Discussion paper

Services in the city

Governance and political economy in urban service delivery

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Key messages

- Urban service delivery is a growing priority as poverty is urbanising
- Densely populated urban areas place pressure on service delivery systems resulting in numerous, often uncoordinated and unregulated providers
- Mobile and sometimes polarised populations can further limit service delivery, including through limited capacity for collective action
- But the urban environment provides opportunities too, particularly for more developmental leadership.

Table of contents

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Executive summary

Improving service delivery for the urban poor is an urgent priority. By 2030, the worldwide urban population is expected to grow by 1.4 billion people, with city and town dwellers accounting for 60% of the total world population. The vast majority of this growth will take place in developing countries, and urban growth and migration is leading to the 'urbanisation of poverty'. The perception of an 'urban advantage' in services can obscure great differences among and within urban populations. There are stark inequalities in many urban areas, and correspondingly clear inequities in access to services, with large proportions of the population unable to access quality basic services. This is especially true for the nearly 1 billion people who live in informal settlements.

Political economy factors are just as important for urban service delivery as funding and technical capacity. These factors are influenced by both the characteristics and accountability relationships of the services in question, and the political economy of the wider context. Urban areas may benefit from greater resources, better technical capacity, and receive more political attention than rural areas, which can make providing and improving services easier. However, incentives in urban centres do not ensure that these advantages lead to more equitable or better-quality service delivery, so that even if urban areas have the resources, the politics of service delivery may hamper performance.

This discussion paper reviews literature on the political economy of four key urban services: solid waste management, water supply, transport, and urban health services. **The four sector reviews demonstrate the importance of governance factors – partly rooted in physical, economic, social and political differences between rural and urban environments – in shaping service delivery in urban environments.** While there are important variations between and within urban environments, urban service sectors display common as well as distinct characteristics in respect to the goods provided, their market failure traits, and their task- and demand-related qualities. At the same time, and often as a result of these sector characteristics, urban environments display patterns of common governance constraints, such as prevalence of certain political market imperfections, a proneness to policy, regulatory and managerial incoherence, and demand-side collective action challenges.

Political salience and political market imperfections: High urban population density means that demand for services is *relatively* spatially concentrated, though actual density is a key variable across and between urban areas. At the same time, *relative* land scarcity is an important dimension of urban environments that influences the available space for service infrastructure, intensifies the political and economic dimensions of land use planning, and heightens competition over land ownership. These inter-related factors can intensify the externalities connected to urban services, heighten political aspects of service delivery, and create intensified opportunities for rent-seeking of various kinds.

Diversity of providers, policy incoherence and monitoring: Particularly where urbanisation is rapid, a common feature of the urban environment across the four

sectors is the greater diversity of public and private sector providers, and market opportunities for informal and private providers. This situation can compensate for sub-optimal public services by improving availability and choice, but the presence of many different service providers creates a significant challenge for policy coherence, and oversight and monitoring. This is especially the case for informal urban settlements where the governing authority is likely to lack information on the services being provided and the population is less able to discern or act on the quality of the services they access. The tendency for urban areas to feature a larger number and range of service providers (whether public, private or informal) suggests that the public sector role must include greater capacity in regulation as well as direct provision or production. Related to this is the capacity to create systems that cross-subsidise service provision among richer and poorer constituencies. Patterns of decentralisation and the structure of local government and government agencies are critical to the capability of a municipal authority to manage service provision, and incoherent decentralisation often contributes to poor services.

Mobility, polarisation, informality and collective action: Urban populations may also be more transient, particularly in informal settlements where tenure is absent or insecure, and this can hinder collective action to demand better services or contribute to the co-production of services such as sanitation. Social and economic polarisation, which is more common among urban populations, can also limit collective action. The characteristics of urban populations may increase the concentration of demand, increase downward accountability for service provision, and expand the diversity of providers; but these advantages are by no means guaranteed.

Informal settlements intensify many of the political constraints to equitable and effective services. Informal settlements – which may emerge as a result of high land prices, low wages, rapid in-migration, and government failures to control land planning and the housing market – intensify negative externalities such as disease and environmental degradation. Service monitoring and cost-recovery can be more difficult; a lack of land tenure can act as a disincentive to the provision of formal infrastructure, and a more transient population may weaken collective action and co-production. While it is often the inhabitants of informal settlements who are most reliant on public services due to private services being unaffordable, they are also most likely to lack access to quality services.

More research is needed on urban service delivery. Policy-makers need to understand how the characteristics of urban areas shape the governance environment for urban services if they are to improve service provision in a developing urban centre. This review suggests that it is effective to build on 'sector characteristics' and 'common constraints' approaches to include specific consideration of the urban characteristics that influence services. Such an approach involves examining the political economy and governance factors across the urban environment in question, the local municipal governance arrangements, and sector-specific characteristics across the whole service production cycle. This review has also highlighted some important gaps in knowledge and research evidence on the political economy of urban services, as follows.

- *Under-studied services*: There is relatively little published research on sewerage and the treatment of waste water, on traffic management and road safety, and on emergency services.
- *Political economy work*: There is room for more analysis of governance, institutional and political economy features of specific sectors, especially

solid waste management, and around the role and emergence of developmental urban political leadership.

- *Integrative work*: Relatively few studies adopt a comparative approach to governance challenges for urban service delivery across cities and countries, or focus on political economy effects on service outputs and outcomes.
- *Programming implications*: More effort is needed to capture learning on how to improve urban service delivery, particularly in informal settings. Studies of successful reforms, and action research and evaluation with urban programmes, would be useful, as well as mapping interventions in urban services.

1 Introduction and analytical approach

By 2030, urban populations worldwide are expected to grow by 1.4 billion people, with city and town dwellers accounting for 60% of the world's population (USAID, 2013). By 2050, this figure is expected to reach 2.6 billion (ibid.). While the pace and pattern of urban growth and urbanisation varies, the vast majority of growth will take place in developing countries, with migration and urban growth leading a shift in the locus of global poverty that has been described as the 'urbanisation of poverty' (UN-Habitat, 2003, in Duflo et al., 2012). Mainstream measures of poverty tend to underestimate urban poverty due to the higher costs of living for urban residents (Mitlin and Satterthwaite, 2012), and it is estimated that 1 billion people live in informal settlements without access to many basic requirements such as shelter and services (United Cities and Local Governments, 2013).

In an increasingly urbanised world, it will be crucial to ensure that public services in urban areas deliver for poor people as well as the wider population. Funding and technical capacity for service provision are both typically more available in urban than in rural areas. However, it is also well known that governance and political economy factors play an important role in constraining and enabling effective service delivery (Boex et al., 2013; Jones et al., 2014). The effects of these factors can be shaped by physical and political economic characteristics of the urban environment, as well as broader political context and sector-specific qualities. In addition, any 'urban advantage' does not apply evenly across an urban population; access to services differs markedly between individuals according to their wealth, education, location, and other social and economic characteristics.

This paper reviews and analyses evidence on political economy and governance dynamics affecting key urban services in developing countries, focusing on solid waste management, water supply, transport and healthcare. It forms part of the Overseas Development Institute (ODI)'s research programme on the governance of service delivery, and expands and integrates previous work on governance constraints and sector characteristics, building on a recent inventory of literature on the political economy urban service delivery (Jones et al., 2014).

1.1 Analytical approach

The general observation that political economy and governance factors affect the provision and delivery of services has prompted increased attention to defining and documenting the specific ways in which these factors influence services. In particular, recent work by ODI and scholars at the University of Birmingham aims to provide a framework for understanding interactions between the governance context within which service delivery takes place, and the characteristics of particular service sectors and sub-sectors.

One strand of this work focuses on how the characteristics of specific services can influence the 'political dynamics' of their delivery (Mcloughlin with Batley, 2012a;

updated in Batley and Harris, 2014, and illustrated in table 1 below). Drawing on public economics and some sectoral and corruption literature, this 'sector characteristics' framework emphasises that service sectors and sub-sectors can be differentiated by some key characteristics: the nature of the good to be provided; the types of market failures that occur in its provision; the kinds of tasks involved in its production; and how the service is demanded and consumed. These characteristics can be explored through some key questions (Batley and Harris, 2014: 2-3):

- *Nature of the good being produced:* Can a service be delivered by the market or does it require public intervention? Can users choose between providers? Is the service for private or collective benefit? Can beneficiaries be excluded and targeted?
- *Market failure characteristics:* Why might market provision limit access to services? What is the rationale for public intervention? Does public provision counter or reproduce failures of inclusion?
- *Task-related characteristics:* How does the way a service is produced and delivered affect relationships of control and accountability between policy-makers, providers and users? Are there particular opportunities for co-production, or for rent-seeking and corruption?
- *Demand characteristics:* How does the nature of the service provided affect the capacity and forms of user demand and provider control?

Table 1: Important sector characteristics

Nature of good	Market failure characteristics	Task-related characteristics	Demand characteristics
Rivalry Excludability	Monopoly tendency Positive or negative externalities Information asymmetry Merit	Measurability and visibility Discretion of frontline staff Transaction intensity Variability of treatment Provider autonomy Co-production Lootability	Frequency of use Predictability of use Territoriality Targetability Choice

Adapted from Batley and Harris, 2014

The answers to these types of questions provide important information about the political economy and governance dynamics of a particular service. They can shape the political salience of the service – that is, the intensity of incentives for politicians to devote resources and political capital to effective delivery. They also determine the possibilities and constraints for control and monitoring of providers, and the likelihood (and means available for users) to influence access and quality of services.

In addition to service sector and sub-sector characteristics, the wider political economy context shapes the constraints and opportunities for access and quality of services. This may include periods of crisis and reform, regime type, and high-level elite incentives and coalitions (see Mcloughlin and Batley, 2012b). It may also refer to deeper, structural elements of the governance context. Wild et al. (2012) have presented a systematised approach to 'common governance constraints' that may cut across sectors in a given context (table 2).

Table 2: Key common governance constraints

Governance constraint	Definition
Political market imperfections	Political logics often based on patronage or clientelistic relationships, contributing to short-term, populist policies and biases to visible outputs
Policy incoherence	Contradictions within policy design, structure and roles, affecting some part or the entirety of policy processes
Levels of performance oversight or monitoring	Insufficient performance regulation and weak accountability contributing to users exiting from provision
Challenges for collective action	Weak capacity of actors to coordinate their activities and work together productively
Moral hazard	Availability of aid or other resources that insulate the state (or others) from the consequences of their actions or inaction

Adapted from Wild et al., 2014

These governance constraints derive from both underlying contextual factors and the sector characteristics described earlier. They manifest themselves in 'symptoms' of poor service delivery such as underinvestment, diversion of resources, user exit, or freeriding. While there is some overlap in the concepts, both of these frameworks have been developed with an explicit recognition that neither by itself can adequately identify all the political economy and governance factors underlying poor service performance in a given situation. Rather, analysis of sector characteristics needs to be 'combined with broader political economy analysis to provide a rounded account of how different services perform' (Mcloughlin and Batley, 2012b: 2).

This discussion paper explores the potential for extending this framework by reviewing literature on the political economy of four urban services (solid waste management, water supply, transport and healthcare) in light of two questions:

- Do these sector and governance characteristics show particular patterns across urban environments and services?
- How similar or different are these patterns in relation to different urban services?

These analyses are presented in the following sections, followed by some preliminary conclusions about patterns. This paper is a piece of integrative work; it is not intended as a comprehensive literature review on any given sector.

