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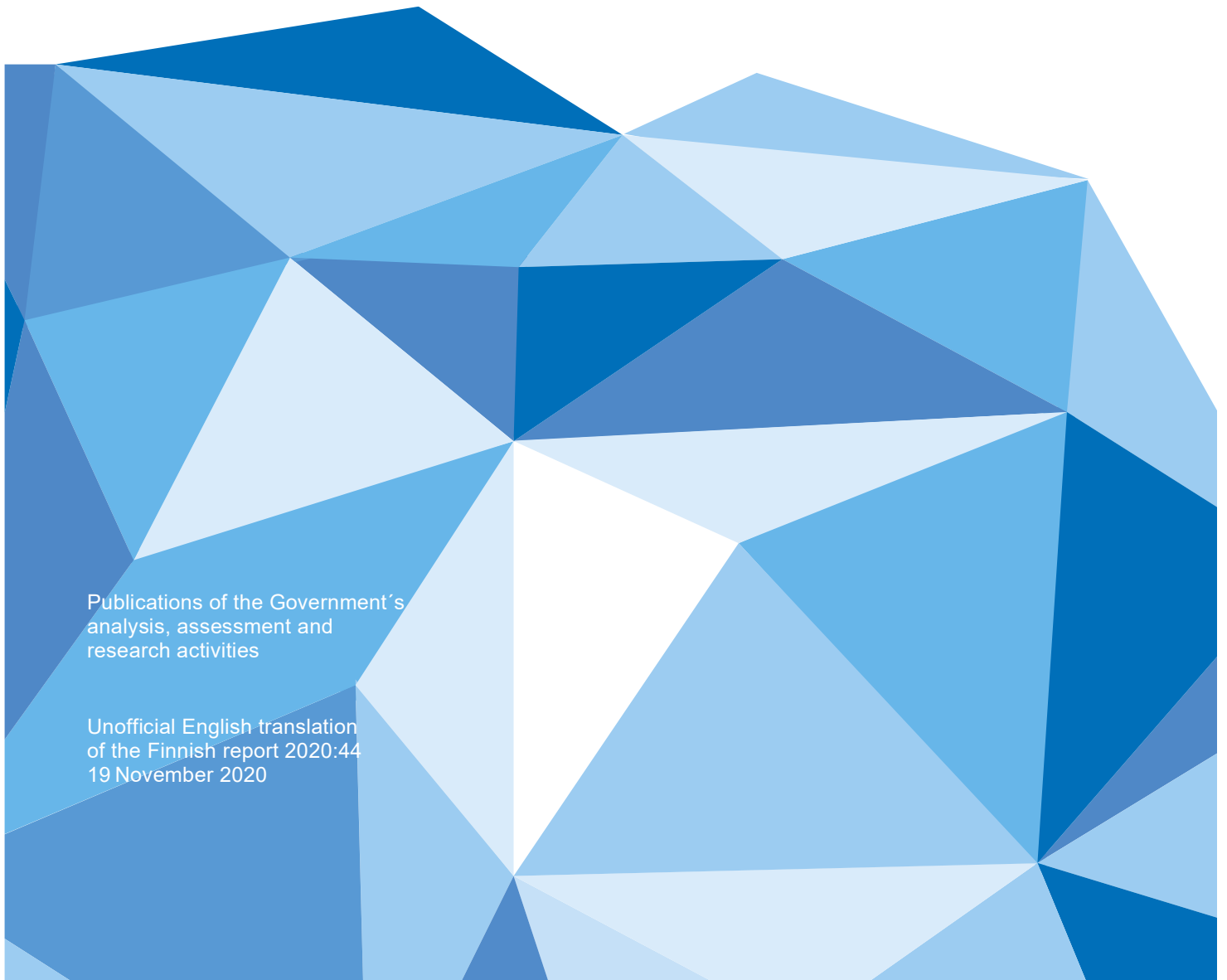Tanja Tamminen & Noora Välimäki

IMMEASURABLE CORRUPTION?
Indicators for monitoring corruption in Finland (KORSI) project and its key results

Korsi Project Report 1

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Description sheet

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Abstract

The KORSI project identified indicators for monitoring certain areas of corruption that are difficult to measure. These monitoring targets are mainly related to structural and network corruption, such as undue influence and unethical decision-making.

Based on the information collected and analysed in the project, corruption is a complex and conceptually contradictory phenomenon. This influences the ways in which corruption and its various aspects can be measured and monitored.

This Report 1 of the KORSI project describes the project assignment, sums up the key results and contains recommendations formulated on the basis of Reports 2 and 3. The introduction to the assignment illustrates the project's background, objectives and methodology. The central results presented in this report are based on information contained in Report 2 regarding comprehensive assessment of corruption and in Report 3 regarding empirical reviews of the different aspects of measuring corruption.

The key recommendations relate to five areas: methods for producing quantitative data; methods that describe the multidimensional nature of corruption and new generation methods; open data and data usability; methodological development and research needs; and the perspectives of corruption control policy. In practice, this means that in order to monitor the status of corruption, quantitative basic data, versatile methods, modern ways of information acquisition, separate studies and comprehensive risk assessments should be used, among other things.

The last section of the report gives many examples of methods and indicators for monitoring corruption brought up in the other reports of the KORSI project. They include comprehensive models for monitoring corruption, proposals for using survey and register data, and observations based on sector-specific analyses.

Contents

FOR THE READER

The title of this report, 'Immeasurable corruption', can refers both to the scale of corruption as a phenomenon and to the challenges of measuring it. The data compiled and analysed in the project *Indicators for monitoring corruption in Finland* (KORSI) indicate that corruption is a complex and conceptually contradictory phenomenon. This naturally affects the way in which it is suitable to measure and monitor corruption and its various aspects.

The project produced three reports on options for measuring and monitoring corruption. The reports also contain information on features of corruption in different sectors of society. The current Report 1 discusses the background of the project, its key results and the recommendations given based on Reports 2 and 3.

Report 2 describes comprehensive measurement of corruption from the perspective of risk assessments, monitoring of anti-corruption actions and uncovering hidden corruption. Report 3 contains reviews of different topics related to measuring corruption prepared using a variety of methods. They deal with corruption risk zones, data on corruption gathered by means of surveys, citizens' perceptions of corruption, monitoring of corruption using register data collected by the police, corruption in the construction industry and its measurement, as well as corruption in sports and competition manipulation.

This project was coordinated by the Police University College, and Director of Research Vesa Muttilainen, Researcher Tanja Tamminen and Research Assistant Noora Välimäki participated in its implementation. Natalia Ollus, Director of the European Institute for Crime Prevention and Control (Heuni) and Professor Emeritus Ari Salminen were also part of the project. In addition to the persons listed above, Researchers Jenita Rauta and Matti Vuorensyrjä from the Police University College as well as Researcher Anna-Greta Pekkarinen from Heuni participated in writing articles as part of the project consortium. An expert review complementing the work was also requested in the course of the project. It was prepared by Jouko Ikonen and Nina Laakso from the Finnish Center for Integrity in Sports (FINCIS). The figures in Report 2 were produced by Communication Officer Aleksandra Anikina, and Project Secretary Aili Pääkkönen from Heuni worked on the report layouts.

The project group possessed diverse expertise, ensuring that the approach to the topic was both multidisciplinary and cross-disciplinary. The participants included experts in administrative, social, judicial, economic and political sciences, criminology and policing. The methodological approaches covered literature analysis, examination of survey and register data, qualitative methods, legal case analyses and risk and threat assessments.

