WORKING PAPER – comments welcome

Redefining sectors: a more focused approach to tackling corruption
Mark Pyman

1. Introduction

This working paper describes a different approach to tackling corruption problems, grounded in 'sectors' rather than in public administration and national-level approaches. Reforms are more likely to get traction when there is an identifiable community – like within a sector – who will adapt generalised reforms to the particular circumstances of their profession and their sector. A sector approach also enables anti-corruption efforts to be framed as one of the means to achieving desired reforms within any given sector, rather than as a stand-alone 'corruption benefit'. The broader political and social environment will always be relevant, but by starting with the sector as the prime element of context – in all its functional, cultural and political detail – practitioners can thereby advance the depth of their analysis and plans. Showing that reform is possible in one or two sectors also puts competitive pressure on the ministries that don't reform. This approach has the potential to open up a huge resource of sector-based competence, shared knowledge and personal motivation.

Whilst making the case for sector approaches, this is not to say that the other approaches are not needed. Civil service, judicial, or fiduciary reforms may well be slower, messier, and less likely to succeed. But that can also mean that you need to have a two-handed strategy, encouraging sectoral reformers to push ahead and be pioneers, while the others are not let off the hook. For example, a health ministry reform will reach the boundary where general administrative weaknesses, such as lack of budgetary transparency or civil service recruitment constraints, limits their reform effort.

Each sector is defined broadly, both nationally and internationally. Nationally, it incorporates the relevant Ministry, other related public agencies and entities, the local commercial companies functioning in that sector, the sector professionals and their professional bodies, sector regulators, sector oversight bodies and civil society organisations in the sector. Internationally it comprises the global community of professionals in that sector, the international companies operating in the sector, and multilateral sector organisations (for example, the World Health Organisation in the health

sector). The international organisations, both government and corporate, are considered as having a responsibility to contribute towards curbing corruption in the sector.

Each application in a country uses a problem-driven approach, starting from a set of usual sector-specific corruption issues, with extensive discussion to identify which of the problems can be realistically be tackled and to put forward options for reform strategies.

This approach is for professionals and citizens who want to solve their own problems: doctors and patents that want to fix health corruption, engineers that want to fix construction corruption, police and citizens who want to fix police sector corruption. Yes, they need help – hence the need for expertise and initiatives across the sector. Yes, it's partial, because this approach does not promise to solve corruption either across the whole sector or across government, but that's the nature of incremental change. It will also not work where there is zero energy for reform. On the other hand, disaggregating and choosing the sector corruption issues to tackle allows a measured approach to pick off problems as they can be feasibly tackled. Sector strategies also have a place as the anchor of national anti-corruption strategies, as the UK has done recently (HMG 2017).

Here's a recent experience that is illustrative of a typical sector, health.

It is a summer's day in 2018 and I am sitting opposite the Minister for Health in a mid-sized, developed OECD country. Everyone in that room is familiar with the corruption in the country's health system. We have a good disaggregation of the corruption issues, an essential pre-condition for action (Heywood 2017). We have a thorough understanding of the all-important context: the daily experiences of citizens, the political interests that impinge on health, the professional interests of doctors and other trade bodies, the commercial interests of medical device manufacturers, the behaviour of regional authorities seeking preferential health facilities and the dynamics of politics at the national level. In short, the analytical and contextual work has all been done. There is readiness and capability to take action and there is political will, with the Minister really wanting to improve the performance of the health sector and the Prime Minister strongly supportive.

On the minus side, much-needed civil service reform is hopelessly stalled in Parliament, the judicial system is constrained by a process that allows ten years of appeals, and the major stakeholder groups, notably the doctors, the medical device manufacturers and the regional mayors, are politically more influential than the Minister. Any single group of these could be challenged, but the likelihood of success against them is low. Within the health system there are multiple staff communities whose interests are not served by reform, even if only because of the burden of additional work, and they are experienced in resisting reform.

After much discussion of the thirty or so health corruption issues, the most realistic strategy seems to be a two-part one. First to show the seriousness of intent by tackling two very public corruption issues – patients who are waiting for an operation jump the queue by bribing the surgeon, and doctors who claim to be available in the hospital but who are away at private practice. Second, to tackle a narrow set of necessary structural improvements: simplified management information, medicine stock management, introduction of clinical auditing, stronger controls over outside health agencies.

This scenario has many positive aspects - the energy of the officials, the step by step approach, the realism at what can/cannot be solved, and the active involvement of the sector regulators; certainly, more than situations where most of those in power are directly benefitting from the corruption. The story nonetheless shows up three features often overlooked in anti-corruption proposals: 1) Those responsible have a very good understanding of the context, they do not need any more analysis; 2) The discussion was fruitful largely because there was a strong underlying structure (the typology of health corruption issues); and 3) Getting to a conclusion on the preferred strategy is a messy, detailed, political discussion of multiple options and no easy preferences.

The story also reinforces a widely learnt lesson about bureaucracies: they are remarkably hard to change. Evidence across many sectors and countries shows that 70% of all efforts to change organisations fail (e.g. Deloitte 2013).

2. Sectors - defining the functions & structures of national life

Sectors are defined as *the individual structures and functions through which national life operates.* Structures include the legislature, the judiciary and the civil service. Functions include public functions, such as health, education, policing and public financial management; economic functions, such as agriculture, telecommunications, mining, construction and shipping; and the multiple public-private functions that span both public and private, such as sport, infrastructure projects, tourism and land management (Heywood and Pyman 2018). A Sector comprises some or all of the following: one or more professions, a government Ministry, multiple government organisations and agencies, multiple commercial organisations and the relevant industry associations; one or more multilateral organisations concerned with international application; and a functional or market regulatory authority.

This is a deliberately broad definition, broader than the earlier proponents of sector-based corruption reform (e.g. Spector 2005, Campos and Pradhan 2007) and broader than economist definitions.

