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RESEARCH ARTICLE

Coordinating government silos: challenges and opportunities

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Abstract

The literature on silos in government often focuses on their failure to engage effectively in horizontal coordination. While this is often true, silos-dominant administrative systems may still find ways to overcome or prevent incoherence in government. The problem is not so much with the structure of silos but with the lack of effective coordination mechanisms between them. Therefore, it is important to identify what mechanisms may enable silos to work successfully with each other and under what conditions, so that there will be no need to pursue a total breakdown of silos, which can be politically and administratively costly. Using Hong Kong examples, we distinguish three different types of coordination and examine their effects on silos: informal or semi-formal coordination where administrative elites and professionals use *quid pro quos* to overcome coordination problems; formal coordination where political expectations, directions and monitoring may mitigate problems; and remedial policy-making where failure is addressed. The Hong Kong case reveals that effective changes may be made by strengthening existing coordinating mechanisms and extending them to the implementation level in a silos-dominant system. Radical reforms may improve coordination but they run the risk of political instability and service disruption.

Keywords Government structure · Coordination · Collaboration · Silos · Hong kong

Introduction

In public administration, a silo is defined as a hierarchical organization which seeks to maximise vertical coordination at the expense of horizontal coordination. It is inward-looking and self-contained with little regard for outcomes other than those

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which affect its own narrowly conceived goals. Silos get a bad press. Much of the academic literature deals with their evident failures to share information, to resolve jurisdictional disputes with other government organizations and to coordinate effectively (Kettl 2006; Jurkiewicz 2007, pp. 22–23). Silos are criticised for the resulting “departmentalism” (Gulick 1937), “tunnel vision” (Rosenbloom et al. 2010, p. 33), and their tendency to become “single purpose organizations” (Bezes et al. 2013). Their inability to overcome these problems may have disastrous outcomes, such as delays in decision-making, duplication of resources, poor service delivery, failure to resolve cross-cutting “wicked problems” and difficulties in collaborating with non-governmental actors. The problems of silos have prompted calls for them to be broken down, blown up or otherwise destroyed (De Bri and Bannister 2010; Froy and Giguère 2010; Tett 2015, pp. 21–24). However, some scholars do emphasise the resilience of silos, their importance within the formal organizational structure and the need for vertical coordination in decision-making processes (Rykkja and Lægreid 2014; Peters 2015). Others highlight the difference between hierarchy and networks, arguing that effective coordination may be achieved through horizontal networks (O’Toole et al. 2004). It has also been suggested that the context in which coordination takes place is a critical variable and that an administrative culture which stresses a public sector ethos and trust relationships helps to promote organizational integration and coherence (Christensen and Lægreid 2007; Lægreid et al. 2015).

We contend that, despite the many failings of silos, some systems are still functioning well. For many governments in Asia, the silo remains the principal organizational form. It is politically valued for its ability to deliver goods and services efficiently and there are seldom calls for radical reform. There is also increasing evidence that breaking down silos into specialised agencies may simply replicate silos-type practices on a smaller scale (Elston 2013). Instead of seeking radical restructuring, which can be politically and administratively costly, we suggest that silos-dominant systems may strengthen adjustment mechanisms to avoid or overcome incoherence in government and to assist horizontal coordination. It is important to identify what these mechanisms are, how they enable silos to work successfully with each other and under what conditions.

The Hong Kong government is a suitable arena for such research because it has had a stable, highly centralised, hierarchical administrative system composed of large departments over a long period. No major changes have been made to the bureaucratic structure since 1974. Although new statutory bodies have sometimes been created to deal with specific functions, silos have continued to provide the core functions of government. The change of sovereignty has made little difference. In 1995, two years before the handover, the Chinese government announced publicly that, in the interests of stability, the civil service system would remain the same (Preliminary Working Committee 1995). In 2002, a new system of politically appointed heads of bureaus was introduced but this affected only about fifteen positions at the apex of government; the administrative structure did not change. This continuity of structure means that problems of horizontal coordination have been addressed in largely similar ways and that, consequently, we can draw on case studies over a forty-year time-span. To identify appropriate cases, we adopted a

three-stage process. Initially, we interviewed current and former senior government officials, including a former Director of Audit, a former Ombudsman, and the then Director of the Efficiency Unit of the Hong Kong government, and asked them to name and describe cases of success and failure in the coordination of government policies involving two or more government departments. From the cases that were provided, we then considered the documentary evidence contained in the Director of Audit and Ombudsman investigative reports, Legislative Council panel and committee minutes, and reports made by other monitoring bodies on structural issues, specific coordination problems and their proposed remedies. We focused particularly on those cases where there were detailed accounts of coordination problems and attempts to resolve them. From the interviews and documentary analysis, we then selected cases for in-depth analysis and further identified and examined the three specific mechanisms which have been used with some success to address cross-cutting coordination issues.