The project was funded by the Government's analysis, assessment and research activities (VN TEAS), and it was directed by a steering group led by the Ministry of Justice. The Anti-corruption cooperation network as well as various authorities and other organisations supported the project, for example in the data collection phase. While the project was underway, its results were presented to the Anti-corruption cooperation network and the working group preparing and steering the national anti-corruption strategy. The project participated in a pilot which evaluated VN TEAS projects.

This Report 1, which sums up the findings of the project, consists of three sections. Chapter 1 provides a concise introduction to the background, objectives and methodology of the project within the framework of the project assignment. Chapter 2 contains brief summaries of Reports 2 and 3. Finally, the conclusions and recommendations based on the project's results are discussed in Chapter 3. Methods and indicators produced as part of Reports 2 and 3 are listed in the Appendix to this report. More detailed analyses of the options for measuring corruption are included in these reports.

As specified in the project assignment, the report in detail discusses areas of hidden corruption related to undue influence, unofficial decision-making and network corruption. It also describes the possibilities of assessing corruption and unethical activity in high-risk industries and at different levels of government. Additionally, the report assesses the usability of the methods in long-term efforts to monitor corruption and anti-corruption actions.

Vesa Muttilainen
October 2020

1 KORSI project assignment

1.1 Background to the project

Corruption is a multidimensional and complex phenomenon with numerous definitions that can vary in different contexts (see e.g. Rothstein & Varraich 2017; Salminen 2018). Corruption is usually associated with not only bribery but also the abuse of entrusted power for private gain (Mansikkamäki & Muttilainen 2016). In addition to money, this gain may also include some other material advantage, information or other benefits.

In countries such as Finland, petty corruption affecting the police, customs and border authorities, doctors or teachers is rare (Peurala & Muttilainen 2015). Some of the corruption is "grand corruption", which is difficult to detect and which has also been described as network, institutional and structural corruption (see e.g. Salminen 2015). Corruption can be related to many other types of criminal and unethical activities, including financial crime, money laundering and trafficking in human beings (see e.g. Jokinen et al. 2011; UNODC 2011). In order to recognise corrupt activity, it is important to take a closer look at unethical and criminal practices in society which are customarily considered normal in the relevant country.

Studies, statistics and country evaluations related to corruption and its prevention have highlighted our country's strengths and areas in need of development (see e.g. Council of Europe 2020; OECD 2020). However, a precondition for preparing and monitoring anti-corruption measures is obtaining more comprehensive up-to-date information on a regular basis. The need for complementary quantitative and qualitative indicators relates to monitoring both the phenomenon of corruption and anti-corruption measures.

The different dimensions of the phenomenon make the measurement of corruption and the development of indicators challenging within the framework outlined in the project assignment, which is described in the next subsection. This is why, rather than being purely research-based, the project also contains features of research and development activities.

1.2 Project objectives

The assignment for the KORSI project is based on the work programme for funding the Government´s analysis, assessment and research activities (VN TEAS 2018). One of the projects to be funded was a project entiled "Indicators for and data collection on corruption compatible with the Finnish country context".

The VN TEAS work programme justifies the information needs related to corruption- from several viewpoints. It states that there has been little research on corruption in Finland, not much is known about the prevalence of corruption in this country, and existing statistics do not describe the most important forms or problem areas of corruption in Finland. Additional information is also needed on previously identified risk areas of corruption (construction, public procurement and tendering, urban planning, political decision-making and funding) and on governance and decision-making at different levels.

The development of indicators suited for the Finnish context would facilitate the monitoring of key corruption problems, the national work against corruption, and the implementation of the anti-corruption strategy. It is also intended to support reporting related to international obligations and review processes and the Sustainable Development Goals.

The work programme notes that the topics to be explored can be divided into two parts. The research to be conducted should both propose indicators that can be used to map corruption, and present methods and data sources that can be used in carrying out such a mapping.

1) What types of qualitative or quantitative indicators (incl. proxy variables) could be used to monitor the prevalence of the following forms of corruption in at-risk areas and levels in various contexts in Finland (different levels of the public sector, the private sector, the political forum and interfaces between these sectors and contexts)?

The assignment listed the following seven sub-categories:

- conflicts of interest and dual roles
- favouritism (including nepotism) and unethical mutual "assistance"
- informal decision-making outside formal decision-making structures
- undue influence in decision-making (including the drafting of legislation and decisions)
- unethical restrictions in tender specifications
- unethical election and party funding
- match fixing, betting scandals and bribery of referees.

2) What research methods could be used to collect information and from whom/which target group? How can regular data production be secured to support decision-making and planning? Are there existing surveys or similar which could be used to collect data or in which the indicators could be included? What level of costs would be incurred?

The assignment required the project implementers to:

- propose at least two indicators for each of the seven sub-categories listed above (at minimum 14 indicators in total)
- select the best methods for collecting data
- carry out a data collection pilot
- analyse the suitability of the proposed indicators and methods and the strengths and weaknesses of the chosen method
- analyse the possibilities of carrying out similar data collections at regular intervals.

The description of the project requirements referred to some key reports and documents that provide a background for the development of indicators for monitoring corruption. These included the draft Anti-corruption strategy (Ministry of Justice 2017), the Strategy and Action plan for Tackling the Grey Economy and Economic Crime (Prime Minister's Office 2016), the Open Government Action Plan (2018), a study on international models for a register of lobbyists (Korkea-aho & Tiensuu 2018), and a research report on the risk areas of corruption (Peurala & Muttilainen 2015).

The work programme indicates that the research task is both broad and complex. On the one hand, this is due to the diversity of the phenomenon and, on the other, due to the multidimensional and partly overlapping areas of scrutiny specified in the assignment. The following chapter describes the main phases and implementation of the project.

1.3 Project implementation

The project plan closely followed the requirements of the Government's analysis, assessment and research acticities2018 work programme. Firstly, the project takes into account the seven target areas specified in the assignment and listed above. Attention has also been paid to the risk areas of corruption and different levels of government. The main phases of project implementation were structured as four interlinked components.

First, the purpose of mapping existing knowledge was to find out what is known about the measurement of corruption as well as the methods and indicators used. This background information was obtained by studying previous research literature, collecting information from the project consortium's networks, examining a broad range of quantitative data on corruption and unethical activity (surveys, register data, statistics) and acquiring different types of complementary material (on such topics as media monitoring, risk assessments, anti-corruption actions, hidden corruption, interviews).

In the selection and piloting phase, information based on the mapping was used to fill in gaps and to assess the need for complementary data. The versatile content of Reports 2 and 3 lent excellent support for the development of monitoring indicators and methods (Tamminen 2020; Muttilainen, Ollus & Salminen 2020;). Detail was added to the proposed indicators at workshops and through expert interviews.

The methodology assessment concentrated on those areas which the assignment specifically asked the project to assess. The project involved several stakeholders; including at meetings of the national Anti-corruption cooperation network, at an anti-corruption conference ("the Finnish model in transition"), and through expert interviews. For the purposes of the assessment, optional models and proposals concerning their implementation (including survey data) were also prepared, and the effectiveness of various quantitative and qualitative methods in measuring corruption and unethical activity was also assessed.

