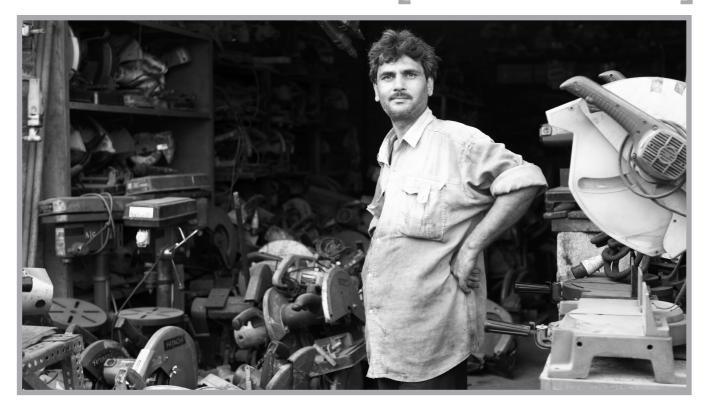
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INFORMALITY IN KARACHI'S LAND, MANUFACTURING, AND TRANSPORT SECTORS

IMPLICATIONS FOR STABILITY

Asad Sayeed, Khurram Husain, Syed Salim Raza



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ABOUT THE REPORT

This study examined the evolution of informality in Karachi's land, manufacturing, and transport sectors and whether informality has contributed to or been impacted by instability. It also explored the underlying roles of ethnicization and state policy. The report draws on field research conducted by the United States Institute of Peace between December 2014 and April 2015.

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Cover photo: iStock. Karachi, Pakistan—June 17, 2010: A Pakistani shopkeeper stands among his power tools, table saw, and drills, imported as scrap from other countries. The shop is located in Shershah Kabari Market (scrapyard), in Karachi, Pakistan. Photo by Danish Khan.

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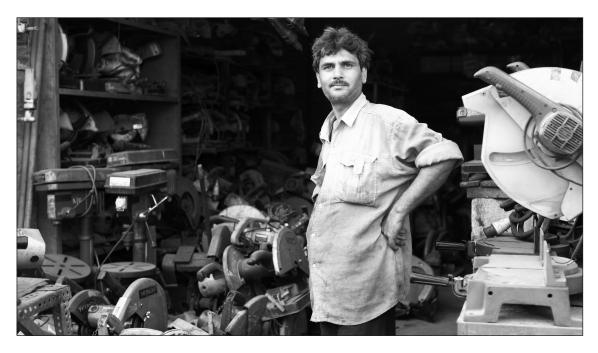
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[Informality is widely prevalent in almost all of Karachi's economic sectors and has both contributed to and been impacted by instability.]

Summary

- Informality is widely prevalent in almost all of Karachi's economic sectors and has both contributed to and been impacted by instability.
- Since the 1970s, informal employment and service delivery have been rising, mainly due to rapid population growth, a policy shift toward deregulation and privatization, and the state's diminishing capacity to regulate the economy.
- Instability has also increased, largely due to the erosion of the state's writ and ethnicization
 of Karachi's politics. Various ethnic groups compete for resources and local political power,
 often through violent means.
- Karachi's land, manufacturing, and transport sectors each experience a different level of informality and therefore affect stability differently. They also offer various entry points to formalize services and improve economic growth and stability.
- Since the Partition of India in 1947, five master plans for urban development have failed to provide formal, low-cost housing. Informal squatter settlements (*katchi abadis*) have taken root, often causing land conflict and instability.
- The *katchi abadis* could be a huge potential resource should they be formalized through the provision of legal title deeds. Economic development could be spurred by enabling the use of housing stock as a marketable asset.
- Informal manufacturing is more prevalent than formal manufacturing in terms of the number of people employed, land area covered by informal enterprises, and number of enterprises. Output data are unavailable, but proxy data suggest that informal manufacturing is far smaller in terms of capital employed and value added.
- Informal manufacturing does not directly foster instability, but some activities inadvertently
 provide the ingredients for instability, such as dangerous goods and pathways to move
 illicit funds.
- Karachi's transport sector is a victim rather than a perpetrator of instability, contrary to the perception that a Pakhtun mafia controls it. Informality in this sector rose dramatically after the state stopped providing public transport.
- Efforts to reintroduce formal, public mass transit are being made, but progress is being held back by financial and land issues, as well as the lack of a Karachi-wide authority to plan and regulate the sector.
- For any formalization to occur in Karachi's land and transport sectors, the local government—with its own "funds, functions, and functionaries"—must be empowered to develop and oversee the implementation of an inclusive master plan.

Introduction

Karachi, with an estimated population of sixteen million, is Pakistan's largest city and the fifth fastest growing mega city in the world. It is the country's only port and serves as the main commercial and industrial hub. Due in large part to its rapid population growth and shifts toward deregulation and privatization, the city has a sizable informal sector that appears to drive most job creation in the area. However, little research has been done on the sector, and despite the nationwide prevalence of informality, there is no consensus on the size of Pakistan's informal sector as a whole or its impact on economic growth. Previous studies, using various methodologies, have estimated the size to be between 20 and 91 percent of the formal economy.

Research is also lacking on the linkages between informality and stability. While it is clear that instability in Pakistan has had a negative impact on the economy, it is less clear how informality may have contributed to instability and vice versa. And given Karachi's history of violence and the past several years of ethnic, political, sectarian, and militant conflict—resulting in thousands of deaths and at times the city's dysfunction—it is important to identify and understand these linkages.

Between December 2014 and April 2015, the United States Institute of Peace examined the evolution of informality and instability in Karachi (1947–present) to lay out a conceptual framework. The Institute then conducted extensive field research to explore the city's land, manufacturing, and transport sectors. These sectors were chosen because each one offers a different perspective of the relationships between informal economic activity and social and political stability. Each sector also engages large numbers of people, which makes understanding the structure of informality even more crucial. With this increased understanding, it will be easier to determine whether and how much to formalize the sectors for improved economic growth, stability, and quality of life.

Evolution of Informality and Instability in Karachi

In addition to being, by far, the largest city in Pakistan, Karachi is the most ethnically and regionally diverse, mainly because of several mass migrations that occurred after the Partition of India in 1947. Between 1941 and 1951, the population almost tripled (a 161 percent increase), and over the next decade, it rose another 80 percent.³ As a result, the local state had to build anew, virtually from scratch. These factors, among others, largely contributed to the gradual movement toward sociopolitical instability and the state's inability to effectively deliver services to its citizens.

Formality-Informality Continuum

For the first three decades after the partition, Karachi was relatively stable and served as the economic nerve center of Pakistan. Sociopolitical problems existed, but the developing state was able to handle them as well as could be expected. Karachi's immediate and most acute crisis was housing the large mass of refugees who migrated from India. The first priority was to house those bureaucrats responsible for essential functions of the state. While this task was fulfilled, and subsequently, the upper and middle classes were also settled, there was a half-hearted attempt to settle working-class refugees. While some of them were settled in central parts of the city, the military regime of Ayub Khan (1958–69) planned to settle many more in the city outskirts (Korangi), adjacent to a newly developed industrial zone. This plan was only half implemented though, and people began to settle in areas without any legal titles. Informal

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developers then gradually started to establish and provide these areas with basic amenities (e.g., water, electricity, roads, and transport). However, because of the lack of legal titles, threat of eviction always hung over the residents.⁵

The nascent, postindependence state was able to provide the necessary amenities in its central, urban areas—and at a pace that, while not commensurate with population growth, was swift enough to enable a smooth functioning city.

Industrialization in Karachi also proceeded at a rapid pace. Five new industrial zones were created,⁶ and the state's industrial policy elicited substantial investment in large-scale, formal industry. This initiative not only created large swathes of employment that absorbed many existing migrants but also prompted further migration from other parts of the then western wing of Pakistan.

The transport sector seemed to develop at an equal rate: Karachi inherited a tram network from the colonial state; a public sector bus service was added soon after; and the circular railway was introduced in 1964.

However, starting in the 1970s, this process of steady formalization of employment and services witnessed a reversal. After the center-left Pakistan Peoples Party (PPP) government came into power, significant nationalization of industries and pro-labor legislation ensued. This prompted the disintegration of the textile industry and, more generally, inhibited investment in large-scale manufacturing. The reversal also led to more technology-related work being outsourced to smaller establishments and a significant increase in temporary employment by formal enterprises in order to evade labor welfare legislation.

In the 1980s and 1990s, informal service delivery began to rise. Underinvestment and mismanagement resulted in a steady decline in the public provision of water, electricity, transport, policing, roads, and social services. This informalization coincided with the first Afghan war in the 1980s, which made Karachi an important conduit for the importation of arms and exportation of drugs. As such, the (in)famous "kalashnikov" and "heroin" culture took root in the city and generated illicit income streams that found their way back into various speculative activities, particularly land and transport. Also in the 1990s, an important economic policy shift began in Pakistan. The process of privatization and deregulation further expanded informality in service delivery and the labor market. On the one hand, this reduced the bargaining power of labor (as several strong public and private sector unions weakened) and slowly created more jobs in the informal sector. But, on the other hand, this led to gradual erosion of the state's regulatory capacity and a decline in fiscal revenues as a result of privatization, which, in turn, led to further underinvestment in services. These consequences created a vicious cycle where services that were not ready for privatization were also being starved of resources. Underinvestment in transport, water, and urban infrastructure, in particular, led to their increasing informalization.

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Impact of Ethnicity on Political and Social Instability

Following the partition in 1947, Sindhi speakers went from constituting 60 percent of the total population in Karachi to just 8.6 percent of the population, with Urdu-speaking migrants or Mohajirs making up 50 percent by 1951. However, two waves of migration in the 1970s and 1980s led to further diversification, decreasing the Mohajir population to 44 percent as of 2011. Together, Sindhi, Pushto, Punjabi, Kachhi, Gujarati, Bengali, and Burmese speakers now have a significant presence in the city, but Mohajirs are projected to remain the single largest ethnic group through 2025 (more than double the size of the next group).

For several decades after the partition, Karachi's politics reflected the pattern found elsewhere in the country or anywhere in the postcolonial developing world. The main sources of political mobilization were student and labor unions. These unions, in turn, were organized along ideological lines; the National Students Federation and the Islami Jamiat Talaba (IJT) represented the leftists and Islamic conservatives, respectively. While conflict existed between the two ideological groups, the state managed the situation well enough that political activity remained largely nonviolent. However, during 1969–72, labor union activity against factory owners in the city became intense. The state squarely backed the owners of capital and not only arrested trade unionists frequently but, on several occasions, fired on them and killed some workers. ¹⁰

An upswing in ethnic mobilization began in 1964, when the son of former president Ayub Khan used a show of force against Pakhtuns at the time of Ayub Khan's election. Later, in 1972, the Urdu-speaking population of Karachi revolted against the introduction of the Sindhi language in school curricula. While these were episodic events and the state quickly contained them, they sowed the seeds for ethnic polarization.