This type of broad sectoral approach is intended to be more detailed than national level approaches, yet broader than defining the sector as the relevant government ministry. It is intended to respond to the sector focus proposed a decade ago by Mushtaq Khan: '*For this reason, a study of interdependence should focus on specific sectoral questions because interdependencies at a very broad level of aggregation often do not have clear policy responses. At the highest level of aggregation (the developing country as a whole), there are so many interdependent institutions and governance capabilities that are either weak or dysfunctional that policy effectiveness would require too many difficult problems to be simultaneously fixed*' (Khan et al 2010, p10).

2.1 Professions and professional associations

There is great functional complexity and correspondingly deep professional expertise in each of the structures and functions of modern life. This is a core reason why one of the approaches to reducing corruption needs to be at sector level. The technical issues and the incentive structures in each sector are quite different, meaning that the safeguards and controls against corruption are likely to be largely different between sectors.

Hidden therein, is also a huge advantage to the sector approach: this approach allows a direct appeal to the involvement of the particular professions involved in the sector - engineers, doctors, nurses, judges, architects, and so forth – to help with fixing the problems, and to work with their pride and professionalism. Such pride can be a major motivator of reform, however corrupt the environment (Pyman 2017).

However, in other situations, the professions and their professional associations will be the principal opponents of corruption reform; the doctors in the health ministry story discussed above, for example. This does not invalidate the importance of working with the professions – large groups usually comprise groups with very different views – but it does serve as a reminder of the necessity of a nuanced understanding of where the support is.

2.2 Government organisations, commercial organisations and the relevant industry associations

Today, almost every area of national life includes public elements, private elements and regulatory elements. For sure, some areas may be largely public (such as taxation and policing) whilst others may be largely private (such as fisheries or tourism), but *the co-mingling of public and private is central to most areas of public policy today.*

However, this binary division into private and public sectors has persisted. For example, in the formulation by Jeremy Pope (2000) of Tl of the influential National Integrity System, which identified eleven pillars of integrity: Legislature, Executive, Judiciary, Auditor-General, Ombudsman, Watchdog Agencies, Public Service, Media, Civil Society, Private Sector, International Actors (expanded to 13 pillars in 2012 with the inclusion of Law Enforcement Agency and Electoral Management Body). This holistic concept of an integrity framework was advanced for its time and is again a current concept in 2019 (OECD 2017). However, the pillars were unbalanced, with a bias towards control/monitoring and away from effective functioning of mainstream institutions. This bias perhaps reflects a particular perspective on corruption and business, in which the dominant reform concept is that of controlling bad behaviour, rather than of improving the effectiveness of organisations: this perspective might have come from the influence of lawyers, journalists and civil society in the initial development of the corruption narrative.

2.3 Multilateral organisations and international dimensions

Many sectors have international bodies that have expertise which is available for use by its member states and to support them in their decision-making: Health has the World Health Organisation (WHO), Customs has the World Customs Organisation (WCO), for example.

These multinational organisations have the potential to play a major role in working internationally with governments and companies in the sector to reduce corruption. Some are active in this role, others are not. Some have global controlling authority over the sector, such as the International Civil Aviation Organisation, whilst others are primarily representative, such as the International Maritime Organisation (IMO) in shipping.

Besides working with these institutions, reform almost always has international dimensions. There is a need to exchange knowledge about international companies in order to understand their strengths and vulnerabilities. Proceeds of corruption are increasingly laundered internationally.

2.4 Government ministry and regulatory authority

Though it is not a formal part of the definition that a sector should have its own ministry and minister, nor that it should have a regulatory authority, most sectors in a country are likely to have both. The Ministry, through the formal leadership of the Minister, has major roles to play in seeking to understand corruption risks and working to prevent and control corruption. The regulatory authority has great scope to be active in controlling corruption, separate from any anti-corruption agency.

Finally, the political environment and the nature of the polity is of course a major factor in influencing corruption reform, but it does not define the sector. The fundamental Montesquieu division of a modern state between the Executive, the Legislature and the Judiciary may or may not be reflected in practice, but for the purpose of corruption reform we think of each of these as just separate sectors with their own weaknesses and vulnerabilities.

2.5 A working list of Sectors

The box below lists a working list of sixty individual structures and functions through which national life operates, relevant for corruption reform (CurbingCorruption 2019a). The list has been grouped for ease of reference into a number of functional categories.

A working list of Sectors

		Natural Resources	**Religious organisations**
Executive, Legislature & Politics		Agriculture	
Office of President, Prime Minister	**Financial**	Climate & Environment	**Military and Defence**
Parliament	Public Financial Management	Commodities trading	
Electoral Management Bodies	Taxation	Fisheries	**Culture, Heritage & tourism**
Political Parties	Central Bank operation	Forestry	
	Financial & fiscal oversight	Land	**Non-sector oversight**
Security, Public order, ROL	Banking	Oil, Gas &Mining	A-C Agency
Judiciary and courts	Investment Services	Wildlife	Civil Society
Policing	Insurance Services		Declaration of assets agency
Law Enforcement	Financial Services	**Other - government**	Media
Prisons		Foreign Affairs	Ombudsman
Prosecution	**Utilities**	International aid	Supreme Audit Office
National Security	Aviation	State owned enterprises	
Borders, customs & immigration	Electricity & power		**Sport**
	Infrastructure		Sport associations
Public services	Land Transport	**Other - commercial**	The Olympics
Education &	Shipping	Professional services (eg legal)	
Higher Education	Telecommunications	Chemicals	**Horizontal sectors**
Health	Water & Sanitation	Consumer Goods	*Civil service*
Social Protection		Manufacturing	*Public procurement*
			Local government

Each Sector comprises some or all of the following: Ministry, Government organisations & agencies, Commercial organisations, relevant industry & professional associations; sector-related international & multilateral organisations; Functional or market regulatory authority; sector professions.