The most important task in the reporting phase was drafting the final reports. In the course of the project, a decision was made to put together three separate and mutually complementary reports. The proposed indicators were specified during the project by extending the work beyond the minimum number of 14 indicators required in the assignment. The description of corruption and unethical activity in Finland provided by a set of indicators of this type was considered limited, which is why the project also decided to propose more extensive approaches for a more comprehensive measurement of corruption.

As the project progressed its coverage was expanded. While the study started with a focus on quantitative indicators, a decision was later made to examine the dimensions of corruption more extensively through different methods and approaches, including qualitative measures. An indicator is understood to indicate the state or level of a matter or a phenomenon. Initially the aim was to engage stakeholders in participatory development throughout the project, but during the course of the project the emphasis was placed on expanding the research component instead. Restrictions resulting from the COVID-19 pandemic played a key role in this. The scope of the reports therefore ended up being larger than planned. The present report sums up the findings of the

project, whereas the other two reports (available only in Finnish) describe in more detail the measurement and monitoring of corruption and unethical activity from various perspectives.

1.4 Using the results of the project

Regular information on corruption is needed as a basis for drafting legislation, making decisions, preparing and monitoring anti-corruption measures and assessing the implementation of the anti-corruption strategy. This information can also be used when preparing for international country evaluations and reporting on Sustainable Development Goals.

The purpose of the project was to develop indicators which can be used for regular monitoring of corruption and anti-corruption work. Similar development work has not previously been carried out on this scale in Finland, and few examples from other similar countries – with a low level of corruption – are known to exist. This is why the project paves the way for more versatile monitoring of corruption and an increased effectiveness of anti-corruption work in the future.

The idea of the project was to engage stakeholders involved in the fight against corruption during different stages of the project as a way also of promoting the dissemination of information on the state of corruption to different levels and sectors of society. This information can be used not only to recognise, detect and investigate unethical activity and corruption-related crime but also for risk assessments, crime prevention, development of statistics as well as training on ethics and corruption.

The project outcomes support scientific and social debate on corruption. Ultimately, the aim is to reduce corruption by raising awareness of this phenomenon and the fight against it. It is also about increasing the transparency and improving the ethical standard of governance as well as strengthening democracy and the rule of law.

2 The three project reports

The *Indicators for monitoring corruption in Finland* project examined methods for monitoring the state of corruption that would be suitable for our country. Attention was focused on corruption in general and its various aspects. The methods and indicators suitable for the Finnish context that emerged in the literature review can be roughly divided into seven groups:

1) opinion-based indicators,
2) experience-based indicators,
3) register-based studies gauging corruption offences,
4) risk assessments and analyses,
5) assessments of anti-corruption measures,
6) sector-specific studies, and
7) indicators for hidden corruption.

Report 2 of the project focuses on three groups of indicators related to risk assessments (group 4), assessments of anti-corruption measures (group 5) and indicators for hidden corruption (group 7). The articles in Report 3, which are based on different methodologies and which describe different aspects of corruption, exhaustively cover the other indicator areas (groups 1−3 and 6). The following observations on the contents of the project reports and key recommendations are based on the results of Reports 2 and 3.

2.1 Methods for comprehensive monitoring of corruption

In Report 2 of the KORSI project, "Methods for comprehensive monitoring of corruption" (in Finnish), Tamminen (2020) describes methods used to monitor corruption that require extensive understanding of the corruption situation and comprehensive indicators. The report also looks at the debate on corruption in Finland and the methodology for indicator selection as well as discusses the usability of these processes and international methods in the monitoring of corruption and the planning of policy measures. Rather than measuring or demonstrating the current state of corruption in our country, the report deals with the selection of indicators and models, giving examples of various options.

The report discusses comprehensive measurement of corruption from three perspectives: 1) risk indicators, 2) measurement of anti-corruption actions, and 3) detection of hidden corruption. Among other things, risk indicator matrices can provide answers to the question of how serious a threat corruption is when its prevalence is compared to the severity of the consequences to society. The risk indicators focus on the reasons and causes of corruption as well as the vulnerability and resilience of society or different sectors. Indicators for anti-corruption actions demonstrate how efficient and effective the instruments are. Few of the indicators for structural and hidden corruption have been tested in practice, let alone used systematically. They include indicators drafted for investigating family ties, monitoring tools drawing on big data, models exploiting different parallel indicators and crowdsourcing.

All of these methods can be used to assess the state of corruption in Finland. Established methods for risk assessment are available, examples of comprehensive monitoring of anti-corruption actions can be found in different countries, and modern tools for analysing big data are available for detecting hidden corruption. At best, a combination of these methods can be used to monitor the corruption situation and complement the commonly used quantitative indicators, including survey and register data.

A precondition for organising the comprehensive monitoring of the corruption situation is that one authority assumes responsibility at the national level and coordinates the regular gathering and publishing of information on corruption and unethical activity in society. In order to support the compilation of information, the coordinator needs risk assessments, grassroots level and other information from different administrative branches and sectors as well as internationally tested assessment methods, for example following the model developed in Lithuania.[1]

2.2 Empirical reviews of the risk zones of corruption

Report 3 of the KORSI project contains articles covering different topics related to the monitoring and measuring of corruption. The contributors used various methods in preparing the articles, which cover the risk zones of corruption, data on corruption obtained through surveys, citizens' perceptions of corruption, monitoring of corruption

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[1] See e.g. https://baselgovernance.org/sites/default/files/2019-02/acn-prevention-corruption-report.pdf

based on police registers, corruption in the construction industry and its measurement, as well as sports corruption and competition manipulation.

The specific aim of the report is to consider different perspectives and methods for measuring and monitoring corruption and to highlight options and examples that describe them. In addition, the articles produce information on features of corruption in general and in different areas. The following section provides a brief description of the themes examined in the articles.

Risk zones of corruption

In the article entitled "The risk zones of corruption: perspectives and measures" (in Finnish) (2020) Salminen looks at the features of corruption and its measurement from four viewpoints. The article examines the characteristics and measurement of individual corruption, corrupt networks, institutional corruption and structural corruption.

The article notes that while corruption is a multidimensional social problem, at least some of the difficulties related to measuring it can be solved. Versatile new generation methods for measuring corruption aim for more nuanced discussion on the problems related to measurement and their solutions. This is why the benefits of a quantitative and statistical approach should be analysed more closely. On the other hand many other methods, including qualitative data, historical reviews and various comparisons, are also suitable for examining corruption. More methodological diversity, theoretical debate and clarification of the conceptual basis of anti-corruption work are needed. Interdisciplinary dialogue on this theme creates preconditions for combining concepts and advances scientific debate.

The diverse characteristics of corruption is a challenge to the development of indicators. The perspectives of corruption influence the measurement and choice of indicators. Different indicators are used to measure individual actors' corruption, corrupt networks, corruption that has infiltrated institutions and structural corruption. For example, whereas mere quantitative measurement with regular repetitions is sometimes sufficient, complementary methods and data are often needed.

Corruption-related phenomena are embedded in culture. This is why it is advisable to investigate country-specific risk zones and the "most vulnerable" areas. Valuable information on corruption can be obtained from such sources as sufficiently systematic assessments and feedback from citizens, investigative journalism, corruption barometers in different industries, and the work of committees and national working groups (e.g. the Advisory Board on Civil Service Ethics and the Anti-corruption cooperation network).

