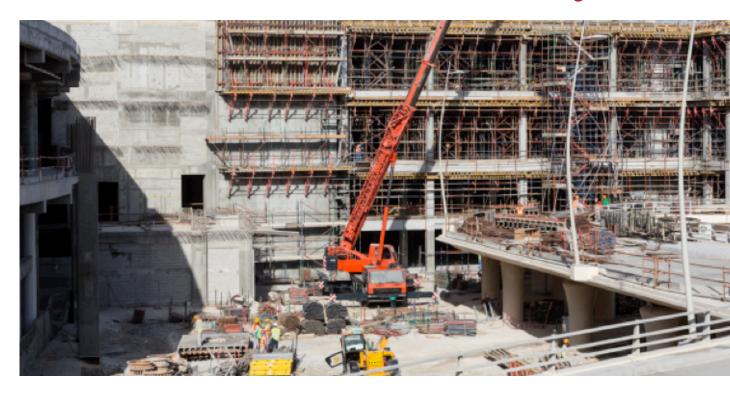
Engineering and construction sector analysis of PwC's 2014 Global Economic Crime Survey

Fighting corruption and bribery in the construction industry



49%

Nearly half of respondents reporting economic crime say it includes bribery and corruption. That's the highest level of any industry.

76%

Asset misappropriation tops the list of types of economic crime experienced by engineering & construction respondents.

70%

Seven out of ten of the most serious economic crimes suffered by engineering & construction companies were perpetrated by insiders.



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Key highlights

Engineering & construction sector survey responses

Crime rates are increasing... 33% have suffered economic crime during the survey period, slightly fewer than across all industries—but significantly up from a low of 24% in 2009, which may be due to an increased level of corporate requirements to report economic crime.

More than one way to lose... Asset

misappropriation is still the primary type of reported economic crime, and at higher levels than across the total sample. But a whole range of other crimes are threatening too, from procurement fraud to human resources fraud to insider trading.

Bribery and corruption can have a pervasive impact... The engineering & construction sector has the highest rate of bribery and corruption of any industry. That's probably increasing the rate of other types of frauds too; for example, since bribes and related payments are not usually recorded accurately in financial statements, a corruption issue can quickly turn into an accounting fraud issue as well.

Some high growth markets can be high risk markets... Expanding globally brings opportunities, but operating in high corruption risk markets can bring additional challenges too. Engineering & construction companies are taking action to cope. Sometimes that includes being willing to walk away when corruption risks are too severe.

Controls aren't catching as many frauds... In most industries, corporate controls detect far more crimes than tips or whistle-blowing systems. Not so in the engineering & construction sector, where the rates are nearly even.

So there's room for improvement... for some companies, this should include implementing annual fraud risk assessments. In our view these can be a valuable addition to your economic crime fighting toolkit.

Engineering & construction companies face a threat from within... Compared to the total sample, far more perpetrators of the most serious economic crimes are coming from within the company. And over half are from senior management ranks. That indicates a serious problem, as fraud by senior management is more likely to pervade the entire organisation.

And need to get tougher on criminals outside...

When the most serious economic crime a company faced was perpetrated by an external party, engineering & construction respondents were much less likely to say their company took civil action, informed law enforcement or notified relevant regulatory authorities. And 31% of engineering & construction respondents say their company took no action at all against the main external perpetrator.

Consistent action can help drive change...

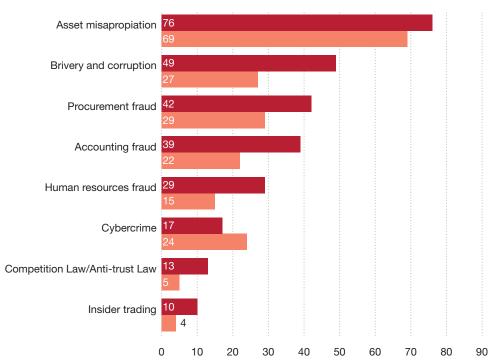
funding institutions and major client or owner corporations should codify best practice and act consistently when they purchase engineering & construction services in order to create equal opportunity and change attitudes towards forms of economic crime. Exposing corruption and communicating the negative impact on society of the waste of resources, public funds or loss of opportunity to improve standards of living should continue to provide a focus for everyone to support a consistent approach.

