

Overview

China has just commemorated the 30th anniversary of the launch of its reform and opening up. The three decades since 1978 have been marked with an impressive performance of economic growth and poverty reduction that is unprecedented in human history. Going forward, however, China faces the serious challenge of ensuring that its strong growth is shared more broadly and equally among the population to continue reducing poverty and to contain and reverse the trend of rising inequality. Addressing this challenge is a key component of the strategy to pursue more balanced urban-rural development and a higher degree of social harmony, which has been promoted strongly by the national leadership since 2002.

As China's leading growth powerhouse and a pioneer of reform and opening up for three decades, Guangdong province is now facing the same challenge and has the opportunity to lead the nation again in paving the way for pro-poor and more equitable growth, setting an example for other provinces to follow. The recent global economic downturn significantly complicates the challenges faced by Guangdong. In response to immediate concerns, the government may be focusing on short-term measures to sustain growth. Meanwhile, maintaining long-term

This overview was prepared by Chunlin Zhang and Xiaoqing Yu.

competitiveness and more balanced development requires that the government continue to tackle a series of long-term issues in a timely and sensible manner. Indeed, the sharp economic slowdown that China has experienced since late 2008 has its roots in domestic imbalances, which are characterized by an overreliance on investments and exports rather than domestic consumption for growth. The weakening support of domestic consumption for growth is clearly linked to the rising income inequality. In this sense, the global crisis has only highlighted the need for attention to this longer-term challenge.

To this end, the provincial authorities need to develop an overall strategy for reducing inequality. For the strategy to work in practice, it must be founded on evidence-based analyses that adequately take into consideration Guangdong's particular situation and lessons from other countries and regions around the world. This World Bank study is designed to provide such analysis. The study has resulted in eight chapters and one policy note (Zhang 2009) on a series of subjects jointly identified by the Guangdong authorities and the World Bank study team.

Although inequality is often discussed in terms of income, this study adopts a broader concept. It defines inequality as having three dimensions: absolute poverty, inequality in opportunity, and inequality in outcomes. Absolute poverty is a state in which individuals are deprived of the minimum means for basic living. It is an extreme form of inequality. Inequality in opportunity occurs when individuals do not have the same chances to pursue their life goals due to predetermined circumstances beyond their control (for example, gender, race, place of birth, family situation). Inequality in outcomes refers to disparity among households and individuals in terms of income and wealth.

This overview summarizes the key findings of the eight chapters and one policy note. It is organized as follows. The first section provides a background of Guangdong, while the second describes the current situation of inequality in the province. Next is a discussion of the potential impacts of the transfer of industrial activities ("industrial transfer") in mitigating regional disparity, followed by the recommendation of a three-pillar strategy for Guangdong. The fifth section focuses on the elimination of absolute poverty through the minimum living allowance (*Dibao*) system, and the sixth turns to policy actions needed to increase opportunities for the rural population by moving them to jobs, increasing their access to finance, and ensuring that their land rights are better protected. The seventh section further assesses Guangdong's options for investing in people through more equitable service delivery in compulsory education,

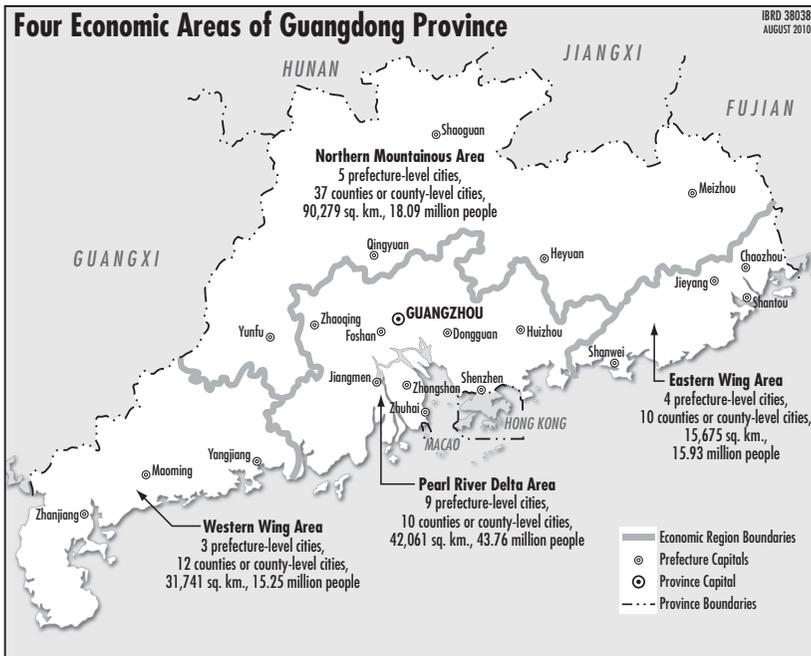
skill development, and health care, with the aim of enhancing the capacity of the poor to seize and utilize opportunities. The last section concludes this overview.

Background of Guangdong Province

Guangdong, a province of over 93 million residents, is located on the southern coast of China (see map O.1). It consists of 21 municipalities, which are commonly divided into four regions: the Pearl River Delta (PRD) region (9 municipalities), the northern mountainous area (5 municipalities), and the eastern wing (4 municipalities) and western wing (3 municipalities) of the PRD.¹

Over the past three decades, Guangdong has maintained an annual average growth rate in gross domestic product (GDP) of 13.7 percent. It is now one of the most developed provinces in China, accounting for over 11 percent of China’s 2007 GDP, the highest among all the provinces.

Map O.1 The Four Regions of Guangdong Province



Source: Guangdong Urban Rural Planning Academy.

Taking Guangdong province as an economy, it would be ranked as the fourteenth-largest economy in the world in terms of purchasing power parity (PPP) (Green 2008).

Guangdong's economy has been highly industrialized and urbanized. In 2007, secondary and tertiary industries accounted for 51.3 percent and 43.3 percent, respectively, of its provincial GDP (Guangdong Provincial Bureau of Statistics 2009, table 3-4) and 63.1 percent of the residents lived in urban areas (Guangdong Provincial Bureau of Statistics 2009, table 4-6). The province is also well established as the leading export province of China. Over 30 percent of China's exports in 2007 were from Guangdong province (Guangdong Provincial Bureau of Statistics 2009, table 17-12). The ratio of exports to GDP in Guangdong was 90.3 percent in 2007, the highest among Chinese provinces. The export-oriented industries have been supported by an influx of migrant workers from inland provinces. Guangdong had about 26 million migrant workers in the province around 2007, compared to its total labor force of 54 million (Xing and Mi 2008; Guangdong Provincial Bureau of Statistics 2009).

The Challenge of Inequality in Guangdong

Historical achievements notwithstanding, Guangdong is facing a serious challenge of inequality. In assessing the current situation, this study found that absolute poverty remains a significant concern in rural Guangdong, inequality in opportunity is widespread, and income inequality has risen to an alarming level.

Absolute Poverty

What is the current poverty situation in Guangdong? Before answering this question, a number of measurement issues must be clarified. First, when measuring poverty, per capita income and per capita consumption are the most commonly used welfare measurements. Generally speaking, income is regarded as a (partial) measure of welfare opportunity and consumption is a measure of welfare achievement. While both measurements have their justifications and limitations, consumption is usually considered a more stable measurement, especially when income reporting can be misleading (World Bank 2009, 188). This study considers both income poverty and consumption poverty.

Second, an appropriate poverty line needs to be defined. A range of poverty lines has been used in China.² The official poverty line (785 yuan

per person per year for 2007, or \$0.57 per person in 2005 PPP dollars) does not seem appropriate for Guangdong. The official poverty line for China is one of the lowest in the world—19.0 percent lower than the one used in the Lao People’s Democratic Republic, 20.4 percent lower than Vietnam, and 55.3 percent lower than Mongolia (Ravallion, Chen, and Sangraula 2008). Of course, a lower poverty line does not have to lead to less satisfactory performance in poverty reduction. However, it does affect the information that feeds into the government’s decision-making process. As a highly dynamic economy with a high aspiration that growth be broadly shared, it may be appropriate for Guangdong to set the poverty line with a view toward catching up with developed economies in this regard. With this in mind, this analysis uses the \$2 per day poverty line (in PPP)³ to estimate the poverty situation and analyze the profile of the poor. This poverty line was equivalent to 2,263 yuan per year for rural Guangdong and 3,195 yuan per year for urban Guangdong in 2007. The rural line was about 42.4 percent of the mean rural per capita income, while the urban line represented 20.2 percent of the mean urban per capita income in Guangdong in 2007.