The assessment of corruption becomes more reliable if international and national indicators do not point to completely different directions and, at the very least, they do not produce excessively conflicting results on the scale and 'nature' of corruption. The better corrupt behaviour can be monitored over the long term, the more accurate and reliable the information is.

Monitoring the prevalence of corruption

In their article "Monitoring the incidence of corruption: survey indicators' (in Finnish)", Muttilainen & Välimäki (2020) examine the possibilities of using different surveys and indicators based on them to monitor corruption. The aim is to find examples of indicators that could be used for measuring corruption and unethical activities in Finland.

The authors went through a wide range of surveys for this purpose and selected sample questions among them that could be used to monitor corruption. The indicators were selected to describe the seven areas of hidden corruption that are the focus of the project. This way, the minimum number of 14 indicators as required in the project assignments were put together, i.e. two indicators for each area of corruption.

A wide range of surveys and other monitoring methods is available for measuring corruption and unethical activity. They describe not only the dimensions of corruption but also crime, the status of democracy and rule of law, ethical standards in government activities, administration, the economy, business activities, the business environment, risks from different perspectives, and the use of public funds.

The range of different survey designs is also remarkably broad when we look at each survey's theme, target area, respondents, formulation of questions, data collection methods, data reliability, data processing or data reporting. Indexes that sum up the features and development of the phenomenon have been compiled based on data from different surveys.

The most cost-effective way of monitoring the state of corruption is compiling existing survey and other data from secondary sources. However, this does not necessarily produce sufficient information on a regular basis. The contents of existing surveys can also be used by including relevant questions in surveys subject to a fee.

Surveys and other quantitative assessment methods produce useful data for examining the prevalence, structure and trends of corruption and unethical activity. It is important to find a balance between affordable information collection from secondary sources and data collection subject to a fee, as well as between research interests and administrative needs. This means that different surveys need to be implemented on a

regular basis, data needs to be collected from a range of target groups, and all of this has to be supplemented also with qualitative data and document analysis.

Citizens' perceptions of corruption

In their article titled "Citizens' perceptions of corruption in the 2020 Police Baromter" (in Finnish), Muttilainen, Rauta & Vuorensyrjä (2020) analyse information on features of corruption based on survey data and assess the effectiveness of this method for monitoring corruption. For the purposes of the project, a set of questions on corruption was included in the Police Barometer survey. The survey was addressed to the population aged 15 to 79 in Finland, and there were 1,082 respondents.

According to the Police Barometer data, Finnish people believe that there is more corruption in the administration of the European Union than at different levels of the Finnish administration. The local level predominates in Finnish corruption by a narrow margin. Of the population aged 15 to 79 in Finland, almost six per cent or 257,000 people completely agreed with the claim "Corruption is a significant problem in Finland", and 18% of the respondents had noticed corruption in their work or free time. As the most serious corruption problems the citizens noted informal decision-making in so called old boy networks, the use of election and party funding for private gain, corruption in land use and construction, and favouring relatives and friends in appointments to official posts.

When the state of corruption at various levels of administration and in different areas of corruption is examined, the strongest statistically significant correlation was found with the respondents' age, education and income. Region, labour market position and gender are less important. The highest proportion of respondents who consider corruption a major problem in Finland are found among older people, those with a low level of education, respondents with a relatively low income, the unemployed and groups outside the labour market.

The questions about corruption added to the Police Barometer survey for the purposes of the project largely produced relevant information and, in this respect, met the requirements of the assignment. In the future, however, more emphasis should be placed on questions that measure the respondents' personal experiences of corruption in different contexts more diversely. The analysis should be linked to questions of unethical action as well as trust and legitimacy.

In the future, however, it would be better to collect the data for monitoring corruption in connection with some other population survey rather than the Police Barometer. This would make it possible to scale up the survey and to conduct it more frequently.

When planning long-term monitoring, it would be useful to vary the scope of the surveys; there could be only a few questions or a specific survey focusing entirely on corruption. The price of the survey would naturally depend on the scale of the implementation.

Corruption offences reported to the police

In their article "Corruption coming to the attention of the police 2007–2018" (in Finnish), Muttilainen & Ames (2020) examine corruption-related crime that has come to the knowledge of the police based on register data collected by the police. The data is based on a method developed at the Police University College in the early 2010s. The data collected using this method describe the situation in three periods between 2007 and 2018.

The latest data from the period 2015–2018 includes 433 reports of an offence, 28 of which contained offence categories related to bribery. Consequently, the number of bribery cases is relatively low compared to other cases of suspected corruption. The most common individual type of corruption is the abuse of funds, which occurs in roughly one out of four reports. When cases of misuse of funds by a guardian are included, this proportion increases to 30%. Disclosure of official information accounts for 15% of cases, as does misuse of information for economic gain. A total of 30% of the cases are linked to exploitation of information.

The benefits involved in corruption cases are mostly related to money and information. The most common offence category is violation of official duty. When looking at the parties involved, the most typical cases are suspicions between the companies or situations involving a private individual and either the central government or a municipality. The suspects are mostly male, middle-aged, while-collar workers and Finnish citizens. In recent years the data shows a decrease in the proportion of cases related to information and offences associated with business activities.

The police have introduced a classification code for corruption-related offences which will make it easier to find basic information on corruption in the future, as cases classified solely as corruption can be examined. In addition to this, other information should also be used, including the currently used methods of searching for an offence category or a keyword, as the classification code may not be used across the board. A quantitative examination can be supplemented with case descriptions and information from pre-trial investigation records. The cases should be followed as they go to the prosecutor and courts to obtain more accurate information on what types of acts are perceived as corruption in society.

Authorities' registers are a significant source of information for monitoring various phenomena in society. The advantage of register and administrative data is that they accumulate in connection with other activities and thus produce objective information. Data gathering is a balancing act between operational needs and the needs of statistics and research, however. Both perspectives should be taken into account when developing and updating systems. In addition, careful recording of the data improves their quality and thus usability.

Measuring corruption in the construction sector

In their article "Corrption in the construction sector: a pilot study" (in Finnish), Ollus & Pekkarinen (2020) provide an example of how a separate qualitative study can be used for investigating and measuring corruption. The article examines corruption in the construction industry and, in this context, the selection criteria in competitive bidding, conflicts of interest and dual roles, as well as unofficial decision-making.

This pilot study tentatively answers the question of what type of sector-specific information can be collected at different levels of society through qualitative research. The article strives to produce a preliminary model for measuring corruption and unethical activity in the construction industry as comprehensively as possible, yet realistically. In further studies, a more in-depth analysis can be produced.

The article has drawn on four different sets of material: qualitative interviews with construction industry experts, focus group discussions in connection with a meeting of the national Anti-corruption cooperation network, data from media monitoring, and rulings of district courts mostly in the Helsinki metropolitan area. Examples of these different sources of data were used to assess how and to what extent they could be used to measure corruption in the construction industry.

Unethical practices in construction are often linked to the grey economy, which occurs more extensively in this industry. Due to the nature of the construction industry, trust relationships between actors are important for ensuring that the work is of good quality and completed on time. On the other hand, they can expose the stakeholders to corruption. From the perspective of corruption, groups identified to be at a particular risk are shop stewards, the middle management of construction companies and property managers. Unethical activity in the construction industry can, for example, be hidden in targeting and selecting tender specifications in different ways (e.g. highly specialised expertise, turnover limits).