In what follows, we begin with a discussion of different types of coordination based on Mattessich's theoretical framework, attempting to locate the Hong Kong experience within it. We then consider the structure of the Hong Kong bureaucracy in greater depth, seeking to establish where the fault lines lie and where problems of coordination have arisen. Finally, we analyse the specific coordinating mechanisms—informal coordination, political direction and remedial policy-making—which we argue have been valuable in preventing or mitigating some of the consequences of failures in horizontal coordination which result from governing by silos.

Cooperation, coordination and collaboration

Because a silo seeks to ensure that it can perform functions and achieve its objectives without reliance on other departments and agencies, it will generally not engage in coordination ab initio but will coordinate if there is political commitment to the objective and if sufficient resources are provided. But the consensus is often short-lived and time-restricted while contests for power and resources are perennial (Roberts 2011).

In practice, silos do have to deal with each other. How and why they coordinate and when they can do so successfully and under what conditions require further exploration. Following Mattessich et al. (2001, p. 39), we divide possible interactions between silos into three categories: cooperation, coordination and collaboration (Table 1). This division is based on the extent of contact between different organizations. *Cooperation* is defined as an informal relationship without any commonly defined mission, structure or planning. It requires the least amount of contact and may be informal. Typically, such contact involves some form of information-sharing or communication which may be ad hoc or continuously related to a particular issue. Authority clearly rests with the individual organizations. Participating organizations do not necessarily have a common goal. *Coordination* is a more extensive form of contact based on some common goals. The contact may be structured or unstructured, formal or informal, routinized or ad hoc, with no requirement for shared authority or decision-making power. Coordination may involve the commitment

Table 1 Cooperation, Coordination and Collaboration: Definitions and Characteristics

	Definition	Characteristics
Cooperation	An informal relationship without any commonly defined mission, structure or planning	Information-sharing; sometimes with promises of future closer links Authority rests with the individual organizations
Coordination	A more formal relationship with an understanding of a commonly defined mission	Some planning, division of roles and commitment of resources Authority still rests with individual organizations
Collaboration	A mutually beneficial, well-defined, and durable relationship entered into by two or more organizations to achieve common goals	New structure with full commitment to a common mission. Comprehensive planning and pooled resources. Authority is defined by the common structure

Sources: Adapted from Mattessich et al. (2001, p. 39); O'Flynn (2009)

of resources in a joint or multiple attempts to resolve a problem (O'Leary 2015). *Collaboration* entails the most extensive, structured and routinized contact between individual organizations. With authority and relationships defined by a new structure, collaboration requires an organizational commitment, comprehensive planning and pooled resources. It involves continuing coordination in a long-term relationship which may be aimed at resolving future problems. By definition, collaboration is not usually the preferred option of silos which seek to retain jurisdictional monopolies and control over their own resources and any newly-created structures.

It is conceivable that organizational relationships may evolve gradually from cooperation to coordination and then to collaboration. However, this is not the case in silos-dominated governments, where cross-cutting issues are likely to be resolved, if at all, at the cooperation and coordination stages and may never proceed beyond that. In the Hong Kong government, for example, silos do sometimes cooperate and coordinate successfully, but there is little collaboration between them in Mattessich's use of the term. The question is how and why they have been engaged in any form of cooperation or coordination.

Hong Kong's silos-dominated government structure

Hong Kong has had a silos-dominant administrative system since 1974 when the McKinsey consultants made recommendations for reform that were aimed at resolving the problem of coordination to deliver vastly-expanded social services. The new structure entailed a classic politics/administration dichotomy: a line was drawn between policy branches (later called bureaus) which would make policy and departments which would implement it (McKinsey and Company 1973). Departments which were likely to need to coordinate were grouped under the same policy branch. In practice, however, they remained hierarchically organized, relatively autonomous from central government and focused on achieving efficient delivery of goods and services within their own exclusive jurisdictions. This structure has persisted through a change of regime because bureaucratic stability has been highly prized by both the British and Chinese governments and because there has never been serious financial pressure for reform. This has meant that problems of horizontal coordination between silos have been largely similar, in principle if not in form, since the McKinsey reforms and have been addressed in basically similar ways.