Clearly no list can be definitive, and the sixty above are above all a pragmatic selection. In addition, three major activities – civil service, public procurement and local government – do not fit neatly into the sector definition. For now, they are listed here as 'horizontal sectors' because, though not naturally sectors, they form discrete activities and form the traditional backbone of public administration.

Having clarified the sector, the next step is to provide much greater clarity and uniformity on what are the 'corruption issues' in the sector.

3. Identifying the base set of sector corruption issues

People use a variety of terms for the corruption problems, largely interchangeably. Common ones are corruption issue, corruption problem, corruption type, corruption vulnerability, corruption threat and corruption risk. In general, people use the variants containing 'vulnerability', 'threat' and 'risk' to point to possible manifestations as opposed to actual occurrence of corruption, or sometimes as more palatable synonyms. In this working paper we use the term 'corruption issue', meaning a systemic, regulatory, institutional or other weakness that creates opportunities for corruption to occur, and regard all six terms as synonyms.

3.1 Identifying and codifying the sector corruption issues

The core 'content' of the sector specific approach lies in identifying the full range of corruption issues in that sector. That these are markedly different from one another is illustrated in a nice analogy from Rothstein and Varraich (2017, p45): 'Biologists classify hummingbirds, hens, eagles and ostriches all as 'birds' despite the fact that they are, to say the least, quite different birds'.

For example, in the defence sector, Transparency International defines twenty-nine distinct corruption issues (Pyman 2017). Through discussions with military officers, ministry staff, academics and civil society in multiple countries over several years, the list of issues had become stable, even across very different national and political environments.

One way to make the first cut of the sector or sub-sector typology, is to identify the likely sector corruption issues within each of the basic sub-categories of policy, finance, human resources, procurement, operations. The number of issues can at this point be as large as it comes out to be. Then you can consider if some other set of system sub-categories for that sector (like the ones from WHO, discussed above) might be more useful than the basic sub-categories. Third, read the literature to see who else has outlined corruption issues for this sector/sub-sector and merge them with your list; and, finally, bring the number of issues down to between 20 and 50.

There could, of course, be an infinite number of corruption issues, disaggregated endlessly. The author has found, however, that in practice having a list of issues that fits easily and legibly on a single page is a powerful way to stimulate discussion and seems to cover most of the scope for reform. This strikes a pragmatic balance between the desire for detail and the practical problems of having too much choice. The founders of the 'Balanced Scorecard' made a similar point about pragmatism, which contributed to the rapid uptake of that concept (Kaplan 2010)

The resulting listing of the corruption issues within any one sector is termed a 'Sector typology'. The typology for the education sector as discussed here is shown below (CurbingCorruption 2019b):

Corruption typology – School education

CENTRAL - POLICY

Misdirection of education budgets

Misallocation to agencies, projects

Over-ambitious curriculum

CENTRAL - TEACHERS

Teacher recruitment

Teacher promotion, posts, exit

Licenses & authorisations

Allocation of teacher allowances

Teacher training (TT): selection

TT: grading, exams, graduation

CENTRAL - PROCUREMENT

Textbook printing and distribution

Infrastructure contracts

School repair and maintenance

Improper contract management

FINANCE & CONTROL

Leakage of central education budgets

Leakage of new project allocations

Theft/control of education assets

Bribes to auditors and monitors

AT SCHOOLS INDIRECT IMPACT

Accepting high absence levels

Teachers bribe for good postings

Schools used for private purposes

Theft of school budgets

Theft of locally raised funds

High prices for meals, uniforms

School food, repair, maintenance

Resources allocated by politicians to favoured schools

AT SCHOOLS DIRECT IMPACT

Payment to obtain a place

Payment to get good grades

Payment to receive exam results

Payment for exam certificates

Payment for exam questions

Payment for others to do the exam

Payment from discriminated students

Requiring use of certain textbooks

Duress payment for private tutoring

Duress to work for free for teachers

Teacher requiring sexual favours

Each issue is expressed in an abbreviated way so that practitioners can see the totality of
the issues on a single page. Typologies for other sectors using this same codification
approach, and with more expansive explanations of each of the corruption issues, can be
found for defence, electricity and power, health, land and policing (CurbingCorruption
2019c). The same approach can be applied to sub-sectors: Within the health sector, for
example, there have been analyses of sub-sectors such as pharmaceuticals and maternal
health.

The sub-headings used in the table usually vary from sector to sector. In health, for
example, a good approach is to use the six major health systems building blocks as defined
by WHO (2007) and USAID (2017). These are: Health system delivery, Leadership and
Governance, Health Workforce, Medical products/Vaccines & technologies, Health
financing and Health informatics. In another sector, a different set of categories will be
appropriate (e.g. See Masters (2015) and Graycar (2015) for an application to corruption
reform in sport).

3.2 Context

Context is all-important. In this sector approach we deliberately separate that context into
two components: the context within that sector, and the broader context.

In each sector the cultural, functional, economic and political contexts will be distinct. For
example, the culture that determines the nature of a favouritism issue in the education
ministry is likely to be different from the culture in the oil and gas ministry. Even where
the core process, like recruitment or procurement or policy making, is common across
sectors, the reform measures are likely to be different. This difference between sectors also
likely relates to ownership of the reforms. Reforms are more likely to get traction when
there is an identifiable community who will adapt generalised reforms to the particular
circumstances of their profession and their sector.

The second element of context, the broader political and social environment, will always
be relevant: reformers always need to be 'thinking and working politically' (Hudson et al
2018). But by starting with the sector as the prime element of context – in all its
functional, cultural and political detail – practitioners can thereby advance the depth of
their analysis and plans.

These differences between sectors also provide some opportunity for clean working
despite a hostile broader political environment. For example, in mining, some of the better
mining companies are very corruption risk averse and they take steps to ensure that their
operations are corruption-free, despite a broader political environment where corruption is
the norm.