Depending on the situation, such factors as the difference between the tender price and the actual price paid for the building contract, the share of additional work, cumulation of sites, or the volume of subcontracting may indicate unethical activity, corruption, a cartel or the grey economy. A precondition for using these sample indicators is that public procurement documents are made as public as possible and that companies provide more information on the cost structure of their contracts and the details of tenders.

Some of the information describing corruption in the construction industry is difficult to obtain and partly covered by business secrecy or confidentiality. It is, however, perfectly possible to collect the data related to the proposed indicators for public procurements. To supervise corruption and unethical activity, these indicators could also be included in such documents as guidelines for conducting internal audits and monitoring procurement in municipalities and cities.

Corruption in sports and competition manipulation

In their article "Corruption in sports – a focus on competition manipulation" (in Finnish) Laakso & Ikonen (2020) discuss corrupt activity in the operating environment of sport, with a special focus on competition manipulation and its measurement. Corruption in sports is influenced by the context and culture in which it occurs, and it can be considered to have its specific characteristics.

Traces of old practices of favourism can still be identified in sports. Sports leaders, who are the decision-makers in this field, are part of an inner circle in the Finnish sports sector and simultaneously serve in many positions of trust. This is why conflicts of interest and dual roles often arise in Finnish sport. Unintentional ethically questionable behaviour in sports can be caused by ignorance, as corrupt behaviour is poorly identified in this field. The international sports business is growing rapidly, as are various peripheral phenomena.

In different situations, such terms as match manipulation, manipulation of results and scores or match fixing are used for competition manipulation. The clearest division in the motives of these activities can be seen between betting-related and sports-related reasons. In betting-related manipulation, the aim is to influence the course or outcome of a competition or match. Manipulation for sporting reasons aims to safeguard a competitor's interests, usually for economic gain.

The Council of Europe requires the Member States to prepare and maintain a national assessment of risks associated with the manipulation of sports competitions. The risk assessment has been seen as a necessary measure for achieving a better national

understanding of the threat posed by competition manipulation for sports and society. The risk assessment of competition manipulation focuses on betting. In order to assess the situation, an ability to recognise, combat, investigate and punish competition manipulation is needed. The risk may be low, moderate or elevated. An example of an elevated risk is a situation where athletes' salaries or fees are low but illegal betting operators are prepared to pay high fees for manipulation.

A systematic threat and risk assessment of competition manipulation based on the Australian model, in which sector-specific risk assessments are compiled to provide the basis for a national assessment, could also serve as an example of monitoring corruption in other areas of society. The indicators for competition manipulation may relate to recognising, preventing and investigating the phenomenon and, for example, describe regulation, training, financial matters, transparency of governance, employment relationships, pay issues, different types of violations and other dimensions of the activities.

3 Conclusions and recommendations

The conclusions and recommendations based on the data collected and analysed in the Indicators for monitoring corruption in Finland (KORSI) project relate to the following themes:

- methods that produce quantitative information,
- methods describing the multidimensional nature of the phenomenon and new generation methods,
- open data and data usability,
- methodological development and research needs,
- viewpoints of corruption control policy.

In addition, Project Reports 2 and 3 provide a number of examples and optional methods for monitoring corruption and unethical activities (for details, see Muttilainen, Ollus & Salminen. 2020; Tamminen 2020). The monitoring, assessment and measurement methods presented in Reports 2 and 3 are summed up in Appendix 1 to this Report. The Appendix also contains the minimum number of 14 indicators for different areas of corruption set out in the requirements of the project assignment. They were originally collected for the article in Report 3 which discusses surveys (Muttilainen & Välimäki 2020).

3.1 Methods for producing quantitative data

Traditionally, various quantitative indicators, including survey and register data, statistics based on them, and indexes summing up data from different sources have been used to measure and monitor corruption and unethical activities. The authorities and other organisations regularly collect different operational data and store them in their registers. Some of the authorities' register data are of interest when examining activities that indicate corruption.

While quantitative data still clearly have a role to play in the monitoring of corruption, attention should be paid to their quality. In this respect, original data collected regularly in carefully prepared data collections comprise the core of the data content used for regular measurement of corruption. The data on corruption offences reported to the police over three periods in 2007–2018 is an example of register data collected over the long term.

Costs are a key factor in the production of quantitative data sets. When using data originally collected and analysed by other organisations originating from different sources, the only cost is incurred from work required to compile the data. However, the data contents are subject to sudden changes, which does not support long-term monitoring of the state of corruption.

In surveys where at least data collection is outsourced to commercial actors, on the other hand, the price may vary significantly depending on the research setting. For example, the factors affecting the cost of surveys include the number of questions, the data collection method used, the size of the target group as well as the work input and other costs invested in the project. The briefest form could consist of a few questions in a continuously repeated survey, whereas the most expansive form could be an independent survey focusing on the theme of corruption.

The scope of the model consisting of at least 14 indicators given as an example in the project is somewhere between two above mentioned options and could serve as a basis for data collection. Through long-term participation in the funding of data collection, the client organisations can influence the data content of the surveys.

Recommendations concerning methods for producing quantitative data

- *The free quantitative data describing corruption and unethical activity that are available should be collected centrally and regularly under the leadership of the responsible ministry in order to lay a foundation for national monitoring by involving different actors in the data production.*
- *Corruption and unethical activity should be monitored regularly by means of high-quality population surveys, with some basic data being produced annually and more detailed data on each area of corruption less frequently.*
- *To monitor the status of corruption, examination of the data in police registers should be continued, other authorities' register data should be used where applicable, and the progress of cases through the criminal process should be followed.*

3.2 Methods describing the multidimensional nature of the phenomenon and new generation methods

Based on the information obtained in the project, corruption is a multidimensional phenomenon that is conceptually complex. Corruption ranges from bribery to other forms of criminal activity related to corruption which are manifested as elements in offences

in public office, abuse of trust, business crime and other forms of crime. Corruption-related activity also takes the form of unethical practices and customs, and some of these cases meet the characteristics of an offence. The prevalence and characteristics of corruption vary in different countries, but also nationally by industry and administrative sector.

In addition to outright bribery and corruption of individuals, increasing attention has been paid in Finland to forms of corruption that are more difficult to recognise, such as structural, institutional and network corruption, in which the benefits offered and received are often difficult to trace. As required by the assignment, the project also looked at these areas of "nebulous corruption" by paying attention to corruption in different contexts. When drawing on information collected from different sources, it is consequently important to pay attention to how corruption has been defined and how the data have been collected and analysed.

The extensive nature of the phenomenon also affects the possibilities of measuring and monitoring corruption and other unethical activity. In this context, so-called "new generation" indicators and methods have emerged. This term has been used to refer to examining the situation with the help of methods that complement each other diversely. Depending on the situation, information gathering methods may include literature reviews, different sources of quantitative data, interviews with various target groups, case studies, online surveys, citizens' reports, risk assessments, automated analyses of big data, different reference data sets, monitoring data on anti-corruption policies and many other sources of information. This also supports the comprehensive evaluation of policy measures across the boundaries of administrative sectors.