Economic crime continues to threaten the sector

Economic crime continues to be a significant issue for the engineering & construction industry. In 2011, economic crime was up significantly, rising to 31% from 24% in 2009. In this year's survey, that level has increased to 33%. That puts the sector slightly below the overall average. The engineering & construction sector is less regulated and has a greater proportion of private ownership than many other industries. Further, fewer incidents are detected through control mechanisms, compared to our sample overall. In our view it's likely that the sector may be failing to detect some incidents of economic crime.

By far the most commonly reported type of economic crime for the engineering and construction sector is asset misappropriation, with more than three-quarters of those executives reporting fraud saying they've experienced it within the last 24 months (see Figure 1). As was true across the overall sample, the other most common types of fraud included bribery and corruption, accounting fraud, and cybercrime. The engineering & construction sector also reported an unusually high incidence of human resources fraud.

Figure 1: Engineering & construction respondents are more likely to report many types of economic crime



% of respondents who experienced economic crime over the survey period; not all types of economic crime shown.

- Engineering & construction
- Overall sample

More than one way to lose

The engineering & construction sector has historically had a serious problem with asset misappropriation. Construction materials are relatively easy to steal and sell on the black market. Indeed, material losses have long been seen as part of the cost of doing business for contractors.

But while outright theft may seem like the biggest problem, other types of asset misappropriation can pose greater threats. Substituting inferior materials or knowingly failing to meet quality standards can be far more damaging than outright theft as it can potentially threaten the stability of the structure, be it a house, office building or bridge. Injuries or even death can be the result. The industry typically uses a large number of subcontractors and billing fraud—overstating the amount of labour, materials or equipment needed for a particular project—is common.

This year we included procurement fraud as a separate category for the first time. It's a significant problem and the engineering & construction sector is one of the industries most affected, with 42% of those reporting economic crime experiencing it. The crimes reported are happening throughout the entire process, from the invitation of bids, through vendor selection and vendor contracting, during quality reviews and during the payment process.

Again, some of the standard operating processes used in the sector are particularly susceptible to this kind of manipulation. One example is change orders, which may be used by contractors to recover costs during a project after a low bid has been accepted. Another is cost transparency where financial amounts or percentages for head office overheads, risk contingency and profit can be misconstrued or manipulated.

Bribery and corruption can have a pervasive effect

The engineering & construction sector is the industry most affected by bribery and corruption. Nearly half of respondents experiencing economic crime say it included bribery and corruption, far more than the next closest sector (see Figure 2). The nature of the construction industry, where the procurement of goods and services and the selection of contractors and suppliers on large-scale projects may be decided or influenced by individuals within an organisation, provides a number of opportunities for corruption and bribery.

This can be amplified by a lack of transparency or governance of the processes established to judge and report on the levels of performance and value for money actually achieved. In many circumstances, capital project owners may have difficulty establishing objective, defined criteria to determine the best contractor or supplier for a particular project. As a result, an environment still exists where individuals can influence the process and outcome.

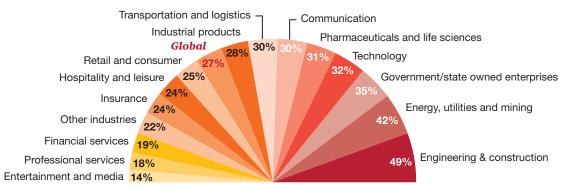


Figure 2: Reported bribery and corruption, by industry

% of all respondents who experienced economic crime over the survey period

The sector's high level of bribery and corruption may be having an impact on the rate reported of other types of economic crime too. For example, engineering & construction executives also report a higher-than-average rate of accounting fraud (39% vs. 22% overall). As bribes and related payments are not usually recorded accurately in financial statements, a corruption issue can quickly turn into an accounting fraud issue as well. Additionally, construction and engineering projects often use complex accounting estimates to record revenue, leading to potential irregularities.

