

Urbanization and Rural-Urban Migration

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Abstract

This chapter considers the literature on urbanization and migration to cities from rural areas in developing and middle-income countries. The chapter assesses recent patterns, discusses traditional models, addresses more recent models of migration, presents some of the recent findings from the micro-econometric literature, and closes with a discussion of the role of cities in economic growth.

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1. Introduction: patterns of urbanization

This chapter surveys the pace, causes, and problems associated with urbanization and rural-urban migration in developing and middle-income countries.¹ The timing is appropriate: the world's population, for the first time in human history, is on the verge of containing more city dwellers than rural inhabitants. Moreover, the world is experiencing a great population deceleration. Thus, while urbanization (defined here as the proportion of a population living in cities and towns) continues to rise, urban population growth rates have fallen in most developing countries. Hence, less is being written about uncontrolled city growth or megacity explosions. Yet, severe urban problems remain, and in many cases are unaltered by the declining pace of growth and in-migration.

For developing countries as a whole, excluding China, annual urban population growth averaged about 4 percent between 1955 and 1985, but after the mid-1960s began an erratic but sustained decline (UN, 2002: 19-21). This decline became precipitous in the 1990s, with urban population growth rates falling to 3.2% in the first half of the decade, 3.0% in the second half, and a projected 2.8% during the years 2001-05. Rural population deceleration was even greater and the decline began earlier. Between 1950 and 1975, rural population growth rates ranged from 1.6% to 2.1% for developing countries, but fell to 1.3% during the next decade, and thereafter decelerated at about 0.2 percentage points every five years. By 2000-2005, the UN forecast for rural population growth in developing countries was only 0.5% per annum.

These patterns have several implications. First, rapid deceleration in rural population growth implies that, even with annual urban population growth dropping from 4.15% in 1960-65 to 2.81% four decades later, the urbanization growth rate decline is more modest (from 1.80% to 1.33% per annum). Second, as fertility and mortality are higher in rural than urban areas, rural-urban migration must account for 100% or more of the urban-rural population growth differential.² These trends are crude, glossing over regional and national differences, differing definitions of the "urban" population and accuracy of demographic estimates, and the appropriate set of "developing" countries.

¹ Unless otherwise noted, data are taken from United Nations (2002) or the World Bank's 2006 *World Development Indicators* <http://devdata.worldbank.org/wdi2006/contents/home.htm>.

² NRC (2003: 127) reports a mean total fertility rate (TFR) of 5.55 for rural areas across 56 Demographic and Health Surveys (DHS) in developing countries, as opposed to 4.16% in urban areas. Crude birth rate differentials should be smaller, since cities have younger adult populations, but the difference should not be enough to overturn the much higher TFR, and will also work to increase the urban crude death rate advantage.

Nonetheless, the trends are sufficiently sharp that there can be little doubt that the patterns are broadly accurate.

The importance of urban in-migration varies markedly both by region and city size (NRC, 2003). Chen, Valente, and Zlotnick (1998) estimate that migration and population reclassification account for about 40% of all developing country urban population growth from the 1950s through the 1980s. Migration accounted for most urban growth in Latin America, though its share is declining, since the region is now predominately urban (meaning a smaller pool of potential migrants). Migration's share is smaller but rising in Asia, which is less urbanized, and has very rapid urban economic growth. Rural-urban migration declined from the 1960s through the 1980s in Africa, which has suffered largely stagnant urban economies.

More recently, observed patterns imply that migration will account for less than 40% of urban growth, save for in countries and regions (notably, Ethiopia, Ghana, and Central Asia) where rural-urban fertility differentials are vast. NRC (2003: 126) presents information on birthplace of women aged 15-49 in DHS surveys. In cities with fewer than 100,000 people, the proportion of fecund women born in rural areas ranges from 36% in North Africa to 61% in Southeast Asia. In cities of 0.5 to 1.0 million, the rural birth share ranges from 21% (Latin America) to 35% (South, Central, and West Asia). In megacities over 5 million, the rural birth share ranges from 12.5% (Latin America) to 38% (Southeast Asia). China is very different from other regions: urban growth has accelerated following the modernization reforms, and reached 4.7% in 2001 (Chan and Hu, 2003). With accelerating economic growth and a fairly strict one-child policy in urban areas, net rural in-migration accounted for 74% to 80% of urban population growth in China between 1978 and 2000, and that percentage appears to be increasing.