Recommendations concerning new generation methods

- *Corruption is a complex and conceptually ambiguous phenomenon, which is why attention should be paid to the definitions as well as the methods of data compilation and analysis used when working with data obtained from different sources.*
- *The state of corruption should be analysed using so-called new generation methods which, as they combine numerous data collection and analysis methods, build an increasingly comprehensive picture of the features and development of the phenomenon.*
- *Corruption is highly context-sensitive, which is why it is necessary to locate and analyse risk areas of corruption specific to Finland, as proposed in the pilot studies implemented during the project focusing on corruption related to the construction industry and sports.*

3.3 Use of open data

Register data collected by authorities are only used to a small extent in research on societal phenomena, structures or activities. However, increasingly efficient data processing tools are available today, as the advancement of information technology and networks, machine learning and artificial intelligence has provided improved tools for analysing big data. On the other hand, data protection and research permit practices may partly restrict the use of such data.

Public procurement data are a good example of big data accumulated in connection with the authorities' activities. If this information were more open and machine-readable and enabled cross-referencing e.g. between the datasets of different authorities, it could be used to reveal ambiguities and corruption in procurement and to assess the risks associated with competitive tendering. Some Eastern European countries, for example, use machine learning systems to screen big data on public procurement for indications of conflicts of interest and other warning signs of corruption. In Finland, industry-specific data analysis could reveal corruption risks, such as differences between tender prices and final prices, under-priced contracts, the proportion of additional work or cumulation of contract sites.

Openness of data is very significant because it promotes the possibilities of investigative journalism and civil society to look at corruption-related activities in governance and decision-making. In other contexts, too, crowdsourcing in its different forms has played a role in the authorities' activities for a long time. The use of Internet and social media services on mobile phones, for example, enables information flows from public authorities to citizens and vice versa. The increased openness is also associated with the more widespread use of codes of conduct and ethical practices in companies, ethical channels as well as discussions on a transparency register and reporting of corruption cases.

Recommendations concerning the use of open data

- *The openness and machine readability of big data related to public procurement and the possibility of cross-referencing them should be promoted in order to identify the risks of corruption more effectively.*
- *By analysing public procurement based on competitive tendering data in each industry, a detailed picture of corruption risks and factors that expose actors to corruption (such as the construction industry or procurement of information technology in different sectors) can be obtained.*
- *To promote openness, the possibilities of crowdsourcing, such as investigative journalism or citizens, should be assessed (including public procurement data).*

3.4 Methodology development and research needs

Some research themes related to corruption and its measurement, which have been mentioned above, would be appropriate to examine in more detail. They include basic monitoring of corruption using survey and register data, targeted risk-based reviews, and research settings drawing on big data concerning public procurement. To support basic monitoring, survey and register data could be analysed in greater detail than at present, and they could be supplemented with documentation, interviews and other similar information.

Research in corruption can be expanded both methodically and thematically. The methodological aspect refers to, for example, addressing a population survey on corruption and unethical activity to another target group where applicable, such as civil servants or business representatives. The designs of register studies can also be utilised at least partly in different environments. In addition, the application of previously untapped or little used methods to the theme of corruption, including comprehensive and sector-specific risk assessments, big data analyses or development-oriented workshops, would be beneficial. Light could thus be thrown on the same target area from different angles, using a variety of data sets.

Thematic examination of possible research topics is, first of all, associated with the fact that corruption is a multidimensional phenomenon. For example, corruption can be examined in the form of bribery and in other forms, in public administration and other areas of society, as well as in different industries and administrative sectors. Geographically, the focus may be on local, regional, national or international corruption. Theoretical and conceptual analyses are also important in understanding the features and measurability of the phenomenon. Significant topics can additionally be found outside the theme of corruption, including links to ethics, openness, legitimacy, trust and the themes of crime and security. Case studies should be conducted based on organisations' in-house practices, risk assessments, reporting channels, internal audit findings and other information.

Recommendations concerning methodology development and research needs

- *A research design prepared for one purpose or a little used assessment method may be suitable for some other purpose, such as a different target group, administrative sector, industry or organisation.*
- *The general theme of corruption contains many sub-themes to be examined, the selection of which must be underpinned by national and international research evidence and observations made as part of regular basic monitoring of corruption.*

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- *When considering research themes, theoretical and conceptual reviews, topics close to corruption, including ethics, openness and trust, and links to crime and security environment themes should be addressed.*

3.5 Viewpoints of corruption control policy

Regular monitoring and assessment of the state of corruption covers not only corruption but also anti-corruption actions and their evaluation. Taking into account comprehensive methods of monitoring corruption is thus appropriate. Threat and risk assessments describe the likelihood and circumstances of corruption, and the follow-up reports on anti-corruption work show the effectiveness and adequacy of actions. The methods examined above in the context of openness make it possible to screen big data for features suggesting hidden corruption.

Various organisations have for a long time engaged in monitoring and forecasting the operating environment and conducting risk assessments. Risk assessment covers a wide range of aspects, including the content of operations, personnel, facilities and information technology. For example, money laundering legislation emphasises a risk-based approach, in which parties subject to a reporting obligation must regularly prepare a risk assessment to identify and assess the risks of money laundering and terrorist financing. These assessments can be used to assess the national risks of money laundering. Regular and versatile risk and threat assessments are also carried out in an effort to combat competition manipulation. No similar established practices exist in the area of anti-corruption work.

Not only national and sector-specific basic indicators but also ambitious indicators for examining the long-term objectives of anti-corruption work are needed to achieve effective corruption control policy. This covers simple indicators for compliance with international commitments but also requires information on the practical implementation of legislation and instruments. Anti-corruption actions are also associated with societal activity in a broader sense, such as action plans on open government and the grey economy as well as the Sustainable Development Goals. Comprehensive monitoring of the state of corruption serves diverse national and international information needs and also supports cross-administrative anti-corruption work.

Recommendations concerning corruption control policy

- *Authorities and other actors involved in combating and controlling corruption should produce sector-specific risk assessments and reports whose data can be aggregated and used to assess national risks.*
- *A comprehensive and cross-sectoral approach and data collection model based on international examples compatible with the Finnish context and focusing on measuring effectiveness, in particular, is a precondition for monitoring corruption.*
- *The strategic indicators for combating corruption need to be taken into account in other action plans related to this topic and vice versa (e.g. open government, money laundering, organised crime, the grey economy).*

Appendices

Appendix 1 Options for measuring and monitoring corruption

1. Monitoring and assessing corruption across a broad front

a) Comprehensive monitoring of corruption

The project examined corruption across a broad front with the help of risk assessments, monitoring of anti-corruption actions, and tools developed to detect hidden corruption. The following table sums up the methods for assessing and monitoring corruption using these three methods (Tamminen 2020).

Table 1. Methods for comprehensive monitoring of corruption

RISK ASSESSMENTS	**Regularly updated risk assessments** In particular, anti-corruption and oversight authorities and other actors should introduce regularly updated risk assessments for different sectors, as currently few of such assessments are carried out. In practice, this means ▪ The preparation of a national Serious and Organised Crime Threat Assessment (SOCTA) within the framework of the EU process and the creation of a threat assessment for corruption in connection with the same process; ▪ Obliging key actors in different sectors of society to carry out sector-specific corruption risk assessments, similarly to the current statutory obligation to assess the risks of money laundering.
FIGHT AGAINST CORRUPTION	**Comprehensive approach** A comprehensive approach should be taken to monitor corruption, and a comprehensive data collection model to enable the gathering of monitoring data over the long term should be created. In practice, this requires: ▪ Creating a nationally adopted monitoring method, for example drawing from the sets of indicators developed by the Commonwealth of Nations and the OECD, through which progress in key sectors of society towards compliance with international standards can be regularly monitored (including statistics on corruption); ▪ A comprehensive approach to monitoring the realisation of the action plan for the anti-corruption strategy, ensuring that the monitoring of the actions is based on not only measuring a few selected objectives but also on an overall impact assessment.
UNCOVERING HIDDEN CORRUPTION	**Using open data concerning public procurement** The openness and machine readability as well as the possibilities of cross-referencing big data on public procurement and administrative data should be expanded, where applicable, to detect ambiguities and corruption. In practice, this means learning from countries where automated systems are in use. ▪ Using such solutions as the machine learning systems employed in the Czech Republic and Hungary should also be considered in Finland to screen big data on public procurement for conflicts of interest and warning signs of corruption; ▪ Systems of this type generally increase the openness of data, which bolsters the supervisory role of investigative journalism and civil society in exposing corruptive practices.

b) Examination of the risk zones of corruption

The diverse content of corruption and different perspectives on it affect the choice of measurement methods and indicators. Observations made in the course of the project on these choices in the examination of individual, network, institutional and structural corruption have been collected in the following Table (Salminen 2020).