Third, measuring poverty requires an appropriate data set. This study uses provincial household survey data covering 2,560 rural households and 1,600 urban households for the years 2005 and 2007.⁴ The sample includes migrants who had lived in Guangdong for more than six months at the time of the survey. It represents the Guangdong subset of the national household survey sample and was collected by the provincial Bureau of Statistics following principles and procedures designed by the National Bureau of Statistics. While the sample at the provincial level is limited in size to analyze the implication of particular policy measures, it is sufficiently representative for the purpose of this study. Going forward, the provincial government is strongly advised to strengthen its capacity for poverty and inequality monitoring by improving the content and size of its household surveys and using the monitoring results systematically.

Using the \$2 per day poverty line and the data set described above, chapter 1 in this volume concludes that, in rural Guangdong, 10.3 percent of the residents lived in income poverty and 18.6 percent in consumption poverty in 2007. In urban areas, residents whose income or consumption in 2007 fell below \$2 per day accounted for over 1 percent of the population. There is a high degree of consistency between the findings in Guangdong and those at the national level that absolute poverty is a rural phenomenon.

Who are the poor in Guangdong? Analysis of the data for 2007 suggests the following:

- *Most of the poor live in the eastern and western regions.* Two-thirds of those who lived in consumption poverty in 2007 were found in the eastern and western regions. The rest were almost equally split between the PRD region and the northern region, with 16.2 percent and 17.5 percent, respectively. The high percentage of poor residing in the PRD region is worth noting, given the region's very high level of wealth and income.
- *Poverty is more pervasive among larger families.* In 2007, 45 percent of the rural income poor were in families consisting of one couple with three or more children, and another 34 percent lived in families comprising three generations.
- *Most of the rural poor are less educated.* In 2007, 85 percent of the rural income poor who were 16 years of age or above did not have a high school or higher education. Moreover, compared with those who had a high school education, those who were illiterate were 1.72 times more likely to be poor. By the same token, primary school graduates were 96 percent more likely to be poor and junior secondary school graduates were 19 percent more likely to be poor.
- *Most of the income poor are able to work.* In 2007, 88 percent of the poor were from households in which no members had lost the ability to work. However, the data also show that the loss of working ability doubled the probability of being poor.

Inequality in Opportunity

Inequality in opportunity is often related to inadequate investment in people and an uneven playing field. First, opportunity becomes unequal when individuals have unequal access to basic social services. A child can be doomed to have a higher probability of poor health and a lower probability of getting a high school education or vocational training than others just because he or she was born to a family that lives in a rural area and is financially poorer than others. Second, individuals with similar health, educational attainment, and skills may end up with unequal opportunities due to unfair competition in the market. For example, they may face discrimination in employment due to their gender, household registration (*hukou*), family background, or other factors. Similarly, their access to land, capital, infrastructure, and other means of production may

be unequal due to factors beyond their control. Chapters 6 and 8 assess the situations of education and health care. Their findings suggest that inequality in opportunity is a widespread problem in Guangdong.

Education. Although Guangdong has made tremendous strides in implementing the new free compulsory education (FCE) scheme, educational challenges remain very acute in rural areas. Although disparities with urban areas have been decreasing, they remain significant for completion of primary education and access to junior secondary education and highly significant for completion of and access to senior secondary education and above. Noticeable gaps can also be seen among households of different income quintiles and among geographic areas of different GDP per capita, with the largest gap appearing between the very wealthiest and the others. Finally, although gaps in educational quality cannot be fully appreciated without comparable assessment of learning outcomes, gaps in completion rates and other intermediate outcomes, such as provision of books and infrastructure quality per student, also indicate major quality gaps.

While there may be several reasons for the persistent outcome gaps, gaps in spending per student and a still too-limited effect of the FCE scheme are certainly parts of the explanation. The evidence shows that, despite increased spending in rural and disadvantaged areas, gaps in compulsory education spending per student widened between urban and rural and between advantaged and disadvantaged areas during 2004–07. In other words, spending increased faster in urban and wealthy areas. The problem is the small relative size of the FCE scheme, in which the main subsidy that replaced miscellaneous school fees does not even reach the level of the fees collected in 2004 in rural areas. The problem is compounded by the different local fiscal capacities and lack of sufficient financial prioritization of rural areas within each geographic area (county, city, district). The increasing gaps in spending are worrisome, as they make it difficult to close the quality gap and educational attainment gap, particularly in junior secondary education. Urgent action is therefore needed to start reducing these gaps while providing adequate incentives for more effective use and management of education spending. Guangdong has room both to increase public compulsory education spending and to improve further the way this spending is used, allocated, and managed, to a large extent by building on the new FCE scheme.

Health care. Inequality in the health sector represents another major challenge for Guangdong. Significant evidence indicates that the health care services provided to the poor and economically disadvantaged are

much less adequate than for others, since the distribution of health care services remains highly dependent on that of income and wealth.

In terms of health outcomes, chapter 8 points to significant regional disparities in infant mortality. The worst-performing municipality has an infant mortality rate three times higher than the best-performing one, and the infant mortality rate of the PRD region is much lower than those of other regions. Of the nine municipalities with infant mortality rates higher than the provincial average in 2007, seven were non-PRD municipalities. Similar disparities can be seen in mortality rates for children under five years of age.

Inequality is also evident in the utilization of health services. For example, according to official data, in seven of the nine PRD municipalities, nearly 100 percent of pregnant women deliver their babies in hospitals. Nine of the 10 municipalities with hospital delivery rates below the provincial average in 2007 were non-PRD ones.⁵ In these municipalities, 10–20 percent of pregnant women still had their babies delivered outside the hospital setting.

A greater disparity can be observed in the utilization of outpatient and inpatient services. In all non-PRD municipalities, the number of outpatient visits per person was below the provincial average in 2007. Similarly, all but one of the non-PRD municipalities fell below the provincial average in terms of number of hospitalizations per person in 2007. The municipality with the highest volume (Dongguan in both cases) had a volume six times higher for outpatient services than Jieyang (the municipality with the lowest volume for outpatient services), and five times higher for inpatient services than Qingyuan (the municipality with the lowest volume for inpatient services).

These differences in utilization are clearly not a result of better health among people in poorer regions. Rather, data and anecdotal evidence suggest that they are most likely a result of financial constraints. For example, in 2006, 18 of the 21 municipalities had per capita government health spending below the provincial average. All but one of the non-PRD cities and four of the PRD cities reported per capita government health spending of less than 41 yuan, compared with the provincial average of 78 yuan and the highest level (in Shenzhen) of 247 yuan. In terms of private spending, the 2007 Guangdong household survey data show that, on average, health spending of an urban resident was 2.5 times more than that of a rural resident. Even among rural residents, the poorest 20 percent spent only 96 yuan on average, while the richest 20 percent spent 3.5 times more than that, at 450 yuan on average.

The high share of out-of-pocket expenditure in total health expenditure is also a cause for concern. This share stood at 45.1 percent in 2006, significantly higher than the average of 36.3 percent for upper-middle-income countries in 2002 (Gottret and Schieber 2006). This issue deserves special attention from the provincial government, because when the income distribution is significantly unequal, the high share of out-of-pocket expenditure in total health expenditure implies a high share of the population that finds health care services unaffordable and is thus left out.