Out of this phase comes understanding of each of the corruption issues and what is
involved in tackling each one. But this is not yet close to representing a strategy. The most
serious corruption issues may be too hard or too infeasible to tackle; conversely, tackling
the smallest problems may have the most public impact, in giving people hope that at least
some progress may be possible. Hence, we come to the next two phases – making sense of

the merits of alternative priorities, and then thinking through alternative possible strategies.

4. Sense-making: Using a problem-driven approach to prioritising corruption issues

Meaningful discussion of open system problems such as corruption issues is not easy to facilitate or to guide towards conclusion. The big purpose of the sector typology presented above is that it is can function as a powerful tool for encouraging deep discussion of the nature of each of the corruption issues in that sector/country/region. It is easily comprehensible – just one page. It is quickly and easily modified if there are local corruption issues that need to be more visible in the typology.

There is a straightforward sequence of questions that relate to the assembly of issues: Which are the most common corruption issues? Which have the most impact on service delivery? Which are the costliest? Which cause the most distress with citizens? Which issues can be most easily fixed? Do some have common solutions?

The underlying analytical approach for this discussion is that of sense-making, which is the process by which people give meaning to their collective experiences. The concept was introduced in the 1970s by Weick (2001), as part of a movement that shifted thinking about organisations away from decision-making and towards how peoples' understanding drives organisation behaviour. It has been particularly influential in providing insights into how organisations take action in uncertain or ambiguous situations. More recently the subject has come up in the corruption reform literature in the guise of complexity thinking and problem-driven analysis (e.g. Bridges and Woolcock 2017 as applied to World Bank anti-corruption experience in Malawi).

Another sense-making approach to corruption reform is used by Klitgaard (1988, 2019), under the title of 'Convening'. In this recent work with the IMF, he gives the example of working through the corruption issues with the leadership of the Philippines in 2010 (see also Sidel et al 2014).

These typology discussions are not simply an analytical exercise. On the contrary, they have power to build a deep shared understanding on the most pressing corruption issues in the sector. You use this discussion to reach agreement on the relative magnitude of each issue, their relative political priority and feasibility, and which ones to leave until later. This is how you build shared knowledge across your sector leadership and stakeholders of the issues and the priorities.

The author has experience of using this approach in many countries using a facilitated, open format as part of a day-long leadership event. Once the group has determined that it is politically safe to talk about this subject, they usually then do so with clarity and perceptiveness. Here is an example from the defence sector in an African nation. The leadership group, some thirty Generals and top Ministry of Defence officials, discuss the defence typology page - 29 defence corruption issues in all - to identify the issues that should be taken most seriously. After discussion, the group participants 'vote' to show

their top five priorities. In this case they are illicit control of the intelligence services, favouritism in pay and promotion, improper tendering of contracts, improper disposal of military assets, and disregard of corruption in any country to which they are deployed. A similar exercise in an Asian country, based on the deliberations of 100 senior Colonels, was equally explicit on the scale of the issues and their relative priority for reform. They too voted on the top corruption issues, which proved to be the illicit use of secret budgets, awarding contracts without competition, and favouritism in pay and promotion (Pyman 2017). In these two country cases the leadership group felt secure enough to vote openly on the issues. In more sensitive environments the voting is done by writing the issues on closed paper slips, which the facilitator then collates.

A quite different application can be seen in a major analysis of corruption vulnerability in the Education Sector in Afghanistan (MEC 2017). The typology shown in Section 3 above was used as the basis for the analysis, which consisted of 540 interviews in the ministry and in schools across the country. The result was that one particular issue was by far the most serious – the nepotistic appointment of teachers across the country – in priority to other corruption problems such as corruption in school construction.

5. Objectives, reform examples and possible strategies

Let us pick up again the example of the health minister from the introduction. The Minister wants to move from analysis to strategy: "Should we tackle the political issues first, or the technical weaknesses, or the easiest problems?" "Should we be aggressive about reform or low profile, broad or targeted?" But the starting point is a little earlier: What is the objective of this reform?

The answer might be obvious for a small project, like eliminating the unofficial payments to officials for services that should be free. But on any larger scale, the objective needs some thought and is often not obvious. ***The key point is that reducing corruption is usually not the main objective***. ***Many would assume this to be the core objective of an anti-corruption strategy. But reducing corruption is more usually a means towards more widely desired policy objectives, such as improving service delivery for citizens, rather than the desired end result in itself***. This is true both for nations at peace and for nations in states of conflict.

A recent analysis of national-level anti-corruption strategies from 41 middle income countries reinforces this point, identifying a curious array of objectives stated in the various country strategies. These included the following: To improve service delivery; to improve national reputation, to improve the nation's ranking in the CPI, to strengthen democracy/ transparency/ integrity, to improve economic prosperity, to improve economic competitiveness, to strengthen national security, to be aligned with international anti-corruption standards, and to gain accession to the EU (Pyman et al 2017, 2018).

5.1 Gaining insight into other reforms

Practitioners want to see examples of reforms used elsewhere in their sector. Not so that they can absorb 'best practice' – because circumstances and context are always different –

but to give them ideas on which they can brainstorm the development of their own solutions. It is hard to overstate the importance of this.

Professionals in many sectors learn by studying how others in their profession have tackled problems in the past. In the military, for example, officers learn by studying past campaigns, all the way back to the Greeks and the other ancient empires. It is nonsensical to think of this as 'best practice'! For professionals in most sectors, corruption is a poorly understood phenomenon, one that they had no experience of working with during their professional education and training: as a result, they do not have the mental models of what could be used or how. This is why sector examples from elsewhere are so important, much more so than just in generic prescriptions of 'transparency' or any other reform approach.

If you have not already done this exercise yourself, there is an extraordinary paucity of reform stories. We do not really know why this should be so. There are multiple reasons for not writing up progress, not least that progress is always partial, political, and fragile. Partial success is a poor, easily criticized narrative and it is so much easier to comment on the failure cases (Boamah and Pyman 2019, Boamah 2019). On the other hand, a good example inspires many. The success that the container company Maersk had in stopping the multitude of cigarette and whisky payments that had to be made to officials as their ships come into port is one such example. They had a clever mix of negotiation training of the key authority figures (the ships' captains), strengthening onshore resolution capability in local offices and an IT system to track the gifts being given out (See Pyman 2019a).