Table 2. Risk zones of corruption and options for measuring them

INDIVIDUAL CORRUPTION	- Focuses on an individual, concerns a private interest, corrupt dependence is formed with an individual, is explained by an individual's behaviour. - Examples of risk zones include conflicts of interest and dual roles as well as unethical election and party funding. - The indicators are put together ensuring that corruption can be measured accurately and that measurements can be repeated.
CORRUPT NETWORKS	- Are based on secrecy and a closed-loop approach which makes it possible to allocate funds belonging to others to network members, "old boys", while others are excluded. Unhealthy interaction creates corrupt dependence and a debt of gratitude, which in turn form the basis for relationships of loyalty and friendship. - Examples of risk zones are favouritism (including nepotism) and reciprocal unethical "assistance" as well as unofficial decision-making outside formal decision-making structures. - Obtaining certain proof of corruption is a challenge, which is why the methods used should be as diverse as possible.
INSTITUTIONAL CORRUPTION	- Rather than on individuals, particular attention is paid to institutions and corrupt communities. Is political in nature as it influences the democratic decision-making process. A dependence on institutions and practices that become corrupt is created. - An example of risk zones is unethical specifications in a tendering competition. - The use of more specific criteria encourages accuracy and continuity in the measurement.
STRUCTURAL CORRUPTION	- Attention is paid to corrupt structures and systems. The targets include abuse of power, impunity and social disempowerment of citizens. - The risk zones include undue influence on decision-making, including the drafting of legislation and decisions. - Qualitative indicators work best and increase the suitability of measurement in all respects.

2 Indicators based on survey and register data

a) Indicators collected from survey data

A wide range of survey and register data sets is available for measuring and monitoring corruption and unethical activity, some of which focus specifically on corruption, while others contain questions about corruption in addition to other main themes. The following Table contains the minimum number of 14 indicators required in the project assignment, or two per each aspect of corruption (Muttilainen & Välimäki 2020).

Table 3. Indicators describing certain aspects of corruption and separate themes

A) Conflicts of interest and dual roles	Source/method
Indicator 1: Certain practices which are generally considered unethical are listed below. In your opinion, do they occur in central government in Finland? Favouring persons of the same political party, identifying with a certain interest group, favouring relatives, inappropriate lobbying, influencing a decision regardless of being disqualified.	State of ethics and morality among public servants in central government – a survey addressed to citizens 4.
Indicator 2: How serious a problem do you think the following phenomena are in Finland? Problems caused by dual roles in public administration.	Police Barometer 2020.
Indicator 3: How common is corruption in our country in the following situations? In preparation of land use decisions.	Foundation for Municipal Development 2019.
B) Favouritism (including nepotism) and unethical mutual "assistance"	
Indicator 4: Certain practices which are generally considered unethical are listed below. In your opinion, do they occur in central government in Finland? Favouring persons of the same political party, identifying with a certain interest group, favouring relatives, influencing a decision regardless of being disqualified.	State of ethics and morality among public servants in central government – a survey addressed to citizens 4.
Indicator 5: How serious a problem do you think the following phenomena are in Finland? Favouring relatives or friends in public service appointments.	Police Barometer 2020.
Indicator 6: How common is corruption in our country in the following situations? When issuing different permits (including building, water, environmental permits)	Foundation for Municipal Development 2019.
C) Informal decision-making outside formal decision-making structures	
Indicator 7: Do you agree or disagree with the following statements? Too close links between business and politics in Finland lead to corruption (Q12 1).	Flash Eurobarometer 374 (Businesses' Attitudes Towards Corruption in the EU).
Indicator 8: How serious a problem do you think the following phenomena are in Finland? Informal decision-making in old boy networks.	Police Barometer 2020.
D) Exertion of undue influence on decision-making (incl. the drafting of legislation and decisions)	
Indicator 9: Municipal chief executives' answers to the question: In your experience, are the following ethical problems topical in your municipality? Delays in taking care of matters, failure to provide information, inappropriate favouritism, exerting influence on the processing of a matter regardless of being disqualified, inappropriate lobbying, misuse of confidential information, gifts and other benefits offered to personnel, accepting inappropriate financial benefits (bribery).	Municipal Executives' Ethical Barometer, University of Vaasa 35.
Indicator 10: How serious a problem do you think the following phenomena are in Finland? Lack of transparency in the drafting of legislation.	Police Barometer 2020.
E) Unethical specifications in contract award criteria	
Indicator 11: How widespread do you think the following practices are in public procurement procedures in Finland? Involvement of bidders in the design of specifications (Q7 3) Specifications tailor-made for particular companies (Q7 6).	Flash Eurobarometer 428 (Businesses' attitudes towards corruption in the EU).
Indicator 12: How serious a problem do you think the following phenomena are in Finland? Corruption in public procurement.	Police Barometer 2020.
F) Unethical election and party funding	
Indicator 13: Do you agree or disagree with the following statements? There is sufficient transparency and supervision of the funding of political parties in Finland (Q12 3).	Flash Eurobarometer 428 (Businesses' Attitudes Towards Corruption in the EU).
Indicator 14: How serious a problem do you think the following phenomena are in Finland? Use of election or party funding for private gain.	Police Barometer 2020.
Indicator 15. How common is corruption in our country in the following situations? When supporting parties or individual candidates financially in elections	Foundation for Municipal Development 2019.
G) Competition manipulation, betting scandals and bribery of referees	
Indicator 16: Were you ever approached at any time in the past 12 months by anyone who asked you to fix a match (including 'spot fixing' or sharing sensitive inside information)?	Don't fix it! May 2014. Birkbeck Sports Business Centre, University of London.
Indicator 17: How serious a problem do you think the following phenomena are in Finland? Match fixing and betting scandals.	Police Barometer 2020.

b) Battery of questions on corruption tested in the Police Barometer 2020

For the purposes of the project's data collection, a section on corruption and unethical activity was added to the 2020 Police Barometer population survey. The questions covered diversely the aspects of corruption referred to in the project assignment. The following Table describes the areas of corruption investigated in the project and the individual questions related to them (Muttilainen, Rauta & Vuorensyrjä 2020).