Indeed, the relationship between health needs and available municipality resources for health is clearly disproportionate, as suggested by figure 8.13 in chapter 8. Roughly speaking, the 21 municipalities can be divided into three groups. The first group of five PRD municipalities (Guangzhou, Huizhou, Shenzhen, Zhongshan, and Zhuhai) has higher per capita spending on health (higher than the 71 yuan of Zhongshan) and lower infant mortality rates (lower than the 0.476 percent of Guangzhou). The second group comprises two municipalities (Heyuan and Shantou) with low spending and low infant mortality rates. All of the remaining 14 municipalities fall into a third group characterized by higher infant mortality rates and low government spending on health. Their levels of per capita government spending on health are all lower than 71 yuan, and their infant mortality rates are all higher than the 4.76 percent of Guangzhou.

Inequality in Income

Analysis of the provincial household survey data set provides insights into the current situation of income inequality in Guangdong province. For Guangdong overall, the Gini coefficient—a measure of the extent to which a particular income distribution diverges from an absolutely equal distribution—stands at 0.394 for 2007, after adjustments for cost-of-living differences between rural and urban areas. This level is lower than the levels for China overall and for countries such as the Russian Federation (0.399), Thailand (0.420), and the United States (0.408), but it is higher than for many other developing countries, such as India (0.368), Indonesia (0.343), and Vietnam (0.344).

What are the sources of this inequality? As elsewhere in China, urban-rural disparity is one of the key sources of overall income inequality. Chapter 1 shows that in 2007, based on the Theil index of inequality, which is useful for its decomposability, income disparity between urban and rural households accounted for 23.4 percent of Guangdong's overall inequality.

Table O.1 Decomposition of Income Inequality in Guangdong Province, 2007

<i>Components</i>	<i>Theil index</i>	<i>% of total</i>
Total	0.282	100.0
Inequality among rural households of the PRD region	0.049	17.4
Inequality among urban households of the PRD region	0.062	22.0
Inequality among rural households of the non-PRD region	0.044	15.5
Inequality among urban households of the non-PRD region	0.024	8.4
Inequality between rural households of the PRD and non-PRD regions	0.016	5.8
Inequality between urban households of the PRD and non-PRD regions	0.021	7.5
Inequality between rural and urban households of the province	0.066	23.4

Source: Guangdong Bureau of Statistics 2007.

What explains the remaining 76.6 percent? The huge gap between the PRD and non-PRD regions in economic development might point to regional disparity (table O.1). However, the data show that inequality within the PRD region itself contributed most to the observed overall inequality. Twenty-two percent of the overall inequality came from inequality among urban households in the PRD region, and inequality among rural households in the PRD added another 17.4 percent. Within-PRD inequality thus explains 39.4 percent of the provincial total. In contrast, inequality between the PRD and non-PRD regions only contributed 13.1 percent (5.7 percent for rural households and 7.4 percent for urban households) of the total. Therefore, in addition to the well-documented factor of urban-rural disparity, regional disparity is a significant source of inequality, but inequality within the PRD region has been much more significant to overall inequality in Guangdong province.

Reducing Inequality with Spatially Unbalanced Growth

Inequality in Guangdong province has geographical roots.⁶ The natural geography of the province is such that the PRD region is endowed with significant advantages over other regions. The PRD region has also enjoyed proximity to, and historical ties with, Hong Kong, China, and Macao, China, and through them, the rest of the world. As a result, Guangdong's economic growth has been highly unbalanced in a spatial sense. Economic activities are concentrated in the PRD region, where per capita GDP is much higher and the growth rate much faster than those of the lagging regions. This imbalance has obviously contributed to urban-rural disparity

and regional disparity in household income, which are both sources of inequality and rural poverty. Therefore, if the spatial distribution of economic growth could be made more balanced—for example, through the transfer of industrial activities (“industrial transfer”)—from the PRD to lagging regions, then reducing inequality would be easier and faster.

The Trend of Industrial Deconcentration from the PRD and the “Pull” Forces

Having examined available data on the evolution of the spatial pattern of Guangdong industry during 1998–2007, Zhang (2009) found that deconcentration from the PRD did take place in recent years, but only on a minor scale relative to the size of Guangdong’s industry. Its strength is far from what would be needed to reduce regional disparities in industrial development significantly. The most significant sign of the deconcentration movement is the strong catch-up of two cities close to the PRD, namely Heyuan and Qingyuan. However, more detailed analysis suggests that the rise of the two cities can be attributed only partially to the deconcentration of a few industries (for example, nonferrous metallurgy and mining, as well as nonmetal mining products) from the PRD. Overall, a clear trend of transfer of labor-intensive industries from the PRD to other regions of Guangdong does not seem to have emerged.

Why has the trend of deconcentration been so weak, despite government promotion since 2005? One plausible explanation is that PRD firms had only weak incentives to move out, and more new firms still preferred to establish themselves in the PRD region because of the existence of some “pull” forces—that is, economic forces that reward firms for locating in the PRD region. It appears that the power of the “push” forces in the PRD region—forces that strengthen incentives for firms to move out of the PRD region—has been neutralized significantly by the pull forces. The most important pull force to Guangdong is agglomeration economy, which rewards the geographical concentration of firms. In particular, concentration of industrial activities in the PRD region enables firms there to reap significant gains in productivity. The second pull force is a favorable investment climate, in which the PRD region has a clear advantage over other regions.

A key implication of the existence of the pull forces is that geographical concentration of industrial activity can, contrary to common perception, be both desirable and inevitable. It is one of the underlying reasons urbanization boosts productivity. Indeed, as the *World Development Report 2009* (World Bank 2008) has found, economic growth is seldom

balanced, and efforts to spread it prematurely will jeopardize progress. Two centuries of economic development show that spatial disparities in income and production are inevitable. A generation of economic research confirms this; there is no good reason to expect economic growth to spread smoothly across space.

Shifting the Policy Focus to Improvement of the Investment Climate

The available evidence on industry in Guangdong suggests only a moderate trend of deconcentration from the PRD region. Industrial transfer from the PRD to other regions will certainly continue, but given the market force of an agglomeration economy, its scale is unlikely to be large enough to alter significantly the spatial concentration of growth in the PRD region. This trend implies a tougher challenge for the Guangdong provincial government: it must reduce inequality on the basis of spatially unbalanced growth.

How to achieve such a reduction, then? One option for Guangdong is to allow the full play of an agglomeration economy in shaping economic geography and shift the focus of policy efforts to improving the investment climate of lagging regions. More comparable investment climates between lagging regions and the PRD region would not only reduce the potential cost of relocation of a firm from the PRD to a lagging region, but would also encourage private business creation and expansion in the lagging region.

Reducing Inequality: A Three-Pillar Strategy

Given the limited potential to make economic growth more even among regions, what strategy should the Guangdong provincial government adopt to reduce inequality? This study recommends a three-pillared strategy: eliminating absolute poverty, reducing inequality in opportunity, and containing inequality in outcome.

Eliminating Absolute Poverty

Absolute poverty is in fundamental conflict with the social values of most societies and certainly with those of China. Ensuring that individuals are free of absolute poverty is the responsibility of the government. Public interventions are needed to protect the livelihoods of society's neediest members and should be executed in the most transparent and efficient manner. Therefore, one of the most important policy objectives

for Guangdong province is to eliminate absolute poverty in a limited period of time. Particularly given the province's leading role in China's development and reform, it is only appropriate that high priority be placed on this policy objective. The financial and administrative strength of the province rules out any question regarding the attainability of this goal.

Reducing Inequality of Opportunity

Inequality of opportunity conflicts with the value of fairness in most societies. Moreover, it hurts economic efficiency and long-term growth. Institutions and policies that promote a level playing field—where all members of the society have similar chances to become socially active, politically influential, and economically productive—contribute to sustainable growth and development for two sets of reasons. First, there are many market failures in developing countries, notably in the markets for credit, insurance, land, and human capital. While correcting market failure is the ideal response, when this is not feasible or far too costly, some forms of redistribution—of access to services, assets, or political influence—can increase economic efficiency. Second, high levels of economic and political inequality tend to lead to economic institutions and social arrangements that systematically favor the interests of those individuals and groups with more influence. Both middle and poorer groups of the population end up with talent that is left unexploited. Society as a whole is then likely to be more inefficient and to miss out on opportunities for innovation and investment (World Bank 2005).