It also helps reformers to simplify the types of reforms. Here are the eight reform categories used by CurbingCorruption (2019d):

1) Functional reforms: improving institutions, public financial management, systems and controls
2) People-centred approaches: working directly with affected communities; building networks and coalitions of supporters
3) Monitoring approaches: strengthen oversight groups and their independence, whistleblowing
4) Justice & rule of law approaches: prosecuting, raising confidence, improving laws
5) Transparency reforms: making visible what others wish to keep hidden
6) Integrity reforms: motivating, instilling pride and commitment
7) Civil society and media approaches: creating space for external voices
8) Incentives, economic theory and nudge approaches: aligning stakeholders, economics, small changes

5.2 Possible strategies

Similarly, a limited palette of categories can be set out as the starting point for choosing strategy options. It is not helpful to tell the Minister or the reform group that there are an infinite number of possible strategies. Options include the following:

1) Incremental reform 1: Multilateral organisations usually advise that you should choose incremental change (e.g. EU 2017 p211). The research from sense-making

also directs us towards recasting large problems into smaller ones. Weick (2001, p427). The current international community working with Myanmar are following such an example (Chung 2019).

2) Incremental reform 2: Start with small changes so as to build momentum and credibility, moving on to larger change projects if the first smaller ones go well and/or if opportunities emerge for a sudden larger change. Academic research has identified this approach as the more common route to success: 'change will occur gradually and punctuated equilibria will be the rule' (Mungiu-Pippidi and Johnston 2017, p76).

3) Radical reform 1: But there are also powerful arguments for the opposite approach. When there is a political dimension to the corruption issues and a political opening happens, you may have that one chance to make a significant change. This is especially the case when there are large changes such as an election, or the disgrace of a major political figure, or a national disaster aggravated by corruption. Similarly, if the anti-corruption messages are part of the reason for coming into power, there is a need to show rapid change before the electorate becomes disappointed.

4) Radical reform 2: There are also arguments for large-scale change when there is no major political angle. Staff in large organisations can become expert at subverting change initiatives, whether in a global commercial organisation or in an Afghan ministry. Making a large, sudden step change can be a smart way to avoid such subversion. This could be on a micro scale, such as secret planning to remove the chief corruption perpetrator inside a directorate, or on a larger scale such as cutting off large pieces of an unreformable Ministry so that each can be tackled as more manageable chunks. The successful national-level corruption reforms in Georgia and Estonia were both through large-scale, rapid change (and against the advice of international organisations).

5) One-signature-issue strategy: A health example might be to tackle the way that people can bribe their way to the top of a surgery waiting list. Success would be seen as a big result, even if all the other bigger and harder issues are left untackled.

6) Using the language of 'Integrity' rather than corruption: The NATO defence sector anti-corruption initiative, for example, was branded 'Building Integrity' from its start in 2007, despite the scope covering a tradition scope of corruption reform (NATO 2019).

7) Media-centred strategy: Ignoring the media can be a strong predictor of failure. Research on 471 corruption reform projects in eastern Europe showed that strategies which do not integrally involve the media had little impact (Mungui-Pippidi 2015, p172-4).

8) Sector Monitoring strategy: Rather than tackle the substance of the issues directly, an alternative strategy is to set up dedicated monitoring of the corruption reform in the sector. Possibly using sector-specific NGOs specifically established for the

purpose: see, for example, the quarterly monitoring teams established by MEC in
Afghanistan to monitor progress in health, education and the attorney general's
operations (MEC 2019).

It goes without saying that the possible strategy options depend markedly on the strength
of political support that the senior reformers have. If the Minister has the strong support of
the Prime Minister, then more can be achieved than if their support is lukewarm or non-
existent. The Health Ministry example is one example, as have been some of the
Afghanistan sectoral reforms under President Ghani this working paper (e.g. Pyman and
Kaakar 2018). On the other hand, reform is still possible without 'to-cover', though it has
to take different forms. Some of the defence reform examples showed this effect, such as
in the Ukraine security service in 2011, where the reformers were rather precisely aware of
what they could hope to change and what they could not in their environment of minimal
top-level support (Pyman 2017).

6. International support, guidance and direction

In the introduction we made the point that the international organisations in the sectors,
both government and corporate, are considered as having a responsibility to contribute
towards curbing corruption in the sector.

What might we most want from international cooperation in sector corruption reform? A
strong answer would be if there could be a set of regulations and operating guidance that
more or less eliminates corruption from the sector. It would probably act by specifying
what the equivalent sector organisations at national level would need to follow and to see
this applied rigorously in every country in the world.

One possible example could be in relation to the problem of falsified and substandard
medicines in the health sector, where transnational cooperation might take a very strict
approach. Perhaps the most extreme example, and therefore perhaps an outlier, is civilian
aviation operations. There are corruption concerns in the aviation sector as a whole –
related to buying, selling and financing commercial aircraft, and in relation to the many
related support services (Control Risks 2018) - but there are very few in the subsector of
civilian aviation operations, the control of planes flying round the world. This lack of
corruption is due not to anti-corruption efforts but to an intense focus on safety. Aviation
has a strong international body (ICAO) which sets the standards for all the equivalent
national organisations in all the countries of the UN. This body has a sophisticated and
directive approach to analysing and eliminating threats and hazards of whatever kind from
aviation operations (Civil Aviation Authority 2013). This aviation operations example
represents one end of the spectrum, where there are strong global rules which dictate how
the sector operates and those rules are strictly obeyed.