2. Models of structural transformation

The key features of urbanization have long been known, as has the understanding that sustained economic growth without urbanization is nearly inconceivable. Urban areas by definition are the locations for activities with substantial economies of scale internal to the firm, along with urbanization and localization agglomeration economies that are external. Higher densities also mean reduced cost of infrastructure and public service provision. These forces result in higher productivities in cities, and transformation from low to high productivities is the essence of

economic growth. Moreover, urban activities can better use skills whose application is most effective in the presence of sophisticated division of labor. Urbanization raises returns to differentiation of labor, and hence the acquisition of refined sets of skills, rather broad but shallow knowledge. Specialization enables the application of skills learned in many years of apprenticeship or education, to which there are significant positive externalities to the community at large.

While not using the jargon above (which emerged in the urban economics literature in later decades), W. Arthur Lewis (1954, 1955) was acutely aware of the advantages of urbanization, and emphasized it in a revolutionary approach to economic growth – through the lens of the dualistic economy, with a traditional agricultural world coexisting with a more vibrant modern urban society. Lewis divided poor economies into two sectors, a “modern”/capitalist/ industrial sector, and a backward/traditional/agricultural (and traditional services) sector. Labor migrates across sectors to equate expected utility from each activity. In modern industry, labor is paid the value of its marginal product. The difference between the net value of output and the wage bill equals profits, some fraction of which is reinvested. In the traditional sector, farmers, artisans, and traders effectively behave as tiny monopolistic competitors, each receiving an average product. For other than a few fortunate individuals, the amount earned is equal to a subsistence-plus level that is roughly constant, while marginal product is zero. Economic growth occurs by reinvestment of modern sector profits and drawing workers from the traditional to the modern sector. Real wages begin to rise only when the “surplus labor” era ends and a standard neoclassical economy emerges in both sectors.

As Lewis did not seek to formally explain how earnings were determined in the traditional sector, neoclassical economists wondered why earnings would not rise if labor were withdrawn, or why they would not fall if population growth exceeded the rate of out-migration to the modern sector. Lewis himself answered that institutions adjusted, while Sen (1966) provided conditions under which “unlimited labor” could be generated in a neoclassical setting. More critically, Hansen (1979) showed that in an African context with unlimited supply of low quality land, the Lewis model would also emerge in a world of neoclassical labor markets.

The standard dual economy model seemed to accord with the erstwhile stylized fact of limited increases in living standards for the poor in developing countries. Yet, evidence has mounted that in most countries neither rural nor urban earnings are stable in the face of either positive or negative shocks (Becker and Morrison, 1999; Jamal and Weeks, 1988). There is now irrefutable evidence that real wages are rising in rapidly growing areas of China and Southeast Asia today, even though a vast number of low income workers remain in rural areas (*The Economist*, 2007).

Even before detailed labor market studies became commonplace, economists realized that the simple dualistic framework had no place for the many urban dwellers who earned little or were openly unemployed. The concept of the “informal sector,” a term popularized by the International Labour Office, took hold, as did recognition that demand for plum high-income “formal” sector jobs exceeded potential supply.³ In response, Todaro (1970) and Harris and Todaro (1969; synthesized in Blomqvist, 1978) put forth a model with an institutionally-determined urban wage above rural incomes. Equilibrium in this setting requires possibly unattractive outcomes to urban migration as well. Migration from rural areas then will occur until the *ex ante* expected utility gain is zero, with the anticipated rewards from landing a high-paying formal sector job offset against possible losses due to extended periods of unemployment or employment in unrewarding informal sector jobs. Wages will be highest in the formal sector, while living standards will be lowest among those unemployed or in the informal sector.