Therefore, the appropriate policy objective with regard to inequality of opportunity is to reduce it as much as possible. Public policy and resources need to be focused on ensuring that members of society have similar chances to be economically productive and socially active regardless of their predetermined circumstances. In the case of Guangdong, two main sets of interventions are most important and relevant. First, public policies should promote more equal access to education, health services, and basic social protection. Second, public and market institutions should be oriented toward providing a level playing field for individuals.

Containing Inequality in Outcomes

The nature of inequality in outcomes measured in terms of income and wealth is more complicated. Some inequality in outcome is “good” for efficiency and growth, so government policy should not pursue a completely equal distribution of income and wealth, particularly when inequality in income reflects uneven performance among individuals. Matching reward

with performance is the foundation of market-based incentives and has been an essential element of China's successful reforms. Urban-rural inequality in outcomes can also be good when it is caused by robust productivity growth in the urban sector, implying that the gap will narrow at some point as urbanization and productivity growth continue.

However, inequality of outcomes can also be "bad," making a case for some government intervention. Even when inequality reflects unevenness of performance among individuals, it can become harmful to growth when it generates substantial inequality in opportunity and distortion in market and public institutions in such a way as to threaten social coherence and stability. Not all income inequality reflects performance gaps; a great deal of inequality in outcomes may reflect unequal opportunity, an uneven playing field, or a society's failure to prevent theft—not the usual criminal act of theft, but the theft of public property and the abuse of public power through corruption.

The most appropriate government policy toward inequality in income and wealth, therefore, is to contain it to a socially acceptable level with minimum cost in terms of efficiency. What, then, is an acceptable level of inequality in income for Guangdong province? How much of the existing income inequality observed in chapter 1 is "good"? These questions require another study on the extent to which the existing income inequality reflects performance gaps. This study focuses more on the elimination of absolute poverty and the reduction of inequality of opportunity, which will both contribute to a more equal distribution of income and wealth.

The Role of the Intergovernmental Fiscal System

A key source of inequality is regional disparity in growth. As argued earlier, since concentration of economic activities is inevitable, the challenge is to reduce inequality on the basis of spatially unbalanced growth. To succeed in coping with this challenge, the role of the intergovernmental fiscal system is of fundamental significance. Without intergovernmental transfer, the spatially unbalanced growth and regional disparity in income distribution will be fully translated into regional disparity in access to key social services, such as education and health care, which inevitably results in inequality in opportunity. The transfer of government revenue from richer regions to poorer regions inevitably weakens incentives for revenue generation. However, a well-designed intergovernmental transfer system has the potential to achieve the optimal balance between equity and incentives. As suggested by the problems with financing of education and

health care services mentioned above, reform of the intergovernmental fiscal system remains an area where a major breakthrough is needed for Guangdong to implement the three-pillar strategy proposed here.

Eliminating Absolute Poverty through the *Dibao* System

As in the rest of China, the minimum living allowance (*Dibao*) program is the main policy instrument for the Guangdong government to address absolute poverty for rural and urban residents. The program is designed to provide direct transfers to households whose average net per capita incomes are below a locally defined threshold of minimum living standard.

Despite the impressive progress made by Guangdong in sustaining and expanding its rural *Dibao* program, a review of implementation experience indicates that the program has yet to achieve its objectives. The key issues hindering the achievement of objectives include level of program coverage, amount of fiscal input, design of some key policy features, and administration of the program.

Building on over a decade of experience with *Dibao*, and given the province's fiscal strength, Guangdong is in a position to lift the poor out of absolute poverty by expanding and improving the *Dibao* program. It will require determination in setting priorities, improvements in policy design to enhance efficiency, and strengthening of safety-net institutions to ensure that the program is well governed.

Expanding Program Coverage by Protecting Adequate Fiscal Input

Coverage of the rural *Dibao* program is low compared to the levels of poverty in Guangdong. Results from the 2007 rural household survey show that the program reached less than 5 percent of poor rural households, measured against a poverty line of \$2 per day. The limited coverage was especially apparent in the eastern and western areas of the province, which had income- and consumption-based poverty rates of 20 percent and 36 percent, respectively, compared to a program coverage rate of only 2.7 percent. The data also point to continued imbalances across different regions of Guangdong: Although the eastern and western areas accounted for over 60 percent of the province's poor, the 2.7 percent coverage rate was lower than those of the other two regions.

One main reason for the low breadth (coverage) and depth (level of protection) of the program is the inadequacy of the fiscal input to it. Currently, financing responsibility is shared between the provincial and

local governments, with a significant redistributive element. However, data suggest that the number of beneficiaries in different parts of Guangdong is strongly correlated to the sufficiency of local funds for the *Dibao* program.

A rather remarkable contradiction can be observed between the policy statement and the program reality, and, indeed, in that sense, the program in Guangdong is not markedly different from that in the rest of China. While the program is designed as an entitlement program with the stated principle “all who are eligible shall receive benefit,” in reality, the depth and breadth of the program are not driven by basic needs but are largely determined by local fiscal capacity.

Moving forward, Guangdong needs to increase program coverage by (1) setting the level of minimum allowance based on a clearly defined approach (for example, basic consumption basket); (2) budgeting the total level of fiscal input required based on needs; and (3) rationalizing financing responsibilities among different levels of government. The principle of cost sharing is sound, but it may be necessary to introduce provincial funding more biased in favor of the poorest regions and ensure that budget allocations at the local level are ring-fenced.

Improving Policy Design to Raise Program Efficiency

Although rural *Dibao* is still in the early takeoff phase at the national level, Guangdong has already experimented with the program for over a decade. Drawing from the experience of urban *Dibao*, which follows the same program design philosophy, a range of policy and program design issues that need to be addressed for the program to function properly and meet its stated objectives can be identified. Four issues and the recommended solutions are highlighted here.

The eligibility threshold. Despite the use of the term “minimum living allowance,” the *Dibao* thresholds are apparently not set or adjusted according to any scientific measure of the minimum living requirement. Instead, they often depend on historical levels and fiscal capacity. The thresholds are also not associated with any particular poverty line, making it very difficult to measure how well the program is achieving its goals.

The actual levels of *Dibao* thresholds used in Guangdong appear to be too low, particularly compared to poverty standards that are arguably more appropriate for the province. In 2007, the monthly threshold for rural *Dibao* was below 100 yuan in 28 percent of counties (cities) and between 101 and 150 yuan in 54 percent of counties (cities, districts).

These levels are quite low compared to a higher poverty threshold equivalent to \$2 per day (or 189 yuan), which may be more suitable for Guangdong, given its level of development.

Chapter 2, on rural *Dibao*, recommends that Guangdong (1) adopt a much more scientific and systematic approach to setting and adjusting the poverty lines; (2) align the *Dibao* eligibility threshold with the poverty line; and (3) consider, as the program is developed further, introducing an equivalence scale that takes into account household size in determining thresholds.

Benefit structure. *Dibao* is designed as a classic guaranteed minimum income (GMI) program, which is common among countries in the Organisation for Economic Co-operation and Development (OECD).⁷ According to such a design, households are expected to receive benefits equal to the difference between the *Dibao* threshold and their actual per capita income, multiplied by the number of household members. Although this is conceptually clean and well justified, the difficulty in determining the actual income of families—especially for rural households—makes it virtually impossible not to overshoot or undershoot and makes performance evaluation impossible.

Given the nature of income and the difficulty of fully recording household income, chapter 2 recommends that the Guangdong authorities consider adopting a much simpler benefit structure. The benefit structure could have two to three flat benefit levels and grant benefits to eligible households depending on where their income roughly stands. It would be a more honest and realistic approach, more feasible administratively, and, in fact, what has largely been in place. Addressing such inconsistencies between policy design and implementation is important to ensure the credibility of the program.

Targeting mechanism. *Dibao* in China uses a combination of income and asset testing and community participation for targeting and determining household eligibility. Households apply, their names are posted openly for community feedback, and then the authorities review and selectively verify. Besides income and assets, major sources of consumption needs such as chronic disease are also taken into consideration.

