Measuring nepotism in the public sector is challenging because of its elusive nature. This brief reviews methodologies developed to measure the extent of family connections in the public sector and introduces an innovative tool, the Kinship in Public Office indicator, that systematises these approaches. Using kinship connectivity as a proxy for the prevalence of nepotism can help policymakers design and measure the impact of anti-corruption initiatives, beyond more easily quantifiable forms of corruption such as bribery and embezzlement of funds.

Nepotism in public office describes situations in which an elected or appointed public official exploits his or her position to favour relatives in obtaining jobs, advancement, or other preferential treatment. Public officials may hire or promote their relatives over better-qualified candidates for private gain, or in response to pressure from their family members. Indeed, favouring relatives may be perceived as a sort of in-kind benefit of holding a position in the public sector. In some contexts where interpersonal trust is low, nepotism can also arise when officials aim to ensure maximum loyalty and reliability among colleagues and subordinates.¹

Favouring individuals with family connections over other candidates for a position wastes public resources insofar as it reduces productivity and decreases the efficiency of the public sector by giving responsibilities to people who are not qualified to handle them. It can also generate conflicts between employees and within the hierarchy and decrease commitment on the part of employees who lack such connections. By giving an unfair advantage to well-connected people, nepotism lowers ethical standards in the public sector. This is turn may encourage other forms of favouritism and corruption, such as absenteeism or embezzlement of public funds, in the public service and in society. Yet examples of successful policies tackling nepotism in public office are scarce, given lack of political will and strong opposition from individuals who benefit from harmful practices.²

The difficulty of measuring nepotism

Despite abundant anecdotal evidence that nepotism in the public sector is common practice in many countries³, measuring its prevalence remains a challenge. Nepotism is a
form of corruption that is particularly hard to detect. Decision-making regarding hiring and promotions involves complex and sometimes unwritten rules and procedures, and the subjective elements that come into play when choosing among candidates can mask the abuse of power.

Identifying cases of positive discrimination towards candidates with family connections requires comprehensive knowledge of the procedures that were followed to recruit or promote the employees, as well as access to detailed profiles of all candidates. Comparing the legitimate requirements for a particular position (e.g., level of education, range of qualifications) with the characteristics of candidates for that position — including whether or not they have a kin connection to anyone currently employed in the organisation — makes it possible to detect cases in which kinship connections increased a person’s likelihood of being hired or promoted.

Unfortunately, this information is generally out of reach, or at best incomplete. To circumvent this problem, researchers seeking to quantify nepotism have looked for alternative methods that are less demanding in terms of data. One alternative is to use family ties as a proxy for nepotistic relationships.

**Family ties as an indicator of nepotism**

Unlike other forms of favouritism such as cronyism, nepotism benefits a relatively easily identifiable group of individuals: the family members of public officials. Survey and administrative data can therefore be used independently or together to identify individuals who are connected to public officials and who may possibly benefit from these connections in terms of contacts, job opportunities, and career advancement.

In the context of a randomised field experiment on reducing corruption in over 600 Indonesian village road projects, Olken (2007) investigated whether villagers having family ties with their village government or the head of the project implementation team were more or less likely than other villagers to report having worked on the project in villages where the project would subsequently be audited. He found that family members of government and project officials were more likely to work on the project in audited villages, a result consistent with the idea that nepotism is a substitute for more lucrative forms of corruption vulnerable to auditing. Olken also showed that family members of village officials were more likely than people without family ties to be employed in a higher-wage category on the project.

Using an administrative data set collected in Philippine municipalities together with information on candidates in local elections, Fafchamps and Labonne (2013) estimated the effect of having local politicians as family members on occupational choice. They found that connections to current office holders increased the likelihood of being employed in better-paying occupations.

As these studies and others have shown, for lack of a more direct measurement tool, family ties can be a useful indicator of nepotism. But this approach to measurement is clearly imperfect.

Having a family connection with someone working in the public sector does not necessarily translate into preferential treatment. People can be related by blood or marriage without having strong social links. On the other hand, people can be related by blood or marriage and have strong social links without necessarily resorting to nepotism — whether because of ethical concerns, fear of detection, or simply lack of opportunity.