The expectations’ driven model proved highly attractive, and the framework has remained. However, the model is not supported by evidence on labor markets in developing country cities. Mazumdar (1983) was perhaps the first to note that unemployment was a luxury status that few poor could afford, and that it was less prevalent among recent migrants than among long-standing city dwellers. Considerable evidence from many countries also has pointed to a pattern of pre-arranged jobs for new migrants, who tend to be assisted by relatives and networks based on common origin regions (Becker and Morrison, 1999).

3. Alternative models

The institutionally-determined wage also came in for severe criticism. Stiglitz (1969) began by examining different incentives for migration, and ultimately developed a labor turnover model (1974). In this paradigm, training is costly, and quit rates depend in part on wages offered. A rational firm with some wage-setting power therefore will pay a premium to reduce turnover and compensate for firm-specific skills. Wage gaps and unemployment still emerge, but urban wages now move procyclically if quit rates are suppressed by visible unemployment.

³ While definitions vary, and must be modified to suit data, the formal sector is generally taken to comprise registered, tax-compliant activities – large-scale manufacturing and mining, highly-skilled services, and the public sector. The informal sector includes unregistered, labor-intensive activities in such areas as commerce, personal services, private transportation, and small-scale manufacturing.

Still others, led first by Stiglitz (1976) and Bliss and Stern (1978), argued that urban formal sector wages above rural and informal levels could be explained by efficiency wages. In particular, firms have an incentive to pay wages to ensure adequate health and nutrition on the part of their workers when productivity gains exceed the higher wage bill.

A different story of wage gaps comes from Sabot's (1979) analysis of East Africa, emphasizing the importance of education credentialism for formal sector employment not tied directly to productivity differentials. Small, segmented labor sub-markets form, leading to a "queuing" pattern of migration. During periods of rapid formal sector employment growth and restricted supply of fresh urban graduates, credentials' requirements decline, providing incentives for migration, especially when rural secondary schooling is widespread. Under the reverse circumstances, migration will be limited, even if average income disparities between urban and rural areas are increasing. Sabot's model is intuitively reasonable, but has received little examination outside of East Africa, partly because of poor data.

Education also figures prominently in demographic shift models of urbanization (Becker and Morrison, 1993; Becker and Grewe, 1996). These models recognize that migration is highly age-specific, with young adults more likely to move than older adults or children. Furthermore, shifts in age structure are correlated with economic growth, so that econometric studies of migration using aggregate population flow data often suffer from problems of observational equivalence. With disaggregation, it turns out that standard attraction forces of cities (higher expected wages, educational and employment opportunities, better services) and repellent forces from rural areas (deteriorating agricultural conditions) still matter. But, the importance of labor market attractions is strongest for young, prime age people, especially men, and many other aspects of cities matter as well. Furthermore, growing rural prosperity is not invariably negative, since rising rural incomes are associated with rising education, and secondary school graduates have much greater migration rates than their less educated peers. Moreover, some rural prosperity is needed to bankroll the cost of urban migration and job search.

By the 1980s, economists had branched out from the simple story of household location decisions being driven by the choices of prime-aged (and presumably male) workers. Short-term, seasonal migration and migration of women began to draw attention. So, too, did the notion of an individual's migration as part of a household's optimizing decision. The "new migration economics" literature is most strongly associated with the work of Stark (1991), though others (notably, Taylor,

1987) were major contributors as well. This literature has added greatly to the sophistication of economic analysis of migration, and by focusing on the returns to migration by risk averse households, qualifies the straightforward results of simpler models. The most valuable lesson from this literature is that sending young adults to the city may be beneficial beyond the directly monetary rewards if, for instance, overall household income variance is reduced, or if the establishment of one family member in the city leads to subsequent migration and higher returns for others.