Political and social instability took a new turn with the emergence of the Mohajir Qaumi Movement (MQM), which sought to mobilize the Urdu-speaking ethnic segment of Karachi's population under an ethnic/nationalist banner. Explanations for the emergence of ethnonationalism among Mohajirs have varied. The more conspiratorial explanation links it with the state's support of the military dictatorship of General Zia ul Haq to help dilute opposition against his regime by the PPP, which had a strong base in rural Sindh. 11 The timing of the MQM's formation in 1984—soon after the resistance to Zia in the Sindh hinterland through the Movement for the Restoration of Democracy—has provided popular credence to this explanation. The more dominant explanation, though, attributes the rise of Mohajir ethnonationalism to the perception of relative deprivation for the Urdu-speaking minority, compared with the economic, social, and cultural development occurring in other regions of the country.¹² The pre-1973 constitutional arrangement not only bestowed economic advantages on the Mohajirs but also suppressed the linguistic and cultural markers of other ethnicities, thereby enabling the Mohajirs to dominate other ethnic groups, except the Punjabis. The federal character of the 1973 Constitution, based on provincial autonomy, empowered the Sindhis, the majority ethnic group in the province. The MQM's emergence is thus seen as a reaction to its diminution in status in the new federal architecture of Pakistan. 13

Regardless of which explanation is valid, for the purpose of tracing the ethnicization of politics in Karachi, the emergence of the MQM's student wing—All Pakistan Mohajir Student Organisation (APMSO)—in 1978 is an appropriate marker. The APMSO was at the receiving end of violence at the hands of Jamaat-e-Islami's student wing, the IJT. As such, it used the same methods of violence to stamp its authority on Karachi's political landscape and organize itself internally. It was in 1984 that MQM emerged as a fully-fledged political entity. The MQM's political strength was first put to the test in the 1987 local body elections. MQM virtually swept these elections and signaled its presence as the most potent political force in Karachi. Instead of voting for religious parties, as often done historically, partition migrants opted for the MQM.¹⁴

However, the PPP retained its traditional vote bank among the Baloch and Sindhis. ¹⁵ PPP has had the reputation of being a pro-poor, center-left party with support from the urban poor and liberal/left intelligentsia. While it still retains that character, it is increasingly seen as representing the Baloch and Sindhis. Similarly, following the trend of ethnicization, the Pakhtuns in Karachi have also sometimes coalesced around a particular political party.

Over the years, Karachi's instability and violence has taken the form of (1) interethnic violence, (2) state crackdowns on one ethnic group to the exclusion of others, (3) domination by one ethnic group, and (4) sectarian violence.

Lower-level collective action also became fragmented along ethnic lines, because most associations tended to link up with higher-level political organizations, including business, trade, and residential associations. The process of informalization and privatization has rendered trade unions virtually ineffectual in Pakistan. Those unions that exist—mostly in the public sector—are linked to political parties and do not have a stake in Karachi's politics.

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The first instance of ethnic violence in Karachi was in late 1986, when the MQM engaged in a pitched battle with the Pakhtuns over control of territory in the city's Orangi/Qasba area. The MQM and the Sindhi population remained in conflict during the next five years, which kept the city destabilized. After dismissal of the PPP-led federal and provincial governments in 1990, MQM gained provincial-level state power over Karachi—to add to the local government powers it had acquired earlier in 1987. With this domination came an increase in petty crimes, extortion, and kidnappings. ¹⁶ The MQM was both blamed for the increase in crime and accused of staffing the police and other government departments with its personnel. As a result, the state launched a military operation against the party in 1992. The operation was largely unsuccessful up until the 1993–96 period, when the police and Rangers managed to eliminate numerous, alleged MQM militants.

From 1997 to 2002, the state response continued at varying levels of intensity as MQM's political influence receded. However, after the 2002 general elections, Pervez Musharraf's government provided the MQM de facto power through the provincial government in Karachi, which was further reinforced by its success in the subsequent local body elections held in 2005. Thus began MQM's domination through to 2008. A precipitous increase in petty crime ensued (mainly mobile phone snatching at gunpoint and extortion rackets), along with the targeted killing of policemen who had participated in the state's operation against the MQM and against some political opponents. This domination over Karachi by the MQM also allowed them to corner rents, mainly through land and by inducting its supporters in government jobs. This, in turn, created significant tension with other ethnic groups, many of whom were at the receiving end of land acquisitions and were deprived of government jobs.

The 2008 elections served to break MQM's exclusive control on state power. The PPP won a large share of the votes, and its majority in the provincial assembly enabled it to form the provincial government. In addition, for the first time, representatives of Pakhtuns were elected under the Awami National Party (ANP). Thus, power was disbursed in the city across three major ethnicities. Arguably, though, because of this dispersion of power, this period turned out to be cumulatively the most violent and unstable in the history of Karachi. ¹⁷

Apart from ethnic-based instability, Karachi has also experienced episodes of religious and sectarian violence over the last two decades. From the mid-1990s to the early 2000s, Karachi witnessed a spate of targeted killings, primarily directed against the Shia community. However, in 2009, Islamist militants established a presence in the city and have been involved in several bombings and killings of minority sects. Violence perpetrated by the Taliban and other militant Islamist groups reached its zenith in the run up to the 2013 national elections. ¹⁸ The Taliban publicly announced that parties in opposition to them would not be allowed to campaign. As such, the MQM, PPP, and ANP were all victims of extremist violence at that point. It is important to note, though, that in these elections, the people of Karachi again voted in favor of the MQM, giving it thirty-three of the forty-two provincial assembly seats.

Informality, Violence, and Instability: The Conceptual Framework

Typically, in countries where states have a monopoly over (legitimate) violence, organized groups bargain with the state for resources, generally under a formal framework. However, where states cannot enforce their writ, informal developers and organized groups often compete for resources; and as informality increases, the state's ability to mediate the contests tends to decrease, leading to the high potential for violence. Informality in Karachi was borne out of three dimensions. The first, and most common for developing countries, was rapid population growth and reduced capacity to deliver goods and services.¹⁹ The second was state policy that deregulated and privatized large swathes of the economy. The third was the state's direct or indirect support of certain groups and/or turning a blind eye to their violence, thus gradually decreasing the state's monopoly over violence. Over time, this policy made the state vulnerable to capture by groups through formal and informal means. Political parties and their coalitions competed for control of the local state through elections and also informally vied to capture the nonelected bureaucratic and law enforcement arms of the state by inducting their personnel.

The intensity of violence brought on by sociopolitical factors was elevated by the influx of arms in the country, which, in turn, was intimately linked to Pakistan's geostrategic forays in covert warfare. Karachi has been particularly vulnerable to arms imports because of its port.

In the last decade or so, due to geopolitical policies of the state, religious groups that have a violent agenda have gained prominence in Pakistan, particularly in Karachi. These groups have been able to infiltrate the city because of the state's weakness and its multiethnic composition. Over time, ethnic and religious groups have become somewhat fractured, and violent groups have broken away from their parent organizations. This delinking has created "mafias" that operate across a range of activities and areas in the city. Without the discipline of a larger political entity, reigning in these mafias has become all the more difficult and has added a more vicious dimension to instability in the city.

With the above history and framework as context, this study explored three important sectors—land, manufacturing, and transport. They each present varying degrees of informality and, thus, offer different causal linkages with instability. They are also of significant economic and social importance to the citizens of Karachi. An in-depth understanding of the linkages between informality and instability will reveal whether and how much reform is needed at the sectoral level.

Land

The influx of six hundred thousand refugees'as a result of partition, as well as several subsequent mass migrations, left Karachi in severe need of a master plan to meet the population's demand for housing. While several plans have been instituted over the years, none have had much success due to frequent changes in government, the shifting of capital to Islamabad, and poor governance in general. As a result, a large gap between the demand and supply of housing has emerged.

An estimated 96,500 housing units per year were needed between 1987 and 1991, and only 26,700 units were supplied.²⁰ In response to the shortage, the market built squatter settlements or *katchi abadis* (KAs). In 1987, 37 percent of Karachi's population lived in these settlements, and in 1999, this number rose to an estimated 50 percent.²¹ Further, in 2012, an estimated 55 percent of the population were living in unplanned or only partially planned areas, highlighting the persistence of this issue.²²

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Twenty-seven percent of land in Karachi is used for formal residential areas; conversely, 8.1 percent of the land is used for informal residential areas, catering to more than 50 percent of the population.

The shortage of informal housing has disproportionally affected low-income residents. Housing schemes have largely catered to high-income residents—and some of these schemes continue to expand. Further, while constituting a smaller percentage of the population, high-income residents occupy a greater portion of land. To put this into perspective, 27 percent of land in Karachi is used for formal residential areas; conversely, 8.1 percent of the land is used for informal residential areas, catering to more than 50 percent of the population.²³

Karachi's land development has emerged via illegal, informal, and formal means, where the "formal" often stems from the government's discretionary powers in making exceptions to rules and regulations. Given the city's ethnic diversity, continued population growth, and increasing housing needs, contestation over land has often been the cause of instability in the city.

Given the government's lack of capacity to provide low-cost housing, land for settlement is a recurring source of conflict among communities. And given that various political parties represent these communities, are supported by their militant wings, and work in partnership with builders, corrupt bureaucracy, and often criminal operators, Karachi's urban growth has been riddled with the illegitimate capture of public land through organized squatting, outright land grabbing, and "China Cutting" (the encroachment into public space established for amenities). Land is the largest source of income generation in Karachi's shadow economy, which can foster more informal and illicit activity.

Contributing to this overall situation is that Karachi's complex mélange of ethnic, economic, and social communities are not linked, through voice and representation, to the city's political and administrative management structure. An empowered local government—which does not exist—is indispensable to creating this link. Further, there has been no orderly integration of informal, low-cost housing into the mainstream infrastructure of the city.

Formally recognizing Karachi's low-income KAs would likely generate numerous salutary outcomes. It would offer a replicable way to absorb the rising poor population, create a powerful incentive for Karachi's communities to cooperate, and support the expansion of microbusinesses that have developed on the settlements. Moreover, it would release "locked" equity value for house owners through allowing them to borrow against proper title deeds; this, in turn, would enable them to build additional floors and further expand their businesses, potentially leading to increased income and employment at the grassroots level.