As a result, the twelve largest departments in the Hong Kong government (Table 2) have remained relatively stable in size, in proportion to the rest of the civil service, and in structure since 1974. The Housing and Hospital Authorities have been hived off, reducing the size of those departments, and some public bodies have been created to deal with specific issues (Painter 2012). The government nevertheless remains highly centralised. Implicitly, it subscribes to the view that speedy implementation is better realised through a well-defined hierarchy rather than through semi-autonomous agencies or more collaborative mechanisms. It has never adopted what has been described as one of the key recommendations of new public management: the disaggregation of "large multifunctional bodies … to replace them with a series of single purpose bodies" (Van der Walle and Hammerschmid

Table 2 Strength of the twelve largest departments in the Hong Kong government, 2020

Department	Strength	%
Hong Kong Police Force	33,245	18.7
Fire Services	10,695	6.0
Food and Environmental Hygiene	10,524	5.9
Leisure and Culture Services	9516	5.4
Housing	9131	5.1
Immigration	8817	5.0
Customs and Excise	7112	4.0
Correctional Services	6631	3.7
Health	6526	3.7
Social Welfare	6229	3.5
Education	5446	3.1
Post Office	4866	2.7
Others	58,898	33.2
Total	177 656	100

Source: Civil Service Bureau (2020). *Quarterly up-dated civil service personnel statistics*, https://www.csb.gov.hk/english/stat/quarterly/541.html

2011). On the contrary, the Hong Kong government takes some pride in its ability to deliver public services efficiently and cost-effectively and to create a corruption-free environment through many different departmental hierarchies rather than through multi-functional bodies.

There have been few attempts to reform the silos directly. Most of the government's efforts to connect silos have instead been concentrated on attempts to resolve issues of common concern through information sharing, consultation and negotiation.

The government has flirted briefly with practices which involve more coordination, such as extensive contracting out, but the main impetus behind its reforming efforts has been to improve responsiveness and to meet public demands (Scott 2010, pp. 98–118). In 2000, the then Chief Secretary for Administration and head of the civil service, Anson Chan, said that she favoured more "joined-up" government. However, the examples she gave endorsed specific measures such as creating a one-stop shop for services rather than a more fundamental reform of the silos (Chan 2000). In 2012, a later Chief Secretary for Administration, Carrie Lam Yuet-ngor (currently Chief Executive of Hong Kong), also made "joined-up" government one of her top priorities. She said that there had been complaints from the public "that the Government tends to be compartmentalised … different bureaus and departments work in their own silos, so my role is to ensure that [they] act in concert as a joined-up government…" (Civil Service Newsletter 2012). The focus in both cases was on the unresponsiveness of the silos to public demands rather than the wider intention of improving horizontal coordination to achieve optimal policy objectives. Reforms, including budgetary measures and the incorporation of new functions within the existing large departments, have

tended to strengthen the silos rather than to weaken them. Personnel practices have also favoured retaining long-serving staff, the vast majority of whom are on permanent, rather than contract, terms. With the exception of the administrative and executive grades and some professionals, they stay in their departments for their entire working lives and, it may be assumed, are strongly acculturated to the kinds of administrative behaviour that result from a hierarchical, self-contained system.

The structure of the government is not designed to aid more extensive horizontal coordination. If a situation reaches a stage where collaboration is required, the most common response is to create a new organization and then place it under the hierarchical direction of one of the silos. For example, in 2004, after the SARS outbreak, the Centre of Health Protection was established under the Department of Health. Similarly, after concerns about food safety, a Centre for Food Safety was created in 2006 and placed under the jurisdiction of the Food and Environmental Hygiene Department. Senior civil servants often express concern about the management and ability of specialised agencies to deal with problems.

The mistrust of decentralised, autonomous and specialised agencies has its roots in historical experience and in failed experiments with such agencies under the post-handover Tung administration. Some services were originally delivered by an Urban Services Department which was notionally run by an elected Urban Council. However, the government believed that the Council was badly run, potentially or actually corrupt, and not sufficiently bureaucratically accountable. From the late 1960s onwards, it wanted to dissolve the Council, an aim that it was eventually able to achieve in 2000. The post-handover administration did create some new devolved agencies and was committed to cutting the size of the civil service but there were management and financial problems with some agencies (Director of Audit 2007a, b). Problems of coordination between the Hospital Authority (which had been hived off) and the Department of Health during the SARS epidemic reinforced the official view that more centralization was generally a better option than creating devolved agencies (SARS Expert Committee 2003, pp. 103–109).

Aside from the difficulty of ensuring coordination between a silo and a specialised agency, it is not entirely clear that specialised agencies do represent a better way of resolving the problem of horizontal coordination. Elston's (2013) study of British executive agencies suggests that there is no guarantee that the sins of the silos might not be replicated in single purpose, more specialised agencies. Tett (2015, pp. 16–17), too, notes that behaviour, such as failing to share information, can be found in different organizational forms. If that is so, then it is not the silo as an organizational form that is the problem but rather the kind of administrative behaviour that may be encouraged within silos.