Below this are global organisations but without any regulatory mandate and a mixed
interest in curbing corruption:

- Sectors where there is a recognised global body for the sector, but it does not
  'regulate' nations. As a generality, none of these bodies have a strong voice on

controlling corruption, though they can mostly point to anti-corruption initiatives. Examples include the WCO for customs (2019), IMO for shipping (2019) and IIEP-UNESCO for the education sector (IIEP-UNESCO 2019). Mostly these are small, narrowly focused initiatives. Promisingly, WHO (2018) has a new networking initiative for anti-corruption for the health sector;

- Sectors where the international bodies are representative rather than authoritative, and/or represent only a certain part of the sector. They too usually do not have a strong voice on controlling corruption. Examples include the Geneva-based Centre for Security Sector Governance (DCAF) collating good practices in police corruption reform and integrity strengthening;

- Organisations for local government sector reform, such as the Open Government partnership's 'Local' programme, the Council of Europe's Centre of Expertise for Local Government Reform, and UN Habitat (2006).

Next is where there is no relevant multilateral body, but there are one or more multi-stakeholder initiatives:

- Some seek to set standards in specific components of the sector. E.g. the Extractive Industries Transparency Initiative (EITI) in the oil/gas & mining sector with 52 nations as members, and the Infrastructure Transparency Initiative (COST) in the construction sector.

- Some seek to share good practice sharing rather than setting standards. E.g. the OECD Water Governance Initiative sharing good practices in the sector, a sector-specific NGO (WIN), water regulators and water companies (OECD 2019).

- Some are tightly focused on corruption reform in the sector. Examples include TI's Defence and Security programme in the defence sector (Transparency International Defence 2011, 2015a, b, 2018), TI's programme in the health sector, and the Fisheries Industries Transparency Initiative (2018) in the fisheries sector (CurbingCorruption 2019e).

Next is where there are academics, working individually or in small groups, on corruption reform in particular sectors. Examples include Professor Vian in Health, Professors Kutnjak Ivkovic, Newburn and Prenzler on policing.

Lastly, there are the sectors where there is currently little or no focus on tackling corruption in the sector. Examples include agriculture, culture heritage & tourism, electricity and power, religious organisations, telecommunications.

Besides the sector-specific entities above, the bilateral and multilateral aid organisations are also active, with their own sector teams. Several of them have been active funders of some of the above initiatives. But they also have work to do to improve in this sector space: most of them have separated anti-corruption efforts out to 'governance' and hence removed the topic from the mainstream sector teams. As a result, their depth of knowledge and their options to develop sector-specific responses are not being developed as they might.

Finally, the other tool in the international community is the use of indices to indicate comparative progress or decline. A major advantage of the sector approach is that it is possible to construct indexes of how thoroughly each country's sector has set itself up against corruption. This is not yet commonplace, but enough work has been done to know that the methodology can be sound and the results useful in practice. The defence sector has the most data and a robust methodology – detailed comparative data on 130 countries in the 'Government defence Index' and 165 Companies in the 'Companies Defence Index (Transparency International 2015a, 2015b,). These date from 2012 and TI is currently carrying out the third iteration of the two indices. Indices for other sectors, notably Health and Education, were developed some years ago by Global Integrity. In the defence sector, these indices have been having a significant effect in driving change in both the countries and the companies (Pyman 2017). These metrics though, really need to be owned by independent entities, preferably NGOs, as established multilateral organisations will not be keen to criticise member states.

7. Optimism bias and concluding thoughts

We have all learnt to be modest when it comes to our hopes in tackling corruption. As one of today's most renowned anti-corruption researchers puts it, we are in the domain of 'great expectations and humble results', (Mungui-Pippidi 2015, p207). The approach put forward in this paper will not, and is not intended to, replace other approaches, such as national-level or governance-focused approaches. This sector approach may yet prove to have disadvantages that we cannot yet see.

Nonetheless, perhaps confirming the eternal optimism-bias of the committed practitioner, this author is hopeful that the anti-corruption community, globally and locally, is in the process of moving into a new phase. One vision is that each sector will develop an ecosystem of anti-corruption and integrity entities: a vibrant network of professionals in the sector anchored by some neutral body (like OECD's Water Governance network), a strong industry grouping in the sector (like the Marine Anti-Corruption Network in the shipping sector), a strong NGO with sector expertise (like Transparency International Defence), a multi-country sector initiative among enthusiast countries (like EITI in the extractives sector), a robust index that compares all the countries and companies in that sector (like the two TI defence indexes), and a global regulator/coordinator/standard setter for anti-corruption in the sector housed in an established multilateral sector entity (no candidates have emerged yet).

What is not in doubt, I believe, is that there is a huge resource of sector-based competence, knowledge and personal professional motivation that has yet to be applied to anti-corruption. As those in each sector, both public and private groups take the responsibility for corruption in their sector and fixing the problems, anti-corruption efforts have the potential to grown dramatically larger than we have seen to date.

Mark Pyman *Redefining sectors: a more focused approach to tackling corruption* Working Paper

References

Boamah, Festus (2019), 'New perspectives on corruption reform in the electricity sectors of Kenya and Ghana', accessed 20 August 2019 at https://curbingcorruption.com/wp-content/uploads/2019/08/190812-Boamah-New-Perspectives-Kenya-and-Ghana.pdf

Boamah, Festus and Pyman, Mark (2019), 'Usain Bolt meters: reform successes in the electricity sector can go fast, but only the failures are reported', accessed 16 Sept 2019 at https://ace.globalintegrity.org/usain-bolt/

Bridges, Kate and Moorcock, M (2017), 'How (not) to fix problems that matter: assessing and responding to Malawi's history of institutional reform'. Accessed 16 Sept 2019 at http://documents.worldbank.org/curated/en/349361513957973588/How-not-to-fix-problems-that-matter-assessing-and-responding-to-Malawis-history-of-institutional-reform

Campos, J Edgardo and Pradhan, Sanjay (ed.) (2007), *The many faces of corruption: Tracking vulnerabilities at the sector level*, The World Bank, Washington DC.

