparedness and Response Financial Intermediary Fund; Natalie Rhodes, Garrett Wallace Brown, and Tom Wright; August 2022
6. For whose benefit? Transparency in the development and procurement of COVID-19 vaccines; transparency analysis in 39 vaccine contracts against COVID-19 in the world; joint TIGH and Transparencia Mexicana updates; Tom Wright, Natalie Rhodes, Paola Palacios; 2021, 2022, 2022
7. Track and Trace: identifying corruption risks in UK public procurement for the COVID-19 pandemic; Steve Goodrich, Tom Wright, Rose Whiffen, Teddy Marks; 2021

Each study had specific research objectives related to the four areas listed above, such as assessing the level of corruption risks in vaccine procurement processes or identifying the drivers of corruption in emergency finance. By compiling and analysing the findings from these studies, this report aims to provide a better understanding of the various corruption risks and transparency issues in the global health sector, and to offer policy recommendations for mitigating these risks and promoting greater transparency.

PROCUREMENT DATA

In this research, we utilized data from OpenTender.eu, a comprehensive source containing over 46 million entries on European procurement. We used a combination of CPV codes and language-agnostic keywords to group products into three separate categories: COVID-19 Products, Healthcare Products and Non-Healthcare Products. The data is selected based on quality to provide a representative sample rather than an exhaustive snapshot.

We extracted data on absolute spending in each of these categories, offering a precise view of

procurement expenditure distribution across the European Union. In addition, OpenTender.eu provides red-flag indicators that highlight potential corruption risks. These red flags include, but are not limited to, instances of single-bidder contracts in open tenders, suppliers with less than one year of experience, and instances of direct awards. By analysing these red flags, we aimed to uncover patterns and discrepancies that might suggest underlying issues or potential irregularities in the procurement processes.

Building upon the data obtained from OpenTender.eu, we used six years of historical procurement data to perform predictive analysis. Utilizing the Prophet forecasting tool in Python, an open-source software package developed by Facebook's Core Data Science team, we generated projections for procurement values of specific products.

PROJECT DATA AND SURVEYS

In addition to these sources, our analysis also incorporates primary research, including surveys and interviews, from two projects funded by the Swedish Ministry for Foreign Affairs (SMFA) and the Open Society Foundations (OSF). The first project focuses on corruption risks and transparency issues in Uganda, Bangladesh, and Zambia, while the second project examines global issues surrounding vaccine procurement and distribution.

The SMFA-funded project conducted two consecutive surveys to uncover corruption and equity risks in vaccine distribution in Uganda and Zambia. It applied two standardized survey questionnaires targeting vaccinated and unvaccinated individuals. The questions covered sociodemographic information, access to vaccine information, vaccine hesitancy, and corruption occurrences. The surveys were administered by community data collectors after training from the Chapters in six target areas of each country selected based on vaccination levels, previous engagement, and socioeconomic diversity. Respondents were selected through randomized sampling, and the final sample size was around 12,000 respondents in Uganda and around 1,000 in Zambia. The resulting data was analysed using descriptive statistics as well as regression analysis to establish the relationships between sociodemographic variables and corruption/inequity-related variables.

ARTIFICIAL INTELLIGENCE MEDIA MONITORING (AIMON) DATABASE

To enrich our observations of manifestation of corruption, we utilized the Artificial Intelligence Monitoring tool (AIMon), developed by Transparency International's Global Health Programme with funding from the Swedish Ministry of Foreign Affairs. AIMon scans hundreds of thousands of online news sites in real time for articles containing reports of corruption in the procurement and delivery of COVID-19 vaccines, helping to uncover trends and patterns across the globe.

Using machine learning, AIMon identifies relevant articles for chosen topics and assesses the level of focus on specific keywords, providing a more refined search than traditional search engines. The tool also enables users to search for specific entities such as organizations, products, or individuals mentioned in articles.

LITERATURE REVIEW

To complement the search for observable manifestations and related sources, we conducted additional searches using the following search queries:

1. (Emergency OR Pandemic) AND (Loans OR

Financing) AND (“Corruption” OR “Corrupt”)

2. procurement AND COVID AND (“corruption” OR “corrupt”)
3. COVID AND “vaccine” AND (“corruption” OR “corrupt”)
4. COVID AND “vaccine” AND “contract” AND (“corruption” OR “corrupt”)

These search queries were applied to Google and Google News, to retrieve additional cases from grey literature and other news sources. We used the free program “Publish or Perish” to bulk query the five academic databases, and the metadata of the top 100 articles was retrieved and input into a CSV file. These included:

1. Crossref
2. Google Scholar
3. Open Alex
4. Scopus
5. Pub Med
6. Semantic Scholar
7. Web of science

This was supplemented by Google searching to identify grey literature. This CSV file was cleaned and deduplicated, bringing us to us to a total of 420 articles. The open-source tool ASreview, which uses machine learning to rank articles based on relevance, was used in addition to the search-engine ranking systems to prioritize the top 100 articles for case study extraction.

LIMITATIONS

The combination of AI-driven analysis, primary research, and TIGH-funded studies provides a robust foundation for understanding the various corruption risks and transparency issues in the four key areas. However, it is important to note that this research report is not intended to be exhaustive. The aim is to compile the findings of TIGH-funded research and provide context for understanding the corruption risks and transparency issues in the four key areas. Due to the scope and nature of our sources, there may be some limitations to the insights and conclusions drawn in this report, such as:

- Geographical and contextual limitations: Our analysis may not cover all regions and countries, and may not account for the unique contextual factors influencing corruption risks in different locations.
- Temporal limitations: The studies used in this report were conducted between 2021 and 2023, and therefore may not capture the most recent developments and trends.
- Selection bias: The reliance on TIGH-funded research and related sources may introduce a selection bias that could potentially limit the diversity and comprehensiveness of the perspectives and findings presented.
- Media bias and reliability: The accuracy and objectivity of the news sources included in the search results may vary. Some sources might have political or ideological biases that could affect the way corruption cases are reported or discussed. Additionally, the reliability of the sources can be a concern, as some media outlets may report unverified or false information. This limitation makes it essential to cross-check and verify the information gathered from these sources before drawing conclusions.
- Language barriers, regional coverage, and online media volume: Google News and our media dataset may primarily cover news articles in widely spoken languages and from more prominent media outlets. This could lead to underrepresentation of corruption cases from regions where local languages are predominant or where media coverage is limited. Additionally, the relative amount of use and volume of online media between countries can vary, leading to an imbalance in the representation of corruption cases across different regions. As a result, some

instances of corruption may be overlooked, and the analysis might not fully capture the extent and diversity of corruption risks across different regions and countries.

Despite these limitations, this report aims to provide valuable insights and recommendations to policymakers, practitioners, and stakeholders interested in mitigating corruption risks and promoting transparency in the global health sector.

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