What is evident is that silos are unlikely to disappear. In Hong Kong, they are embedded in perceptions of how government should be run and are seen as a necessary constituent part of institutional stability and as an essential means of providing efficient services. In other Asian countries, they are sometimes also seen as an integral part of the economic development strategy. It is equally evident, however, that there are situations in which if the conditions are favourable, as the Hong Kong government's experience suggests, silos can coordinate successfully, implementing

policy initiatives and dealing with crises and emergencies, even without formal structures, comprehensive planning, and pooled resources for collaboration. What kinds of conditions are necessary to foster success in horizontal coordination?

Coordinating the silos

Hong Kong has had its fair share of failures arising from lack of horizontal coordination between government departments and other agencies. Some could well have cost lives such as in the SARS epidemic. Others have been costly and potentially dangerous such as the construction of two major railway lines and the initial failure to deal adequately with the problems of seepage in high-rise buildings (Office of the Ombudsman 2008a, b). Still others, such as the maintenance of footpaths near public parks, cleaning up after typhoons, and part of a road that was not opened for eighteen years after repairs had been completed (Yeung 2017), have caused considerable inconvenience to the public. Yet amidst the failures, there have also been instances of successful coordination between departments which has resulted in favourable outcomes. Three mechanisms—informal coordination, political direction and remedial policy-making—have helped overcome some intrinsic problems in Hong Kong's silos-dominated system and have helped to enhance horizontal cooperation and coordination.

Informal coordination

Within the Hong Kong government, most civil servants work in silos with hierarchical structures. Although seniority often seems to determine promotion, the career prospects of civil servants are generally framed by their performance within the department. There is, therefore, an incentive to ensure that the hierarchy functions effectively and that services are delivered efficiently. But there is very little to motivate civil servants to devote time and attention to problems requiring cross-departmental action and even some risk in doing so if the issues concern resources and jurisdiction, as most do. However, at the decision-making level within many departments, there are two groups—administrative grade officers and professionals—who are more inclined to engage in coordination with other departments and who have some incentive to do so.

The administrative grade is the policy-making elite within the Hong Kong government. It is composed of about 600 civil servants who serve in 13 policy bureaus and over 30 departments (Civil Service Bureau 2020). They owe their loyalty to the Hong Kong government as a whole rather than to any specific bureau or department and are subject to transfer within the government every few years. Members of the administrative grade are selected partly on their expected ability "to get things done" on which their promotions may depend. They are highly paid and, provided they perform, can expect to rise quite rapidly to very senior positions. In addition to their policy formulation role, administrative officers may also be posted to the district level where they have a formal brief to coordinate the provision of government

services. They are also charged with the responsibility of developing and implementing joint projects between departments. Departmental officers, by contrast, are not usually transferred outside their departments. Senior officers, whom we interviewed, believe that departmental officers are more committed to existing procedures and practices and more resistant to change than their administrative grade counterparts.

Under colonial rule, administrative grade officers had a significant impact in enhancing horizontal coordination, as two historical events illustrate. In the late 1970s, a government priority was to decant some of the overcrowded population of Hong Kong and Kowloon to three new towns in the New Territories. Implementation involved coordinating many different government departments and ensuring that the plan did not fall behind schedule (Hayes 2012, pp. 113–114). Squatters had to be removed from the land to enable building works to begin; contractors had to deliver on time; and there were many deadlines to meet. All this required departments to work in concert. Administrative officers played a critically important bridging role between the silos. They succeeded partly because they had backing from senior officials in the administration and partly because they were able to exercise the *quid pro quos* which enabled them to trade favours with other administrative officers to ensure speedy completion of projects. This applied particularly when developments were likely to cause friction between the government and those who were to be moved off the land (Hayes, 2012, pp. 100–114). Had there been no horizontal coordination, it is unlikely that the silos-dominated colonial government would have been able to move swiftly enough to complete its public housing and infrastructural projects.

Between 1975 and 1980, approximately 200,000 Vietnamese refugees arrived in Hong Kong by boat and sought asylum. The influx of refugees was felt in every part of the government; concerns included security, the possible spread of disease, the immediate provision of accommodation which was already in short supply, facilities in the camps in which the refugees were subsequently temporarily housed, access to social services and efforts to persuade foreign governments to take more migrants. The Hong Kong government was slow to react to the crisis. It did have a committee to deal with emergencies but it was also faced with such problems as the fact that the disciplined services (such as the Police, Immigration and Customs and Excise) could not talk to each other because their communication systems were incompatible. When the crisis broke, resources had to be deployed immediately. A departmental officer would have had difficulty in authorising expenditure but administrative officers in effect ignored the existing protocols because they knew that they had political support for the action taken *in extremis*. They were willing to circumvent regular procedures because they expected that favours would be returned in the interest of achieving the political priority of settling the refugees in more humane conditions.