1.2 Sector and literature selection

The sectors covered in this review are not exhaustive. They were selected to be 'representative' to some degree (being services almost entirely limited to urban areas and for which urban governments typically have responsibility), and where there was sufficient literature for analysis. Elements of an 'evidence-focused literature review' methodology were used, with a structured search for academic and grey literature complemented by expert informants who identified key sources and authors for cross-reference (see Jones et al., 2014). Additional documents were retrieved on an ad-hoc basis according to emerging issues and gaps. Documents were screened for inclusion/exclusion using formal criteria and analysed according to explicit, pre-established theoretical frameworks.

2 Solid waste management

In low-income countries only 40% of waste is collected, and a very large amount of this is either dumped or sent to poorly managed landfills (United Cities and Local Governments, 2013). A large body of research indicates that governance issues are highly significant in the effective delivery of solid waste management services. In fact, some have even used the effectiveness of these services as a proxy indicator for the quality of governance in urban areas (Whiteman et al., 2001; Adama, 2007). A number of studies – covering North Africa, East Africa, West Africa and South Africa, South Asia and South-East Asia, and Latin America – examine political economy factors and the drivers of better or worse governance of solid waste management (Yhdego, 1995; Walling et al., 2004; Mariwah, 2012; Bjerkli, 2013). Many (though not all) of these do make explicit efforts to connect governance, institutional and political economy issues with measurable service delivery outcomes.

Solid waste management is typically seen as a pressing priority for urban areas where there is a higher per capita and spatial concentration of waste production, and the potential for various social and economic problems is higher in the more concentrated settlements of urban areas. This is reflected in the fact that the vast majority of the literature on solid waste management focuses on urban areas – and for this reason, it can be seen predominantly as an 'urban service'. In many cities, it is primarily a municipal government or other local government responsibility. There is also often a greater focus politically, and in the studies available, on waste collection than waste treatment and disposal, or the enforcement of environmental regulations such as anti-dumping rules.

2.1 Service characteristics

2.1.1 Nature of the good

Solid waste management broadly has the characteristics of a 'public good' (Whiteman et al., 2001; Cointreau-Levine, 1994), in the sense that the benefits of a well-executed full solid waste management cycle are generally non-rivalrous and non-excludable. There is also strong merit in and good motivation for such services, as improperly managed waste can be a breeding ground for carriers of disease (Hoornweg and Bhada-Tata, 2012). There are also environmental protection dimensions: improperly managed waste can contaminate groundwater and surface water, and cause air pollution from burning rubbish. Areas that lack proper waste collection can have double the rate of diarrhoea and six times the rate of respiratory disease (ibid.). This affects businesses as well as residents; robust solid waste management services are not only valuable for people working in the area but also provide a more positive image that can be important for certain businesses (Yhdego, 1995).

Waste collection has some private good characteristics as well – clearing waste from houses and businesses provides some excludable, rivalrous benefits (Batley, 2001).

Evidence on Indian cities, for example, shows that households would like their waste taken away, and that industrial and commercial enterprises value waste collection (Appasamy and Nelliyat, 2007). There is therefore a willingness on the part of broad segments of businesses and urban populations to pay for solid waste management services (Cointreau, 2005). Other factors also create private incentives for collection, such as the valuable resources to be found in waste, growing domestic and international markets for recyclables, and improving waste-to-energy technology (Hoornweg and Bhada-Tata, 2012). It is estimated that around 1% of the urban population worldwide relies on salvaging recyclables from waste for their livelihoods (Lizner and Lange, 2013).

These 'private good' characteristics and the resulting willingness to pay have led to many urban areas funding solid waste management through user fees (Hoornweg and Bhada-Tata, 2012). However, where these services have been contracted out, this approach has often had adverse effects on low-income residents (Nunan and Satterthwaite, 2010). Deprived areas are often poorly served by privatised services, due to an inability to pay and lower-value waste (Mariwah, 2012). Even where tariffs for collection are set at a level that is affordable for poorer residents through government subsidy or cross-subsidisation (allowing contractors to charge higher rates to affluent areas), contractors often introduce higher informal charges or simply fail to collect from poorer areas (Nunan and Satterthwaite, 2010).

Willingness to pay also does not typically cover the treatment and disposal of waste. Where user fees and tipping fees are not affordable or acceptable to households, businesses, or solid waste management contractors, then waste tends to get dumped illicitly. A study in India found that most households and businesses are not overly concerned with what happens to the waste once it is taken from their immediate surroundings (Appasamy and Nelliyat, 2007). Willingness to pay may also apply to waste collection from individuals' households, place of business and/or immediate local area, but not large public spaces or other parts of a city (Cointreau, 2005).

These factors present significant challenges for ensuring that revenues are sufficient to cover the costs of a full solid waste management cycle. One study across four cities in Africa found that the highest proportion of waste management costs recovered was 30% (in Abidjan), with only 5% recovered in Johannesburg, and considerably less than that in Ibadan and Dar es Salaam (Onikobun, 1999). As such, it is unlikely that a purely private sector approach will provide an adequate supply of solid waste management services (World Bank, 1994); there remains considerable need for government intervention and subsidy to ensure that poorer areas are well-served, and that there is adequate collection of waste in public areas, which is then properly disposed of.

2.1.2 Market failures

For waste collection, there is clearly a low tendency towards monopoly: it requires relatively low capital investment and technology, and there are minimal start-up costs (Cointreau, 2005). This often leads to a variety of formal and informal players in the market for waste collection. For example, in Ethiopia, a variety of small enterprises and informal workers create considerable competition in the sector (Bjerkli, 2013). Competition and narrow margins mean that an artificial monopoly is often needed (in the form of exclusive rights to collect waste from particular areas for a period of time) to reduce conflicts and negative side-effects of competing operators (ibid.).

It would seem likely that there is a higher tendency towards monopoly for effective disposal and final treatment of waste, due to larger capital requirements and economies of scale – for example, in large municipal compost facilities and landfills due to the cost of land and machinery (Cointreau, 2005). 'Waste-to-energy' facilities

have the potential to provide opportunities for entrepreneurs while also addressing social and environmental needs. However, financial viability is challenging, partly because such facilities require considerable upfront investment in technology, machinery and human resources (Karekezi, 2002).

Solid waste management involves very significant externalities that mean markets will not function efficiently to provide these services (World Bank, 1997). Poorly managed waste has effects on public health and the environment (as mentioned earlier), as well as traffic, flooding, and ambience. These not only affect people living in the immediate area where waste is dumped but also others living in the city. Siting of waste disposal and treatment facilities such as landfills and incinerators has considerable negative consequences for those living nearby, especially if the facilities are not properly managed – for example, the landfill in Dar es Salaam causes considerable problems for people living in the nearby neighbourhood of Vingunguti, who suffer from fumes, smell, noise and vibrations, leading to health problems which in turn affect their livelihoods (Kironde, 1999).

Conversely, there are some positive externalities of functional solid waste management arrangements, and it is quite easy for people to freeride on the efforts of others. There can be a 'not in my back yard' (NIMBY) mentality, with diffused benefits and highly concentrated costs presenting challenges for implementation (Yhdego, 1995). Part of the theoretical solution to solid waste management externalities involves incentivising consumers and industry to produce and consume less, with proposals such as extended producer responsibility schemes (for the waste that comes from companies' products) (Lifset, 1993). However, achieving this reduction at scale – especially where a large proportion of products are imported – is challenging, because waste reduction policies are predominantly driven within a city or town (Cointreau, 2005).

There is little literature on information asymmetries in solid waste management services. There may be examples of asymmetric information influencing contracting arrangements with private providers in relation to the quantity and composition of the waste in a municipality (Dorvil, 2007). However, it seems likely that the solid waste management sector may have lower asymmetries of information than the other three sectors studied here.

2.1.3 Task-related characteristics

There are considerable differences in the task characteristics of different parts of the solid waste management cycle. Waste collection is a highly visible service, with outputs that are relatively simple to measure (Whiteman et al., 2001). Some even argue that it is the most visible of all municipal services (ibid.), and therefore has a large influence on perceptions of government effectiveness (Batley, 2001). For example, when waste build-up has become particularly severe in Dar es Salaam, there have been well-publicised interventions by the top tiers of Tanzania's ruling party (Kironde, 1999). Although there is limited discussion of other aspects of the task characteristics of waste collection, it is clear that collection does not require a high level of professionalisation, professional bodies have limited power, and there seems to be minimal space for discretion and low variability of user demand.

The stages that follow waste collection have quite different task-related characteristics, not least in terms of visibility. In many cases, waste is not taken to a transfer/sorting station but instead simply dumped elsewhere. The poor functioning of post-collection solid waste management in India has been partly attributed to low visibility of waste after it has been collected from households and businesses (Appasamy and Nelliyat, 2007), and in Dar es Salaam there is an 'out of sight, out of mind' mentality whereby collected waste is frequently dumped out of sight of

sensitive areas, typically in poor and informal settlements (Yhdego, 1995). In Ghana, environmental protection officers tasked with monitoring and enforcing compliance with anti-dumping rules face a challenge due to the discretion involved in their task, whereby they are often pressured or bribed not to report offenders (Mariwah, 2012).

Treatment of waste is less visible still, although there is limited literature on the political economy of this task. Treatment and disposal facilities such as landfills and incinerators require professional input into their design and placement, though less technical knowledge is required to operate them (Hoornweg and Bhada-Tata, 2012). There is no evidence that engineers or professional groups hold considerable power or autonomy in relation to the design of these facilities. In India, compliance with environmental protection regulation on the part of municipal waste disposal facilities is virtually absent, partly due to the technical requirements of monitoring (Appasamy and Nelliyat, 2007); others speculate that this has contributed to underinvestment in proper treatment and disposal facilities worldwide (Swedish International Development Agency, 2006). However, as a large proportion of cities suffer from poor levels of collection, and frequent dumping of waste, underinvestment may also be related to the fact that little waste actually reaches the dumps in the first place.

2.1.4 Demand characteristics

Beyond these 'willingness to pay' studies, there is very little literature analysing the demand characteristics for solid waste management. However, it can be inferred from the literature that the service has a high frequency and predictability of use, and is a highly territorial service – all of which factors can contribute to increased attribution and collective action around quality, and hence political salience. Much of the literature tacitly gives the impression that solid waste management is a relatively low priority compared to jobs, healthcare and water; however, a few studies suggest that solid waste management services are seen as an important priority by many urban residents, as illustrated by surveys in Gujranwala (Pakistan) and Mekelle (Ethiopia) (Altaf and Deshazo, 1996; Hagos et al., 2012).

There is also considerable potential for co-production, whereby community-operated services and infrastructures play an important role in some areas (Oosterveer, 2009; Pargal et al., 1999). Households can make a positive contribution to solid waste management by separation and sorting at the source of waste, transporting waste to collection points, or cleaning local public areas. In many cities, local communities have, under their own initiative, hired contractors to carry out these tasks for them. A great deal of evidence points to the potential for strategies of co-production to be a driver of improved services for the poor (Mitlin and Satterthwaite, 2012), so this marks an area of potential influence of service users.

2.2 Common governance constraints

2.2.1 Political market imperfections

Solid waste management is susceptible to patronage and politicisation, and this can lead to a high incidence of political interference (Oosterveer, 2009; Swedish International Development Agency, 2006). As a local and labour-intensive service, it typically accounts for a substantial proportion of employment under the control of a municipality (Hoornweg and Bhada-Tata, 2012). As such, it is frequently used by local government to buy and reward loyalty with salaries. Bjerkli (2013) shows how solid waste management was used in Ethiopia to secure and reward loyalty to the ruling party through employment. The high visibility of collection also means that tariffs may be set artificially low, causing problems for fiscal sustainability. The market for private providers is, for many municipalities, a way to generate income (Bjerkli, 2013; Jones and Sharma Mainali, 2014).