However, key impediments to sustainable land planning and management in Karachi include the fragmentation of landholdings across seventeen land-owning agencies and the provincial government's overriding discretionary power. These impediments undermine binding constraints imposed by building rules and regulations and distort the integrative framework of the city's master plan.

The lack of an empowered local government is also an obstacle to sustainable urban development. Karachi needs to have strong local representation and accountability and its own "funds, functions, and functionaries" to build the accessible system of governance the city requires for its stability and prosperity.

Master Planning in Karachi

Karachi's seventeen land-owning agencies each have their own bylaws, standards, and planning powers. Coordination and consultation with the Master Plan Authority for Karachi would be required, but the provincial government has never approved an entire master plan, so this requirement has remained largely inoperative. The Karachi Division is about 3,400 square kilometers—of which 1,300 is urban. Within the urban precincts, the Karachi Development

Authority owns 31 percent of the land, the Sindh government owns another 18 percent, and government and military agencies own the remainder. Only 9 percent of Karachi's land is owned by private bodies.²⁴

Many of the land-owning agencies operate with inadequate budgets. Property rates and charges levied are low to begin with and are frequently paid late or not at all. To generate extra revenue, agencies have allowed densification (high rises) and commercialization to take place in many parts of Karachi, without public referral or coordination with the city's traffic and utility/power services. As a consequence, significant construction has occurred without approvals and has created traffic congestion and strain on utilities.

Furthermore, wealthy private financiers and powerful developers often gain land allocation and project rights through collusion with bureaucracy or political connections. Coordination of new mega-developments with the city's private town planners, architects, and environmentalists is infrequent and largely immaterial to the outcome when it does happen.

The provincial government's discretionary power and land-owning agencies' operational latitude could have been contained by a duly-constituted Master Plan Authority and a fully approved master plan. Although master planning for Karachi has been a recurrent exercise since the partition in 1947, the resulting plans have never been wholly adopted (i.e., published by the provincial government, with binding force thereafter).

Draft Plan-1948

A draft master plan for Karachi was commissioned in 1945, but by the time the plan was drawn up in 1948, events in the country changed the parameters and the plan was shelved. The population explosion that occurred after the partition led to squatting in the city's open areas and encroachment into its playgrounds, parks, schools, and colleges. The city's administrative authorities prioritized the development of housing societies for government employees and middle-class segments (e.g., Nazimabad and Liaqatabad) and largely ignored the needs of the low-income population, which comprised an overwhelming majority of the refugees.

Merz Rendall Vatten Plan—1952

The first, complete master plan was developed by a Swedish firm, Merz Rendall Vatten. The plan envisaged the transfer of all government offices to a new city to be built in Gadap, north of Karachi, while refugees would be settled in ten-floor blocks to be built alongside several miles of the Lyari riverbed, between the old city and the new center for government. The main industrial zone for the city was planned to run alongside the high-rise blocks to the west. Reluctance, or simply inertia regarding the en masse relocation of government offices, put an end to this plan.

Greater Karachi Resettlement Plan—1956²⁵

The Greater Karachi Resettlement Plan (GKRP) was developed by the Greek architect and town planner, Doxiadis. Encouraged by the president of Pakistan to clear the city center and its environs of all shanties and squatters, Doxiadis planned a city where low-income groups would be settled in two large satellite towns to be built 25 kilometers to the northeast (Korangi) and northwest (New Karachi), with their own industrial and commercial centers. The plan's implementation started with major construction of refugee housing at Korangi. The transfer of squatters from the city center began, but the project failed to gain momentum mainly because jobs for this population were scattered around Karachi and transport was expensive

Many of the land-owning agencies operate with inadequate budgets....To generate extra revenue, agencies have allowed densification (high rises) and commercialization to take place in many parts of Karachi, without public referral or coordination with the city's traffic and utility/power services.

and inadequate. Jobs were in and around a radius of 10 kilometers from the city itself, while the allocated settlements were planned 30 kilometers away. Thus, travel to their workplaces would take up a substantial part of the residents' income and time. In addition, the industrial zones in those satellite towns, which would have provided employment, were slow to develop; the necessary roads, water and sewage utilities, and power infrastructure were long delayed.

Much of the transferred population left Korangi and joined the freshly evicted population moving out from Karachi to establish informal KAs. Today, these settlements, located in between the proposed satellite towns and the main city, are now much larger in size and density, constituting a major portion of low-income settlements in the city. In 1959, the decision to transfer the federal capital to Islamabad broke the momentum of the GKRP, which was then shelved.

There have since been sporadic attempts to create housing colonies on the land allocated for low-income settlement. For the most part, though, the land has been bought or "earmarked" for purchase by the city's land developers (for the construction of middle-income colonies, as infrastructure falls into place)—essentially making the areas unaffordable for low-income populations.²⁶

Planning Lapse—Early 1960s to Mid-1970s

For the next twelve years, urban planning largely lapsed. Orangi, Baldia, and Qasba were identified for the establishment of large-scale, low-cost housing, but transport links and utility infrastructure remained undeveloped for a long time. As the city's population grew, government land located near the city was illegally subdivided (enabled through collusion between land-owning agency officials and developers and politicians), adding steadily to the number of informal KAs. In their quest to live near the city, communities settled alongside road and rail corridors and alongside the major natural drainage systems of the city.

Karachi Master Plan—1975

Prepared with assistance from the United Nations Development Programme (UNDP), the next master plan covered a ten-year period (1975–85). At the time of its development, squatter settlements were mushrooming, and the city lacked a clear vision for meeting its urban zoning, utility, and transport needs.

The planning process yielded the first comprehensive collation of data for urban settlements in Karachi since 1947. Through well-considered directional mapping, the plan identified Karachi's future expansion corridors, with the aim of addressing the low-income population's need for adequate utility and transport infrastructure and close proximity to employment opportunities.²⁷

However, little implementation ensued. The plan had made two basic assumptions that failed to recognize Karachi's functional realities: It assumed that an empowered executive agency to oversee implementation existed and that city authorities had the financial capacity and singular power to develop Karachi. It had envisaged that a Master Plan Office (MPO) would oversee all the land-owning agencies, requiring them to consult and coordinate with the MPO. But, the office was not given any formal authority to compel land-owning agencies to follow its directions, so even if it had been instituted, it would likely have been ineffective. The Master Plan Authority—even when it was accredited (e.g., by the City District Government Karachi or CDGK during 2004–10)—was unable to prevent each land-owning agency from developing its plans independently, even when these plans had implications for the city's infrastructure.

Karachi Development Plan—1986

Also developed by the UNDP, the fourteen-year Karachi Development Plan (KDP) 2000 dictated, again, that a central authority for the master plan be created—the Karachi Division Physical Planning Agency. However, the provincial government authorities never formally approved the plan. KDP required a computerized mapping of Karachi's land and building profile to be constantly updated, so that planning could be based on real-time versions of the city's profile; and this would have bound the provincial government and land-owning agencies to prior consultation, so it was unlikely to have been acceptable to them.

Karachi Strategic Development Plan—2007

The current thirteen-year master plan, Karachi Strategic Development Plan (KSDP) 2020, is the first-ever approved plan (under a resolution of the City District Council Karachi) and was initially given legal status under Section 40 of the Sindh Local Government Ordinance (SLGO) 2001. It was prepared by the Master Plan Group of Offices of the CDGK under a 2001 presidential ordinance that greatly strengthened local government institutions. KSDP 2020 envisages a denser, commercial city, with land allocated specifically for business parks and educational centers. Implementation of some plan initiatives had begun when a lapse of the local government ordinance in 2010 stopped any further operation (the master plan has now been subordinated to a Sindh government body no longer "owned" by the city).

As a result of the collective failure of the formal system to provide low-cost housing, communities have developed their own, quite comprehensive, responses. It is important to look at KAs as they are now constituted. They are already functional ecologies of settlement and enterprise. Formally recognizing the KAs and allocating moderate resources to upgrading infrastructure could foster significant progress toward addressing the land issue for low-income groups and resolving a major source of conflict between Karachi's communities.

Evolution and Functioning of Informally Established Low-Cost Housing

At least half of Karachi's population lives on 8 percent of its land in KAs.²⁸ As described earlier, land allocated for low-income housing was set far from the city, and transport and utility infrastructure were long delayed. In the absence of viable planning by the state, the burgeoning low-income population responded by squatting on vacant land in or close to the city's center, usually assisted by "entrepreneurs" from their communities. In collusion with law enforcement and land and building authorities, the entrepreneurs subdivided the land into 80–100 square meter lots in a grid layout and provided basic utility infrastructure; their intention was to make the settlements suitable for anticipated formal regularization. This anticipation was based on the announcement of Prime Minister Zulfiqar Ali Bhutto in the mid-1970s that KAs would be regularized (i.e., be given ex-post official approval for their construction) and was reinforced later in 1987, when the government set up the Sindh Katchi Abaadi Authority (SKAA). The SKAA was empowered to formally transfer the land to individual KAs and subsequently upgrade the KA and provide formal utility supplies to the settlement. To date, though, the SKAA has been unable to formally transfer all the land, as KAs have continued to expand.

Viability of KAs as Sustainable Housing

KAs can serve as a building block for sustainable housing because they were developed through grassroots private enterprise, without any assistance from the government beyond allowing the

encroachment of land. Unlike Rio de Janeiro's *favelas* (slums) and Turkey's *gecekondus* (squatter settlements), KAs were largely built on grid patterns, with identified areas for residences, retail shops, and amenities (e.g., schools, clinics, prayer centers). If slums are defined as squalid habitations that are built from nondurable building material and lack water and power, sanitation, and official acknowledgement of their existence, then most KAs in Karachi, which house eight or nine million people in all, are not slums. However, all KAs would need some level of infrastructure upgrading (e.g., for creating more water supply/sewage connections to main trunks).²⁹

In addition to Orangi and Baldia, many large KAs are located close to the city's business district and high-income residential and shopping areas, with limited, but operative, bus services providing access. Furthermore, KAs have their own business operations, joint community enterprises, amenities, and entertainment. Property ownership, albeit mainly informal, has generally allowed collegial relationships among the typically diverse communities living in KAs. Management of a KA is seamlessly shared among members of different communities, and the intermingling that occurs through schools, mosques, leisure activities, and business relationships brings further cohesion.

In addition to supporting inhabitants' needs, KA businesses also supply large businesses in the city with garments, coarse cloth, utensils, and electronic repair services. The residents also work as domestic help, plumbers, carpenters, electricians, and so on for the nearby elite and upper-middle class residential areas.

As a "reserve" land asset, KAs have vertical space to accommodate population growth, with the potential to add floors to all the single or double story units. A rough estimate suggests that an average increase of all KAs to ground plus three floors would provide accommodation to at least another 1.5 million people. Any large-scale expansion would require access to significant financing though.