Some couples meet in the workplace, in which case family ties are a consequence rather than a cause of working together. Alternatively, a public official’s family member may happen to be the most qualified or deserving candidate for a promotion or open position, with no abuse of power involved in the process. Because there is no a priori reason to believe that these confounding factors are more likely to occur in relatively high- or low-corruption environments, family networks remain nonetheless a valid proxy for nepotistic practices in the public sector.

**Identifying family connections with public officials**

While collecting information on family networks is undoubtedly easier than measuring nepotism directly, it is still a challenge. Researchers have typically relied on two sources of data to identify such networks: surveys and shared family names.

**Surveys**

In order to investigate the relation between nepotism and government audits in Indonesian road projects, Olken (2007) asked a random sample of households in surveyed villages if they were related to village government members or to the head of the project implementation team. Approximately 30 percent of respondents reported being either an immediate or extended family member of some village official, and 6 percent reported family ties to the head of the project. Similarly, Scoppa (2009) used four waves of the Bank of Italy’s Survey on Household Income and Wealth to study whether children of Italian public employees were more likely than others to hold jobs in the public sector, controlling for individual characteristics and labour market conditions. The survey asked household heads and their partners about their occupations, as well as about their parents’ occupations when the parents were the same age as the respondents. About 17 percent of respondents (irrespective of their profession) reported having at least one parent employed in the public sector.

Surveys can provide a valuable account of family ties with public officials, allowing researchers to delve into the roots and dynamics of nepotism. Yet, as nepotism is usually concealed, survey respondents may not reveal the true extent of their connections for fear of punishment or shame. For this reason, survey data have been criticised as a biased measure of connections to public officials (Fafchamps and Labonne 2013).

**Shared family names**

Family names are another source of information that can be used to track kinship networks. Fafchamps and Labonne (2013)
assessed blood and marriage links between local politicians and respondents to a large-scale household survey in the Philippines. They identified respondents who had family ties with local politicians by matching the names of all individuals surveyed with the names of candidates in local elections. A respondent was categorised as a family member of a given politician if the respondent or someone in his/her household had a middle name or last name in common with the politician. Using this technique, the authors found that political candidates were, on average, connected to 70 individuals aged 20 to 80 in their municipalities.

Allesina (2011) proposed another method based on shared family names to identify academic disciplines with a high likelihood of nepotism. Using standard statistical techniques, the author investigated whether academic disciplines display few distinct family names compared to what might be expected at random. Applying this method to Italy, he found that nine out of 28 disciplines display a significant paucity of family names, indicating that academia in Italy is very likely affected by nepotism.

Using family names to assess family ties circumvents the need to rely on self-declarations, which may be subject to bias. The shared names approach, however, has its own limitations. Inferring blood and marriage links from names is reliable in some contexts, but in countries where a handful of family names are common, they may be weak indicators of kinship networks. Shared family names may reflect a shared ethnic or regional background rather than family ties. Even when they signify kinship, shared names cannot reveal the full extent of kinship networks. Naming conventions ensure that many people related by blood or marriage do not share family names. For instance, in societies where children are given the father’s last name but women keep their maiden name after marriage, last names only relate the children to the father, not the mother. More distant relatives frequently have different family names – for example, matrilateral cousins in patrilineal societies – but may still be involved in nepotistic practices.

The Kinship in Public Office indicator

Studies pioneering the use of information on family networks as a proxy for nepotic relationships have opened a promising path towards better detection of nepotism in the public sector. However, current initiatives lack systematisation. Researchers have designed various tools to measure kinship networks, but as these are tailored to different purposes, issues of consistency and replicability arise. The Kinship in Public Office (KPO) indicator provides a systematic measure of kin connectivity among public officials that can be computed for any public entity, using a combination of self-reported links, tracking of shared names, and follow-up interviews to investigate possible misreporting.

Definition of the indicator

The KPO indicator is defined as the percentage of interpersonal connections among public officials (whether appointed or elected) that are based on kinship. The indicator computed for public entity \( j \) can be formulated as follows:

\[
KPO_j = \frac{100}{N(N - 1)} \sum_{i=1}^{N} f_i
\]

In this equation, \( f_i \) is the number of public officials in entity \( j \) with a family tie to official \( i \), and \( N \) is the total number of public officials in entity \( j \). The indicator, scaled for readability, ranges from 0 (no family connection in the entity) to 100 (every single person in the entity is connected with every other person).