The voice of poor people is typically inadequately represented with respect to SWM (Oosterveer, 2009; Mitlin and Satterthwaite, 2012; Kazungu, 2010; Jayasinghe and Baillie, 2013). There is often a lack of willingness to recognise and cooperate with informal waste management workers, despite the fact that they are estimated to be responsible for 20% of municipal waste recovery worldwide (Gunsilius, 2012). The political imbalance may be partly due to the fact that residents of informal settlements are typically unable to vote as they have no formal address (Mitlin and Satterthwaite, 2012). Nunan and Satterthwaite's (2010) cross-country comparison also shows that rising urban land prices make 'redevelopment' attractive for real estate interests, who pressure politicians to evict the poor from informal settlement areas. Politicians resist providing services and infrastructure to these areas because this would potentially 'legitimise' the settlements and strengthen current residents' claims to the land.

2.2.2 Policy incoherence

Policy incoherence is mentioned in many of the available studies on governance and the political economy of solid waste management. Tasks can be spread across several government departments. For example, in Tanzania different bodies are responsible for the maintenance of vehicles for waste collection, the monitoring and enforcement of anti-dumping regulation, and employment of waste collection staff (Yhdego, 1995). Problems can also stem from successive reforms or policy initiatives that are neither aligned with each other nor designed to consolidate previous changes. In Ethiopia, for example, successive privatisation and decentralisation reforms have resulted in disjointed and overlapping mandates (Bjerkli, 2013).

However, in general, local governments have fairly clear formal responsibilities for the provision of solid waste management services (Whiteman et al., 2001). Consequently, the level of both *de jure* and *de facto* decentralisation has been rigorously and positively correlated with solid waste management service delivery outcomes in South Asia in a study by the Urban Institute (Boex et al., 2013). A primary source of policy incoherence may therefore relate to decentralisation reforms. Often, local governments may have responsibility for providing such services, but lack the finances to adequately meet their obligations. For example, a study across Nigeria, Côte d'Ivoire, Tanzania and South Africa found that municipal governments have insufficient control over resources to carry out solid waste management functions, typically needing to get by with only a fraction of the funding that is needed (Onibokun, 1999).

2.2.3 Performance oversight and monitoring

The review found that the literature implicitly tended to emphasise the difficulty of monitoring performance with regard to solid waste management in developing country contexts, often due to strong discretion on the part of providers and even users. Ideally, households and businesses would be charged for the volume of waste that they produce (also known as 'pay as you throw' schemes). However, in contexts where it is difficult to monitor and punish illegal dumping, this is not possible; it therefore seems likely that these monitoring challenges explain the very limited application of the approach outside developed countries. Crook and Ayee's study of Ghana (2006) argued that limited funding and the scale of the challenges facing environmental health officers severely hampered their ability to enforce cleanliness and punish dumping; similarly, in Nairobi, weak oversight of environmental protection laws enables solid waste dumping to go unpunished (Kazungu, 2010).

Contractors may cut costs if they dump waste out of sight rather than putting it through sorting, transfer and disposal facilities. For example, in Nairobi, privatisation of and competition in waste management services increased the extent to which waste was collected but also led to uncontrolled dumping practices, with private operators looking to reduce transportation costs and avoid dealing with gangs operating the

dumps (Baud and Post, 2003). Also, the typical solution to the problem of lower revenues from poorer areas is to ensure that richer areas cross-subsidise them; however, where collection activities are not properly monitored or enforced, waste is often not collected from poorer areas at all (Nunan and Satterthwaite, 2010).

2.2.4 Collective action

One way to overcome the monitoring challenges mentioned earlier is to give citizen groups a role in monitoring solid waste management contractors (Mariwah, 2012). There are examples of civil society organisations (CSOs) influencing planning and provision of these services on behalf of poorer citizens. However, in many contexts, local government is either reluctant to work with civil society, or there is not an adequate framework to enable this to occur productively and regularly (Nunan and Satterthwaite, 2010).

There are clear opportunities for 'co-production' of solid waste management services (Majale, 2012). For example, community participation to clean up or provide composting services is described in India (Zurbrügg et al., 2004). Such co-production tends to occur where there is sufficient social capital, but can face challenges where this is not the case (e.g., in heterogeneous neighbourhoods), where residents do not own their own houses, and where they fail to overcome information barriers and transaction costs (Pargal et al., 1999). In Abuja, Nigeria, the social and ethnic heterogeneity of urban residents and a weak history of community action have presented hitherto insurmountable obstacles to collective action on waste management (Adama, 2007).

Collective action among informal workers in the waste management sector has, at times, achieved more consistent levels of service and better services for poor areas, or provided materials for small-scale industries that sell to poor people. In some cases, cooperatives and agreements on the sale of materials recovered have improved the organisation of informal collection (Medina, 2008). In Dar es Salaam, Tanzania, scavengers are quite well organised, and through a series of middle men interact with the end users of the materials; in Ghana, better organisation among informal waste workers has resulted in improvements in waste management services in poorer areas (Mariwah, 2012).

Oosterveer (2009) defines a broader form of collective action: 'networked governance'. This modality of solid waste management service provision can work in the absence of a functional state. It recognises the failure of privatisation through formal or informal exchanges between organisations, concerted action, and joint production, involving government agencies at different levels, key legislators, pressure groups, relevant private companies, non-government organisations (NGOs) and CBOs, and citizens. In many cases, the promise of such networked governance has not been fulfilled. As Mariwah (2012) argues, despite the relative weakness of local governments, they are still the locus of certain crucial powers such as legislative powers, powers to award contracts, and to determine service charges. This tends to restrict what collective arrangements can achieve and often sees the service delivery 'network' functioning to serve local patronage networks (Jones and Sharma Mainali, 2014).

2.3 Summary

The 'private good' dimensions of waste collection and its low monopoly tendency, visibility and territoriality tend to place greater emphasis on collection than the downstream aspects of the service. These also explain why informal settlements and poorer neighbourhoods typically do not have well-functioning collection, as there is lower ability to pay and political significance. Once the waste has been collected

from source, various service characteristics militate against effective provision. Low willingness to pay for proper disposal, large externalities and incentives to freeride (especially due to strong competition between waste collectors) mean that waste is often dumped after collection. Disposal and treatment is trickier still, and there is less research surrounding the political economy of this aspect of the process.

Political market imperfections lead to considerable constraints in extending waste management services to informal settlements, and patronage dynamics are quite prevalent due to the scale of employment under municipal control. While there is a relatively clear municipal responsibility for the provision of solid waste management services, inadequate or incoherent decentralisation and the challenges of monitoring and enforcement (particularly around anti-dumping rules and access) limit the effectiveness of service delivery.

3 Water supply

This analysis examines the political economy literature on how sector characteristics of water services and related governance constraints affect the provision of water in urban areas. The literature on the political economy of water services is rich and extends to informal coping strategies, health and environmental externalities, competing demands for services between social groups, and the potential for collective action and co-production to improve access to water. There is also considerable discussion in the political economy literature over the political salience of water, especially in the poorest areas, which – when combined with the common perception that water should be free of charge – can result in a lack of resources for public water services.

The literature regarding the provision of water in urban areas is largely oriented around different financing options, while ensuring that water is accessible to poor people, as well as the role of the private and public sectors in ensuring this. There is also a tendency to focus on the distribution and pricing of water rather than its treatment or disposal.

3.1 Service characteristics

3.1.1 Nature of the good

Water supply does not share the qualities of a pure public good, as it is generally rivalrous and often excludable, depending on the nature of the supply. Rivalry over water may increase in urban areas as populations increase and living standards improve, leading to greater demand (Muller, 2008). Extraction of water from a particular source for consumption elsewhere also has the potential to provoke conflict. For example, peri-urban residents in Chennai (India) and in Mexico City resent water being extracted from sources in their locality for onward sale in the centre of the city while they experience water shortages (Muller, 2008; Allen et al., 2006). Rivalry can compound problems of policy incoherence since jurisdiction over water sources and responsibility for environmental management may not be clearly defined or enforced. This can also be tied to structural issues such as competing claims for land and economic opportunities (Cheng, 2013).

It is generally difficult to make water provision fully exclusive, and since water is also rivalrous, there are strong incentives to freeride on water infrastructure. Between extraction, treatment, and delivery of water to consumers, a large proportion may be lost due to leaks, theft, drilling boreholes, unbilled consumption, and inaccurate meters (Araral, 2008). Some forms of water provision common in urban areas, such as standpipes, are also difficult to control. However, while the urban poor are often assumed to be primarily responsible for water theft, Cheng (2013) notes that non-payment among the poor actually accounts for relatively small percentage of commercial water losses. The urban poor consume a relatively low volume of water compared with the commercial losses from industrial establishments and other large users.

However, the excludability of water may be greater in urban underground piped water systems, which may be more difficult (although not impossible) for non-

contributors to tap into. Consequently, the poorest households may be excluded due to the cost of water services even though the proximity and quality of services may be better than in rural areas. The territorial nature of water and its excludability mean that water is also a 'targetable' service. Politicians may exploit this 'targetability' by offering subsidies to particular poorer households to lower the cost of water tariffs. However, this does not usually benefit the poorest households who do not have access to a household networked supply (Mason et al., 2013).

3.1.2 Market failure characteristics

The literature on the commercialisation of water is dominated by discussion of private, public, and public–private partnerships for service delivery. The need for investment in infrastructure and the difficulty of charging for water consumption suggests important roles for the state as provider, regulator and financier (Nilsson and Nyangeri Nyanchaga, 2008; Bauer, 1998). In addition, there are a few significant externalities of water provision, including important community and public health benefits deriving from access to water (Allen et al., 2006; McGranahan, 2002; Nilsson, 2005). Proponents of private sector involvement argue that it improves efficiency and cost recovery and is a source of finance, while opponents argue that it raises costs, increases potential for corruption, and reduces affordability (Bakker et al., 2008).

However, the high investment costs of creating a networked system that meets the needs of all residents and the ongoing expansion of urban areas and informal settlements mean that it is very challenging to maintain a comprehensive infrastructure for city-wide water supply (Duflo et al., 2012; Bakker et al., 2008). Where the rate of population growth is higher than the rate of economic growth, municipal budgets can become inadequate for the high cost of water infrastructure (Davison, 2001). Consequently, less technical solutions such as rain-water harvesting, drilling shallow boreholes and tankers, can be found alongside a networked supply (K'akumu, 2004; Sansom, 2006). Informal solutions are less likely to provide clean water in urban than rural areas given the higher probability of the water source being polluted (Allen et al., 2006). Consequently, the urban poor are less likely to have access to safe water than the urban rich (Garland and Herzer, 2009).

A study of 10 African cities found that while city-wide water authorities were legally obliged to provide water to all residents, in most cities the municipal authorities served a third or less of the population, with independent operators covering the rest (Collignon and Vezina, 2000). Water vendors who provide flexible, informal and easily accessible water may be preferred providers in informal urban settlements (Bakker et al., 2008). In turn, water can be an important source of income and employment for informal vendors where formal provision is lacking, and the potential to make money from selling water can create conflict. For example, in areas of Jakarta (Indonesia), mafia groups control the water supply, preventing state suppliers from entering the market (Bakker et al., 2008).