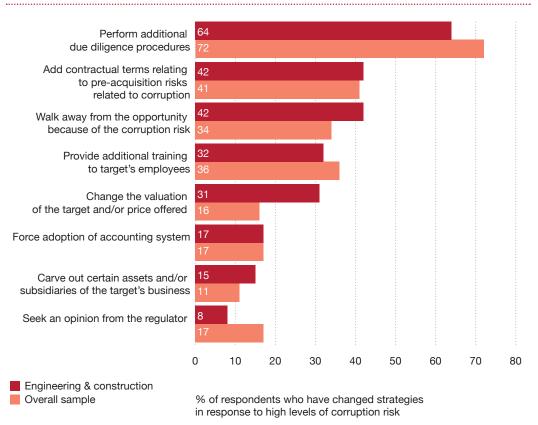
Many sector executives are aware of the threat bribery and corruption poses, particularly as it relates to operating abroad; 64% of engineering & construction executives see bribery and corruption as the highest risk of operating globally. More than one in four (29%) acknowledge that they've been asked to pay a bribe. And 38% say they've lost an opportunity to a competitor who they suspect paid a bribe.

Operating in markets with high levels of corruption risk

More than half of engineering & construction respondents say their companies have operations in markets with high corruption risks. That's not surprising due to the global nature of the industry -47% of engineering & construction respondents say they've pursued an opportunity in one of these markets in the past 24 months. But the challenges are changing how they operate; 44% of sector respondents pursuing growth opportunities in regions with high levels of corruption risk say they've needed to adapt their business strategies.

Just what are they doing? There's no one answer. As is true across the sample, additional due diligence is the most popular choice, although slightly fewer respondents say they'll make this change (see Figure 3). Many engineering & construction executives say they'll add contractual terms. And around a third are planning to provide additional training to the target's staff. But in some cases, even these efforts aren't enough. Forty-two percent of engineering & construction respondents say they walked away from an opportunity in response to corruption risk, more than across the overall sample (34%).

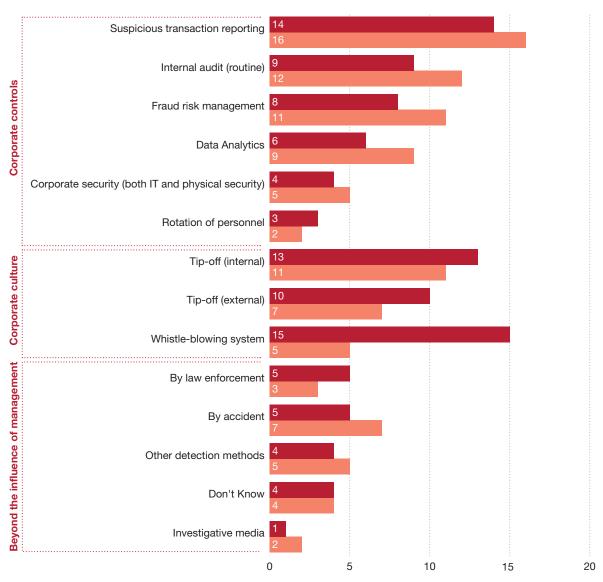
Figure 3: Changes to business plan or strategy in response to high corruption risks



More effective controls are needed

In most industries, corporate controls like internal audit, fraud risk management, and suspicious transaction reporting detect far more incidents of economic crime than whistle-blowing systems or tip-offs. Not so in the construction sector. While 43% of economic crimes were detected by corporate controls, 38% were discovered through whistle-blowing systems or tip-offs (see Figure 4).

Figure 4: Economic crime detection methods in engineering & construction organisations

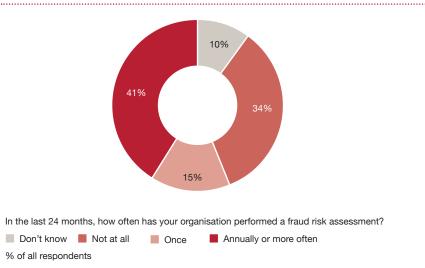


% of all respondents who reported economic crime over the survey period

Engineering & constructionOverall sample

Compared to our overall sample, fewer engineering & construction respondents say their companies conduct fraud risk assessments annually or more frequently. What's more, 34% of sector respondents say their companies don't perform assessments at all, and 10% don't know whether their companies do or not. For those who don't perform fraud risk assessments, the most common reason isn't cost—it's that respondents aren't sure what a fraud risk assessment is. We think there's a need for greater awareness. In our view enhancing such systems can be a valuable tool in a company's economic crime-fighting toolkit.