Operationalisation of the indicator

The characteristics of nepotism as well as the definition of family may vary depending on the context in which the KPO indicator is applied. Before implementation in a given context, preliminary assessment must be undertaken to define how the methodology of the indicator can be adapted to take those local specificities into account.

Once this initial step is completed, self-administered questionnaires are handed out to all public officials in the investigated organisation to obtain data on the family ties they share with their workfellows. Self-administered questionnaires have been criticised for allegedly underestimating corrupt behaviour, but the evidence is far from unanimously supportive of this criticism. Sequeira and Djankov (2014), for instance, have shown that self-administered and anonymous questionnaires can increase customs officials’ willingness to disclose bribery. The supposition is that officials feel less pressured and are thus more prone to report their true behaviour when collecting the corruption data themselves as opposed to being questioned by an enumerator.

Name registers of public officials are then used to cross-check the self-reported information and detect misreporting. Whenever two officials belonging to the same public organisation are found to share a family name but no family connection has been disclosed in either of the two self-administered questionnaires, face-to-face interviews are carried out with the two officials to clarify the nature of their relationship and identify unrevealed family connections.

Consider the example of a public entity (e.g., a police station or health centre) composed of 11 people, as represented in Figure 1. The number of possible family connections in that system is: \( (11 \times 10)/2 = 55 \). Of those 55 possible connections, six are observed (highlighted in blue in the diagram). The KPO score of this entity is therefore: \( 100 \times (6/55) = 10.91 \).

Uses of the indicator

By determining the degree of kin connectivity among officials within public entities, the KPO indicator is able to identify which systems are more likely to be affected by nepotism. Researchers can use this information to track trends in corrupt behaviour over time and to measure outcomes of initiatives aiming at tackling nepotism in the public sector.
The indicator can be applied to a wide range of public organisations but is particularly suited for use in a comparative evaluation of public entities of similar size and structure. With this systematic yet adaptable methodology, decision-makers can learn how nepotism affects recruitment in the public sector and design appropriate responses to promote fair practices.

**Figure 1. Sample entity with 11 employees and 6 family connections**

**Perspectives for future research**

Researchers studying nepotism in public office have long been constrained by the challenge of measurement. As it is almost impossible to measure nepotism directly, recent studies have used survey data and family names to examine family ties with public officials, using these ties as a proxy for nepotistic relationships. The innovative KPO indicator expands on these initiatives by using self-declarations, examination of family names, and interviews to systematically quantify the extent of kinship connections within public sector agencies. This greater systematisation may help address issues of consistency and replicability that have arisen in current research.

Future research should address the limitations of the KPO approach. Like its predecessors, the indicator can reveal only the presence of family connections, pointing to the likelihood – but not the certainty – of nepotism. Further work is needed to develop a means to distinguish those family connections that actually involve preferential treatment from the larger web of kinship ties between public officials.

**References**


**Notes**

1 This motivation is also at the root of other forms of favouritism such as cronyism or patronage. Cronyism refers to partiality towards social acquaintances, whereas patronage involves the use of public resources to reward electoral support. These types of corruption share many similarities with nepotism but are even harder to detect, as they benefit a less easily identifiable group of individuals.

2 For example, in Brazil it took a decade of struggle to achieve the adoption in 2008 of an anti-corruption law prohibiting nepotism in the executive, legislative, and judicial branches of government (Soares 2008; BBC News 2000).

3 Examples include the employment of relatives by Members of Parliament in the United Kingdom (BBC News 2010) and JP Morgan’s hiring programme targeting children of high-ranking public officials in China (Protest and Silver-Greenberg 2013).

4 Sometimes illegitimate requirements (e.g., particular training unrelated to the job description) may be established for the purpose of favouring the profile of a connected candidate while hiding abuse of power.

5 In the Philippines, a man’s last name is his father’s last name and his middle name is his mother’s last name. A married woman takes her husband’s last name, but she keeps her father’s last name as her middle name. These naming conventions were introduced in the Philippines by Spanish colonial authorities in the nineteenth century (Fafchamps and Labonne 2013).

6 In Madagascar, for instance, where hundreds of people can feel part of the same family, social pressure to support one’s family members can be somewhat weak, even among close relatives.

7 We must acknowledge that the KPO indicator fails to capture instances of nepotism in which a public official uses his or her position to favour a relative in obtaining a position in the private sector.