

Corruption contagion: How legal and finance firms are at greater risk of corruption

April 24 2019



Professor Maziar Nekovee, of the University of Sussex, and Dr. Jonathan Pinto, of Imperial College. Credit: University of Sussex.

Companies with fewer levels of management such as legal, accountancy and investment banking firms could be up to five times more susceptible to corruption than similar sized organisations with a taller structure such as those in manufacturing, a new study by the University of Sussex and Imperial College has revealed.

Conversely the quantitatively-modelled research also shows that widespread [corruption](#) spreads more quickly through a taller [company](#) than through an organisation with fewer levels of management and is more likely to permeate throughout its ranks.

The new research paper, published in next month's *Physica A: Statistical Mechanics and its Applications*, also warns that a medium-sized organisation with less than 5% of employees committed to whistleblowing would be powerless to prevent corruption spreading through their company. The authors say a company with a critical threshold of 25% of whistleblowing employees is needed to prevent widespread corruption taking hold.

Prof Maziar Nekovee, who Heads the Centre for Advanced Communications and Mobile Technology at the University of Sussex's School of Engineering and Informatics said: "We modelled the spread of corrupt practices infiltrating an organisation like a social contagion. Our [mathematical modelling](#) assumes that the infection susceptibility of each [employee](#) is independent and identical with every contact with a corrupt colleague and takes into account the complex organizational network through which the corrupt practice spreads.

"From just one bad apple it might take 100 simulation timesteps for corruption to take hold of the company. Each simulation timestep is related to the average time it takes for a bad apple to propose or communicate the corrupt practice to a peer and the incubation time it takes for the peer to start the corrupt practice. This could take anything

between a few days or a few weeks.

"Once corruption pervades an organization to the extent that it becomes an organization-wide phenomenon, it will almost certainly decay and die, resulting in enormous social and economic costs. For corrupt practices to diffuse widely within an organization, the [organizational culture](#) would necessarily be complicit."

The report's authors recommend companies screen for high-integrity individuals during the recruitment process, using specific integrity or honesty tests and general personality instruments, for almost all roles above the lowest levels, especially in organisations with several layers of management, to limit the risk of becoming overwhelmed by corrupt practices.

Other recommendations include advising companies to train up a small proportion of their workforce in whistleblowing principles and prioritising integrity as the key characteristic of high-level appointments after their study indicated the higher up the structure a corrupt bad apple is employed, the greater the likelihood, speed, and pervasiveness of corruption through its ranks.

The author's believe that companies, particularly those in professional services, may be reluctant to follow-up on their recommendations as they might interfere with other business priorities such as maximising profit.

Dr. Jonathan Pinto, Associate Professor of Organizational Behaviour and Negotiations at Imperial College Business School, said: "In order for corruption to spread in an organization the presence of bad apples is necessary but not sufficient. It is also requires the rest of the organization to be susceptible to influence.

"Corruption is more likely in a flat organization with few or no levels between management and staff level employees which supervises its' employees less and promotes their increased involvement in the decision-making process.

"However in a tall organisational structure, our research indicates that regardless of the location of the initial corruptor in the hierarchy, the corruption spreads rapidly through the organization and results in a large proportion of the [organization](#)'s workforce getting corrupted. The fact that flatter structures have looser couplings, with employees enjoying more autonomy from management, and departments being more isolated and independent may encourage corruption to initially take hold but could also act as a barrier to the pervasion of the corrupt [practice](#) throughout the whole firm."

More information: Maziar Nekovee et al, Modeling the impact of organization structure and whistle-blowers on intra-organizational corruption contagion, *Physica A: Statistical Mechanics and its Applications* (2019). [DOI: 10.1016/j.physa.2019.01.140](https://doi.org/10.1016/j.physa.2019.01.140)

Provided by University of Sussex

Citation: Corruption contagion: How legal and finance firms are at greater risk of corruption (2019, April 24) retrieved 11 July 2024 from <https://phys.org/news/2019-04-corruption-contagion-legal-firms-greater.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.