Chung, Heesu (2019), 'Local Government Sector – Myanmar Case Study', CurbingCorruption. Accessed 16 Sept 2019 at https://curbingcorruption.com/wp-content/uploads/2019/07/190710-CurbingCorruption-Myanmar-research-report-Heesu-Chung.pdf

Civil Aviation Authority (2013), 'Bowtie risk assessment models', accessed 19 August 2019 at https://www.caa.co.uk/Safety-initiatives-and-resources/Working-with-industry/Bowtie/About-Bowtie/Introduction-to-bowtie/

Control Risks (2018). Accessed 16 Sept 2019 at https://www.controlrisks.com/our-thinking/insights/anticorruption-compliance-in-aviation

CurbingCorruption (2019a), 'Sectors'. Accessed 16 Sept 2019 at https://curbingcorruption.com/sectors/

CurbingCorruption (2019b), 'The Education Sector', accessed 21 August 2019 at https://curbingcorruption.com/sector/education/

CurbingCorruption (2019c), 'Sector typologies'. Accessed 16 Sept 2019 at https://curbingcorruption.com/corruption-types/

CurbingCorruption (2019d), 'Reform strategies'. Accessed 16 Sept 2019 at https://curbingcorruption.com/reform-approaches/

CurbingCorruption (2019e), 'Fisheries Sector'. Accessed 16 Sept 2019 at https://curbingcorruption.com/sector/fisheries/

Deloitte (2013), 'Demystifying change management'. Accessed 16 Sept 2019 at https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/public-sector/lu-demystifying-change-management.pdf

European Commission (2017), 'Thematic factsheet: Fight against corruption', accessed 19 August 2019 at https://ec.europa.eu/info/sites/info/files/file_import/european-semester_thematic-factsheet_fight-against-corruption_en.pdf

Mark Pyman *Redefining sectors: a more focused approach to tackling corruption* Working Paper

Fisheries Industry Transparency Initiative (2019). Accessed 16 Sept 2019 at http://fisheriestransparency.org/page/2

Graycar, Adam (2015), 'Corruption: classification and analysis', Policy and Society, **34**, 87-96. Accessed 20 Sept 2019 at https://www.tandfonline.com/doi/full/10.1016/j.polsoc.2015.04.001

HMG Her Majesty's Government (2017), *United Kingdom Anti-Corruption strategy 2017-2022*. Crown Publishing Service, accessed 19 August 2019 at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/667221/6_3323_Anti-Corruption_Strategy_WEB.pdf

Heywood, Paul (2017), 'Rethinking corruption: hocus-pocus, locus and focus', *Slavonic and East European Review*, 95 (1), 21-48.

Heywood, Paul and Pyman, Mark (2018), CurbingCorruption 'Definition of a sector', accessed 18 August 2019 at https://curbingcorruption.com/sectors/

Hudson, David, Mcloughlin, C., Roche, C. and Marquette, H. (2018), 'Inside the black box of political will: 10 years of findings from the Developmental Leadership Program'. Development Leadership Program publications accessed 18 August 2019 at https://www.dlprog.org/publications/research-papers/inside-the-black-box-of-political-will-10-years-of-findings-from-the-developmental-leadership-program

IIEP (International Institute for Educational Planning) at UNESCO (2019), 'Ethics and corruption reform in education', accessed 19 August 2019 at http://www.iiep.unesco.org/en/our-mission/ethics-and-corruption-education

IMO International Maritime Organisation (2019), 'IMO sets new anti-corruption agenda', accessed 19 August 2019 at https://www.maritime-executive.com/article/imo-sets-new-anti-corruption-agenda

Kaplan, Robert (2010), 'Conceptual Foundations of the Balanced Scorecard', Working Paper 10-074, Boston: Harvard Business School. Accessed 23 Sept 2019 at https://www.hbs.edu/faculty/Pages/item.aspx?num=37638

Khan, Mushtaq, Andreoni, A. and Roy P. (2010), 'Anti-Corruption in Adverse Contexts: A Strategic Approach.' Accessed 24 Sept 2019 at https://eprints.soas.ac.uk/23495/1/Anti-Corruption%20in%20Adverse%20Contexts%20%281%29.pdf

Klitgaard, Robert (2019), 'Engaging corruption: new ideas for the International Monetary Fund, Policy Design and Practice,' accessed 8 August 2019 at https://www.tandfonline.com/doi/full/10.1080/25741292.2019.1612542
DOI: 10.1080/25741292.2019.1612542

Klitgaard, Robert (1988), *Controlling Corruption*. University of California Press.

Masters, Adam (2015), 'Corruption in sport: From the playing field to the field of policy', Policy and Society, **34,** 111-123.

Mark Pyman *Redefining sectors: a more focused approach to tackling corruption* Working Paper

MEC Afghanistan Independent Joint Anti-Corruption Monitoring and Evaluation Committee (2019), 'Follow up reports.' Accessed 16 Sept 2019 at http://www.mec.af/index.php/reports/follow-up-reports

MEC Afghanistan Independent Joint Anti-Corruption Monitoring and Evaluation Committee (2017), *Ministry-wide vulnerability to corruption assessment of the Ministry of Education*. Accessed 16 Sept 2019 at http://www.mec.af/files/2017_23_10_moe_english.pdf

Mungiu-Pippidi, Alina (2015), *The quest for good governance: how societies develop control of corruption*, Cambridge, UK, Cambridge University Press.

Mungiu-Pippidi, Alina and Johnston, Michael (2017) (ed.), *Transitions to good governance.* Cheltenham, UK and Northampton, MA, USA: Edward Elgar Publishing.