Table 4. Corruption themes listed in the project assignment and questions in the Police Barometer

Perspective on corruption	Question in the Police Barometer
Assessment of the significance of corruption, and corruption at different levels of government	Please indicate how you feel about the following statements about corruption. (scale: strongly agree, somewhat agree, somewhat disagree, strongly disagree, cannot say)
• Significance of the problem • Corruption at EU level • Corruption at national level • Corruption at regional level • Corruption at local level	• Corruption is a major problem in Finland • Corruption occurs in the institutions of the European Union • Corruption occurs in national institutions in Finland • Corruption occurs in regional institutions in Finland • Corruption occurs in municipal and local institutions in Finland
Experiences of corruption	Have you personally observed corruption in your work or free time?
	• Yes/No
Special corruption themes	How serious a problem do you think the following phenomena are in Finland? (scale: very serious, fairly serious, fairly minor, very minor, cannot say)
• Conflicts of interest and dual roles • Favouritism (incl. nepotism) and unethical mutual "assistance" • Informal decision-making outside formal decision-making structures • Undue influence in decision-making (incl. drafting legislation and decisions) • Unethical specifications in competitive tendering • Unethical election and party funding • Competition manipulation, betting scandals and bribery of referees	• Problems related to disqualification due to dual roles in public administration • Corruption in land use and construction • Favouring relatives or friends in public service appointments • Informal decision-making in old boy networks • Abuses in NGO and association activities • Lack of transparency in the drafting of legislation • Corruption in public procurement • Corruption in healthcare • Use of election or party funding for private gain • Match manipulation and betting scandals

c) Monitoring of corruption offences reported to the police based on register data

The register data on corruption offences reported to the police have been used to describe information on bribery and other types of corruption in reports of an offence over three four-year periods between 2007 and 2018. The following table describes the content of these data sets, in other words offences, background variables and some other information contained in them (Muttilainen & Ames 2020).

Table 5. Data content of the register data describing corruption offences reported to the police

CASES	CONTENT
Situations involving corruption	▪ suspected bribery offence, other suspicion of bribery, abuse of funds, misuse of funds by a guardian, partiality of activities, exceeding authority, failure to disclose information in decision-making, disclosure of authorities' information, misuse of information (economic motive), suspected loss of customer property, other situation
Gains	▪ money, information, goods or right to use goods, multiple benefits, service, entertainment, travel, other gain, no clear benefit or not known
Consideration of charges	▪ yes, no, not known
Interested parties	▪ a company, the central government and a private individual, a municipality and a private individual ▪ a municipality, the central government, a company and a private individual, a private individual and other, the central government and a company, a municipality and a company, other
OFFENCES	
Offence categories	▪ the examination covered ten of the most common offence categories: breach of duty in office, theft, violation of company secrecy, embezzlement, abuse of position of trust, personal data file offence, abuse of official status, fraud, breach of official secrecy, gross misappropriation, others, total ▪ the data sets also contain information on other offences
BACKGROUND VARIABLES	
Gender	▪ woman, man
Age	▪ under 30, 30–39, 40–49, 50–59, 60 or over, not known
Nationality	▪ Finnish, Russian, Estonian, other/not known
Socio-economic status	▪ self-employed, senior white-collar, junior white-collar, employee, student, pensioner, other, not mentioned
OTHER INFORMATION	
	▪ the data sets also contain other information (e.g. person making the report, reciprocity, region as a background variable) ▪ case descriptions of bribery offences

3 Indicators for industries at risk of corruption

a) Corruption in the construction industry

Construction is one of the key industries at risk of corruption. A precondition for measuring corruption in the construction industry is extensive collection of register data, qualitative data, tendering and procurement data and information related to the operation of companies. The following Table presents the forms of information acquisition used in the KORSI project and possible indicators (Ollus & Pekkarinen 2020).

Table 6. Methods and indicators for assessing corruption in the construction industry

METHODS FOR OBTAINING INFORMATION	
Interviews	▪ Structured interviews with trade unions, employers' unions, the police, the prosecutor, construction companies, occupational safety authorities, municipal procurement experts, etc.
Pre-trial investigation (and prosecution) documents	▪ Information collected by the pre-trial investigation authorities on cases investigated and cases processed by the prosecution service
Court documents	▪ Relevant decisions of District Courts, Courts of Appeal and the Supreme Court, the Market Court and Administrative Courts
Media material	▪ Articles in newspapers and periodicals (printed or online versions), press archives, television and radio recordings
Register data sets	▪ Registers of the Tax Administration, contracting entities, the police, the Legal Register Centre (including on bankruptcy, corporate restructuring, debt restructuring, business prohibition), etc.
INDICATORS	
Prices	▪ Comparison of the price given during the tendering process and the actual final price of the contract. If the difference is major, this may be caused by unethical activity. In addition, the price spread in competitive bidding may indicate a possible cartel.
Additional work	▪ In connection with the previous indicator, the percentage of additional work may be an indication of corruption or unethical activity. If the cost estimate changes after contract award and if there are significant budget overruns, they may indicate that the customer and the contracting entity have already agreed on this in advance.
Accumulation of contracts	▪ Especially in public construction projects, the number of different actors between which the contracts are divided should be investigated. If they accumulate on a handful of suppliers, this may involve corruption or other inappropriate influence. Other similar indicators are the targeting or concentration of building permits on certain actors, the volume of subcontracting, the involvement of actors with a short life cycle and the number of foreign employees used.
Private interests	▪ Transparency of private interests as well as disqualification or leaving a position; if a person has dual roles, they must be reported, ensuring that the person is not affected by conflicts of interest.
Operators/markets	▪ Construction industry operators and their market shares should be mapped, for example as regards the following: turnover, contract awards, volume of awarded contracts (in euros), identity of the contracting entity, return on marketing costs (to assess whether the situation is about marketing, sponsorship or corruption), and tax adjustments based on section 16 of the Business Income Tax Act (bribery and items with the character of bribery in taxation).

b) Sports corruption and competition manipulation

Sports corruption and, in particular, competition manipulation are emerging risk zones of corruption. The expert article produced for the project described competition manipulation, in particular, and outlined indicators for it. The following Table describes the assessment and monitoring methods of competition manipulation (Ikonen & Laakso 2020).

Table 7. Assessment and monitoring methods of competition manipulation

RISK ASSESSMENT	
Risk itemisation	▪ It is essential to specify the factors that both increase and lower the risks in a threat assessment. ▪ The realisation of low-risk areas may cause minor disruptions to activities. ▪ The realisation of a moderate risk will not interrupt the activity but may lead to changes in operational plans and cause damage to reputation. ▪ The realisation of an elevated or high risk may cause significant damage or costs.
Aspects of assessment	▪ A national threat assessment addresses a number of factors with different weightings. The ability to identify and combat manipulation and to investigate and punish competition manipulation are the cornerstones of the fight against manipulation and threat assessment.
INDICATORS FOR COMPETITION MANIPULATION	
Recognition	▪ Indicators related to recognising competition manipulation may include the number of training events and persons receiving training, coverage of supervision mechanisms, number of warnings issued by an electronic betting monitoring system, and suspicions and cases of manipulation brought to the attention of sports actors and authorities.
Prevention	▪ Indicators related to the fight against competition manipulation may include whether competition and disciplinary regulations are up to date and applicable, confidential channels for reporting irregularities, transparency of good governance, adequate terms of employment as well as the level of pay and fees and the ability to pay them.
Investigation and sanctions	▪ Indicators for investigation of and sanctions imposed for competition manipulation may include the authorities' ability to investigate and prosecute suspected violations related to competition manipulation, the level of cooperation between national and international authorities, and up-to-date legislation and the ability to apply it.

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