4. Micro empirics

The “modern era” of development economics – namely, that informed by a proliferation of micro household and labor market surveys – thus commenced with increasingly sophisticated models giving somewhat contradictory predictions. There was little dispute that migrants reacted to opportunity differentials, and that markets rather than institutional rules determined earnings and prices. Yet, few common points beyond this bland statement emerged. Indeed, the key lesson of the past two decades lies in the heterogeneity of developing country migration and city growth. In China and Southeast Asia, booming urban manufacturing has led to very high in-migration rates for traditional “pull” reasons. Much of Africa has been beset by stagnant urban economies, but cities continue to grow, reflecting high birth rates as well as a high share of young adults in the population. And, in some countries visited by economic decay or collapse, urbanization rates actually have declined.

With deceleration in urbanization deemphasizing “runaway cities,” empirical work today asks questions about inter-sectoral and social class mobility, about the extent of urban inequality and poverty, about the nature of informal economies, and about the nature of remittances back to home areas. Regarding poverty, perhaps the most useful cross-country, urban-rural assessments are based on comparisons of the numerous Demographic and Health Surveys. Sahn and Stifel (2003) use 41 such surveys in their analysis of conditions in Africa alone. They relate measures of quality of life, from infant mortality rates to asset ownership to education indicators to urban residence, finding huge urban-rural gaps with very few exceptions. Their rich set of results yields no evidence of pan-continental urban-rural convergence, save for infant mortality. Individual countries that appeared to experience convergence (mainly in the 1990s) across a wide range of measures include Burkina Faso, Cameroon, Ghana, Mali, Niger, Senegal, and Tanzania. Widening gaps appear in Madagascar, Nigeria, Zambia, and Zimbabwe: convergence seems more likely where initial gaps are greatest, and where governance is relatively good.

Household surveys point to the rich diversity of migration flows from rural areas. Confirming strong selective out-migration, Mberu (2006) finds that migrants in Ethiopia actually have higher living standards than non-movers, with no effective difference once one controls for education and non-agricultural income differences, a commonplace finding (Becker and Morrison, 1999). Agesa and Kim (2001) focus on rural-urban migration of individuals *vs.* whole families in Kenya. Older households with children are more likely to migrate as a unit, rather than to split up. As migrants account for about 70% of Kenya's urban labor force and most migrants are from split households, Agesa and Kim argue that decreasing split migration may also reduce urbanization.

Their paper reflects renewed attention to the heterogeneity of migrant populations, also a theme of Beauchemin and Bocquier's (2004) review of West African migration. West African data also indicate much lower unemployment rates among migrants than permanent residents. Moreover, much as transition nations, economic decay in West Africa is associated with outmigration from secondary towns to capital cities and abroad. There is also substantial migration back to rural areas, and not simply to retire. Most urban families maintain rural ties, and will send children or adult family members back to the countryside when urban conditions deteriorate, both in terms of income and security.

The explosion of micro surveys also has made it much easier to track urban inequality, which appears to rise during early stages of development but not indefinitely. Part of this increase is due to growing inter-city or inter-regional inequality, especially absent correction for living cost differentials. But inequality rises within a given city as well, partly because of the increased importance of skilled labor in the production of goods and services. Inequality may then decline as skills generally increase across the labor force, as skill premia decline, and as unskilled labor shortages emerge (Knight and Sabot, 1990). The well-known rise of urban inequality and less well-known decline in China are documented in Démurger *et al.* (2006). An apparently universal phenomenon is that migrants are not locked out of the formal sector: indeed, West African studies generally find that migrants are *more* likely than non-migrants to find formal sector employment (Beauchemin and Bocquier, 2004). However, it is also clear that formal sector employment does not guarantee high living standards, though it does seem likely to reduce income variance.

Liang *et al.* (2002) find from a 1 percent sample of the 1990 Chinese census that rural industrialization has no significant effect on the likelihood of either inter- or intra-provincial migration. A reasonable interpretation is that the variable is capturing multiple effects that run in

opposite directions. These multiple effects and endogeneity issues are discussed at length for specific types of infrastructure, public services, and employment in an exceptionally careful and elegant study of migration from rural areas and secondary towns to Burkina Faso's main cities (Beauchemin and Schoumaker, 2005). They find that secondary schooling and paved roads have large impacts on migration to large cities. Non-agricultural employment opportunities in towns and of markets in rural areas both deter out-migration. There are also very strong age (peaking at 20-29) and distance effects. The presence of health centers increases migration likelihood, though there may be an endogeneity problem. Other infrastructure (electricity, piped water, telephone service) appears to have no impact. Thus, rural and small town development efforts are unlikely to deter migration to large cities. However, small towns can be made more viable to existing residents (and attractive to those in nearby rural areas) if they experience increasing nonagricultural employment.