There can be a lack of incentive for property owners and construction companies to invest in water infrastructure for low-cost housing due to inability of poor households to pay for such facilities. Similarly, tenants may be unwilling to pay for infrastructure and formal connections that they perceive to be an upgrade to a property they do not own (Allen et al., 2006). These incentives are exacerbated by insecurity of land and housing tenure. Informality and illegality surrounding land development and tenure in urban areas shape the way inhabitants interact with developers, service providers and public authorities (Ducrot et al., 2010). Aside from inability to pay, provision may be withheld from irregular settlements due to the difficulty of monitoring usage and billing customers (K'akumu, 2004). A municipal government may also refuse to

provide access to formal water infrastructure in informal settlements as a way of dissuading developers from contravening planning and building regulations (Allen et al., 2006) and to deter squatters. Demands from developers to allow access to services in illegally developed settlements opens up opportunities for bribery, as government officials may allow regulations to be flouted (Hasan, 2002).

Consequently, both market failure and state failure can influence the provision of water. As a result, water is usually provided by a range of public, private and non-profit providers. These can be divided into four broad types: public providers; informal providers; civil society organisations supporting community-based management; and private operators as part of public–private partnerships (Sansom, 2006). Each type of service and provider influences the cost and quality of water for the user. For example, wealthier households commonly receive water at a lower unit cost than poorer households who are reliant on local vendors (Bakker et al., 2008; Connors, 2005; Garland and Herzer, 2009). However, the lack of financial security experienced by poor households may prevent them from paying for a regular connection, and so they adjust their consumption of water according to what they can afford each day (Allen et al., 2006).

Information asymmetries in the water sector occur due to both technical and institutional complexity. With regard to technical complexity, it may be difficult for users to judge water quality, and a lack of public health information (particularly in poor urban areas) may mean that users are unaware of the health risks of poor-quality water. Furthermore, while formal service providers typically lack information on users in informal settlements (which makes cost recovery difficult), users may lack information on quality and value for money (Bakker et al., 2008).

In urban areas, institutional complexity can mean that users lack information about who is responsible for the maintenance of infrastructure and who regulates the service (Duflo et al., 2012). This is especially problematic for water because horizontal coordination is required across a number of departments such as health, water, land-use planning and regulation, and housing – each of which is likely to be responsible for a distinct part of a service or policy.

3.1.3 Task-related characteristics

Water supply task characteristics vary depending on the nature of the supplier and infrastructure in use. There are numerous ways in which water can be extracted, treated, distributed and used or re-used, and urban areas typically exhibit a wide range of practices, varying between wealthier areas of a city with formalised housing and poorer areas with informal settlements. For example, there may be a formal network of piped water and sewerage, standpipes for water which are shared by neighbours, a water truck delivering barrels of water, illegal tapping of water pipes, or boreholes. In general, the processes of treating and distributing water upstream are not as visible as supply, which means demand from voters tends to be low and little credit is given to politicians for improving these stages of the cycle – unless there is an obvious health or supply breakdown (Nilsson and Nyangeri Nyanchaga, 2008). This invisibility gives politicians an opportunity to keep funding for water services at an absolute minimum while maintaining political gains from keeping water tariffs low (Baietti et al., 2006).

3.1.4 Demand characteristics

Water demand is territorial, and this is particularly relevant in urban areas where the inner city is likely to be reliant on water sources located in the peri-urban area (Allen et al., 2006). As a result, conflict may arise between those living close to the water source, and those who consume the water in the inner city (von Bertrab, 2003). There is also a strong spatial link between access to a formal water supply and poverty, with

the urban poor generally living either in areas not reached by formal water infrastructure, or in informal settlements on hazardous sites such as river banks, where laying pipes is more difficult or contravenes planning regulations (K'akumu, 2004). Allen et al. (2006) note that the amount of water consumed does not vary as much by need, but rather, depending on the service available, with higher quantities being consumed where this is affordable. There is also a common misunderstanding of the cost of treating, transporting and distributing water, whereby users perceive water as a natural resource that should be free (ibid.). Households may prioritise living in an informal settlement where housing is accessible even if the water services are limited or absent (Bakker et al., 2008).

3.2 Common governance constraints

3.2.1 Political market imperfections

Water supply is particularly vulnerable to patronage politics, since local politicians can promise improved access in particular localities where their voters live or in line with other priorities for personal or political gain. Bakker et al. (2008) note that in Indonesia, the political incentives to present a city as modern and attractive to the international political and business elite can result in water provision being prioritised in the rich, business districts, rather than in poorer areas where need is greater.

Water provision is also affected by a strong perception that water is a free, natural resource. Public water agencies frequently succumb to populist pressures to provide a low-cost water supply, which causes chronic underfinancing of the water system. In addition, these subsidies may still not benefit the poorest households and can be distorted by political incentives to reduce costs to particular groups (Araral, 2008). Unsustainable funding for water can result in political actors providing financial bailouts, which can give further opportunities to manipulate service provision to their political advantage (Mason et al., 2013).

Furthermore, the capacity of public water agencies may be limited by patronage politics by which staff members are appointed according to political interests rather than technical competency (Bakker et al., 2008; K'akumu, 2004). Economic rent-seeking may also occur through corruption in the procurement of private sector services, by diverting revenue away from maintenance and towards personal or political benefit, or by overstaffing, since job creation is likely to generate more political support than service maintenance (K'akumu, 2004).

3.2.2 Policy incoherence

Policy incoherence is a frequent problem for water provision, and institutional fragmentation is especially problematic in urban areas. There can be an inability to coordinate policy across water, energy, transport, land-use planning, and waste management sectors (Allen et al., 2006; Connors, 2005). In particular, policy on housing tenure and a lack of tenure rights obstructs access to formal water provision in informal urban settlements, and policy and legislation regarding effluence from industry must be aligned with the provision of waste water treatment services (Adesogan, 2013; Parkinson and Tayler, 2003).

Incoherent decentralisation can also create opportunities for local bodies to shirk responsibility for providing water to difficult areas (Connors, 2005). Decentralisation may devolve responsibility for water and sanitation provision to municipal government, but the resources required to deliver these services may not necessarily be decentralised as well (Davison, 2001). Furthermore, in decentralised settings, municipal governments often assume multiple functions for utilities management,

including financing, policy-making and regulation. This combination of regulatory oversight with other functions can create conflicts of interest (Baietti et al., 2006).

Rapid urbanisation and the growth of informal settlements also make policy coherence a challenge. Peri-urban areas are likely to have especially fragmented water services because municipal authorities may fail to take responsibility for rapidly changing outer-city areas. Consequently, independent providers and community-based organisations are more active in these areas, catering for low-income arrivals from rural areas and others who are beyond the network's reach (Collignon and Vezina, 2000). While the variety of services provided by such suppliers increases the likelihood of policy incoherence, governments and utilities are increasingly accepting the importance of alternative providers, and attempting to collaborate with them (Sansom, 2006).

Periphery areas of towns and cities also often contain poor households as well as the water sources required by those living in the urban centre. As a result, there may be tension between outer- and inner-city areas over access to water (von Bertrab, 2003), in which the marketability of water leads to water being sold to wealthier households in the centre, leaving those in the peri-urban area experiencing water shortages.

3.2.3 Performance oversight or monitoring

Management arrangements are critical to the regulation of water supply systems. Conflicts of interest arise where the owner and the regulator is the same body, which results in performance contracts not being credibly enforced (Araral, 2008). There are currently few independent water regulatory agencies in low-income countries, and the challenge of regulating suppliers is particularly great in informal urban settlements where there are many diverse, small, informal suppliers. Monitoring usage and quality of provision in these areas is generally impractical and an inefficient use of resources (Sansom, 2006). In terms of bottom-up monitoring, where users feel a greater sense of ownership – for example, when they pay for piped water to their household – monitoring and reporting by users of the quality of water provision is more common (Allen et al., 2006).

3.2.4 Collective action

Whether a water supply system is networked or not influences the potential for collective action and co-production. Networked systems, which are far more common in urban than rural areas, bring users together to rely on a common service. Usage is predictable and regular, and the service covers a defined territory. Consequently, if there is a breakage in the system, a large number of people will experience the same problem at the same time, and so collective action may be triggered (Collignon and Vezina, 2000). However, networked systems are also more likely to be monopolised due to the high investment costs of building them, and so the system may be less easily influenced by public demand.

Collective action to demand better-quality water may be prevented by social and economic polarisation or patronage that limits a community's capacity to create political pressure. Newly arrived residents in informal urban settlements may not be in a strong position to demand better water provision, and a high population turnover in an informal settlement may also hinder collective action and co-production (Duflo et al., 2012; Collignon and Vezina, 2000; Hardoy et al., 2005).

Nevertheless, the literature describes various initiatives for co-production in water supply, often through intermediaries. Connors (2005) found that NGOs can act as brokers to increase cost recovery in informal settlements for formal water suppliers. NGOs can also provide a community point which residents can use to access information and to communicate with agencies providing water. NGOs acting as

intermediaries in this way can provide information on residents' water usage while communicating resident demands to providers. Similarly, Allen et al. (2006) note that participatory democracy can promote collective ownership of and responsibility for local services.

3.3 Summary

The primary governance constraints on the provision of water supply concern the territorial and rivalrous nature of water – which together result in 'targetability'. This means that water is a particularly politically salient resource, and there may be pressure on local politicians to protect access to water in certain areas of a city. Social polarisation and competition for water in urban areas also mean that coherent public demand for universal access to water is unlikely, and so public funding may be targeted at a particular group. Public funding is also likely to be invested in the most visible, and therefore politically rewarding, aspects of water provision, rather than infrastructure maintenance and treatment. The common public perception that water should be provided free of charge also creates political pressure to subsidise access to water, even if formal provision does not reach the poorest inhabitants. Finally, policy incoherence is a significant problem in rapidly growing urban areas. Local authorities may lack sufficient power, resources and incentives to effectively coordinate the different agencies and providers involved in supplying water.

4 Urban transport

Transport-related services in urban areas include the construction, operation and maintenance of infrastructure (e.g. roads), public transportation, traffic management, and support to non-motorised transport. In most low-income countries, daily mobility is a major challenge, especially for poor people living on the outskirts of cities (United Cities and Local Governments, 2013). Many fast-growing urban centres in the developing world are facing 'premature congestion', with declining mobility due to increasing car ownership that is outpacing management capacities (Gakenheimer, 1999; Sietchiping et al., 2012). The majority of cities not only struggle to provide decent public transport, but they also lack a functional traffic management unit, even though this is a relatively low-cost intervention (Cracknell, 2000; Gwilliam, 2003).

Many of these functions are resource-intensive, but there is also a strong emphasis in the literature on the importance of management, institutions and governance in shaping these services (e.g. Meakin, 2004; IDLgroup, 2013). Policy coherence and institutional coordination are central themes (e.g. Kane, 2002; Gwilliam, 2003; Meakin, 2004; Mitric, 2013), and many argue that the solution lies in the creation of a single transport authority for metropolitan areas (e.g. GTZ, 2004; Mitric, 2013. Imported 'good governance', typically in the form of privatisation and deregulation of public transport, has not proven entirely successful, due in part to principal–agent issues and challenges for effective contracting and properly aligned performance incentives (Estache and Gomez-Lobo, 2003; Imran, 2010; Mitric, 2013). In some cases it has been argued that the best hope for improved transport management is to escape 'good practice' models and find unconventional approaches better suited to local realities and the institutional landscape (Imran, 2010). Related work emphasises the 'polycentric' nature of transport services and network management (Vaidyanathan et al., 2013).