While such a combination of means testing is a sensible approach conceptually, it gives grassroots authorities significant discretionary power in determining eligibility. Proper checks and balances have not been put into place, and marginalized groups may not receive fair treatment. As the

program expands, this type of highly discretionary approach may leave it vulnerable to abuse and criticism.

Considering the difficulty in verifying household income, chapter 2 recommends that the Guangdong authorities consider piloting a proxy means-testing mechanism. Proxy means tests basically require statistical analysis of data from detailed household surveys to identify the key determining and easily observable factors of poverty. They use a formula and relative weights to generate a score for applicant households based on easily observable characteristics, such as location and quality of dwelling, ownership of durable goods, demographic structure of the household, and the education and possibly occupations of adult members. Eligibility is determined by comparing the household's score against a predetermined cutoff. Proxy means tests are useful for reducing discretion and ensuring greater transparency and fairness. They are also appropriate for addressing chronic poverty, which accounts for a significant share of the poor.

Strengthening Program Administration and Governance

The rural *Dibao* program in Guangdong suffers from lack of resources for administrative capacity. Much of the program administration has been pushed down to the lowest level (community or village), which is not even a level of government. The ratio of beneficiary households to staff is very high, making it impossible to verify eligibility, handle grievances, ensure proper financial management, or monitor the program.

As Guangdong moves away from relying on self-reported income and explores new targeting methods such as proxy means testing, the information requirements will be enormous. Chapter 2 highlights the need for Guangdong to invest in its safety-net institutions by establishing sound processes and systems for targeting, making payments, and preventing and detecting error, fraud, and corruption. Investments are also needed in monitoring and evaluation to measure program success. A well-developed management information system and full staffing are needed for the *Dibao* program at every level.

Boosting Rural Income by Giving People Opportunities

Most rural poor people can improve their incomes and their lives if they have access to better opportunities. Opportunities that are broadly related to the three factors of production—labor, capital, and land—are particularly important. First, rural poor people will be able to share the fruits of urban productivity growth if they have equal access to urban off-farm

jobs. Second, they will be able to help themselves better if they have equal access to finance. Third, they will be able to improve their well-being if public and market institutions provide better protection of their rights over land.

Helping People Move to Jobs

The fundamental cause of urban-rural income inequality in a developing economy is often development itself. When an economy develops, its urban sector enjoys higher productivity and faster growth than the rural sector, leading to a gap in incomes between rural and urban households. The basic approach to closing this gap is to help rural labor move to urban jobs, allowing the rural population to share urban income in a productivity-enhancing manner.

This approach seems very appropriate for Guangdong for several reasons. First, as will be discussed in chapter 1, 88 percent of the rural poor are from households in which no working-age members have lost the ability to work. Second, wage income already accounted for 56.9 percent of net income for rural households in Guangdong in 2007, compared to 38.6 percent for China overall, 52.5 percent for Jiangsu province, and 48.5 percent for Zhejiang province. Third, industrialization and urbanization in the PRD region have created a huge number of urban jobs. Moving more of Guangdong's rural labor to urban jobs in the PRD region and beyond is therefore a natural approach for reducing urban-rural income inequality.

While transferring rural labor to off-farm—and in most cases urban—jobs will ultimately help improve rural income and reduce inequality, analysis is needed to understand the profile of the farmers, and to identify the appropriate policy actions required. This implies two main questions: First, how many rural laborers remain in Guangdong who are not needed for agricultural activities, and what are their characteristics? Second, what are the main barriers that prevent Guangdong's labor market from being highly mobile, and how can such barriers be removed to facilitate the transfers?

The size of transferable rural labor of Guangdong. If government policies for labor transfer need to focus on laborers who are “transferable,” the first step is to determine the size of Guangdong's pool of transferable labor. An analysis of the rural household survey data collected by the Guangdong provincial Bureau of Statistics (see chapter 1 for data description) suggests that about 60 percent of the province's rural labor force

may already be transferred in the sense that their working time is devoted to off-farm activities, which include local off-farm activities (35 percent) and migrant off-farm work (25 percent). This does not imply, however, that the remaining 40 percent can all be transferred. A more in-depth analysis of the profile of the remaining labor is needed.

The most frequently used methodology for measuring the size of transferable labor is to estimate the difference between the total rural labor force and the total labor demand for agriculture. However, this methodology is flawed because the labor allocation to agriculture is determined not only by agricultural productivity, but also by many other factors, such as prices of agricultural outputs and job opportunities in the nonagricultural sector. Furthermore, the estimation is often based on aggregated data that do not capture the variations caused by individual characteristics.

Chapter 3 uses a different methodology. It first analyzes the profile of transferred rural labor using the rural household survey data. After obtaining an understanding of the key determinants of migration decisions and outcomes, the study estimates the probability of transfer among rural workers in various age groups and obtains the total number of transferable rural labor. Employing this methodology, chapter 3 concludes that out of the 11.67 million nontransferred rural laborers in Guangdong province in 2007, 4.35 million, or 37.3 percent, are transferable. This pool includes 1.54 million, or 13.2 percent, who could potentially be transferred to migrant jobs, and 2.8 million, or 24 percent, who would do better with local off-farm activities.

Policy interventions to facilitate labor transfer. What is required to bring the 4.35 million rural workers to migrant or local off-farm jobs? This is the central question that must be answered before the necessary government policies can be formulated.

The first is to facilitate migration. It is important to recognize that the share of transferable rural workers who could migrate to urban labor markets can be influenced by government actions to a certain extent. Using the rural household survey data, chapter 3 identifies four important determinants of a rural worker's decision to move to a migrant job: age, gender, years of schooling, and whether he or she has preschool children. Young male rural workers are more likely to migrate to nonlocal off-farm jobs. Rural workers with longer years of schooling are more likely to take migrant jobs, but having preschool children can significantly lower their probability of moving to migrant jobs. None of these findings is surprising. Government actions could help address some of the key factors that

influence migration decisions. In particular, two sets of actions may be effective: (1) enhancing rural education and vocational training to prepare rural labor better for urban employment opportunities, and (2) providing better social services (such as child care, education, and health services) to rural migrant children in the urban areas.

However, these measures may not be sufficient. In the past, on the demand side, the dynamic PRD region created millions of urban jobs for migrant farmers; on the supply side, there were probably 1.5 million rural Guangdong farmers who had the potential to take those migrant jobs. For some reason, demand and supply failed to meet. While the 1.5 million rural Guangdong workers stayed in their home areas, millions of jobs in the PRD region were filled by migrant workers from outside Guangdong. Because of lack of data on these non-Guangdong migrant workers, further investigation of the cause of this phenomenon is not possible. However, the phenomenon does underscore that the effectiveness of government policies designed to promote rural labor transfer to migrant jobs will be seriously compromised if the root causes of the problem are not identified correctly. Further study of this issue is strongly recommended.

There is also a range of policy issues that would affect the migration decisions and actions of not only rural labor from Guangdong, but also those from the rest of China. Whether these issues can be addressed successfully affects the well-being of rural migrants as well as the competitiveness of the Guangdong economy. Chapter 3 highlights in particular four issues that Guangdong needs to tackle further and that it is well positioned to do. They include (1) the restricted access to social services and protections dictated by the residency requirements (*hukou*); (2) the labor regulations that, on the one hand, may imply serious restrictions on the employers' hiring and firing decisions and, on the other hand, cannot ensure basic rights of the migrant workers and the bargaining power they need to acquire; and (3) the limited coverage of social insurance programs.

The second policy intervention is to create off-farm jobs in rural areas. While much attention has been rightly given to the need to facilitate rural-urban migration over the past few years, the creation of local off-farm jobs in rural areas should be a policy priority. In the context of Guangdong, since nearly two-thirds of remaining transferable rural labor would be better off with local off-farm activities, opportunities that are far away may not help them move to more productive jobs and better income. For fostering the development of off-farm activities, a wide range of policies, including tax, land, and rural finance, are highly relevant. It should also be emphasized that the most effective way of maximizing

local off-farm job creation is to improve the local investment climate to facilitate business creation and expansion, as discussed in the section on reducing inequality with spatially unbalanced growth above.