There is also a growing literature on the role of remittances. Often, the figures are huge. For example, Kyrgyzstan's central bank has estimated that remittances in 2005 equaled 50% of exports and 14% of GDP (Ukueva, 2007). The purpose of remittances varies greatly from one setting to another. In a country such as Tajikistan, which is poor and whose migrant workers are mainly unskilled married men employed abroad, remittances are used mainly for food and basic necessities (Ukueva, 2007). Elsewhere, remittances may be used to finance education, housing construction, purchase of a vehicle, or migration by other family members. Page and Plaza's (2006) survey finds that remittances are associated with both higher education and improved health of origin families. McCormick and Wahba (2003) in a study of international return migration in Egypt find that while 45% of those who return came from public sector jobs, only 9% return to the public sector. Returning migrants from urban areas are far more skilled than their rural counterparts. But even controlling for human capital characteristics, those from urban areas are much more likely to start a non-farm enterprise (and, relative to existing urban small businesses, will employ more people).

Skill selectivity in both internal and international migration has been well documented. Moreover, as Kanbur and Rapoport (2005) show theoretically, the impact of a skill brain drain on the source region is ambiguous. There are costs (relatively productive workers are lost), but the possibility of migration also raises returns to education, thereby increasing supply. The presence of information networks can also lead to increasing returns through externalities. Indeed, the dynamics are complex: if skilled emigration raises returns to additional skilled labor emigration and lowers returns (fewer agglomeration economies) to staying, the origin economy may be permanently stunted. But, this outcome is not inevitable, as returns at home to increasingly scarce skills might make return

migration attractive. Remittances plus further skill acquisition in destination regions, and their application when migrants return, further reduce brain drain costs to origin regions.

Taylor *et al.*'s (2003) empirical analysis of the rural China finds that out-migration increases origin household self-employed income and, of course, remittance income – but at the expense of even greater losses in cropping, wage, and other income. This study is careful to correct for migration endogeneity and selectivity, which is essential for the results to be credible. Ideally, one would also correct for remittance endogeneity, but this can be difficult, since few surveys contain information on potential demands both in origin and destination areas for household members. Taking remittances as exogenous, Taylor *et al.* (2003) find that the impact of migration on total origin family income is not significantly different from zero, while per capita income increases since the number of family members has been reduced. These findings appear consistent with empirical work elsewhere (Özden and Schiff, 2006).

The nature of migration flows, which depend on relative rate of return differentials, is more varied. Mora and Taylor (2006) examine out-migration from rural Mexico to competing Mexican and US destinations, and find that unskilled labor flows mainly to the United States, while skilled labor flows to Mexican cities. The skills' nature, extent, and distance of migration also affect the impact on origin regions' economies. It is difficult to generalize: some areas will be emptied of young workers; others will experience construction booms as the result of remittance flows.

Finally, the urban informal sector is now well documented (Guha-Khasnobis and Kanbar, 2006). To grossly characterize recent findings, the extent of segmentation is far less than was anticipated in earlier empirical studies, though returns to human capital attributes do vary by sector, even controlling for selection effects. The informal sector has a high elasticity of employment with respect to output, and it thrives, both in terms of output and earnings, when the economy as a whole is doing well.

5. Urbanization and growth: new macro empirics

While recent emphasis has been on the micro side, there also have been substantial contributions from researchers using aggregate analysis. Again, the role of remittances has been central, reflecting the huge increase in the numbers of both temporary and permanent international

migrants, with studies quantifying their impact on recipient areas. Labor-exporting countries now commonly receive remittance flows equal to several percent of GDP. Page and Plaza (2006) summarize the literature on macro determinants, and in their own empirical work find that exchange rate distortions and the presence of black markets for currency strongly deter remittances. They also infer unofficial (or unrecorded) remittances as a share of the total: their estimates vary from virtually zero in South Asia to 27% in the Middle East and North Africa, to 73% in sub-Saharan Africa, and about 50% elsewhere.