4.1 Service characteristics

4.1.1 Nature of the good

Most transport networks in urban areas may be thought of as common-pool resources (Witbreuk, 1998). Road networks are typically not excludable, but in urban areas they are rivalrous due to congestion (Wales and Wild, 2012). It has been calculated that in the 1990s, congestion lowered the GDP of developing country cities by 3-6%, and traffic has markedly increased since then (UN Habitat, 2013). The features special to urban roads include the fact that they are rivalrous due to congestion, and there is some potential for higher-quality private provision due to lower monopoly tendency, and the potential for better monitoring of construction and maintenance. Toll roads and public transport networks are excludable, and typically do not suffer the same congestion problems, and hence are defined as club goods.

Public transport is both excludable and rivalrous, and thus amenable to some mixture of public and private provision. This is reflected in private and even informal provision of a wide variety of public transport services in urban areas (Kumar and Barrett, 2008). As well as forms of transport familiar to developed country settings (such as buses, trams, trains and metro systems), there are typically a variety of smaller motorised vehicles such as 'tuk-tuks' and minibuses in many developing

country cities. For example, in Nairobi, Dakar and Kampala, the majority of public transport journeys are on crowded minibus services provided by the informal sector (Adam Smith International, 2005).

The market price for fares may not be affordable for some poorer residents, and private provision may not cover all routes; there is typically strong competition for a small number of profitable routes, and a dearth of applications for less profitable routes or those encompassing poor quality roads (Estache and Gomez-Lobo, 2003; IDLgroup, 2013). Ensuring that the majority of routes are economically feasible requires controlled competition, with exclusive rights to routes for a period long enough to ensure investment payback (Kumar and Barrett, 2008). Government intervention in the form of subsidies or direct service provision is often required, and where this is inadequate, informal providers step in to provide transport services that are crucial for cities' poorer residents (UN Habitat, 2013).

4.1.2 Market failure characteristics

Alongside land use planning that can improve proximity of populations to jobs and link elements of value chains, transport services are the key means for providing connectivity. Transport infrastructure and systems are thus associated with the positive externalities – typically economic agglomeration effects – arising from this improved connectivity, and hence justify some government intervention (Sohail et al., 2006). Improved connectivity creates jobs, increases labour markets available to businesses, and increases overall economic output. Connectivity enables people to access basic services and economic opportunities, while expensive mobility is shown to be a contributor to inter-generational poverty (UN Habitat, 2013).

On the other hand, there are serious negative externalities of road usage in the form of congestion, pollution and injuries (ibid.). It is estimated that every year, 1.3 million people are killed in road traffic accidents (exceeding deaths from HIV or malaria), and 79.6 million healthy years of life are lost due to road traffic injuries and pollution (Global Road Safety Facility, the World Bank and Institute for Health Metrics and Evaluation, 2014). Of these deaths, 85% are in developing countries (Gwilliam, 2003), and in sub-Saharan Africa, pedestrians comprise two-thirds of all road traffic fatalities (Kumar and Barrett, 2008).

Larger public transport systems such as metros are costly and hence also have a tendency towards monopoly. However, broadly speaking, public transport has low entry costs and thus high levels of competition (UN Habitat, 2013), which, if unregulated, can foster perverse effects. For example, in Santiago, Chile, the bus sector was liberalised from 1983; while this brought benefits to passengers (reduced waiting times and shorter distance to the nearest route), it also made Santiago's atmosphere one of the most polluted in the world by the late 1980s (Estache and Gomez-Lobo, 2003). Increased congestion comes from incentives to 'headrun', 'race' and 'box' – competitive behaviours that also lead to higher accident rates and reduced quality of service (Gwilliam, 2001). These market failures are often cited as justifying the need for government intervention and regulation (Sohail et al., 2006).

There is information asymmetry involved in the construction and maintenance of roads and other transport infrastructure due to lack of monitoring and oversight mechanisms and the difficulties of non-experts judging the quality of construction – although these may be less problematic for urban areas due to lower costs of monitoring, for both construction and maintenance (World Bank, 2010; Wales and Wild, 2012). The professional knowledge and discretion involved in construction enables corruption in infrastructure projects through using substandard materials, as seen in transport construction projects in Nairobi, for example (Klopp, 2012). There may also be asymmetries of information between public transport contractors and

government agencies because agencies cannot easily monitor cost-reduction activities or technological efficiency (Akbar and Campos, 2009).

4.1.3 Task-related characteristics

The level of discretion given to some frontline public transport staff seems to be central to understanding key aspects of service delivery. Operators in informal or private systems may typically pay costs out of their takings, which means there are strong incentives for drivers to pick up as many passengers as possible. The resultant behaviour (e.g. waiting at a terminal until the bus is full before leaving, 'front-running' where a bus stays just in front of competitors, or racing to subsequent stops) leads to poor frequency and unpredictability of routes (Estache and Gomez-Lobo, 2003).

Providing financial incentives to improve public transport performance is challenging. Paying operators in line with the number of fares taken aligns incentives to the private interests of operators and owners, but also incentivises the negative behaviours mentioned above. Paying a fixed wage may reduce service quality and financial sustainability if it is not possible to monitor performance or effort. In developed country contexts, the solution is often to pay operators according to service quality variables, while sharing revenue between companies – both of which can be difficult (Estache and Gomez-Lobo, 2003). Often, concessions are not implemented by bus operators, and payments and transfers between providers, and between government and providers, frequently do not take place (IDLgroup, 2013).

Informal equivalents of professional bodies – particularly unions and syndicates composed of informal transport operators and bus drivers – play a relatively strong role in the sector, serving as gatekeepers, setting fares, and allocating routes and services, and generally protecting their members' interests (UN Habitat, 2013). Despite having some positive functions (see 'collective action' below), such unions and syndicates often do not operate in ways that contribute to a quality service. For example, in the African cities of Dakar, Kampala and Nairobi, the respective government has effectively ceded control of the supply and allocation of minibuses to route associations and syndicates (Adam Smith International, 2005); in Santiago, liberalisation of the bus sector strengthened the role of these interest groups, making future reforms more difficult to implement (Estache and Gomez-Lobo, 2003). They work to ensure a consistent and broad distribution of revenues among members, which can lead to actions that are not in the interests of passengers (Kumar and Barrett, 2008). In some contexts, they are co-opted by political parties (Akbar and Campos, 2009). More generally, unions are seen to be forces of the status quo, blocking rather than leading change (IDLgroup, 2013).

Bus drivers and conductors also have some discretion about the amount to charge – for example, in Douala and Dakar, despite official tariffs for minibuses and shared taxis, fares are often negotiated (Adam Smith International, 2005). The challenges in monitoring fares taken can also contribute to a frequently atomised and fragmented ownership structure: owners typically have just a few vehicles and are reluctant to delegate to hired employees, using family members or other trusted individuals instead in order to minimise 'skimming' (Estache and Gomez-Lobo, 2003; Kumar and Barrett, 2008).

Traffic police and others responsible for managing and monitoring road users typically also have a high level of discretion (Akbar and Campos, 2009), although there is limited focus on these services in the literature. Corruption is a common problem in enforcing traffic management; bribes, at a lower amount than statutory fines, are taken by traffic police who typically receive very low salaries (Cracknell, 2000). For example, in Dhaka, corruption is apparent in a large number of transport

management functions as officials seek bribes for licences, registration numbers, speeding fines, etc. (Akbar and Campos, 2009).

4.1.4 Demand characteristics

Roads and transport services in urban areas are characterised by their high visibility, territoriality and frequency of demand, resulting in significant political salience. In many cases, this produces strong incentives for politicians to provide affordable public transport and opportunities for political leadership (IDLgroup, 2013; Estache and Gomez-Lobo, 2003). However, public safety, and hence also traffic management and road safety, are not particularly high on the agenda of the general public in developing countries (Gwilliam, 2003).

4.2 Common governance constraints

4.2.1 Political market imperfections

Transport services – roads and public transport – combine high visibility, wide discretion and rent-seeking opportunities ('lootability'), and significant information asymmetries, creating a recipe for political market distortion and corruption. Roads are highly visible in rural as well as urban settings, contributing to a particular degree of political salience and manipulation (Mcloughlin and Batley, 2012a). The same seems to hold for other urban transport infrastructure, which may often be constructed for political benefits (UN Habitat, 2013). There is frequently collusion in the awarding of contracts for building transport infrastructure as well as leakage to corruption during construction (Vaidyanathan et al., 2013), while large projects sometimes displace poor communities and destroy livelihoods (Klopp, 2012). Transport infrastructure is often constructed to reward constituencies and 'buy' votes, leading to inappropriate and/or inefficient investment of resources (IDLgroup, 2013). One study on India showed that politicians' preference for 'big-ticket projects' resulted in systems being built that are simply not needed (Vaidyanathan et al., 2013). In another case, relatively low-cost measures to improve urban transport in Cairo were not implemented due to a lack of political prestige when compared with large investments such as metros or rail systems (Mitric, 1994).

Public transport services can also be affected by patronage politics, as illustrated by case studies on Dakar, Senegal and Dar es Salaam (IDLgroup, 2013). In Dhaka, Bangladesh, positions in public transport bodies such as government bus companies are distributed as rewards for loyalty, and the body responsible for allocating bus routes often allocates too many in order to benefit as many clients as possible – leading to congestion and unhealthy forms of competition (Akbar and Campos, 2009). In Nairobi, some bus routes are run by cartels and criminal gangs (Klopp, 2012). More generally, subsidies are often used to finance higher wages and improved benefit packages without resulting in service improvements (UN Habitat, 2013).

Fare regulation is a key tool for ensuring a socially efficient level of service, in particular to induce the right entry/exit decisions and frequency of services by private operators (Estache and Gomez-Lobo, 2003). However, public transport tariffs are often set for political and populist purposes, creating challenges for the long-term fiscal sustainability of services (ibid.; IDLgroup, 2013). In general, political economy models of choice and investment in transport systems show that heterogeneous cities are likely to be biased against investment in transport quality, presumably due to political market problems deriving from the higher degree of clientelism present in such environments (Brueckner and Selod, 2006).

Another theme in the literature is a pervasive bias towards roads and car ownership over public transport and non-motorised forms of transport – ultimately at the

expense of a more effective, efficient and environmentally friendly transport system. In many sub-Saharan African cities, most trips are taken on foot, but pavements, streetlights and other facilities for pedestrians are extremely poor, and there is nearly no support for bicycle transport (Kumar and Barrett, 2008). UN Habitat (2013) argues that this bias is fed by a cultural and commercial context wherein the car is a symbol of status, freedom and development – but one that is sustained by strong elite lobbies for fuel subsidies, the trade interests of developing countries, and collusion of politicians with these forces. The automobile industry skews transport policy and practice in a wide range of contexts (Vaidyanathan et al., 2013). A study on transport policy in Ghana concluded that the government favours solving the problems of wealthier groups (who benefited from lower tariffs on the importation of cars and construction of more roads) ahead of issues such as pollution and road traffic accidents that are more likely to affect poorer groups (Obeng-Odoom, 2013). Similarly, in Nigeria, transport policies have largely been designed to benefit car-owning elites at the expense of poorer households who do not own cars – for example, reflected by a focus on congestion rather than road safety, despite a high death toll on the roads (Hathaway, 1993).