To persuade silos to coordinate, it is often necessary to have circuit-breakers willing to engage in action which will correspond with wider political objectives, as in the cases mentioned above. The administrative officers provide some leavening to the general departmental disposition to keep new developments in-house. However, there are relatively few administrative officers at the relevant mid-to-senior levels of the departments and their influence is consequently limited and has been further diminished by the introduction of political appointees in the post-handover period.

Until 2002, administrative officers could aspire to become policy secretaries in the bureaus. Thereafter, although former administrative officers were often appointed as policy secretaries, they had to resign from the civil service, losing their tenure. They were appointed on contract and could be dismissed by the Chief Executive. In 2008, political appointees were also introduced in the bureaus with the specific intention of taking over the political role of administrative officers. Political appointees at this level are prohibited from playing a coordinating role in the civil service. However, middle-level administrative officers in the departments now have less incentive to do so because their lines of communication with senior officials are less direct than they were before 2002. Concentrating on managerial duties within the department is seen to be less risky.

Specialist teams may fill the void under such situations. Specialist teams are a feature of most large bureaucracies (Serrat 2017, pp. 711–716). However, in Hong Kong, they are a relatively recent development, representing a change in the composition of the civil service although not its structure. Under the colonial government, the civil service had a broad base of employees at the lowest levels and relatively few senior personnel. It now has many more middle level professionals and a diminishing number of lower-level employees. In 1988, for example, 23 per cent of the civil service, mainly labourers, cleaning staff and lower-level functionaries, were on the Model Scale 1 pay scale (Civil Service Branch 1988); in 2018, only 4 percent were on the Model Scale 1 pay scale (Civil Service Bureau 2019). As the government has increasingly needed more specialised skills, more professionals have been recruited at the departmental level. When multi-dimensional projects are implemented or specific policies are formulated, they are assembled in teams to discuss the issues, plan the approach, complete the task and are then dissolved. The role played by specialist teams helps to mitigate the worst aspects of horizontal coordination in a silos-dominated system. Potential problems which might arise from the lack of formal collaboration mechanisms can be prevented by informal coordination.

Political direction

Despite the hierarchical system, political decision-making at the top may not always provide sufficient direction or monitoring of horizontal coordination and implementation (Peters 2015, p. 47). For issues high on the political agenda, there may be sufficient political will to ensure coordination; for more enduring policy issues requiring coordination, political attention is likely to be more sporadic; and for minor issues that fall between the jurisdictional cracks, there may be difficulty in persuading the centre to take action. In this section, our principal concern is with issues that are enduring or unresolved but require central direction and monitoring.

In 1973, the McKinsey consultants noted that "once a departmental proposal has been approved there is virtually no control over whether the implementation is carried out efficiently or on time" and that joint programmes required large coordination meetings of senior staff of all departments involved (McKinsey and Company 1973, p. 12, 15). A fundamental assumption of the Hong Kong government has been that, once a policy is formulated and approved, it can be

implemented through the hierarchy without much need for further action from the senior and political levels of the administration. There is some justification in this assumption if the issue is only concerned with vertical coordination where there is usually an efficient organization in place and where the span of control is usually sufficient to ensure that mistakes are detected at an early stage. Horizontal coordination, however, is an entirely different matter. Here there is very often no commitment other than that which might be provided by political direction and monitoring; left to their own devices, silos may well allow projects involving horizontal coordination to wither on the vine. Two examples illustrate the difficulties.

Water seepage is a major problem in Hong Kong where the vast majority of the population live in skyscrapers. Public housing complaints are dealt with by the Housing Authority which receives some 15,000–20,000 repair requests per year (Legislative Council Panel on Housing 2014). These do not seem to cause major difficulties; rather, it is in private sector housing and other buildings where most of the problems have arisen. Complaints about seepage in those cases rose by 70 per cent from 17,405 in 2007 to 29,617 in 2015 (Director of Audit 2016). Private owners can seek government assistance if their neighbours are not cooperating in solving a seepage problem or the source of the seepage is not clear (Office of the Ombudsman 2008b). Three departments are involved in rectifying problems: the Buildings Department (BD) which supervises contractors employed to detect the source of the seepage; the Food and Environment Hygiene Department (FEHD) which makes the initial inspection and may issue nuisance notices to uncooperative neighbours; and the Water Supplies Department which may be called in to deal with leaking pipes.