More negative is the brain drain effect, with large losses relative to the stock of skilled workers occurring in the poorest and least stable countries (Lucas 2006; Amin and Mattoo 2007). For poor and unstable countries, brain drain estimates can be large. The costs are perhaps greatest in countries such as Nigeria, with a tradition of high quality tertiary education and a substantial middle class, from which it is estimated that more than one-third of those with university education are now in OECD countries.

There is also some potential for transmitting macroeconomic shocks from advanced host countries to poorer sending countries: in their time-series analysis of aggregate remittances from the US to Mexico, Vargas-Silva and Huang (2006) find that US macroeconomic conditions are more important than home country conditions in determining remittances. However, Quartey and Blankson (2004) use micro data from Ghana to find that remittances also run countercyclically with respect to the origin macroeconomy, increasing during periods of economic crisis; Lucas (2006) draws a similar conclusion. However, Adams (2006) does not find a link between aggregate remittances and origin country's poverty. Taken together, these findings suggest short term stabilization effects of remittances, but no systematic contribution to reduced global GDP inequality.

Macro data sets also have improved, enabling new sorts of analysis that were impossible a few years back. For example, Becker *et al.* (2005) use data on monthly migration from Kazakhstan to Russia to examine the time series impact of economic crisis on migration flows of different age groups. They find that some economic news is perceived more rapidly than others, and that there may be threshold effects: small shocks get lost in the noise, while large shocks are noticed and have rapid impacts.

On the modeling side, Brueckner and Zenou (1999) and Brueckner and Kim (2001) fill an important, neglected niche by adding an endogenous land market to the Harris-Todaro model. Much of the benefit of a higher urban formal sector wage will be dissipated through higher land rents.

Furthermore, to the extent that formal sector workers live apart from – and closer to the urban center than -- those in the urban informal sector, rental gradients will reflect labor market distortions. To my knowledge, no empirical work on this link has been conducted, though Malpezzi's (1998) analysis of rents in Cairo finds virtually no pattern of rent transfers, at least in that setting. Other notable work on urban land markets in developing countries includes Dowall and Leaf's (1991) study of Jakarta, and Lanjouw and Levy's (2002) analysis of land prices in Ecuador. There are few surprises: weak registration and property rights reduce land values, lower densities, increase sprawl, and therefore increase commuting costs and reduce labor market opportunities for the urban poor.

During the past two decades, growth economists have become increasingly aware of the importance of cities as a source as well as a consequence of vibrant economic growth. This comes as no surprise to urban economists, who emphasize scale and agglomeration economies. However, measuring them is not easy, though Henderson (1988) has provided many creative ways of doing so. Nor has it been easy to disentangle causality and demonstrate a clear link from urbanization to growth, though consensus empirical evidence is now that there is a strong, positive effect (Soludo and Kim, 2003).

The importance of urbanization and its endogeneity in the growth process is central to the literature known as the “new economic geography” (Venables, 2000). Scale and agglomeration economies are at the heart of this analysis, and are hypothesized to be critical contributors to overall economic growth. These forces also give rise to uneven rather than smooth patterns of urban development: some cities grow rapidly, while others progress slowly. Early development is likely to be characterized by increasing population and production concentration within systems of cities, with deconcentration following at later stages of development. This literature also emphasizes the importance of transportation costs and barriers to trade, and, indirectly, the social cost of protectionism on behalf of rural areas and smaller cities.

6. Coping with city growth

“Large urban areas are among the greatest social inventions of all time.” (Mills, 2000: 73)

It is indisputable that overall urbanization is strongly associated with level of economic development (for regressions, see NRC, 2003). However, changes in urbanization and urban population growth rates are not exclusively linked to development level, nor to its rate of change

(economic growth). In countries such as China, rapid growth means rapid urbanization, as spatial economic models of growth predict.⁴ Those who come to the cities are poor and mainly work in low-paid jobs. But, most live far better than in their origin regions. Migration is large, and the gains are great even when growth is widespread, since rising prosperity and improved rural schooling and roads all make it easier to migrate. The reverse holds elsewhere: when economic chaos ensued with the collapse of the USSR, urban populations stopped growing, and many secondary cities virtually died.