4.2.2 Policy incoherence

Policy incoherence is a major challenge for urban transport and is one of the most prominent issues in the available literature (UN Habitat, 2013; Kumar and Barrett, 2008; Meakin, 2004; Adam Smith International, 2005). Fragmentation and lack of coordination within and across relevant agencies has been noted in Africa, in Latin American mega-cities, and in India (Kane, 2002). There are often protracted implementation periods for transport initiatives, with some schemes eventually being abandoned and key functions being beset by challenges of jurisdictional issues (Cracknell, 2000).

There are a number of dimensions to transport policy incoherence. Part of the challenge is poor vertical coordination related to incoherent decentralisation, with powers often distributed between central and local levels. For example, transport services in India are hindered by city authorities with limited powers; transport policy is typically a state matter, but the financial resources required to implement policy is under central control (Vaidyanathan et al., 2013). In Bangkok, urban transport initiatives developed by one level of government are frequently blocked by another with overlapping authority. For example, one set of bus priority measures devised by the national transport office could not be implemented because the city government controls traffic management in the city centre (GTZ, 2004).

Many cities have a number of institutions horizontally at each level of government (federal, state and local) involved in different aspects of transport policy (Kumar and Barrett, 2008). A study in Nigeria found a proliferation of management bodies and institutional conflicts among three tiers of government around enforcement, provision and use of infrastructure, policy formulation, and coordination (Oni, 1999). Another study of Lagos (Mobereola, 2006) found that there were almost 100 agencies, ministries and local government departments involved in transport provision and/or services, most of which were developing and implementing their own policies and programmes with little regard to their effects on the policies or activities of other agencies. This proliferation of institutions may even have political economy dimensions: Klopp (2012) notes that fragmentation in Nairobi seems to be partly driven by patronage, to create enough government bodies to distribute to various political parties.

Powers within local government are often distributed – for example, in some cases a municipal infrastructure body will be responsible for bus stops and terminals, while traffic management and on-street activities are managed by the municipal police

force (IDLgroup, 2013). Incoherence between medical services and traffic police has significant implications for road safety due to the need to treat casualties as quickly as possible (Gwilliam, 2003). Lack of coordination between transport providers means uncoordinated schedules and multiple fare payments, and without links between different modes of transport journeys can take considerable amounts of time (UN Habitat, 2013). Where donors are involved in the urban transport sector, there is also often a lack of coordination, with a lack of sector-wide approaches (IDLgroup, 2013). The availability of foreign funding for transport projects can also have a distortional effect – for example, encouraging a bias towards capital spending on transport infrastructure (Klopp, 2012).

At the local level, administrative boundaries are often not aligned with the transportation patterns of urban areas, which means that a number of local government bodies must cooperate in order to ensure adequate services (UN Habitat, 2013; Kumar and Barrett, 2008). As with other urban issues, the potential for coherent planning and sufficient financing is particularly affected by the economics and politics of urban land use (Borck and Wrede, 2005; IDLgroup, 2013; Kumar and Barrett, 2008; UN Habitat, 2013). Lack of coordination between land planning and transport authorities has led to new settlements being built without a road leading to them, and slum populations being resettled to areas with no public transport links.

Much of the literature calls for coordinating bodies or unified transport authorities to combine planning, regulation, licensing, monitoring and enforcement in one body. However, it is apparent that in some cases, even unified bodies are not effective (Vaidyanathan et al., 2013; IDLgroup, 2013). There seems to be potential in a 'polycentric management' approach to public transport, improving coordination and collaboration between multiple interdependent agencies and power centres that are not hierarchically linked (Vaidyanathan et al., 2013). Similarly, a review of the regulation of public transport in developing countries argues that improvements in communication and coordination should be built between the self-regulating system components such as owners, employees and passenger associations (Sohail et al., 2006). However, many of the conditions for constructive polycentric management do not exist, partly due to imbalances in bargaining power between various bodies, lack of citizen participation, and political competition for resources, which results in poor collaboration and destructive forms of competition (ibid.).

4.2.3 Performance oversight or monitoring

There are numerous challenges involved in performance oversight and monitoring, particularly where there are many transport service providers, some of whom are not formal enterprises and operate with just a few vehicles (Sohail et al., 2006). Police monitoring of traffic safety is difficult due to the need to survey such a large population (Gwilliam, 2001). There is often very limited enforcement of regulation of vehicle inspection and licensing. In many cases, the government departments responsible for inspections collect fees but do not carry out any actual inspections, as in Dakar (Adam Smith International, 2005). It can also be easier to obtain a fake licence without taking a driving test or vehicle inspection, particularly from authorities who may take considerable time to issue licences and will seek to extract bribes to do so (Kumar and Barrett, 2008).

In such contexts, self-regulation may be the best available option; however, this often benefits service operators but reduces service quality for passengers. A typical solution to the behaviours incentivised under self-regulation is to create a formal property right for operating a particular route or schedule and allocate it through periodic competitive tendering; however, where such legal rights are not enforced, this will not work (Gwilliam, 2001). Such route allocations are typically difficult to regulate due to the large number of informal providers and a lack of monitoring by

government, as has been observed in Dhaka (Akbar and Campos, 2009). However, it can be done if there is sufficient political will, as the experience of Bogota in the early 2000s shows, aided by exclusive bus lanes (Estache and Gomez-Lobo, 2003).

As with road construction, the quality of construction of urban transport infrastructure can also be difficult to monitor (Wales and Wild, 2012). This lack of monitoring and oversight also fosters a lack of data, which undermines good transport management and coherent policy (Adam Smith International, 2005). Where permits and licences are affected by rent-seeking, it is unlikely for records of licence-holders to be kept; where there is no regime of rules on vehicle safety and maintenance, it is difficult to ascertain information such as average mileage; and where operators have an incentive to conceal fares collected, it is difficult to monitor numbers of passengers.

4.2.4 Collective action

Unions and syndicates of public transport operators have often emerged in response to fragmentation and competition, fulfilling some functions of self-regulation and reducing the incentives for some of the more dangerous operating behaviours (Gwilliam, 2001). They operate separate bus terminals, and typically play a major role in allocating routes and ensuring controlled competition, hence avoiding some of the worst consequences of competition and conflict between providers (Kumar and Barrett, 2008).

The diversity of public transport providers means that collective bodies typically do not cover enough providers to reach consensus (IDLgroup, 2013). Informal service providers are rarely consulted, despite their important role in the system (UN Habitat, 2013). As already mentioned, public transport users have a weak political voice compared with the powerful middle-class car-owner lobbies, and it seems that they very rarely work together (IDLgroup, 2013). Transport planning is conveyed as an issue for experts, with technical assessments used to justify political decisions, which can disenfranchise users and residents – as observed in Colombo (Sri Lanka), Dhaka (Bangladesh), Kathmandu (Nepal), and Harbin and Changzhou (China) (Asian Development Bank, 2009). There is little involvement of civil society and few channels for passengers to voice their views (Sohail et al., 2006). Also, it seems there is not much scope for co-production of transport services (Vaidyanathan et al., 2013), and a focus on co-production of rural roads seems to be less prominent in the urban literature. However, the salience of road and traffic management has seen communities organising their own tolls and traffic controls in some situations (Akbar and Campos, 2009).

4.3 Summary

Urban transport services generate strong positive and negative externalities through their impact on economic agglomeration effects and their potential (if mismanaged) to create congestion, pollution and threats to public safety. Public and private good characteristics and low barriers to entry lead to a diversity of providers of transport services that are difficult to coordinate, in part due to fragmented governance. Capital-intensive infrastructure and transaction-intensive transport services create substantial rent-seeking opportunities. High visibility and attributability creates political market distortions, and there are biases towards the interests of wealthier user groups such as car owners. Together, these factors lead to high levels of patronage, manipulation, corruption and poor coordination throughout the urban transport sector.

5 Urban health services

There are significant differences between urban and rural areas in terms of the health services available, the populations they serve, and the problems they treat (Harpham and Molyneux, 2001). Recent literature on urban health is generally divided into studies of the provision of curative healthcare services and wider public health problems. Some common differences include much greater access to hospitals for the urban population and greater provision by the private sector (Kennedy et al., 2010). As a result, urban populations have a wider choice of providers and – for those who can afford it – the standard of care they receive is likely to be higher than in rural areas. It is also important to consider how other services related to health such as water, sanitation, and education can affect urban healthcare services.

However, while it is sometimes assumed that there is an 'urban advantage' in accessing healthcare, the urban poor do not necessarily have better access to healthcare than the rural poor, despite being closer to more services (Matthews et al., 2010; Satterthwaite, 2011). Unlike rural areas, where the main barriers to healthcare include shortages of staff or medicines and difficulty in reaching facilities (Cambanis et al., 2005; Banerjee et al., 2004), in urban areas, the cost and coordination of services are often more significant barriers to adequate healthcare provision. While it is important to recognise the different challenges facing urban and rural healthcare delivery, a strict urban-rural dichotomy can obscure the fact that populations move around, transferring knowledge and practices, and that health practitioners make referrals across this divide (Harpham and Molyneux, 2001). Populations and practices referred to as 'rural' or 'urban' may be more closely connected spatially and across sectors than has been assumed (Takoli, 1998).

A large part of the evidence on the political economy of healthcare focuses on financing health services. This is because the high cost of providing healthcare is a major constraint in the delivery of public services, limiting access by poorer groups. Debate around healthcare financing is also concerned with how providers can manage the risks and unpredictability of consumers' needs, which is the basis for arguments regarding health insurance schemes.

5.1 Service characteristics

5.1.1 Nature of the good

Healthcare – particularly curative services – are rivalrous because availability of medicine and staff are finite (Harris et al., 2014). The high population density in urban areas can exacerbate this rivalrous nature. As Hanson and Berman (1998) found, although the number of private physicians is positively and significantly related to urbanisation, areas which are urbanising most rapidly may lack a sufficient number of healthcare professionals for the growing population. Shortage of public resources to finance health service provision can mean that decisions on the allocation of limited health resources are particularly vulnerable to political rent-seeking and the influence of powerful social groups (Samuels and Rodríguez Pose, 2013).

Curative care and, to a certain degree, primary healthcare provision are also excludable by denying registration to a healthcare facility or by imposing fees that not all people can afford. Access rules which target a particular segment of the population are common (Bossert and Beauvais, 2002) and cost is a key barrier preventing the poorest from accessing services. Exclusion of individuals from healthcare due to cost suggests an important role for the public sector in ensuring that poor households can access healthcare (Blumenthal and Hsiao, 2005).

5.1.2 Market failure characteristics

Healthcare has important positive externalities – the most obvious being disease control, which is particularly significant in urban areas because the risks of spread of disease are higher due to crowding, high mobility, and inadequate water and sanitation (Mobarak et al., 2004; Garland and Herzer, 2009). Urban public health may also be complicated by people's greater connections to travel and trade routes (Fischer and Katz, 2011). Other positive externalities include the economic benefits of a healthy workforce.

There is therefore a compelling need for public intervention, and public health schemes are usually directed at providing basic services to poor and marginalised groups. However, since this is of little direct value to wealthier groups, who can afford private healthcare, there may be political pressure from these groups to divert public spending away from universal healthcare programmes (Ghobarah et al., 2004). This may especially be the case in urban areas where it is likely that there are more wealthy groups with political influence.

There are strong information asymmetries in healthcare due to the professional nature of the service. The technical knowledge needed to monitor quality of diagnosis and treatment means citizens cannot easily evaluate the quality and efficiency of the services they access (Keefer and Khemani, 2003). Research in Nepal found that in urban areas, greater inequality in education levels within the urban population means that some groups are better able to discern poor treatment from higher-quality treatment and so can better challenge providers to improve their services (Harris et al., 2014). The private, transaction-intensive and variable nature of treatments compounds the unequal power relations between providers and users, though some basic services are less vulnerable to information asymmetry (for example, vaccinations).