Making Finance Work for Rural Households and MSEs

Financial sector development can play a crucial role in reducing inequality in many ways. One area in which it can have a direct impact—and in which the Guangdong provincial government could potentially make a significant difference—is access to finance for rural households and micro- and small enterprises (MSEs).

The inadequacy of financial services for rural households and MSEs.

Rural households and MSEs are often victims of unequal access to finance. Chapter 4 finds that Guangdong is no exception, and that the province even lags considerably behind the national average and other coastal provinces in terms of access to finance for rural households and MSEs. According to China Banking Regulatory Commission (CBRC) statistics, only 13.6 percent of rural households in Guangdong had borrowed from formal financial institutions in 2007, compared to 13.5 percent in Zhejiang, 17.3 percent in Jiangsu, 23.4 percent in Shandong, 36.7 percent in Fujian, and a national average of 34.6 percent.

Moreover, it seems not the case that Guangdong rural households are less bankable than the national average or their counterparts in other provinces. The provincial household survey data indicate that the percentage of rural households with outstanding debt to informal moneylenders in 2007 was 4.6 times that of rural households with outstanding loans to formal financial institutions.

MSEs did not fare any better; in 2007, only about 5.0 percent of Guangdong's small businesses had ever borrowed from banks, compared to 7.5 percent nationally, 5.5 percent in Jiangsu, 8.2 percent in Fujian, 10.2 percent in Zhejiang, and 11.2 percent in Shandong.

Access to credit is not the only area in which rural households and MSEs are underserved. Like urban dwellers, rural households and MSEs have diverse demands for financial services, such as savings deposits, payments, remittances, insurance, and leasing. However, the 2002 household survey data indicate that only 34.8 percent of farming households in the lowest income quartile had savings deposit accounts (46.5 percent in the next-lowest income quartile, and 63.2 percent in the third-lowest income quartile). The percentage of all rural households in Guangdong with saving accounts stood at 53 percent, significantly lower than the

national average (62 percent) and the percentages of comparable provinces (72 percent in Jiangsu, 76 percent in Fujian, 81 percent in Shandong, and 90 percent in Zhejiang). Of those households in the lowest income quartile that did not have savings deposits in banks, average cash holdings were as high as 5,425 yuan at the end of the year (7,759 yuan for the second-lowest income quartile).

The inability of financial institutions to serve. What is lacking in Guangdong in general—and in rural areas, in particular—is not savings, but the ability of financial institutions to turn savings into productive loans. At the end of 2007, the combined loan-to-deposit (L/D) ratio of financial institutions in Guangdong, including branches of state-owned commercial banks (SCBs), stood at 58 percent, indicating that they were able to lend out slightly more than half of what they had collected in deposits. This compared poorly with comparable provinces and the national average. The L/D ratio for rural financial institutions was even lower at 32 percent, which was less than half of that in the comparator provinces.

The L/D ratio is a meaningful indicator of effectiveness of intermediation, because if the actual ratio is lower than the prudential threshold by a wide margin, there is reason to believe that an undue amount of the savings has either gone to investment in fixed-income financial instruments, such as government securities and bonds issued by policy banks, or has flown to other parts of the country through the intrabank funds transfer systems. If it is not a surprise that the national banks were the channels of outflow, the roles played by the rural credit cooperatives (RCCs) should be, as they were touted as the mainstay of rural finance.

While a large portion of funds flows out of Guangdong, those that find their way into lending in Guangdong have had a lower rate of repayment than elsewhere in China. Despite faster than average economic growth and spectacular urban prosperity in Guangdong, loan portfolio quality has been notoriously bad in the past many years. As of the end of 2007, the combined nonperforming loan (NPL) ratio of all financial institutions in Guangdong stood at 9.3 percent, higher than those of the comparator provinces and the national average. Among them, the Agriculture Bank of China (ABC) and the RCCs exhibited even poorer loan quality. Measured by the risk-based loan classification criteria, the ABC's nonperforming loan ratios were as high as 26.5 percent, while the RCCs' were 19.8 percent.

Actions the provincial government could take. Suffice it to point out that there is little the Guangdong government can do to influence the

decisions of the financial institutions directly. What it can do, though, is to make conditions more conducive for the financial institutions that would scale up their operations in Guangdong of their own volition. There are several areas where the Guangdong government can take immediate action, keeping in mind their impacts and implications for the medium and long terms.

First, launch a pilot of village-level, member-based financial cooperatives in selected rural and mountainous areas. The pilot should help fill the void of basic financial services, deposits, and loans for rural households that have been denied access due to the withdrawal of SCB presence since 1998 and the diminishing role of RCCs as they are being restructured into joint-stock rural commercial banks and becoming increasingly urban. Several experiments with such financial cooperatives are already taking place in China, notably those promoted by the Leading Office for Poverty Alleviation and Development of the State Council and the Agriculture Department of the Ministry of Finance in Henan and Sichuan, with World Bank support. For the cooperatives to be successful, care should be taken to preserve the autonomy and initiative of members and to avoid willful interference by government officials at all levels. The provincial government should set up an auditing unit to protect the interests of members through periodic audits as a public service to the newly established financial cooperatives.

Second, revise policies and guidelines to promote microcredit companies under the overall sponsorship of the People's Bank of China (PBC) and the CBRC. It is critical that the provincial policies avoid the mistakes of provinces that chose to set thresholds even higher than those stipulated by the PBC and the CBRC. The systemic risks posed by such microcredit companies are minimal, as they do not take public deposits. Artificially constraining their ability to formulate and borrow will cause a systemic risk because few, if any, such companies can even hope to be sustainable. The Guangdong provincial government should take a broader perspective and a pragmatic approach to promoting microcredit companies. The microcredit companies should be established not only at county level but also at township level. To foster competition and provide a level playing field, Guangdong should consider allowing multiple microcredit companies to be set up in all counties, with lower thresholds of paid-up capital and relaxed restrictions on their funding limits and geographic expansion. It should be understood that microcredit companies require economies of scale to achieve meaningful outreach and commercial sustainability.

Third, redesign fiscal incentive programs to promote access to finance by rural households and MSEs, with a special focus on the reduction of transaction costs, the introduction of innovative products and instruments such as microleasing and factoring (or reverse factoring), and branchless banking models. The intended beneficiaries of fiscal subsidies should be well defined, and the enhancement of their welfare should be subject to monitoring and evaluation. Giving monetary rewards to foreign and Chinese financial institutions to attract them to Guangdong should be reconsidered, since doing so wastes public resources and hampers the healthy development of the financial sector. If the Guangdong government wishes to stimulate the credit supply to rural households and MSEs, it can replace the volume of loans with the number of loans as a basis for award. Awards based on volume of loans actually encourage banks to lend to large borrowers at the expense of MSEs. Such subsidies or tax treatments should not be institution-specific—that is, they should be awarded without discrimination among financial institutions. Any financial service providers wishing to serve the rural and MSE borrowers should have equal access to the fiscal stimulus. The government should not resort to interest rate subsidy but to nondistortive policy actions that help bring down transaction costs. In addition, in certain geographic locations with extremely adverse natural conditions, it makes economic sense to move the people out of such locations rather than forcing the rural financial institutions (RFIs) to set up or maintain outlets without commercial prospects or social benefits.

The Guangdong government may also wish to reconsider the policies encouraging the proliferation of government-owned credit guarantee companies and policy-oriented reguarantee companies. The role of such credit guarantee companies is dubious at best, as they may add to transaction costs without raising overall credit supply. The wide spread of credit guarantee schemes tends to perpetuate moral hazard in the credit market and erode the fragile credit culture, without bringing about the intended addition of credit.