While KAs' property values have been rising steadily, owners cannot unlock any monetary value from the capital accrued in their homes. Borrowing against home mortgages would enable them to upgrade and expand their properties or leverage their businesses. Such financing could thus play a strong role in raising incomes and wealth at the grassroots level and contribute to overall stabilization of the city.

Formal Finance as a Route to Consolidating Regularization of KAs

KA properties are not financed by banks because most lack title deeds and planning permission. Before title deeds can be issued for a KA property, the entire settlement will need to gain official sanction (i.e., regularization from the land-owning authority concerned). According to the SKAA, almost 90 percent of the KAs built prior to 1985 were notified (approved in principle) for regularization (i.e., 489 out of 564). Records show that 452 have been regularized—through demarcation, the transfer of land, and the establishment of individual titles—but the SKAA's records are out of date. Since 1985, KAs have expanded greatly, new ones have been established, and population density has grown exponentially. The SKAA's record covers 2.5 million people living in KAs in 1985, but the population today is nearly four times bigger. The authority's work has slowed, and with the creation of the Sindh Special Development Board, its original mandate stands compromised.

Demand and Price Pressure on Existing KAs

Demand for housing continues to grow due to natural population growth, migration, and newly married couples wanting their own abodes. The KAs have responded by building

upward, and the number of ground plus two- and three-floor buildings is increasing; a floor or two in a four-story block will often be rented out for additional income. As a result, there are now 2,800 people per hectare versus 200 people per hectare in Karachi's elite residential areas.³⁰

The price of a standard 80–100 square meter KA property has been increasing along with demand and currently equates to seven years of income for the average low-income wage earner.³¹ The accepted industry ratio for affordability is considered to be four years of income,³² which was the case in Karachi a decade ago. Consequently, more people are renting; depending on the area, 33–50 percent of the housing units may be rented.

The SKAA could oversee the implementation of incremental KA schemes on vacant government land (e.g., similar to the Khuda-ki-Basti scheme), as well as the upgrading of existing KA infrastructure. However, the associated costs (e.g., for connecting sewage lines to the main trunks) would need to be heavily subsided by the residents via labor and resources. Ideas, guidance, and advice could be garnered from the Khuda-ki-Basti Project and Orangi Pilot Project and from some nongovernmental organizations that have worked in KAs.

Regrettably, the provincial government's current plan has taken a different shape. The newly created Sindh Special Development Board is mandated to densify Karachi through high-rise buildings in elite and upper-middle class areas of the city. The proposed construction would involve relocating residents in major, well-situated KAs to high-rise, 600 square feet apartments on 25 percent less land area and releasing the adjoining land to develop commercial and residential projects for the elite. The KA inhabitants would be given apartments in exchange for vacating their KA houses. Whether those houses approved for regularization, but still without proper title deeds, could be left out of the arrangement is still to be discussed.

Various town planning experts have criticized the plan due to multiple factors: (1) financial (building new versus upgrading the existing); (2) social and commercial (building vertically versus horizontally—the present horizontal spread offers conveniences for conducting business activities, and the streets/open ground offer spaces for social interaction and common amenities); and (3) environmental (constructing new high-end commercial/residential buildings will add to traffic congestion, strain power and water supply capacity, etc.). The plan will likely be reconsidered.³⁴ (Several examples of official misuse of authority for land use are being examined by the country's criminal investigation agencies as a by-product of the Rangers' actions against criminal elements associated with political parties. Numerous plans such as this one will likely be suspended until further evaluation.)

KA Formalization and Access to Finance

Currently, the equity released through mortgages on existing homes in KAs is negligible (less than Rs. 5 billion *nationally* for low-cost housing, according to the State Bank of Pakistan), while finance for land purchase and construction is unknown. The commercial bank lending rate for all types of residential mortgages in Pakistan is one of the lowest in the world at 0.2 percent of the gross domestic product.³⁵ India (9 percent), Thailand (17 percent), China (22 percent), and Malaysia (33 percent) all had much higher rates in 2012.³⁶ For KA inhabitants, their locked property value is significant and growing; if they cannot access it, they may—for business or personal reasons—be forced to sell in the informal market to crystallize capital and then use some of it to relocate to less costly land elsewhere in the city. This would simply perpetuate the current housing problem.

The precise number of existing KA units is unknown, and so the monetary value of the KAs' land and property can only be approximated through tenable assumptions. According to Arif Hasan and others' estimates, Karachi has about one thousand KAs, housing about ten

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million people. Assuming the average unit is two floors, with a density of six people per floor, this would mean approximately 830,000 housing units exist. Prices of these units vary. KA units close to upmarket residential areas and the city center (e.g., Qayyumabad) can have a market value of Rs. 2.5 million and up for two-story units. The price can go down to Rs. 300,000 for an empty plot in distant or less developed KAs. Whether the KA has been regularized also affects the price. Assuming an average price of Rs. 600,000 (probably conservative), total KA property would have a minimum value of around Rs. 500 billion.³⁷

For communities with an average household income of under Rs. 25,000 per month, this is a substantial sum. Even if half of this property were to be used as collateral for debt (at a 50 percent loan-to-value), Rs. 125 billion could be unlocked for home or business expansion. This could lead to increased community interdependence, a greater sense of security, strengthened grassroots relationships, and higher incomes—all of which would decrease communities' reliance on political parties and the government for patronage.

Hurdles to Formal Financing for KAs

For bank lending to commence, individual KA units will need title deeds. Lending can start with microfinance banks, later expanding to larger banks. Pooling of borrowers, in some type of cooperative arrangement, will expand coverage in situations where the individual loans are small (e.g., under Rs. 200,000 each) and where individuals—who may otherwise not meet the bank's income criteria—would benefit from the surplus servicing capacity of the group.

To generate valid title deeds for each KA unit, the settlement will need to be regularized, the individual KA home will need to be demarcated on the floor-grid of the KA, and the name of the home's owner must be registered in the records of the land-owning agency. Even where regularization has been completed, only about a third of those eligible have actually obtained title deeds. The current process for issuing title deeds in KAs is protracted and cumbersome. The registration process involves a significant fee, can take up to eighteen months, and involves several bureaucratic processes (up to twenty-two steps). Hence, because the residents believe that a notified KA has official approval and their properties are hence safe from demolishment, many prefer not to pay the fees or undertake the copious registration process.

When sold or purchased, property in regularized KAs is transferred on the register of the land-owning agency, and property in unregularized KAs is only recorded locally. In the latter case, property is transferred on a confirmatory document on official stamped paper, between the buyer and seller, with the signatures of two community notables. Unregistered property sells for a discount of up to 25 percent, but in well-established KAs, the discount can be nominal.

To encourage registration, the associated costs (money and time) must be reduced. The central office of each land-owning agency could delegate registration to duly empowered sub-registrars in each KA. This would greatly shorten the registration process, as the local office would deal exclusively with a single, demarcated KA. The Khuda-ki-Basti Project in Hyderabad has successfully taken this approach, reducing the bureaucratic steps and total registration time to a few weeks.

To obtain bank financing for a unit exceeding one floor, KA units need the land-owning agency's consent. Permission for two floors is routinely granted on application. However, the construction of additional floors is a grey area, as definitive planning guidelines for KAs do not exist. Permission can be negotiated upon "special" payments, though this is not commonly done for two-story plus units. Through collusion with officials, the construction is tacitly acknowledged.

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For titling and planning to move ahead systematically, the Sindh government must outline a time bound agenda for the SKAA to achieve set goals and objectives. The authority needs to strengthen its operational capacity and consider whether Karachi is best served by devolving KA operations to a Sindh government body under a provincial minister. As suggested earlier, empowering the local government to implement the agenda, with direct representation of and interaction with the population, would be much more effective.

Effective Local Government or Formal Authority for City Planning and Development

Karachi's lack of authority for even limited self-governance and negligible access to financial resources are vastly incongruous with its nationally dominant economic power. Ministries and agencies of the provincial government manage the city, while the local government has an indiscriminate role, limited to a handful of municipal functions.

Karachi's population constitutes approximately 38 percent of Sindh's total population.³⁸ The PPP dominates Sindh, routinely having a simple majority in the 168 member Sindh Assembly. Karachi is represented by 42 of the 168 (25 percent) of the provincial assembly seats, and the MQM (even with some seats from other urban Sindh) are consequently junior coalition partners or sit in opposition. Empowering the local government for Karachi would normally have been the MQM's natural objective, as the predominant party.

However, since the lapse of the SLGO in 2011—which had set up a city government for Karachi with certain devolved powers—the MQM's commitment to local government has been indiscernible. Rather than pursuing devolution, the party appears to be maintaining patronage powers through running select provincial ministries and otherwise maintaining its influence and control over a large part of the city through informal methods (although the current Rangers crackdown might be changing the situation). Whether the MQM is a champion for local government or sees it as a parallel power structure that would run counter to its desired dominance over the city is unclear.

The issue is simple. To function effectively, an elected third tier of government will need to have substantial powers and revenues devolved to it (i.e., more "funds, functions, functionaries"). But, it is unclear whether both Sindh's major political parties support a continuation downward of the eighteenth amendment to Pakistan's constitution, which devolves substantial authority and finance from the federal government to the provinces. Further, public consultation on an appropriate form of local government for Karachi has failed to develop.

In fact, matters have regressed. Besides amalgamating the former CDGK, created under the defunct SLGO, into a body of the provincial government, the Sindh executive has, progressively since 2008, effectively stripped the city government of even the powers it enjoyed under colonial rule. The Master Plan Authority has been placed under the Sindh Building Control Authority (SBCA), which means the master plan could be altered by the SBCA without due public consultation. The Sindh Special Development Board has been given powers to restructure the KAs through building high-rises across the city and replacing some of the KAs; the Solid Waste Management Board of the Karachi Municipal Authority has been taken over by a Sindh body; and the SKAA, charged with regularizing and upgrading KAs, is effectively moribund.

If the Karachi/Sindh political parties do not support empowering the local government, Karachi's coherent development should then be addressed another way. The provincial government would need to accept the integration of detailed urban planning (i.e., the

disposition of land use and plans for the city's infrastructure expansion) into an overarching master plan, under an independent Master Plan Authority. The provincial government's discretionary power (embodied in an 1884 law) would have to be tempered by clear definitions of what is truly in the "public interest."

Local Government in Karachi:

Absence of an Overarching Planning Framework since the Demise of SLGO

Karachi's local government under the SLGO 2001 consisted of a three-tier system. At the base were 178 union (neighborhood) councils (UCs), comprising 2,314 elected representatives with defined administrative authority but no fiscal powers. This was the only directly elected cohort in the local government system. The next tier included eighteen town councils. The city's mayor, at the top tier, was elected by all the UC members.