5.1.3 Task-related characteristics

The visibility of healthcare services and their possible attribution to political leaders affects user demand for certain treatments. For example, provision of a clinic in a local area is easily recognised by the electorate and can easily be attributed to a particular politician or party, so there tends to be greater political interest in investing in such services. In contrast, the quality of services provided by clinics and public health campaigns are less visible and not so easily evaluated by users, so may receive less political attention and funding (Keefer and Khemani, 2003; Eldon et al., 2008). The visibility of curative healthcare services as opposed to preventive services also means that political attention may be more easily drawn to curative care. This is especially the case since the benefits of preventive care are less directly observable or attributable to interventions, even though they are usually more cost-effective (Harris et al., 2014).

Furthermore, the high visibility of inputs such as technical equipment and medicines is compounded by strong information asymmetry between providers and users, which means that users may perceive technical interventions and medication as more desirable than simpler interventions that may be more appropriate. This dynamic can skew public investment towards high-tech hospitals and equipment, unnecessarily

raising the cost of healthcare and reducing spending on basic healthcare provision (Bork et al., 2011).

Due to the strong information asymmetries in health services, their unpredictability and variability, and the multiplicity of urban providers, staff have considerable freedom to influence the quality of the service they provide as well as who can access it. In Chinese cities, Bork et al. (2011) describe how primary agents in healthcare provision bypass regulation with relative ease and, as a result, have shaped healthcare services in an informal manner. Where frontline staff are not closely monitored, there are opportunities to take bribes or prescribe more expensive treatment than is necessary. Monitoring of frontline staff by government or may be lacking, and if patient litigation for aberrant practices does not pose a real threat, there may be little control over service quality (Sheikh and Porter, 2011).

5.1.4 Demand characteristics

The intensity of demand for healthcare may be higher in urban areas due to the higher risks to health caused by over-crowding, unsanitary living conditions and accidents – all of which are the cause of increasing numbers of deaths in low- and middle-income countries (Fischer and Katz, 2011). Similarly, unhealthy lifestyle choices, such as tobacco use, are often more common in urban areas, which leads to higher rates of chronic disease (Fischer and Katz, 2011).

Demand for health services – unlike transport or water, for example – is also highly variable, increasing discretion and information asymmetries. Collective action to demand better, more affordable healthcare is therefore unlikely in urban areas because individuals tend to use different services at different times. NGOs can help to broker collective action for improved healthcare – for example, using tools such as community mapping to document service needs in informal urban settlements and use the results to place pressure on government to improve service provision (Karanja, 2010; Patel et al., 2012). However, NGOs may also be working with government as service providers and so their ability to advocate could be limited.

The option to self-medicate or use informal treatments reduces people's reliance on the provision of formal healthcare services, and individuals' needs vary in their complexity and the frequency of care and treatment required. Perception of value for money also affects demand, whereby users may perceive the most visible and expensive aspects of care (such as medication and technical equipment) as indicators of quality (Bork et al., 2011). As a result, even the poorest members of society tend to show a preference for more costly, technical, and private sector services, regardless of whether they can access public healthcare free of charge (Tawa Lama-Rewal, 2011).

5.2 Common governance constraints

5.2.1 Political market imperfections

Political incentives have an impact on the quality of healthcare provision. In preventive care and public health, the difficulty of targeting healthcare improvements at one specific group of voters also limits political attention to improving these dimensions of healthcare, other than providing the most visible improvements, such as new clinics (Keefer and Khemani, 2003). Even when politically popular, the availability of health services may vary greatly by locality due to local government lobbying rather than needs (Brixi et al., 2011). Nevertheless, the political salience of healthcare may be increased by an epidemic or risk thereof, such as the SARS epidemic in China and the Ebola crisis at time of writing (Blumenthal and Hsiao, 2005). There could be additional pressure on politicians to reassure the international

community that the country or city is a safe place in which to travel, invest, or do business.

The quality of healthcare may also be affected by patronage in human resource management towards certain interest groups over qualified individuals (Keefer and Khemani, 2003). Political market imperfections may also affect the quality of procurement of healthcare services. Contracting to private providers or NGOs (Bossert and Beauvais, 2002) introduces the potential for kickbacks, which can undermine quality. Distortions can also occur within entirely publicly operated services if the regulation of the health sector is delegated to associations of medical practitioners, who may find that it is in their interests to protect rather than regulate their fellow professionals (Mills et al., 2001; Bork et al., 2011). Furthermore, Sheikh and Porter (2011) found that an association of medical professionals may lobby against stronger medical regulation in order to maintain their autonomy and control over their sector.

5.2.2 Policy incoherence

Policy incoherence is a significant problem in the provision of urban healthcare due to the diverse mix of providers and the variability of services that are both available and in demand. These include services run by different levels of government, private hospitals and practitioners, missions and charities, traditional healers, and various types of medication available in shops, pharmacies, or from informal sources (Harpham and Molyneux, 2001). The higher number and possibly greater wealth of potential clients, the ease of recruiting staff, and greater availability of other infrastructure such as water and sanitation mean that investment in urban areas is far more attractive to the private sector (Kennedy et al., 2003), and the blurring of private and public practice in many contexts increases complexity. The possibility of self-medicating or buying medication without a prescription also creates more market opportunities and accommodates differing cultural beliefs and practices.

Rather than having an integrated system, developing urban centres often have limited formal interaction and cooperation between different healthcare providers (Harpham and Molyneux, 2001). The unplanned mix of public and private assets and providers of healthcare which exists in urban areas makes coordinating the provision of healthcare extremely difficult for a municipal authority, particularly in rapidly urbanising areas (Fischer and Katz, 2011; Barten et al., 2010; Bork et al., 2011).

5.2.3 Performance oversight or monitoring

The diversity of healthcare providers and policy incoherence also makes regulation and oversight difficult. In Delhi, for example, multiple agencies provide healthcare services in the same locality but under the responsibility of different levels of government, which results in duplication and reduced accountability (Tawa Lama-Rewal, 2011). Bork et al. (2011) note that lack of independent monitoring of healthcare in Chinese cities is a particular problem in ensuring high standards of care. While local-level regulation may be useful for improving service quality (Pérez Montiel and Barten, 2011), this will only be the case if local providers and politicians have the incentive and the capacity to meet regulation criteria (Keefer and Khemani, 2003).

5.2.4 Collective action

On the demand side, there are many barriers to collective action by users to improve the health services they receive. Users access different services at different times and with varying frequency, and the variable and private nature of many of these services hinders collective awareness and action. In addition, wealthier users can often afford private healthcare and may even oppose public spending on certain public health services (Ghobarah et al., 2004).

5.3 Summary

The variety of services required and the difficulty of developing and coordinating a universal public healthcare system means that urban areas have multiple forms of healthcare provision. The involvement of multiple private sector and informal providers presents challenges for careful oversight and monitoring, and the potential for rent-seeking may mean that strict regulation is not in the interests of public officials. Private sector provision is unlikely to guarantee affordable services for the entire urban population and so public sector intervention is important to realise positive externalities of disease control and prevention. The technical complexity and professionalism involved in the health sector means that information asymmetries between providers, regulators and users are also a significant problem. Consequently, there are many opportunities for providers to artificially raise costs and prescribe unnecessary treatment, exploiting misperceptions of value for money and quality in healthcare. This is likely to have a disproportionate impact on poorer, less-educated urban populations.

Political commitment to public and preventive health improvement can be limited by the difficulty of targeting these improvements at a particular group of voters, and because public demand for quality health services is relatively incoherent. Healthcare is also vulnerable to patronage, with the potential for jobs and contracts to be allocated to favoured providers. Policy incoherence is a common governance constraint, since healthcare requires considerable coordination within government and across providers. This may be compounded by a blurring between public and private sector providers as professionals operate and make referrals across organisations. In addition, there can be limitations to effective monitoring and oversight due to information asymmetries and self-regulating professional bodies.

6 Conclusions and common themes

The four sector reviews in this discussion paper demonstrate the importance of governance factors – in part rooted in physical, economic, social and political differences between rural and urban environments – in shaping service delivery in urban environments. There is a perception that inhabitants of urban areas enjoy an 'urban advantage' with regard to service provision. In general, urban centres have more services in greater proximity than rural areas, services are likely to be better quality due to the availability of a more highly skilled workforce and necessary resources, and the political incentives to invest in urban areas are often greater than for rural areas.

However, as these service sector analyses show, this advantage is not uniform and there are numerous urban-specific barriers to access and quality. Whereas in rural areas service provision is often largely constrained by a shortage of staff and resources, in urban areas the key constraints may include differences in political salience (deriving from differences in intensity of demand, visibility, targetability and attributability), the cost of services to users, capacity to articulate demand, and the management of diverse providers across complex governance environments.

While there are important variations across and within urban environments, urban service sectors display some common and some distinct characteristics in respect to the goods provided, their market failure traits, and their task- and demand-related qualities. At the same time, and often as a result of these sector characteristics, urban environments display some patterns in their common governance constraints, such as prevalence of certain political market imperfections, a proneness to policy, regulatory and managerial incoherence, and demand-side collective action challenges. None of these are found uniformly across all sectors or in all cities, but they merit discussion and further exploration.

Table 3 summarises some of the key findings of the sector review with respect to the sector characteristics framework, and Table 4 presents the sector analyses in relation to the common governance constraints framework. The following subsections briefly review some common themes regarding political and economic incentives influencing services in cities, managerial challenges for provision, and challenges on the demand side. The final part of the paper identifies some areas for further research.

Table 3: Summary of key sector characteristics

	Solid waste management	Water	Transport	Health
Nature of good	Mostly non-rivalrous and non-excludable Public/merit good characteristics and private benefits mean willingness to pay insufficient for full market provision	Rivalrous, excludable in some infrastructure and not others Private benefits but widespread perception of entitlement	Roads are non-excludable but rivalrous leading to overuse and congestion Public transport excludable and rivalrous, leading to mixed provision	Rivalrous and excludable leading to mixed provision
Market failure	Positive externalities in health, environment and ambience Negative externalities from contractors and others dumping rubbish	Asymmetries of information over water quality Disincentives to connect public infrastructure to informal settlements	Public transport has private benefits but access for poor and positive externalities imply public participation Traffic management has positive externalities	Very important positive externalities Large information asymmetries due to technical complexity
Task-related	Differences across waste management cycle with collection most visible Low provider autonomy and professionalisation Labour-intensive with low barriers to entry for collection services	Differences across water supply cycle with upstream infrastructure less visible than local supply Variety of provision arrangements Low barriers to entry leading to private and informal provision	Roads most used by influential groups Strongly autonomous organisations of transport operators High discretion among providers, operators and traffic monitors Capital investment encourages rent-seeking	Visible and attributable facilities and equipment over-emphasised compared to public health and preventive care Autonomous provider organisation may self-regulate High discretion
Demand-related	Collection predictable, visible, territorial and attributable so relatively salient compared to treatment and disposal Can be co-produced / scope for collective action	Targetable, territorial and visible, contributing to political salience and populist or patronage policies Consumption varies with price and availability	Roads and transport infrastructure and services frequent and visible; traffic management and safety less so	Variable and generally private demand Choice