Fourth, restructure the Financial Working Office (Jinrongban) to balance its roles and functions as an owner and regulator of local financial institutions and markets. The increasing responsibilities of the provincial government in maintaining local financial stability and providing access to finance justify the addition of regulatory and supervisory functions. The CBRC does not have enough capacity to oversee the numerous local financial institutions, which are rising in number as the experiments with new types of financial institutions continue. In the meantime, the provincial government

does not have an explicit regulatory and supervisory function. The resulting vacuum not only creates uncertainty and opportunities for regulatory arbitrage, but it also leaves potential risks unattended. Guangdong will be a pioneer in charting new waters for the next generation of financial reform if it takes the initiative in this important area.

Fifth, plan a thorough study of the issues and problems surrounding the RCCs to explore a real pilot for restructuring, one aimed at making the RCCs truly resilient financial institutions with good governance and sound control systems. The RCCs should be freed from their ambiguous roles and become real commercial financial institutions without the label of “serving *sannong*”—that is, agriculture, farmers, and rural communities. Local governments and the CBRC should make a commitment not to interfere with the internal operations of post-restructuring rural cooperative unions (RCUs) and rural commercial banks. The shareholders, directors, and management should be allowed to execute their responsibilities fully under the new governance framework. In exchange for granting RCUs this much-needed autonomy, the regulatory authorities should be decisive and prompt in closing down failing RCUs and should announce their policy in this regard in advance to make it a credible deterrent to mismanagement. It would also be wise for the government to take a sober-minded approach to the creation of government-dominated financial holding companies by amalgamating the existing RFIs and financial institutions run by local government or state-owned enterprises. Such top-down conglomeration rarely works unless fundamental changes are introduced in governance and incentives. The recommended pilot on village-level financial cooperatives could be combined with the pilot on dealing with insolvent RCCs, as the two are complementary.

Reforming Land Policies for Better Rights Protection and a Healthier Development Pattern

Although industrialization and urbanization contribute to rising gaps in urban-rural productivity and income, they also raise the demand for—and hence the potential value of—rural land, which is an important source of rural income. Data show that income from farming activities still accounts for almost 60 percent of farmers’ per capita income in today’s rural China. Protecting farmers’ rights over land is therefore critical to reducing urban-rural income inequality. Adequate protection can not only help boost rural income but also generate a market signal that reflects the true social cost of land, helping the urban sector develop on a land-efficient path.

Many national and provincial policies aim to protect farmers' rights over land and improve land use efficiency in the economy. Guangdong province could lead the nation in land policy reform by doing more in this regard and being more innovative. Three specific reforms could be considered, as described below.

Establishing a land registration system and granting land rights certificates. Farmers in rural China generally do not enjoy a high degree of land tenure security, and the situation in Guangdong is no exception. Some local governments have continued to support or at least allow community-level land readjustments, using different justifications. Frequent land readjustments, even on a small scale, will weaken farmers' perception of land tenure security, and a low degree of tenure security will negatively affect farmers' long-term investment and production behavior on the land. Land readjustments at the community level will also create rent-seeking opportunities for local elites. In light of these negative impacts, the Rural Land Contracting Law of 2003 basically prohibited land readjustment, and this legislative intention was reinforced in the Property Rights Law of 2007. Extending farmers' land leases from a 30-year term to an open-ended one, as announced by the Communist Party of China (CPC) Central Committee in mid-October 2008, sent the clearest and strongest signal of the central government's determination to grant farmers a higher degree of land tenure security.

Tenure security is also crucial for healthy development of the land market in both rural and urban areas, in terms of protecting land rights as well as reducing land conflicts. Guangdong has enjoyed an increasingly active rural land market since the 1990s. However, an emerging phenomenon is that farmers' interests are being violated to different degrees by village elites, local governments, and some enterprises during the land transfers. This problem calls for further government action to protect the tenure security of farmers. International experience shows that securing land use rights of individuals *before* promoting rights tradability is a sound principle.

Therefore, it is recommended that the Guangdong provincial government take timely and concrete actions to strengthen farmers' land tenure security. One of the most effective ways to achieve this goal is to establish a plot-level rural land registration system and grant farmers land rights certificates. Such a registration system is strongly supported by the most recent policy changes, as reflected by the CPC's decision in mid-October 2008 and the No. 1 Document of 2009. Rich international experiences can

be found in this field—Vietnam, for example, which has a land rights arrangement similar to China’s, has endeavored to conduct a broader land administration reform and establish a nationwide digital cadastral record system (see box 5.1 in chapter 5). Guangdong could again be a national pioneer in establishing a provincewide rural land registration system to promote more equitable growth with a higher degree of social harmony.

Adopting a new system that maximizes the overall economic value of land. Farmland protection is a major challenge for Guangdong. Under the existing policy framework, all remaining farmland in Guangdong falls into the category of “basic farmland,” and, hence, scope for further conversion from farmland to urban use is very limited. In addition, under the current policy, this conversion is subject to approval by the State Council, the Chinese cabinet. The 2007 census shows that Guangdong has 42.7 million *mu* of farmland, but the basic farmland quota assigned to Guangdong for protection is also 42.7 million *mu*.⁸ Therefore, in theory, Guangdong must keep 100 percent of its remaining farmland to meet the “basic farmland” protection quota unless the State Council determines otherwise.

Given Guangdong’s rapid urbanization, it is unavoidable that a certain amount of farmland will and should be converted for urban expansion. Two principles should be followed for farmland protection in Guangdong. First, the core of farmland protection should focus on improving land productivity. The potential to improve land productivity is huge: current data show that 62 percent of the remaining farmland is middle- or low-yield land. Second, a mechanism to maximize the overall value of land resources should be introduced. The decision on whether a plot of land should be converted to urban use should be based on the overall economic value of all plots of land involved, rather than on the agricultural value of the specific plot alone. Inflexible farmland protection in a rapid urbanization area could result in an inefficient urban development pattern with problems such as urban sprawl, overstretched infrastructure, and the coexistence of incompatible land uses. In short, Guangdong should be innovative in piloting more effective ways to achieve the farmland protection objective.

Piloting the transferable development rights mechanism. Environmental degradation has become a matter of urgency in two respects. First, the quality of the living environment has declined significantly in certain areas. Second, the quality of farmland is deteriorating, which has a significant

negative impact on the safety of agricultural products. Innovative land policy, such as land transferable development rights (TDRs), could be very useful for addressing this issue (see box 5.2).

TDRs could be viewed as a tool for the government to purchase land development rights from landowners. The core of TDR is to shift development rights from sending areas (where the development rights have been bought by the government) to receiving areas (where the land could be developed at a higher density). Similar to a marketable permit system, TDRs are used to implement development restrictions on land designated for environmental protection or as permanently agricultural (the sending area). Owners of agricultural land in the sending area are granted TDRs as compensation for the restrictions on their ability to develop the land for higher-value urban uses. Owners of developable land in a designated receiving area are typically allowed to exceed limits on density only by purchasing a sufficient number of TDRs. In addition to facilitating environmental gains, compensation associated with TDRs will also help reduce incentives for illegal land conversion and address increasing tensions among regions with different economic growth prospects. The United States has a quite well-developed TDR system at both the federal and state levels. Drawing on international experience, Guangdong could pilot this mechanism, adapting it to the province's particular situation. If the pilot is successful, the mechanism could be expanded province-wide.

Investing in People through More Equitable Service Delivery

While opportunities are important, they must be seized and fully utilized by poor people to have a real impact on inequality. Therefore, the capacity of the poor to utilize opportunities is critical. Among the many factors that determine such capacity, three are particularly essential and can be influenced by government policies: educational attainment, skills, and health. Better-educated people with better skills and health have greater capacity to make use of the opportunities available to them. The government can therefore help poor people help themselves with a policy of investing in people through equitable and effective service delivery in basic education, vocational training, and health care.

Granting Rural Children Equal Access to High-Quality Education

Equal access to high-quality education is crucial for reducing inequality. Given the increasing importance of educational attainment to young people's competitiveness in the labor market, it is very likely that today's

inequality in access to high-quality education will translate into inequality in income tomorrow. Based on an assessment of the current state of rural compulsory education, chapter 6 concludes with five recommendations.