Certain areas, such as urban land use and regulation and education and health, were devolved to the local government. The police and civil services were also devolved to the third tier of the government, giving the mayor additional enforcement authority.

The local government officially had its own revenue sources. The provincial government was to divert some of its tax receipts to the city government, and new revenue levying powers were granted to the local government. However, the provincial transfers were never clearly delineated, and, in any case, would not have been sufficient for Karachi's huge infrastructural needs. Hence, the federal government directly funded the local government.

While the local government had its critics, two aspects of its functional framework held promise for Karachi's long-term stability: (1) elected councilors largely represented the interests and needs of mixed ethnic communities (mainly housing and basic infrastructure)—which would have, in time, diluted communities' dependence on rival political parties; and (2) urban planning would have had to proceed consensually and transparently, with elected officials being held accountable.

After the SLGO's demise in 2011, local bodies went back to having a purely municipal function. The police and civil services were placed back under the Sindh provincial government. Karachi has one central and five district municipal corporations, each comprising a commissioner and five deputy commissioners. Because these civil servants now chair the municipalities, devolved grassroots authorities no longer exist. The provincial government has assumed control of city planning. With Karachi's management bodies being headed by politicians and bureaucrats and government nominees being on the relevant boards, there is no transparent, consultative role for town planning professionals and civil society at large. While the latter group may sometimes be consulted, it has no recurring role in ongoing planning or implementation.

As a result, the PPP-led provincial government now has direct relationships with the city's financiers and developers. This partnership will likely increase the focus on planning elite and upper-middle class areas, where a heavy bias for developing commercial centers, shopping malls, and expensive residential schemes is already evident. As noted earlier, if not more rigidly defined, the discretionary powers of the provincial government could prevent the implementation of any long-term framework for city planning.

At the time of this study, elections had begun for local government (LG) bodies across Sindh. Karachi LG elections were also due imminently. The LG framework for Karachi will consist of UCs (elected by wards), which will then elect municipal committees and together elect the municipal corporations and its head, the mayor. However, because of the lapse of

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the SLGO, the police and civil services will remain under the authority of the provincial government. In addition, local government will still depend on the provincial government for funding—for example, the mayor will continue to lack formal access to the center for special allocation for development projects (e.g., the Lyari expressway).

Thus, the local government's role will remain limited to municipal supervision, and city land planning and development will remain under the control of provincial authorities. While the MQM, representing Karachi, may strive to recapture authority for the local government, the PPP will likely resist this effort. Note that since the local government and mayor's success will depend on nonpartisan development initiatives (in the interest of all its mixed communities), devolution to the local government may not be fully supported by Karachi's ethnically aligned parties, including the MQM.

The action taken in recent months by civil and military authorities—against corruption, poor governance, and terrorism allegedly associated with political parties—will likely influence how powerholders manage Karachi moving forward. Cooperation and consensus among political parties will be essential to suppress Karachi's recurring instability. An empowered local government is a prerequisite for this to happen, because Karachi is too large and its issues are too pressing for it to be managed without an accountable local body.

If consensus on the empowerment of local government cannot be reached, a compromise would be to make the Master Plan Authority the custodian of urban planning. The authority would jointly implement the plan with Karachi's land-owning agencies and hold frequent public consultations.

Structure for a Corresponding Master Plan Authority

Besides an operating executive, the authority must have a board that includes government nominees and land-owning agency representatives, private urban planning professionals, environmental experts, builders, and architects. The objective would be to maximize the expertise, practical knowledge, executive authority, and manpower of the official land-owning agencies to address planning, ecological, environmental, and operational issues.

Land-owning agencies have an adequate framework of rules, regulations, codes, and standards. What is needed is more transparency about present and planned land use and corresponding development plans. The board should have complete access to information on land use, change approvals, and ongoing projects. Moreover, the board should have the authority to approve the increase of fee schedules for land-owning agencies and to enforce penalties for invalid disapprovals or misuse of approvals.

A Master Plan Authority like this has been proposed before (e.g., in the KDP 2000), other structures could be considered. It is only vital that a formal, credible structure be institutionalized.

Conclusion

The state has consistently failed in achieving coordinated and inclusive urban development for a rapidly growing city. This has allowed the various special interests of community leaders, property developers, and politicians to influence land and settlement issues. There are two ways to achieve coordinated development in Karachi: (1) through an empowered local government or (2) a central master plan, developed with the participation of civil society, which acts as an overarching framework.

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Manufacturing

Nature of Informal Manufacturing

Since deregulation began in the early 1990s, informality in manufacturing in Karachi has grown. While it is still far less prevalent than in Punjab—where large industrial clusters in small towns have mushroomed into major production centers—the growth presents some challenges to maintaining stability in the country. As informality increases, it becomes more difficult for the state to collect revenue, enforce policy directives, and guide the economy. As a result, productivity and economic growth are inhibited. As is the case nationwide, Karachi's growing informal economy has contributed to a stagnant or declining tax to gross domestic product ratio and the failure to graduate basic industries like textiles to a high-tech or heavy manufacturing base such as chemicals. The potential rate of economic growth has been steadily declining over the last several decades.

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An informal manufacturing enterprise is an activity that operates without any formal permissions from the state. For example, informal enterprises are set up on land that is not permitted to be used for industrial purposes. Workers are hired without being registered with the labor department and without any of the protections that registered workers receive, such as mandatory deductions for pension or insurance for accidental death or injury. Some firms are registered as sole proprietorships, but the bulk of them have no registered credentials of any sort. They do not possess a national tax number and are not registered for sales tax. In many cases, transactions are carried out through the proprietor's personal bank accounts rather than company accounts. Many firms are able to access electricity as industrial enterprises, where the tariff is lower, despite being informal, but often use stolen electricity (via loose wires thrown onto an overhead transmission line) or, in the case of home-based workers, electricity from residential connections, which are also commonly stolen.

Lack of adequate land and infrastructure for large-scale manufacturing have been key drivers of the growth in informal manufacturing in Karachi. The deterioration of law and order over the last several decades has also been a factor, preventing further formal investment.

The slow growth in large-scale manufacturing, combined with continued migration and active incentives for home-based production or "cottage industry" (e.g., exemptions from excise duties), led to the proliferation of small-scale enterprises in the 1980s. According to some leaders of the SITE Association of Industry, the total number of people employed there has almost halved since 2000. However, this figure refers to full-time workers and there has been a movement toward contract labor, which is not reported to the association.

The cottage industry has largely been established by industrial plant workers, who could not advance their careers due to declining industrial investment. Many of these workers, having acquired the skills to organize and operate a production line, went into their own business. The cottage industry continues to grow, with frequent outsourcing from localities within and around industrial zones.

Size of Informal Manufacturing

The size of the cottage industry is difficult to estimate, although some data on power consumption suggest it is much smaller than the formal manufacturing sector. For example, with far fewer active consumers, SITE still consumes more than seven times the electricity of Gadap, Orangi-1, and Baldia combined.³⁹

However, the data are approximate and might not paint a full picture. Many residential connections are also used for running manufacturing processes, and some amount of informality likely exists in SITE. In addition, many of the informal enterprises in the surrounding localities might be labor intensive (e.g., garments) and therefore do not heavily rely on power consumption.

Nevertheless, the total amount of power consumption (residential, commercial, and industrial) in the three adjacent localities is low, leading to the conclusion that whatever manufacturing activity there is in the city's largest informal cluster remains quite small.⁴⁰ This runs contrary to what the naked eye reveals, because a simple walk through many unplanned neighborhoods shows small-scale manufacturing underway in most dwellings. But in its aggregate, this activity does not add up to much.

The cottage industry has taken root primarily in unplanned localities and, in addition to outsourcing, has been driven by the supply of informally sourced raw materials from the trade sector. The industry thus forms an important link between formal and informal activity.

However, the industry faces constraints in maintaining and achieving further growth. One is the Free Trade Agreement with China, signed in 2007 and up for renewal now, which has flooded the country with cheaper goods and raw materials, making it difficult for the smaller players in the city to compete. The other is a growing reluctance among large-scale manufacturers to outsource production to local, informal operations, given the logistical hassles created in dealing with them and the growing concern among foreign clients about being involved in disastrous situations, such as the collapse of a factory building in Bangladesh and the fire in Ali Enterprises in Baldia Town that killed more than 250 people. All large textile business owners consulted for this study reported reducing their outsourcing after 2012, especially since their clients, including major international brands, have imposed strict controls over the practice. Hence, further growth in informal manufacturing in Karachi is likely to be slow, restricted to those goods, routed through exporters, that have little foreign competition and do not depend on demand from international markets.

Stability Challenges Posed by Informal Manufacturing

Karachi's informal manufacturing sector poses several unique challenges. Local regulatory bodies, such as the labor department, find it hard to reach the informal enterprises—for example, to serve bills and disconnection notices; and the big utilities (e.g., K Electric and the Sui Southern Gas Company) find that theft is common in areas with a large number of small-scale enterprises. In areas that enjoy piped gas, the use of residential connections to run small generators is common.

Power losses—the gap between units of electricity sent into an area and the amount recovered through bills from the same area—are close to 9.5pc (power consumed) in the Sindh Industrial Trading Estate (SITE), which is one of the largest industrial zones in Pakistan. In the three adjacent localities, power loss rates are between 45 and 50 percent.⁴¹ This does not necessarily relate to informal manufacturing, but it does illustrate the difficulties in collecting bill payments and undertaking disconnections in these areas.

Additionally, many illegal items—from water and gas suction pumps to unregulated medicines—are produced by the informal sector and are difficult for local regulatory authorities to track and remove. This means there is always a ready supply of these items, and traders can offer them to anyone without any oversight.

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For example, readily available phosphorous was stolen and used to help set Bolton Market on fire during the riots after a bombing of an Ashura procession in 2009. Phosphorous has also been used in numerous arson attacks, but city and provincial government authorities find it difficult to regulate its supply due to the informal nature of the city's wholesale distribution channels. Many traders who had suffered losses in the Bolton Market fire demanded the regulation of dangerous chemicals like phosphorous, but their demands were fruitless. There is no constituency for such regulation among the trader community, which is deeply suspicious of the state and resists all attempts to subject its activity to state oversight. The only form of state intervention they ask for is protection, particularly from extortionists.