Table 4: Summary of common governance constraints and related symptoms

	Solid waste management	Water	Transport	Health
Political market	High political salience results in distortions through clientelistic employment, subsidies, and corrupt contracting Over-emphasis on collection and under-emphasis on disposal and treatment	Private benefits and high political salience encourage distortions including patronage and subsidies that exclude the poorest not linked to public infrastructure	Patronage, and market access controlled by unions, cartels, and gangs Corruption in infrastructure contracting and construction Distortions away from public transport and non-motorised transport in favour of cars	Higher salience of curative and technical care over preventive Lobbying and patronage dynamics can influence healthcare provision Corruption in contracting and regulation
Policy coherence	Relatively clear local government mandate Incoherent reforms or decentralisation source of some problems	Institutional complexity and interactions among sectors such as land registration Incoherent reforms or decentralisation source of some problems Peri-urban areas particular challenge	Numerous overlapping functional and geographical mandates leading to high levels of incoherence	Extremely diverse mix of public, private and informal providers leads to poor coherence
Performance oversight	Oversight typically difficult for treatment and disposal Major challenges in monitoring waste dumping	Greater bottom-up oversight in household provision in piped systems, difficult in informal provision	Limited ability to monitor numerous operators Traffic enforcement high discretion and lootability	Diversity of providers hinders regulation and oversight High professional autonomy and technical specialisation can hinder reform or regulation
Collective action	Community or civil society monitoring and co-production where social capital strong Potential of, but also limits to, network governance	Network infrastructure focuses demand, less in informal provision and settings Co-production with CSO intermediation	Potential for polycentric or network management	Variability and privacy of consumption and large information asymmetries hinder collective action

6.1 Political salience and political market imperfections

Political salience is a varying and emergent property arising from the characteristics of the urban environment and the sector in question. High urban population density means that demand for services is *relatively* spatially concentrated, though actual density is a key variable across and between urban areas. At the same time, *relative* land scarcity is an important dimension of urban environments that influences the available space for service infrastructure, intensifies the political and economic dimensions of land planning, and heightens competition over land ownership. These interrelated factors can intensify the externalities connected to urban services, heighten political aspects of service delivery, and create intensified opportunities for rent-seeking of various kinds.

The combination of limited urban territory and high population density can heighten both positive and negative externalities of services. For instance, negative disease impacts of inadequate sewerage, solid waste management and sanitation are exacerbated in urban areas. This is due to a lack of space for informal solutions, a higher per capita waste production, and a greater risk of disease transmission or contamination of water and land. Similarly, well-functioning water or solid waste systems can provide amplified benefits with respect to disease control. In the same way, the functioning of transport systems can generate harmful congestion and pollution, or contribute to positive economic agglomeration effects.

The significance of these externalities (positive and negative), the intensity and regularity of demand for waste, water and transport services, and visibility of service failures contribute to politicisation. These services are subject to significant political distortions, though the nature of these imperfections varies. In labour-intensive services such as waste management, political patronage in hiring may be common, while for services with considerable discretion and high returns such as transport, collusion in the form of cartels may occur. Each of the services studied also features very different task-related characteristics across their production cycle or between different inputs, and these variations contribute to distortions that influence service quality and access. Water and waste management both tend to neglect less visible aspects of their provision, and transport and health show sub-sectoral biases of their own.

Populist measures such as subsidies and a bias towards facilities (as in healthcare) over softer elements of services are common, as are biases towards influential groups (as in the pervasive emphasis on private road transport versus non-motorised or public means). Further, greater social polarisation in urban areas can create political incentives to service those areas considered more politically important, though these will vary among urban contexts. Politicians may promise service improvements to poor areas of a city in order to win votes but these promises usually concern targeted, visible improvements, rather than wider-reaching reforms. On the other hand, municipal governments may be incentivised to focus service quality on richer areas of the city. Informal settlements may be denied formal service provision as a deterrent to squatters and illegal land development.

Finally, the urban environment, through intensity of demand and the general pattern of higher land values, can result in services that are heavily affected by rent-seeking and corruption. In this review, solid waste management, water and transport were shown to be particularly rife with rent-seeking in the forms of patronage, collusion, and corruption in contracting.

These varied but widespread political market imperfections in the provision of urban services are not simply the results of poor management or coordination, lack of

information or insufficient demand. They comprise deep and persistent incentives that lead elite behaviour towards providing inequitable, inefficient and sometimes expensive services. Technical and managerial know-how may well form part of the solution to some of the challenges arising from provision of urban services, but without an approach that is heavily informed by politics, they cannot succeed alone (Batley, 2004).

At the same time, these sources of political salience can lead to opportunity. Urban areas (often a seat of government), with concentrated economic importance, large populations, and wealthier and powerful social groups, can generate political incentives to improve quality and access to services. For instance, where political structures are coherent and accountable at the city level, and where developmental leadership is enabled by sufficient administrative and financial powers, major transformations can take place. A growing number of studies have highlighted the role of political leadership in turning around the fortunes of various cities in developing countries – famously in Bogotá (Devlin and Chaskel, 2010) and Medellín (Maclean, 2014). Tangible improvements in services which are particularly visible and locality-specific may quickly be used as a platform to pursue further reforms, and potentially begin a virtuous circle of improvements in institutional structures and service delivery outputs.

6.2 Diversity of providers, policy incoherence and monitoring

Different urban areas have distinct historical trajectories that influence the mix of providers, and considerable variations exist within cities – for example, between central business districts and informal settlements. Nevertheless, particularly where urbanisation is rapid, a common feature of the urban environment across the sectors examined is the greater diversity of public and private sector providers due to the larger, denser population, as well as the presence of wealthier groups creating demand for private sector service provision. Where services are excludable, such as healthcare, the private sector plays a large role in urban service delivery, offering for-profit services to those who can afford to pay for them. While the role of the private sector in service provision does mean greater choice, and sometimes higher-quality services, this also enables wealthier groups to opt out of state-provided services. Access to high-value land attracts private sector investment and may also encourage the development of for-profit private services, rather than public services; the presence of high-value private sector services such as private hospitals may also feed corruption in the form of bribery and kickbacks in land use planning and related areas.

There are market opportunities for informal and private provision to meet the varying needs of the urban population. This situation can compensate for sub-optimal public services by enabling greater availability and choice. This is evident in all of the services explored in this review: for example, water vendors selling water in areas outside the networked supply; private bus provision to particular sites; and informal refuse recyclers who can make a profit by providing a specific low-skilled but valued service.

However, the presence of many different service providers from the public, private and non-profit sectors creates a significant challenge for policy coherence. Municipal authorities may lack the autonomy and authority to align policies with national policy and policies of neighbouring regions. They may also lack the ability to coordinate the different service sectors within their municipality, which is vital for providing joined-up services. These challenges are heightened by the interdependencies between services in more densely populated areas – for example, a lack of sanitation, waste water treatment and solid waste management are likely to place greater demand

on healthcare services. Where urban areas are expanding rapidly, this challenge is compounded by a lack of clarity over who is responsible for peri-urban areas, and where service infrastructure such as water supply systems extend beyond the municipal boundary, this also poses problems for policy coordination.

The plethora of service providers in urban areas poses problems for oversight and monitoring. This is especially the case for informal urban settlements where the local authority is likely to lack information on the services being provided and the population is likely to be less able to discern or act upon the quality of the services they access. The tendency for urban areas to feature a larger number and range of service providers – whether public, private or informal – suggests that the public sector role must expand to include significantly greater capacity in regulation as well as direct provision or production. Related to this is capacity to create systems that cross-subsidise service provision among richer and poorer constituencies.

Service delivery is also often conditioned by the particular governance arrangements in place. Across the services examined, patterns of decentralisation and the structure of local government and government agencies are critical to the capability of a municipal authority to manage service provision, with incoherent decentralisation often contributing to poor services. If responsibilities are fragmented, overlapping or unclear among government levels, it can be difficult to achieve policy coherence, while government regulation and monitoring of service delivery is likely to be insufficient. The autonomy of a municipal authority to manage services locally, source revenue through local taxation, and access resources from elsewhere are important determinants in the governance of urban service provision.

6.3 Mobility, polarisation, informality and collective action among users

Urban populations may also be more transient, particularly in informal settlements where tenure is absent or insecure, which can hinder collective action to demand better services or contribute to the co-production of services such as sanitation. Social and economic polarisation, more common in urban populations, can also limit collective action. Wealthier inhabitants may opt out of state-provided services and pay for private provision instead, or social divisions may limit cooperation within and between neighbourhoods. Such ‘urban secession’ can divert the political power of wealthier groups to demand improvements to services and hold providers accountable, contributing to a vicious cycle of declining service standards for the poor.

In the case of networked services such as water and sanitation, the large number of users experiencing the same problems within a defined locality may enable collective action. Yet such networks are unlikely to reach all households, particularly where informal settlements are prevalent. Proximity to services, and users having higher levels of education, may also aid oversight. When services are less territorial and predictable – as in healthcare – then these demand characteristics make it harder to organise collective action. In sum, the characteristics of urban populations may increase the concentration of demand, increase downward accountability for service provision, and expand the diversity of providers, but these advantages are by no means guaranteed.

Box 1: The particular challenge of informal settlements

A great deal of the literature on urban service delivery points specifically to the challenges posed by informal urban settlements. These settlements – which may emerge as a result of high land prices, low wages, rapid in-migration, and a failure by government to control land planning and the housing market – intensify many of the political constraints to service delivery. Negative externalities such as disease and environmental degradation are greater in densely populated informal settlements; service monitoring and cost recovery can be more difficult; a lack of land tenure can disincentivise the provision of formal infrastructure; and a more transient population may weaken collective action and co-production. While it is often the inhabitants of informal settlements who are most reliant on public services due to their inability to afford private services, they are also the most likely to lack access to quality services.

This exclusion may be worsened as areas which are informally settled may be denied formal service provision as a deterrent to squatters and illegal land development. In some contexts, the emergence and stability of informal settlements can be driven by a political economy that reinforces a pattern of privileged elite access to land and amenities, political patronage, rent-seeking and its attendant political market failures (Goodfellow, 2013; Fox, 2013). These patterns mean that the very presence of informal settlements can engender interests in their continued existence and isolation from networked services (Gulyani and Taludkar, 2008).

6.4 A future research agenda

Understanding how the characteristics of urban areas shape the governance environment for urban services is important background for policy interventions to improve service provision in a developing urban centre. This review suggests the need to build on 'sector characteristics' and 'common constraints' approaches to include specific consideration of the urban characteristics that influence services. Such an approach involves examining political economy and governance factors across the urban environment in question, the local municipal governance arrangements, and sector-specific characteristics across the whole service production cycle. The review has also highlighted some important gaps in knowledge and research evidence on the political economy of urban services:

- *Under-studied services*: There is limited published research on some urban sub-sectors, including traffic management and road safety, or emergency services; other services such as water treatment and sanitation have been researched in some depth, but remain less salient for the reasons described in this review.
- *More political economy work*: There is a need for greater analysis of governance and political economy features of various sectors, especially solid waste management, and around the emergence of developmental urban political leadership. There is also a need for a more detailed understanding of how specific government structures at the municipal level can favour or constrain service delivery.
- *Integrative work*: There are relatively few studies that take a comparative approach to governance challenges for urban service delivery. There are also too few studies that combine a theoretical focus on political economy and governance with empirical examination of their effects on service delivery.
- *Programming implications*: Many successful urban reforms have addressed institutional change and collective action problems incrementally, working with a variety of actors, and respecting the organic and unpredictable nature of

change. More needs to be learned about appropriate and successful approaches to improving urban service delivery, particularly in informal settings. Studies of successful reforms and action research with urban programmes would be useful, as well as more studies mapping interventions in urban services.

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