Figure 5: Only a minority of engineering & construction companies are conducting fraud risk assessments at least annually



Facing threats from within

The majority of perpetrators of the most severe economic crime faced by engineering and construction companies (70%) were internal actors. That's far above the overall average of 56%.

Presumably, there is a silver lining to having most of one's fraud losses attributable to internal players—you have a better opportunity to mitigate these risks through improved internal policies, processes and controls when the fraudster is someone employed by the company. Mitigating the actions of external criminals may not be so easy.

70%

of the most serious economic crimes in the engineering & construction industry were committed by internal perpetrators But there's a complication for engineering & construction companies, in that more than half of frauds are actually committed by senior management (see Figure 6). That's probably related to the high levels of bribery and corruption and procurement fraud seen in the sector; senior executives are more likely to be in a position to influence bids and manipulate contracts (for example contract terms, programme requirements, technical specifications or quantities required). That makes certain types of controls, e.g. levels of authority and segregation of duties even more important.

Dishonesty in the ranks can erode employee trust. Nearly a third of engineering & construction executives describe the impact their most serious incident of economic crime had on employee morale as 'significant'.

52% 28% 18% 2%
Senior management Middle management Junior staff members Other (please specify)

70% Internal perpetrators

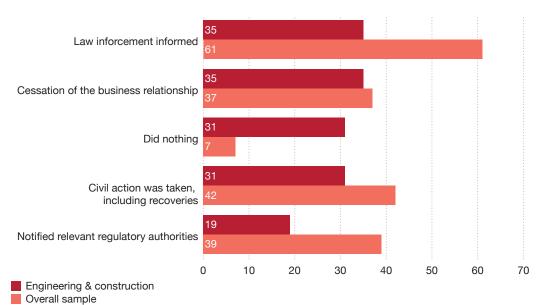
Figure 6: Engineering & construction companies need to fight the threat from within

Is the sector too soft on external perpetrators?

Once a perpetrator has been identified, what should companies do? To deter future crime and improve employee morale it's important to take action. For internal perpetrators of serious economic crime, the most likely result is dismissal; many engineering & construction respondents also say they are taking civil action or reporting perpetrators to the authorities.

But what about external parties? Engineering & construction companies were less likely to take action against the main external perpetrator of the most serious incident of economic crime they experienced. Far fewer engineering & construction respondents say their companies took civil action, informed law enforcement or notified relevant regulatory authorities (see Figure 7). Alarmingly, 31% of engineering & construction respondents say their company took no action at all against the main external perpetrator. This is most likely due to the impact on a company's reputation if it reports that it has suffered a fraud.

Figure 7: The engineering & construction sector is taking less action against external perpetrators of the most serious economic crimes



% of all respondents who reported that the most serious economic crime experienced by their company was committed by an external perpetrator

Looking forward

Given the global nature of supply chains and therefore the potential involvement of contractors and suppliers from many different countries, languages and cultures, the potential for economic loss (or fraud/corruption) is considerable. Moving forward, embracing and embedding the necessary behaviours requires funding institutions and major client or owner corporations to codify best practice and act consistently when they purchase engineering & construction services in order to create a "level playing field" and change attitudes towards forms of economic crime.

Whilst infrastructure is a vital element of socio-economic development, governance of public procurement is not only difficult to achieve consistently—outcomes can also be driven by political will. Companies choosing not to work with clients or suppliers that do not have a good track record of supporting anti-bribery and corruption measures will increase the speed at which the market changes. Exposing corruption and communicating the negative impact on society of the waste of resources, public funds or loss of opportunity to improve standards of living should continue to provide a focus for everyone to support a consistent approach.

Contacts

For more information on the Global Economic Crime Survey and the survey methodology, please refer to Economic crime: A threat to business globally at www.pwc.com/crimesurvey.

If you would like to find out more about the information contained within this report, or to discuss any issues around economic crime and how our team can help you, please get in touch with your local PwC contact or the sector report team:

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