In 2006, the government created a Joint Office (JO) composed of staff from the BD and the FEHD to establish a one-stop shop to deal with complaints about seepage. However, complaints continued to rise and the Ombudsman eventually decided to conduct a direct investigation into the JO (Office of the Ombudsman 2008b). Her report contains a list of problems afflicting efforts to provide a coordinated response to seepage problems. Clearly, there were difficult relationships between the departments in the JO. The Ombudsman (2008b, p. 9) noted that the

> JO is a loose assortment of BD and FEHD staff in an uneasy partnership. Neither BD nor FEHD is in a position to exercise proper authority over all JO staff or to take full responsibility for JO's performance. Furthermore, the disjointed organisation is hardly conducive to the two grades of staff working together efficiently or communicating effectively and cultivating a mutual bond in service.

There was no acknowledged head of the JO with "formal authority and clear lines of command over staff secondment and office management" (Office of the Ombudsman 2008b, p. 9). Subsequent investigations revealed that there was friction between the FEHD and BD staff over investigations on seepage and on follow-up measures. In 2016, the Direct of Audit returned to the issue, observing that success rates in determining seepage had declined from 46 per cent in 2007 to 36 per cent in 2015, that there were anomalies in the classification of information between departments and that the relationship between the JO and its 19 district offices was

still not consistent in terms of the collection of information. The time taken to solve problems had not improved which, as the Director of Audit noted, was the point of establishing a one-stop shop (Office of the Ombudsman 2008b).

In December 2020, the Ombudsman once more published a direct investigation report on the seepage problem (Office of the Ombudsman, 2020). The situation had deteriorated still further and complaints to her office about seepage problems had been continuous. The main complaint was that the JO had failed to identify the problem and that, in consequence, there was a huge backlog. In June 2020, the JO had 23,403 cases, 8437 of which had been received before 2019. The performance indicator states that cases should be completed within 90 days. Many of the Ombudsman's recommendations were about improvements to operational practices but a critical suggestion was that there should be a "lead department" for the JO which would have organizational responsibility for its work. The Ombudsman (2020, p. 6–7) noted that:

> …some JO staff consider the division of labour between the two departments unreasonable while others find that the absence of a lead department has caused conflicts and disputes among staff of different professional backgrounds. We are concerned that staff from FEHD and BD may work in silos, lack coordination and lack determination to resolve problems in the absence of a coherent management structure overseeing JO's operation. The inadequacies in JO's handling of water seepage reports…have persisted for many years. Hence, it is necessary for JO to have a lead department coordinate and monitor its operation and be accountable for its performance.

In a silos-dominated system, the failure to address the structural issues relating to coordination has been a root cause of implementation problems for well over a decade.

A second instance of the failure of political direction occurred in the Mass Transit Railway Corporation's (MTRC) construction of two railway links. The MTRC is a semi-autonomous corporation, 75.6% owned by the Hong Kong government. In constructing the links, both of which ran through densely-populated areas, the corporation had to deal with numerous government departments, which caused significant delays. Coupled with construction problems, the cost of the first 26 km link between Hong Kong and the Chinese high-speed rail network blew out from an original HK$39.4 billion to HK$84.4 billion per kilometre, then the most expensive railway line in the world. The cost of the second link, an internal subway connection, increased from an initial estimate of HK$79.8 billion to HK$97.1 billion, surpassing the first link in terms of cost per kilometre.

In 2019, the government finally appointed a commission of inquiry into the causes of the construction problems of the second link. The Commission found that there were many building problems in the construction process but that the government also had to bear "a measure of responsibility" for the failures because it should have been an "active participant" rather than a "passive bystander" (Hartmann and Hansford 2020, p. 200). The Commission identified at least twelve bureaus and departments with which the MTRC had to deal on a one-to-one basis and recommended that instead there should be a single point of contact and the development of

a more collaborative culture. It also proposed the adoption of the Building Information Modelling system "as a collaboration tool" which would serve to link data from all parties and reduce wasted or duplicated effort. The Chief Executive had already proposed the creation of a separate Railway Development Department, which the Commission endorsed, and also supported the establishment of a senior leadership forum to oversee major projects and "a comprehensive review of the way in which the government monitors and controls major projects…" (Hartmann and Hansford 2020, p. 201).