The importation of dangerous chemicals is heavily regulated by the state. A no-objection certificate is required from the Ministry of Interior for each consignment, and products once imported are tracked by the Anti-Narcotics Force (ANF), which in turn, is empowered to ask for the records of all recipients. There is little coordination between the ANF and tax authorities, thus the records provided to the ANF cannot be used for tax assessment purposes. Nevertheless, in less formal settings, traders admit that circumventing these oversight mechanisms is not difficult. Traders also report facing growing competition from smuggled consignments, particularly from Iran, which are driven across the border crossing at Taftan or arrive in boats along the Makran coast. Such practices would not be possible without some collusion with the authorities entrusted with control of these areas.

A brief focus on trade is necessary when discussing informality in manufacturing because informality creeps into the production process through mechanisms designed to conceal the value and volume of international trade. False declaration of the value of imports, whether raw materials or machinery, as well as informal sourcing of raw material, have become fundamental elements of formal sector manufacturing. Additionally, the demand for raw material and machinery from informal enterprises creates a pathway for industrial goods that have multiple purposes to leak out of the supply chain for manufacturing.

The payment stream for transactions in the informal sector creates another pathway for illicit activity and makes that activity difficult to identify. For example, the only suspicious transaction reported in Karachi by the banking system in 2014 (suspected to have links with violent elements) was about a party using a personal bank account in the city to transfer funds to a small town "equidistant from three different conflict zones in the country." Funds were deposited in large quantities into the account in Karachi and then withdrawn in the small town. The amounts were far larger than the expected turnover declared by the beneficial owner at the time of opening the account, which is what raised the suspicions of bank staff.

But law enforcement agents tasked with investigating the case admitted that while the transactions could have been payments to support violent elements in the town, they could just as easily have been payments to a contractor building a house, for example. The widespread use of personal bank accounts to conduct business transactions creates a signature that can resemble the illicit movement of funds and therefore inadvertently provides a camouflage for illicit activity.

Most of the informal manufacturers interviewed declined to talk about protection payments or stated that they do not pay anyone anything.⁴³ They indicated there is limited collective action by owners and low levels of labor activism or organization. Owners' associations are largely inactive and little horizontal mobilization occurs. They also reported limited contact with state authorities and want to keep it that way. The primary problem for them is energy, but with the establishment of large utilities, theft has provided an easy way out.

Per those interviewed and anecdotal evidence, labor recruitment in Karachi's informal manufacturing sector does not appear to follow ethnic lines. However, there is some evidence of ethnic preference playing a role in labor recruitment surrounding the Hub industrial estate, which is technically in Balochistan Province. Workers of non-Baloch origin have been attacked while traveling in contractor-provided trucks to their work site.

The role of labor contractors is small in informal enterprises, with owners and workers developing direct relationships. In other more formal, large-scale industry, owners often look to contractors to hire labor for them, where the contractor negotiates the wage and in some cases provides the transport and the housing for the workers. This is especially the case in the industrial zones of Punjab, where labor moves back and forth between the urban industry and agrarian hinterland. Unlike in other industrial cities, in Karachi, the industrial sector does not compete with the agricultural sector for its labor.

Contractors help arrange the supply of labor for limited segments of the economy in Karachi (e.g., for construction projects), and in the past, they played a large role in supplying industrial areas as well. But informal manufacturers require small quantities of labor and usually recruit their own labor from their immediate surroundings. This is one reason why informal manufacturing has grown within areas like Orangi, Landhi, and Korangi, which house laborers working in nearby industrial zones. The poor state of public transport has also been a factor. Contractor gangs become mediators in labor recruitment and can heighten the role of ethnicity in the process or succumb to criminal impulses. Their absence in the informal sector means that the process of labor recruitment does not create the ingredients that can potentially fuel instability.

Conclusion

Informal manufacturing does not appear to directly contribute to instability. It absorbs a significant amount of labor, but ethnicity does not play a role. Nor has it become a viable competitor for formal sector enterprise in the city's designated industrial zones. Owners of informal enterprises prefer to keep political parties or other organized interests at arm's length to the extent possible. Their reasons for wanting to do so are simple: They could utilize the services of a political party to obtain a service today, but the cost of creating this relationship would play out for years to come.

While informal manufacturing does provide ingredients for instability, such as dangerous goods and pathways for the movement of illicit funds, it does so inadvertently; and the issues are found nationwide, not just in Karachi. Thus, there is no clear pathway for reducing the indirect risks to stability that informal manufacturing gives rise to.

Transport

Steady Receding of the State

The public sector dominated transport in Karachi up until the late 1960s. The tramway was established toward the end of the nineteenth century and had spread across most of the city by 1947. After the partition, public buses were introduced to serve new settlements created as a result of mass migration. At the time, privately owned buses were operating in the city as well (see table 1). These buses were informally run, but their routes were regulated by the state. Despite their availability though, most residents of the city relied on the tram to commute.

Karachi's size, in terms of both population and area, grew significantly over the next decade, and demand for transport rose accordingly. To meet this demand, the number of cars for the tramway was increased to almost four times its initial number and more public buses were put into operation. Private entrepreneurs also increased their number of buses, but the total remained under the number of public sector buses.

During the 1950s and early 1960s, the ownership of public sector bus initiatives changed several times as a result of economic policy, government turnover, and the introduction of new master plans. In addition, some public bus companies were taken over by private ventures. Thus, by 1964, there were more private buses in operation than public buses.

The public sector continued to dominate though, with the introduction of the Karachi Circular Railway (KCR) in 1964. It provided another essential public mode of transport in the city, as the buses and tramway were struggling to meet the transportation needs of Karachi's growing migrant labor force.

The 1970s proved to be a turning point for Karachi's transport sector, however. In 1971, the Free Transport Policy was introduced, which liberalized the procurement of route permits. This policy stated that anyone who could afford to purchase a bus could also procure a route permit.⁴⁴ This led to the proliferation of privately owned buses, and by 1974, their number had roughly doubled. It also allowed the minibus, a smaller and more affordable vehicle, to enter the market for the first time; in just three years, the number of minibuses reached eighteen hundred.

In 1974, the tramway was closed down for two main reasons: (1) it was blocking traffic on the roads and causing accidents, and (2) an alternative form of mass transit was to be proposed in the 1975 master plan. ⁴⁵ As a result, the number of private buses and minibuses rose significantly over the next fourteen years. Although the absolute number of public buses also rose, their proportion in the city decreased considerably. The number of daily trips the KCR made also decreased by 1988.

By 1999, the private sector dominated transport in Karachi. The KCR was shut down that year, while the Karachi Transport Corporation buses had stopped operating a few years earlier because the corporation was functioning at a loss. Private buses and minibuses increased to their highest number ever and became the primary form of transport available in Karachi.

Due to various reasons, however, private buses and minibuses remain unable to meet the high demand for transport. Their running costs continue to be high, and ownership frequently changes hands because they often operate at a loss. Due to this situation, there has been a decrease in the number of buses, which are relatively large and require more investment. While the number of minibuses has increased marginally, these buses are also not very profitable. For both types of transport, the number of owners has been decreasing as well—fewer and fewer people want to invest in an unprofitable business. According to Irshad Bukhari, head of Karachi's transport association, for the one thousand or so buses operating in 2013, there were only 650–700 owners.

The market's response to this gap between supply and demand has been the introduction of *chingchis*, which are small motor-rickshaws that can seat 6–9 people. They first appeared in the mid-2000s, but by 2013, their number had jumped to fifty thousand. Chingchis are completely unregulated and operate on a system similar to buses, but on much smaller routes.

Table 1: Mass Transit in Karachi Over the Years^a

Year	Tramway (No. of cars)	Karachi Circular Railway (No. of trips daily)	Buses			
			Public	Private	Minibuses	Chingchis
1948	37	-	20	35	-	-
1957	157	-	344	259	-	-
1964	157	Initiated	317	583	-	-
1974	Shut Down	104	891	1,000	1,800	-
1988	-	93	1,050	1,450	5,500	-
1999	-	Shut Down	200	4,000	6,500	-
2013	-	2	160	1,000	9,000	50,000

a. Compiled from Hasan, *Understanding Karachi; Hasan and Raza, Karachi: The Transport Crisis; Ismail, Transport;* M. Sohail (ed.), *Urban Public Transport and Sustainable Livelihoods for the Poor, A Case Study: Karachi, Pakistan* (Leicestershire, UK: Water Engineering and Development Centre, Loughborough University, 2000); and author interviews. Numbers may be averages or estimates.

Impact of Informality on Bus Operations

Informality in the transport sector influences both efficiency and the welfare of vehicle owners, operators, and consumers.

Route Determination

An early sign of the state ceding its space to informality came in 1971, when private operators were given permission to apply for new bus routes. This policy change reflected the state's recognition that it had failed to keep up with growth in Karachi's residential and commercial areas.

While the process of route permits still exist, study interviewees stated that some buses and minibuses that operate on routes that are neither registered with the authorities (in this case, the commissioner's office) nor the ones for which permits were issued. Interestingly, the number of officially sanctioned bus and minibus routes has been declining. According to one source, the number of routes in Karachi has declined from 165 in 2007 to 144 in 2014.

Overall, there is a lack of data on the density of urban transit and demand in different areas of the city. Without this information, it will be difficult to develop an effective, urban mass transit plan.

Residual Payment System

There are several ways in which informality negatively affects transport workers and, indirectly, consumers and the commuting traffic at large. One way involves how bus and minibus drivers and conductors are employed through an implicit contract. Owners use a residual payment system that requires drivers to pay them a specified amount every day, and after deducting for

fuel costs (and any payments to the police), the remainder of the day's revenues are divided between the driver and conductor as their wages. This method of wage determination creates a perverse incentive structure for the drivers and conductors. They feel compelled to work long hours (a form of self-exploitation) and allow more people than possible on the buses in order to maximize their returns for the day. Consumers are then faced with overcrowded vehicles that are uncomfortable and also more susceptible to accidents.

Time Keeping as Self-Regulation⁴⁶

Over the years, bus and minibus operators have managed to create an elaborate system to streamline business for all operators working on a particular route. They monitor the time buses take to get from one point to another along the route. Given that there is no regulation for buses to stop at designated stops, this informal mechanism ensures that buses are not stopping at different points to pick up passengers and thus taking away business from other operators on the route. This also ensures that drivers do not speed to increase the number of rounds they do on a particular route. Unlike the payment system, the time keeping system shows how informality can produce a cooperative outcome that mitigates the negative impact of an unregulated environment.

Informal Insurance Mechanism

Because the transport sector largely operates in the grey area of informality and there are high risks associated with it, the formal insurance market does not cater to the sector. After suffering successive losses, the umbrella owners' association in the city—Karachi Transport Ittehad (KTI)—devised their own insurance mechanism, offering two packages. For a premium of Rs. 500 per month, the maximum benefit is Rs. 300,000; and for a premium of Rs. 1,000 per month, the maximum benefit is Rs. 600,000. Considering that neither package covers the entire replacement cost of vehicles, the insurance premium appears to be high. However, due to the risk associated with operating buses in a volatile environment (e.g., where buses are easy targets during riots), it is unclear whether the formal insurance market's premiums would be any lower.