Cities also grow when economic conditions in origin regions are bad or deteriorating. Sub-Saharan Africa experienced the most rapid population growth, and the greatest urbanization increases after East Asia, yet few of its countries enjoyed rapid growth. Urban economic stagnation will not prevent rapid growth in the face of even greater rural decay, a pattern also predicted by economic models (Becker and Morrison, 1988).

Migration and attendant urbanization are best thought of as equilibrating responses to positive opportunities and negative shocks. Migrants are not a particularly disadvantaged group and few urban problems are unique to migrants. Nor are cities bad. It is true that crime and a range of negative externalities, such as pollution and congestion, generally rise with city size.⁵ But scale and agglomeration economies work the other way, and most economists would argue that these latter effects are more important in most settings.

It is also true that governments distort urban structure. These distortions include efforts to restrict the growth of large cities, to restrict housing space, and to under-invest in urban infrastructure and public health while over-investing in showcase projects and favored industries (Mills, 2000). These distortions are costly, both in terms of static and dynamic efficiency. Elsewhere, and often concurrently, governments engage in activities that comprise an “urban bias” (Lipton, 1976). If large cities’ services and infrastructure are neglected, it is usually much worse in small cities and rural areas. Protectionist trade policies favor industrial cities, and showcase projects (from

⁴ Shifting definitions make analysis of urbanization trends in China a complicated subject (Becker and Morrison, 1999); one gets an appreciation of the problem in light of the emergence of peri-urban regions from Lin (2001). An excellent discussion of data problems and a reconciliation of different series appears in Chan and Hu (2003).

⁵ For evidence of the association of crime incidence and city size (at least for very large cities) in the Latin American context, see Heinemann and Verner (2006). This positive association may reflect greater anonymity, greater opportunity, and lower “social capital” of large cities. However, this association is not universal: Fafchamps and Moser (2003) find that the incidence of crime, controlling for population composition and risk factors, declines with population density in Madagascar.

airports to hospitals to stadiums to skyscrapers) almost invariably go in a few large cities, or to a handful of small, favored cities (new capitals near the President's home). Yet, none of this implies that urbanization, or large city growth, is bad. Rather, these issues remind us of the inefficiencies caused by government intervention aimed at favoring particular groups, classes, or industries.

Three features of urbanization seem reasonable to anticipate in the coming decades. First, the world will continue to become increasingly urban. In nations with large rural populations and large rural-urban fertility differentials, this growth will be fueled mainly by migration, and urbanization will increase rapidly. In countries with slow economic growth and initially high levels of urbanization, further urbanization will be modest, and urban growth will be driven mainly by natural increases. Second, in much of the world, intra-urban inequality is likely to increase further. Greater mobility and globalization will ensure that those with skills earn high and likely rising incomes, even if they are in poor cities. Globalization is likely beneficial to the poor, but far more modestly. The same forces will increase differences in growth and prosperity across cities within developing countries. Those that are well connected and have industries and services that benefit quickly from technological advances elsewhere will boom; others will lag.

Finally, future urban growth seems likely to be dominated by service sectors, especially in large cities. Total manufacturing and extractive industry employment is likely to continue to rise, but the greatest gains will be in services, both sophisticated and unskilled labor-intensive. In nations with weak public administration or repressive registration practices, with low levels of education, or that restrict the growth of large commercial, financial, and transportation enterprises, much if not most of this growth will be in the informal sector. To the extent that informal activities are poorly measured relative to formal sector production, it may appear that little economic activity is taking place, even if in reality substantial growth is occurring. Indeed, an important, unaddressed empirical issue involves reassessment of urban production and incomes in sub-Saharan Africa, where the informal sector is most prevalent.

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