Do centralizing measures of these kind resolve problems of horizontal coordination? In both the cases of the JO and the rail links, more central oversight might have improved situations by drawing attention to issues before they deteriorated into costly mistakes. But there is still a need for more effective coordination at the implementation level. In highly centralised systems, such as that in Hong Kong, permitting discretion to deal with immediate problems may not always be granted, resulting in delays as information is transmitted upwards in the hierarchy. As the McKinsey consultants observed, attempts at coordination between silos are likely to drift because the political priority of the issue tends to be forgotten. Departments left to themselves usually place issues requiring coordination at the bottom of their agendas. In Hong Kong, a neutral administrative officer as head of the JO might have been able to resolve differences between departmental personnel, stress the mission of the office, and ensure that vertical coordination with the 19 district offices was improved.

Strengthening horizontal coordination at the implementation level in ways which retain communication with central political decision-makers is important in all silos-dominated systems but it must be accompanied with the authority to act. Where there is a clear intent from the central government to pursue a course of action which requires coordination, the centre can usually persuade or insist that departments work together. But where the issue is not regarded as critically important, political direction from the top is often missing. The heavy emphasis on line implementation needs to be supplemented by improved monitoring, communication and direction from the top and by the provision of personnel who are specifically entrusted with responsibility for achieving results at the implementation level. Leaving coordination to the silos alone is likely to founder in a morass of conflicting departmental regulations and objectives.

Remedial policy-making

In silos-dominated administrative systems, it is often central action that brings about more horizontal coordination. It may be difficult for reformers at the centre to question the autonomy of government silos unless they have pressing evidence of defects in the way in which a problem is being handled. By the time that the defects became evident, central policy-makers may have moved on to other issues. Hong Kong is fortunate in possessing effective monitoring agencies such as the Ombudsman and the Director of Audit. They provide the kind of information (and

ammunition) which may be used to re-visit an issue and thus belatedly strengthen horizontal coordination. We refer to this as remedial policy-making.

In 2001, the Hong Kong government set up an integrated call centre (ICC) to provide a one-stop shop for enquiries and complaints about government services. The purpose of the arrangement was to increase the efficiency of public service provision and to deal with citizens' requests more effectively. Twelve departments initially joined the scheme which was run by the Efficiency Unit (EU), an agency which reported directly to the Chief Secretary for Administration. Although a survey reported that the ICC was a significant improvement to complaint-handling over departmental hotlines, there were still problems with insufficient follow-up action and misdirection of calls to the participating departments. In 2003, the Ombudsman launched a direct investigation into the ICC. The investigation revealed tensions between the departments and the call centre. "Departments report[ed] feeling 'pressured' to join ICC and being given 'hard sell' by EU on the benefits of surrendering their own hotlines" (Office of the Ombudsman 2003, p. 53). The report recommended that greater regard should be given to the individual requirements of the departments and even suggested that they might be allowed to opt out of the scheme. If that had been permitted, as the EU pointed out, it would have undermined the whole idea of the one-stop shop (Office of the Ombudsman 2003, p. viii).

By 2007, complaints about the ICC were rising and the Ombudsman decided to conduct a second direct investigation. Many recommendations related to the logistics of dealing with some three million calls per year but there were also interesting observations on relationships between departments and the ICC and between departments themselves. One issue was the extent of the service. Although the number of departments covered by the ICC had risen to 20, six major departments—Police, Housing, Home Affairs, Fire Services, Environmental Protection and Water Supplies Department—were still outside the system. Some departments saw the value of the system and wanted to join the scheme but the ICC had manpower constraints and could not accommodate them. There was also some evidence that departments were using the ICC as a shield, particularly where multiple departments might be involved in areas such as vegetation management, illegal waste disposal, traffic, and slope safety. The report noted that some departments preferred to communicate with each other through the ICC and recommended that departments should make direct contact with complainants on complex issues (Office of the Ombudsman 2008a).

Over the next decade, the ICC's teething problems seem largely to have been resolved. Technology may have helped resolve some of the logistical difficulties: from 2011 onwards, it has been possible to download a mobile application to make a complaint and receive a response from the department concerned without making a phone call. Email, fax and Facebook are also used although the phone call remains the most popular method of communication. Departments also seemed to place more value on the ICC which provided both initial contact with the public and speedy direction to the means of resolving the problem. In 2015, the ICC received over four million enquiries and complaints and now covers 22 departments (Chan 2016; Efficiency Unit 2018). The benefit of re-visiting and remedying the kinds of problems which the ICC faced has probably not only made it more efficient but has helped to increase trust between departments and the Centre.