Bus owners feel that KTI is fleecing them with high premiums, but there are no other available options. In addition to cost, bus owners also complain about a particular provision: If the bus is on the road on the day of a strike endorsed by the KTI and is damaged, KTI is not liable for the damages. There is some suspicion that KTI endorses strikes called by political groups (that paralyze the entire city) in order to limit its insurance liabilities. Given KTI's lack of transparency regarding its finances, this suspicion may have some substance.

Investment in Vehicles

Informality affects investment in vehicles significantly, especially buses and minibuses. A new (or reconditioned) minibus costs between Rs. 1.2 and 1.6 million, and a bus costs between Rs. 3 and 4 million. Based on daily returns to owners, it will take 3–4 years to recover the cost of the vehicle. And this is in a situation where no formal sector credit is available to them.

Bank credit is not available for the transport sector because transport has not been declared an industry. The head of KTI states that, over the last three decades, they have applied with the local Chambers of Commerce to grant them membership but have been refused.

As a result, the sector suffers from severe underinvestment. The average model of buses is currently from 1980, and most minibuses were manufactured in the mid-1990s. The newest

minibuses were built in 2003. In addition, the number of vehicles over the years has declined considerably. Between 1999 and 2014, the number of buses declined from 4,000 to 1,000. And while the number of minibuses increased from 6,500 to 9,000 during this time, the population was estimated to have increased 63 percent, depending on the data examined.⁴⁷ This reveals an acute decline in mass transport in Karachi.

Ethnicity and Vehicle Ownership

Since the 1960s, the majority of owners in the private transport sector have been Pakhtuns. The Pakhtuns migrated to Karachi mostly as laborers after industrialization began. They became drivers as well as vehicle owners. However, the role of ethnicity in the sector did not become salient until the mid-1980s.

In 1985, a college student was killed by a speeding bus. The student was from the Urduspeaking community and the bus driver was a Pakhtun.⁴⁸ This sparked ethnic riots in the city, and since then, the general perception that a Pakhtun mafia runs the transport sector has gained traction.⁴⁹ In the late 1980s, this perception deepened when it was alleged that money made through the drugs and arms trade in the 1980s was being channeled back into the transport sector.⁵⁰

Whether a mafia or similar organization existed two decades ago is debatable, but, clearly, no such mafia exists in the transport sector now. This is best exemplified by the fact that ownership of vehicles in the sector is highly dispersed. The 1,000 buses in Karachi today are owned by 650–700 individuals. There is also no indication of collective action among the owners, beyond the informal insurance scheme outlined earlier, despite that the majority of owners are of the same ethnicity. Moreover, there is no evidence of any linkage between Pakhtun political mobilization and the transport sector.

However, given the ethnically volatile environment of Karachi, the domination of Pakhtuns in the sector inherently increases the risks for Pakhtun owners and drivers; in an intra-ethnic conflict, where Pakhtuns may be involved, the sector's vulnerabilities increase even more *because* it is Pakhtun dominated. On an economic level, their domination could be inhibiting the sector's growth, as other ethnic groups may find it difficult to invest and participate in the sector.

Rise of Chingchis and Motorcycles

Since 2000, the number of motorcycles and chingchis has significantly increased. According to some, these smaller vehicles have become the de facto mass transit system of Karachi.⁵¹ They are trying to meet the demand created by fewer buses and the closure of the circular railway.

Technological advances and trade openness made their proliferation possible. Chingchis are imported from China, and the cost of motorcycles has reduced by about 50 percent in nominal terms over the last decade, mainly because of local cooperation with Chinese companies. The emergence of chingchis was also aided by the state's laxity regarding regulations. Chingchis still do not have legal status, and when they are registered, they are registered as motorcycles. There are an estimated 65,000 chingchis on the streets of Karachi. ⁵²

The shift to smaller vehicles has several downsides. The per unit cost of mass transport on motorcycles is higher than it is on buses, trams, or trains. This is true both in terms of capital and operational costs. Second, motorcycles and chingchis are hazardous for riders and passengers because of direct exposure to other vehicles and because the chingchis, in

Between 1999 and 2014, the number of buses declined from 4,000 to 1,000. And while the number of minibuses increased from 6,500 to 9,000 during this time, the population was estimated to have increased 63 percent.

particular, are highly unstable. These vehicles are also a nuisance and safety concern for regular motorized traffic.

State Investment and Regulation

Karachi is perhaps the only city of its size worldwide that is so severely deficient in urban mass transport. The state's neglect of the sector has become a source of immense hardship for millions of commuters. Returns to investment are low for vehicle owners, and the sector is fraught with risks arising from violence in the city for both owners and operators. Also, since the demise of public transport, no union (or other form of occupational collective action) exists for workers. With no occupational forum to vent their grievances, joining religious entities and political groups—some of whom are linked with violence—becomes more attractive.

Consumers of public transport are the ultimate victims of the state's neglect. With the size of the sector shrinking—in terms of mass transport vehicles—time lags and overcrowding have become a source of constant discomfort for commuters. Chingchis and motorcycles may be the solution for some, but the per unit cost for the consumer is much higher.

The deficient transport system is negatively affecting urban development as well. Lack of transport has forced households to live close to their places of employment, leading to the establishment of densely populated clusters around the city center. In turn, this situation has been contributing to land-related conflict and instability in the city. This constraint on mobility has also resulted in low labor productivity in manufacturing and services.⁵³

Conclusion

The transport sector in Karachi is a victim of state neglect, as well as violence and instability. Formalization of the sector is necessary to reverse its decay and improve mobility and safety. Fiscal constraints led to its informalization and decline, but international and national experiences suggest that efficient intra-city mass transport is always subsidized.⁵⁴ Regardless of whether the state owns public transport or merely leads and regulates the sector, the state must introduce some level of formality. While some effort has been made to revive a public mass transit system (e.g., the circular railways or a bus system), little progress has been achieved over the last two decades.

A circular railway extension plan was included in the 1985 master plan. The Japan International Cooperation Agency (JICA) provided a loan to Pakistan to execute the extension, but because of a lack of government coordination (especially between the federal and Sindh governments) and the state's inability to acquire land for the railways, the project stalled. JICA is reportedly on the verge of withdrawing its US\$2 billion loan.

A rapid bus transit system (known as BRT) has also been in the works for a decade, and extensive planning has been undertaken with technical assistance from the Asian Development Bank. However, the plan has reportedly become a victim of intra-government turf wars. ⁵⁵ Like the housing sector, the transport sector is lacking a Karachi-wide authority to plan and regulate it.

The Way Forward

There are several policy directions the state could take to reassert its writ, formally meet the high demand for low-cost housing and urban transport, and reduce instability.

Lack of transport has forced households to live close to their places of employment, leading to the establishment of densely populated clusters around the city center. In turn, this situation has been contributing to land-related conflict and instability in the city.

Land. Providing appropriate land titles could counteract and prevent the spread of dense, unplanned informal settlements, as well as spur economic development through the use of housing stock as a marketable asset. However, this step toward formalization cannot be done without an effective local government and a well-supported, inclusive master plan.

Urban development in Karachi has failed for two main reasons: (1) frequent changes in local government law at the provincial level and (2) long periods without elected local governments. The latter issue appears to be resolved: The Supreme Court has ensured that constitutional provisions for the third tier of government will be permanently enforced. However, regarding the LG law, there will be an ongoing struggle to convince (or force as the case may be) the upper tiers of government to devolve more fiscal, administrative, and jurisdictional powers to local governments. In Pakistan's nascent democracy, jurisdictional issues pertaining to all three tiers of government is an arena of contestation. Resolution of this contest depends on continued democratic governance in Pakistan as well as incentives for political parties to devolve powers to lower tiers. With local body elections being held for the first time on a party basis, ⁵⁶ greater acceptance of the third tier by political parties seems more possible than it was at any other time.

Historically, master plans have fallen victim to political expediency and opposition from various groups and interests. To ensure the effective implementation of a master plan, the drafting and amendment processes must be as inclusive as possible. Given Karachi's highly politicized environment, where collective action along ethnic or religious lines is the norm, the plan cannot be seen as excluding certain groups or giving rise to vertical and horizontal inequalities.

Transport. Despite current perception, the transport sector is not being controlled by a "mafia"; in reality, the sector can be considered a victim, not a creator, of instability in Karachi. While there is consensus at the policy level that the state needs to reintroduce public mass transit, progress has stalled because of lack of financing and, more importantly, significant issues related to land acquisition. JICA has provided a loan, but given the long delays, it is considering withdrawing the loan. Unless resettlement plans and compensation are viewed as equitable and implemented in a transparent manner, without capture by larger ethnic or religious political groups, the effort will remain stalled.

Manufacturing. Informal manufacturing activity does not directly contribute to instability in Karachi. One main factor is that ethnicity does not dictate employment. However, better regulatory capacity and coordination across national and provincial governments is required to mitigate the inadvertent effects of informal manufacturing, such as the misuse of dangerous goods for violent activity.

In 2013, the state launched an operation to improve law and order by clamping down on militant groups. This has nominally restored order in the city, and levels of violence have steadily declined. According to reports, the number of cases of extortion, kidnapping, and targeted killing has declined significantly, but the number of cases of muggings and street crime remain about the same.⁵⁷

However, the operation, primarily conducted by the Rangers under federal government supervision, could be falling into the same trap as previous operations did. Allegations of targeting political parties—with strong ethnic support bases—have once again created the perception of ethnic bias by the state. Similarly, reports of the state sanctioning extra-judicial abductions and killings⁵⁸ have reinforced the perception about arbitrary action. Given Karachi's

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tumultuous recent history, such perceptions will only serve to further polarize positions and jeopardize the city's medium- and long-term stability.

Strengthening the state's regulatory and service delivery capacity will be essential to improve services and create enduring conditions for increased stability and reduced violence. This does not mean that the law and order effort currently underway is superfluous, but that both efforts are equally important and have to be carried out in tandem. For either of them to succeed, though, the state cannot exclude groups or appear biased against one or the other; otherwise, the state will be caught in the same vicious cycle that has been witnessed over the last three decades.