NATO (2019), 'Ten years of NATO's Building Integrity Programme'. Accessed 16 Sept 2019 at https://buildingintegrity.hq.nato.int/?AspxAutoDetectCookieSupport=1

OECD (2019), 'The OECD water governance initiative', accessed 19 August 2019 at http://www.oecd.org/cfe/regional-policy/water-governance-initiative.htm

OECD (2017), 'Public integrity: a strategy against corruption', accessed August 8 2019 at http://www.oecd.org/gov/ethics/OECD-Recommendation-Public-Integrity.pdf

Pope, Jeremy (2000), 'The TI source book', accessed August 8 2019 at https://www.transparency.org/news/pressrelease/ti_source_book_now_on_internet

Pyman, Mark (2019a), 'From Maersk, AEC, and Shell, inspiring stories about changing corporate behaviour', The FCPA blog, 23 July, accessed August 19 2019 at http://www.fcpablog.com/blog/2019/7/23/from-maersk-aec-and-shell-inspiring-stories-about-changing-c.html

Pyman, Mark (2019b), Broad Anti-Corruption Programs Are the Wrong Approach', Corruption in Fragile States Blog, Fletcher School, Tufts University. Accessed 23 Sept 20119 at https://sites.tufts.edu/ihs/broad-anti-corruption-programs-are-the-wrong-approach/

Pyman, Mark (2017), 'Addressing Corruption in Military Institutions', *Public Integrity*, **19**(5), 513-528, DOI: 10.1080/10999922.2017.1285267. Accessed 23 Sept 2019 at https://www.tandfonline.com/doi/abs/10.1080/10999922.2017.1285267

Pyman, Mark and Kaakar, S. (2018), 'Afghanistan's Radical–and So-Far-Surprisingly Successful–Public Procurement Reforms'. Global Anti-Corruption blog March 8, 2018. Accessed 23 Sept 2019 at https://globalanticorruptionblog.com/2018/03/08/guest-post-afghanistans-radical-and-so-far-surprisingly-successful-public-procurement-reforms/

Pyman, Mark, Eastwood, S., Hungerford, J. and Elliott, J. (2018), 'Analysing the anti-corruption approaches of the 26 top-ranked countries: an opportunity for a new generation of strategies', accessed August 19 2019 at https://curbingcorruption.com/wp-content/uploads/2018/07/Pyman-et-al-2018-Analysing-the-anti-corruption-approaches-of-the-26-top-ranked-countries-copy.pdf

Mark Pyman *Redefining sectors: a more focused approach to tackling corruption* Working Paper

Pyman, Mark, Eastwood, S., Hungerford, J., and Elliott, J. (2017), 'Research comparing 41 national anti-corruption strategies. Insights and guidance for leaders', accessed August 19 2019 at https://curbingcorruption.com/wp-content/uploads/2018/07/Pyman-et-al-2017-Research-comparing-41-national-anti-corruption-strategies.pdf

Rothstein, Bo and Varraich, A. (2017), *Making sense of corruption,* Cambridge UK, Cambridge University Press.

Sidel, John (2014) ,'Achieving Reforms in Oligarchical Democracies: The Role of Leadership and Coalitions in the Philippines'. DLP Research Paper 27. Birmingham: Developmental Leadership Program, accessed August 19, 2019 at http://www.dlprog.org/publications/achieving-reforms-in-oligarchical-democracies-the-role-of-leadership-and-coalitions-in-the-philippines.php

Spector, Bertram (2005), (ed), *Fighting corruption in developing countries*. Kumerian press, Lynne Rienner Publishers, accessed August 19 2019 at https://www.amazon.co.uk/Fighting-Corruption-Developing-Countries-Strategies/dp/1565492021

Transparency International Defence & Security (2018), 'Global standards for responsible defence governance'. Accessed 16 Sept 2019 at http://ti-defence.org/wp-content/uploads/2018/07/Global_Standards_Responsible_Defence_Governance_v2.pdf

Transparency International Defence & Security (2015a), 'Government Defence Anti-Corruption Index'. Accessed 16/9/19 at http://government.defenceindex.org/#intro

Transparency International Defence & Security (2015b), 'Defence Companies Anti-Corruption Index'. Accessed 16 Sept 2019 at http://companies.defenceindex.org

Transparency International Defence & Security (2011), 'Corruption threats and international missions: practical guidance for leaders'. Accessed 16 Sept 2019 at http://ti-defence.org/publications/corruption-threats-international-missions-practical-guidance-for-leaders/

U4 (2014), 'Mainstreaming anti-corruption reform into sectors: practices in U4 partner agencies' accessed August 19, 2019 at https://www.u4.no/publications/mainstreaming-anti-corruption-into-sectors-practices-in-u4-partner-agencies.pdf

United Nations Habitat (2006), 'Restore the Health of Your Organization: A Practical Guide to Curing and Preventing Corruption in Local Governments and Communities, Volume 1, Concepts and Strategies. Author Fred Fisher', accessed August 19 2019 at https://unhabitat.org/books/restore-the-health-of-your-organisation-a-practical-guide-to-curing-and-preventing-corruption-in-local-government-and-communities-volume-1-concepts-and-strategies/

USAID (2017), *Health System Assessment Approach: Version 3.0*. Accessed 19 August 2019 at https://www.hfgproject.org/the-health-system-assessment-approach-a-how-to-manual/

Weick, Karl E. (2001), *Making sense of the organization*, Malden USA and Oxford, England: Blackwell Publishing.

Mark Pyman *Redefining sectors: a more focused approach to tackling corruption* Working Paper

WCO (World Customs Organisation), 'New anti-corruption initiative', accessed 19 August 2019 at http://www.wcoomd.org/en/media/newsroom/2019/april/the-wcos-new-anti-corruption-programme-highlighted-at-the-integrity.aspx

World Health Organisation (2018), 'Integrating a focus on anti-corruption, transparency and accountability in national health policies, strategies and plans. Accessed 19 August 2019 at https://apps.who.int/iris/bitstream/handle/10665/310991/9789241515177-eng.pdf

World Health Organisation (2007), 'Everybody's business: Strengthening health systems to improve health outcomes. WHO's framework for action'. Geneva: World Health Organization. Accessed 16 Sept 2019 at http://www.who.int/healthsystems/strategy/everybodys_business.pdf,