Remedial policy-making may also result from the sudden elevation of an issue to a position on the policy agenda that is thought to require immediate attention. A case of domestic violence, for example, resulted in a political response that changed relationships between the Police and the Social Welfare Department and also affected the role of five other departments. In April 2004, in Tin Shui Wai, an immigrant Mainland mother and her three children were murdered by her husband who subsequently committed suicide. The mother had sought help from the Social Welfare Department and the tragic outcome might have been attributed to the department's failure to share information. The panel which reviewed the case thought otherwise. It noted that Tin Shui Wai, of all Hong Kong's districts, had the highest rate of spouse abuse, the highest rate of unemployment and the highest proportion of public housing. It looked carefully at the coordinating mechanisms between departments and found that, while there was a District Coordinating Committee, there was a need for a more effective interface between departments in the planning process and better coordination between the Social Welfare Department and its district offices (Legislative Council Panel on Welfare Services 2004, p. 38). In its recommendations, the panel also noted that, although there was an informal referral system between the Police and the Social Welfare Department on domestic violence cases, there was a need for a more formal system and for greater coordination and information-sharing. The coroner's report also suggested improvements in police procedures for dealing with domestic violence.

Between 2004 and 2008, there was a flurry of governmental activity on domestic violence which moved the issue from departmental cooperation to more formal coordination. The role of departments was more clearly specified and, in some cases, expanded; the government provided additional resources; NGOs conducted research; the Legislative Council's Panel on Social Welfare set up a specific subcommittee to consider the issue; and the domestic violence ordinance was amended (Lee 2008). The Police were initially reluctant to become involved in domestic violence issues, believing that it was not a normal part of policing duties. However, they did improve their coordination with the Social Welfare Department, establishing a 24-h hotline connection to exchange information and advice (Legislative Council Panel on Welfare Services 2007). The Police role in dealing with domestic violence cases was also more carefully delineated; victims received more protection, offences were investigated and cases were referred to other departments where appropriate. However, there were still claims that the Police tended to minimise offences and to believe that domestic violence could never be properly controlled (Leung 2014; Hong Kong Hansard 2017, p. 5234–5241).

Despite the criticisms of the system, it was an improvement over past practice. The Police gradually adapted their procedures to their perceptions of the problem and the item slipped down the policy agenda as cases classified as domestic violence showed slight declines (Hong Kong Hansard 2017, p. 5240, Annex 1). But coordination improved and it has remained the kind of issue that could galvanise further action. Ideally, a policy initiative involving multiple departments would specify proper coordination between departments from the outset but that rarely seems to happen in silos-type situations. Remedial policy-making, therefore, becomes necessary to provide the political direction for better coordination and a more effective

future approach to the problem. What is important is that when gains are achieved, they should not be allowed to lapse into deteriorating situations where the major problems that caused the need for remedial policy-making will re-emerge.

Conclusions

Under a silos-dominated system, issues quite often drift into a bureaucratic stand-off between departments. Some issues may continue to fester with detrimental consequences for servicing public demands and for the image of the government. The findings of this study nevertheless suggest that silos can engage in effective horizontal coordination if the conditions are right. The Hong Kong case illustrates that horizontal coordination can be improved within a silos-dominated bureaucratic system through three mechanisms: encouraging informal coordination, ensuring better monitoring of the implementation of political directives and learning from experience in remedial policy-making situations. Specifically, if the political direction is clear and committed and is followed through with appropriate, powerful, formal or informal coordination mechanisms at the implementation level, then results can be achieved. In some cases, there may be later opportunities for remedial policy-making when the issue is re-visited and the problem of inadequate coordination is identified and rectified.

This study contributes to a better understanding of silos-dominant administrative systems. Although silos often cause problems for effective governance, radical reform to break them down may come with negative consequences such as institutional instability and service disruption. We contend that more effective changes can be made by strengthening a government's coordinating mechanisms and extending them to the implementation level. In practical terms, this may mean posting officers without ties to a silo as the head of new coordinating bodies. That has not always been done in Hong Kong, resulting in the kind of problems that arose in the seepage case and in the attempt to bring about better coordination between the Police and the Social Welfare Department on the domestic violence issue. Impartial coordinating officers can provide direct channels of communication to the centre and help to overcome the tendency of the silos to retain control over staff and resources even when that is detrimental to resolving problems. It is possible that a similar strategy might work in cases of evident failure and where remedial policy-making becomes necessary.

Our study focuses on Hong Kong, but it has implications for other silos-dominant administrative systems which face the same challenges in coordinating government departments. Whatever measures might be adopted to improve horizontal coordination in silos-dominated systems, a basic consideration is to retain the virtues of vertical coordination and to ensure that the structure and functions of the silos are consistent with that aim. At the same time, the increasing complexities of government everywhere mean that the prospect of new issues falling between the jurisdiction of silos is very real. Horizontal coordination, for that reason, requires more attention

from governments and more innovative ways of dealing with the kinds of administrative problems which it presents.

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Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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