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Notes

- 1. The population size of 16 million is based on systematic methodology undertaken by the United Nations; see United Nations, World Urbanization Prospects, 2014 Revision (New York: Population Division, Department of Economic and Social Affairs, United Nations, 2014). However, due to the lack of recent data (the last census was conducted in 1998), there is no agreement on population size, with the range being 14–25 million. The most recent global Demographia study estimates it at 22 million; see Demographia, Demographia World Urban Areas, 11th Annual Edition (Belleville, IL: Wendell Cox Consultancy, 2015), www.demographia.com/db-worldua.pdf; and Aamna Saiyid, "The Population of Karachi Has Doubled in 15 years," The Express Tribune, January 13, 2014, http://tribune.com.pk/story/658394/the-population-of-karachi-has-doubled-in-15-years/.
- Ali Kamal and Ahmed Waqar Qasim, "Precise Estimates of the Informal Economy" (Islamabad: Pakistan Institute of Development Economics, 2012).
- 3. Arif Hasan, Understanding Karachi: Planning and Reform for the Future (Karachi: City Press, 1999), 23-25, 39.
- Haris Gazdar and Hussain Bux Mallah, "Informality and Political Violence in Karachi," *Urban Studies* 50, no. 15 (2013): 1–17.
- 5. Hasan, Understanding Karachi.
- 6. These were SITE, Korangi, Landhi, Hub, and Federal B Area estates.
- Laurent Gayer, Karachi: Ordered Disorder and the Struggle for the City (New York: Oxford University Press, 2014) 44
- 8. See Hasan, *Understanding Karachi*, 24. The local term used to refer to the migrants is Mohajir. Predominantly, Mohajir and Urdu-speaking are used interchangeably to refer to these migrants. The current generation continues to identify themselves by these terms, even though they were born in Pakistan.
- 9. Haris Gazdar, "Karachi's Violence: Duality and Negotiation," SPO Discussion Paper Series, no. 10 (2011).
- 10. Zafar Shaheed, *The Labour Movement in Pakistan: Organization and Leadership in Karachi in the 1970s* (Karachi: Oxford University Press, 2007).
- Arif Azad, "MQM and Growth of Ethnic Movements in Pakistan," Economic and Political Weekly 31, no. 18 (1996).
- Farhat Haq, "Rise of the MQM in Pakistan: Politics of Ethnic Mobilization," Asian Survey 35, no. 11 (1995):
 990–1004; Feroz Ahmed, "Pakistan: Ethnic Fragmentation or National Integration?" Pakistan Development Review 35, no. 4 (1996); and Maryam S. Khan, "Ethnic Federalism in Pakistan: Federal Design, Construction of Ethno-Linguistic Identity and Group Conflict," Harvard Journal on Racial and Ethnic Conflict 30 (2014).
- 13. Khan, "Ethnic Federalism in Pakistan."
- 14. Gazdar, "Karachi's Violence."
- 15. Ibid.
- Azmat Ali Budhani, Haris Gazdar, Sobia Ahmad Kaker, and Hussain Bux Mallah, "The Open City: Social Networks and Violence in Karachi," Crisis States Research Centre Working Paper no. 70 (2010).
- 17. Gayer, Karachi, 10.
- 18. See "Upward Trend in Violence Reported in 2013," *Daily Times*, January 6, 2014, www.dailytimes.com.pk/national/06-Jan-2014/upward-trend-in-violence-reported-in-2013; and Pak Institute for Peace Studies,

- Elections 2013: Violence Against Political Parties, Candidates and Voters (Islamabad: Pak Institute for Peace Studies, 2013).
- 19. Jo Beall, Haris Gazdar, and Sean Fox, "Cities and Fragile States," Policy Directions (London: Department for International Development, Crisis States Research Centre, 2010).
- 20. Hasan, Understanding Karachi, 59-62.
- 21. Ibid.
- 22. Gazdar and Mallah, "Informality and Political Violence in Karachi."
- 23. Arif Hasan, Asiya Sadiq, Mansoor Raza, Noman Ahmed, and Saeed Uddin Ahmed, "Karachi: The Land Issue" (Unpublished Draft, 2012).
- 24. Arif Hasan, Asiya Sadiq-Polack, Mansoor Raza, Noman Ahmed, Saeed Uddin Ahmed, and Moizza B. Sarwar, *Karachi: The Land Issue* (Karachi: Oxford University Press, 2015).
- 25. Hasan, Understanding Karachi.
- 26. In fact, the MRV Plan, with its high-rise development planned in between the city and demarcated industrial zones, had offered a better alternative for the formal settlement of the low-income population.
- 27. See Hasan, Understanding Karachi; and Hasan et al., Karachi: The Land Issue.
- 28. Hasan, *Understanding Karachi*; Gazdar and Mallah, "Informality and Political Violence in Karachi"; and Hasan et al., *Karachi: The Land Issue* all estimate the number of residents in Karachi living in KAs to be either 50 percent or greater. Our interviews suggest the same as well.
- 29. Hasan et al., Karachi: The Land Issue.
- 30. Ibid.
- 31. Authors' estimates.
- 32. The general banking rule-of-thumb is that monthly mortgage payments should not exceed 30 percent of pretax income. This will capitalize back at different levels, depending on the size of the down payment, the length of the loan, and the interest rate. The four-year X income capitalization works out to debt servicing at around 30 percent of income with a 20 percent down payment, fifteen-year repayment term, and 10 percent annual interest, which would be the appropriate terms in Pakistan today—though individual banks may be more or less conservative. As banks do not lend to KA property owners, consider this affordability level as an indicator rather than as practice.
- 33. For extensive details of the new bill and its implications, see Mahim Maher, "Roti, Kapra Aur Dukaan: Govt Schemes to Give Builders Katchi Abadi Land," *The Express Tribune*, November 10, 2014, http://tribune.com.pk/story/788350/roti-kapra-aur-dukaan-govt-schemes-to-give-builders-katchi-abadi-land/.
- 34. Mahim Maher, "Govt Hypocrisy: The Plot Thickens with Karachi's Evil New High-Rise Building Law," *The Express Tribune*, July 8, 2014, http://tribune.com.pk/story/732452/govt-hypocrisy-the-plot-thickens-with-karachis-evil-new-high-rise-building-law/.
- 35. Authors' estimate based on State Bank of Pakistan data.
- Chung Chee Leong, "Building Sustainable Housing Finance Systems: Malaysian Experience," Presentation at the 6th Global Housing Conference, Washington, DC, May 28, 2014.
- 37. Authors' estimate based on interviews.
- 38. The Population Welfare Department, Government of Sindh states Sindh's population as 42.4 million on its website.
- 39. Data obtained from K Electric.
- 40. Data in Figure 3, obtained from K Electric, includes losses.
- 41. Data obtained from K Electric for two billing areas: SITE and surrounding localities.
- Khurram Husain, "Analysis: Tracking Terror Money: Mission Impossible?" Dawn, January 25, 2015, www. dawn.com/news/1159333.
- 43. This portion draws on fieldwork and interviews conducted with informal manufacturers, workers, and association leaders
- 44. Arif Hasan and Mansoor Raza, Karachi: The Transport Crisis (Karachi: Urban Resource Centre (URC), 2015)
- 45. Aquila Ismail (ed.), Transport, (Karachi: URC, 2000).
- 46. For a fascinating account of the process of time keeping and its attendant benefits, see Mahim Maher, "Timekeeping and Transport: The Minute Men of Karachi," *The Express Tribune*, May 22, 2014, http://tribune.com.pk/story/711471/timekeeping-and-transport-the-minute-men-of-karachi/.
- 47. United Nations, *World Urbanization Prospects, 2014 Revision*; Pakistan Bureau of Statistics, "City District Karachi at a Glance," www.pbs.gov.pk/sites/default/files/tables/City%20District%20Karachi%20at%20 a%20glance.pdf.
- 48. The prevailing belief was that the driver was Pakhtun, and as a result, the incident sparked ethnic riots (primarily between the Mohajirs and Pakhtuns). However, the driver's ethnicity was heavily debated, with some claiming he was from Azad Kashmir and some claiming he was Punjabi. For details, see Saba Imtiaz

- and Noman Ahmed, "Bushra Zaidi, The Woman Who Changed Karachi Forever, by Dying," *The Express Tribune*, March 8, 2012, http://tribune.com.pk/story/346933/march-8-bushra-zaidi-the-woman-who-changed-karachi-forever-by-dying/.
- 49. Gayer, Karachi.
- 50. Arif Hasan, "Karachi's Godfathers," *The Herald*, December 15, 1986, http://arifhasan.org/articles/karachis-godfathers.
- 51. Hasan and Raza, Karachi: The Transport Crisis.
- 52. Interview with the head of the Chingchi association. The chingchis were banned in August 2015 by the Sindh High Court. This ban was then subsequently overturned by the Supreme Court of Pakistan, with a stipulation that the chingchis be regularized and a safer vehicle design be introduced. As of March 2016, the chingchis remain inoperative, because the new design has not been completed.
- 53. Anjum Altaf, "Megacity Narratives," *Dawn*, March 1, 2015, www.dawn.com/news/1166555/megacity-narratives.
- 54. The initiation of the Metro Bus Scheme, first in Lahore and then in Rawalpindi-Islamabad, demonstrates that policy makers have now accepted that state subsidization is a necessary condition for creating an effective urban mass transit system.
- 55. Mahim Maher, "Public Transport: Race to Build Karachi's First BRT Gets Too Many Green Signals," *The Express Tribune*, March 20, 2015, http://tribune.com.pk/story/856554/public-transport-race-to-build-karachis-first-brt-gets-too-many-green-signals/.
- 56. All previous local government elections in Pakistan's history have been contested on a non-party basis.
- 57. Imtiaz Ali and Atika Rehman, "Robbed at Gunpoint: Citizens Vulnerable Despite Rangers Operation," *Dawn*, August 16, 2015, www.dawn.com/news/1200645/robbed-at-gunpoint-citizens-vulnerable-despite-rangers-operation.
- 58. Maqbool Ahmed, "Operation Overkill: How Not to Improve Law and Order in Karachi," *The Herald*, October 29, 2015, http://herald.dawn.com/news/1153278.



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Rapid population growth, ethnicization, and a policy shift toward deregulation and privatization have contributed to a rise in informality in almost all of Karachi's economic sectors. In turn, these factors have diminished the state's capacity to regulate the economy and reduce violence and instability. The United States Institute of Peace conducted a study to examine the evolution of informality in Karachi's land, manufacturing, and transport sectors and to determine whether informality has contributed to or been impacted by ongoing instability. The results varied per sector, but overall, they suggest that formalizing particular services will help create the conditions for improved economic growth and enduring stability. However, formalization cannot occur, at any level, without an empowered local government and inclusive master plan to effectively guide the process.

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- Pakistan's Power Crisis: The Way Forward by Rashid Aziz and Munawar Baseer Ahmad (Special Report, June 2015)
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