First, Guangdong province needs to put more emphasis on measuring and monitoring multiple dimensions of educational performance, with a particular focus on gaps across groups to identify where the equity challenges really are. The current diagnostics are still very much focused on the school-age population, on average indicators or, at most, disaggregation across geographic areas, and on standard enrollment and transition rates, which provide only part of a more complex picture. It will be important to look at the educational performance of both the workforce and school-age populations, and across urban-rural areas, socioeconomic strata, and geographic areas. For a thorough diagnostic, a wider array of indicators should also be considered, such as dropout rate or standardized learning outcome indicators.

Second, the subsidy that was designed to replace miscellaneous fees, which were collected by schools from parents to finance school operation expenses, needs to increase over time to help close the gap. While making rural compulsory education free, the new scheme that was implemented recently has put greater pressure on rural and disadvantaged areas in the provision of compulsory education. The current minimum standards of subsidies, which are 288 yuan per student for primary school and 408 yuan per student for junior secondary school for rural areas, are very low and do not even reach the level of the miscellaneous fees they are supposed to replace in very poor counties. The province is well aware of this issue and of the increasing pressure on rural schools, and it has planned some increases with, for instance, standards set at 350 yuan per student for primary schools and 550 yuan per student for junior secondary schools in 2009. This measure is a step in the right direction, but, as shown in the simple simulations presented in figures 6.40 and 6.41 in chapter 6, it will not be enough to make a substantial difference.⁹ The analysis in chapter 6 shows that about 390 yuan and 580 yuan per student, respectively, would be the minimum needed to fill the rural fee gap—that is, to make up for the average rural fees collected in 2004 at 2007 prices—and even that would only marginally help close the gap. What would really start to make a difference is a substantial increase in the minimum subsidies to rural schools that would allow their teacher salary allowances to reach the provincial average, and their operation and maintenance (O&M) budgets to reach the urban school standard.

Third, an improved funding formula for the subsidy in replacement of miscellaneous fees is needed. The high and increasing spending gaps between urban and rural areas in Guangdong clearly point to the need for differentiating urban and rural standards in replacement of miscellaneous fees to ensure that rural schools can satisfy basic needs. It is important to continue working, as the province currently is, with minimum and predictable subsidies per student that limit the scope for lengthy negotiations and provide strong incentives for efficient behavior. The issue is not about changing the subsidy per student approach, but, rather, getting a better grasp on what the subsidy “needs to buy” in rural areas and then adjusting the current minimum subsidy accordingly over the short to medium run. Rural school operation cost includes teacher cost, such as salary allowance/bonus for permanent teachers and substitute teachers, as well as O&M cost, such as basic school supplies, utilities, and simple classroom maintenance, which used to be covered, to the extent possible, by the miscellaneous fees that were collected by schools from parents. If the subsidy that is supposed to replace miscellaneous fees needs to allow rural schools to cover acceptable teachers’ costs and O&M costs, then it would make sense to fix minimum acceptable standards for both—set at the provincial average or, more likely, other standard costs—and review the overall amount of the subsidy. As described in chapter 6, some useful examples of funding formulas from across the world could be used as a reference for Guangdong.

Fourth, there is strong justification for a systematic, predictable, and well-articulated maintenance scheme. The analysis in chapter 6 shows that regular funding for O&M budget per student is much lower in rural areas—which typically experience faster dilapidation of school buildings—and differs across counties without an apparent logic. The policies for financing are also fairly different. These findings provide strong justification for the more structured, systematic, and predictable longer-term maintenance plan proposed for rural areas and already implemented by the province in 2008. One question is how this new plan would be best articulated with the subsidy in replacement of miscellaneous fees, which also cover some O&M. These two subsidies could, in principle, be seen as complementary, with the subsidy in replacement of fees covering just the basic O&M (supplies, utilities, minor classroom maintenance) and the separate maintenance subsidy feeding into a longer-term fund for more in-depth refurbishment and renovation of the infrastructure when the time comes. The articulation

between these two subsidies may need to be further reviewed to ensure their different purposes and mechanisms are well understood and implemented. Finally, the proposed 50-50 county-provincial cofinancing scheme (with a 100 percent county- and city-financed scheme in the PRD) seems to be a generally acceptable solution for ensuring rational infrastructure decisions and cost sustainability.

Fifth, the textbook and needy student subsidies need to be reviewed further and rationalized. As above, the subsidy in replacement of fees and the textbook subsidy, which was extended to almost all compulsory education students in 2008, should be well articulated to ensure that they are complementary and to determine if it is justifiable to keep them separate now that they have the same coverage. How to ensure that the current textbook gap between urban and rural areas is filled remains an open question, as the textbook scheme has been extended to urban areas. One option for closing the gap would be to factor in a one-time supplement to the subsidy in replacement of fees for rural areas.

The targeting of the subsidy for needy students may need to be reviewed. The planned 2008 increase in the subsidy for 20 percent of needy students in special difficulty—to include supplements of 500 yuan in primary and 750 yuan in junior secondary schools—is welcome, as it will help address the significant private education expenditure burdens faced by poor rural households. However, coverage of needy students still appears to be quite low and, more importantly, does not seem to adhere to very clear poverty logic when comparing beneficiary groups across counties and cities. The targeting of the subsidy may need to be reviewed to ensure it is at least allocated as equitably as possible.

Overall, all of these measures to improve the FCE scheme will need to be accompanied by improved management practices at all levels to ensure that funds always reach their intended beneficiaries and do so in the most efficient way. The move toward giving schools more budget management responsibilities is positive, as they generally have better knowledge of needs and are accountable to their communities, and this approach is also consistent with the use of block grants per student. This move will need to be accompanied by coaching and training in financial management and procurement.

Equipping Workers with Skills

Workers' skills and education are an important constraint on growth as viewed by employers in Guangdong. In the World Bank's 2006 investment climate assessment survey for China (World Bank 2006), which

covered 120 cities and 12,400 firms,¹⁰ 14 factors were ranked as potential constraints on growth. Workers' skills and education were ranked as either the first or second most important constraint on growth by one-third of the Guangdong firms surveyed. Only access to dependable electrical power exceeded this in importance (see figure 7.1 in chapter 7). At a national level, access to finance was ranked as the most important constraint on growth, followed by worker skills and education. Improvements in workers' skills are thus a high priority from the viewpoint of employers.

Chapter 7 finds that Guangdong faces a series of interrelated challenges in meeting the rapidly changing skill needs of its economy and ensuring that the poor have the skills necessary to take advantage of the opportunities available to them. As in the case of compulsory education, lower fiscal capacity in rural areas poses a major constraint, and the subsidies provided to reduce the urban-rural spending gap are limited. Given this context, it will be critical for Guangdong to use its public expenditures for skills development more effectively and efficiently, which will also involve stronger coordination of public and private skills initiatives, greater emphasis on demand-side financing, and other measures to address the skills development challenges, as described below.

Strengthening coordination with a new governance framework. To achieve the national and local objective of a skilled workforce, a strong governance framework is required to coordinate Guangdong's diverse provider community for skills development. Faced with a similar diversity of state and nonstate providers, governments in countries such as Australia, Chile, Singapore, and South Africa have created coordination bodies. Their governance frameworks include national and regional training authorities run by governing boards, which have public and private members with roles and responsibilities defined in legislation and decrees. The duties and powers of these authorities vary, but all have the overarching objective of creating a more coherent policy and operations framework for providers and consumers of education and training, whose purpose is helping a workforce prepare for employment. Guangdong could establish its own provincial training authority with oversight and advisory responsibilities and, possibly, implementation responsibilities for some activities. Such training authorities serve as umbrellas for other market institutions that improve the operation of training markets. Their creation would address the growing fragmentation in the provision of skills and lead to a more strategic use of public expenditures.

Making financing bring about results. Changing how skills are financed is a powerful tool to get better results from public expenditures. While governments are concerned with mobilizing more financing for skills development, improving how money is spent can be even more important to meeting an economy's objectives for skills development. Incentives need to be put in place to encourage public and private providers to deliver education and training of good quality that is responsive to market demand. The incentives are already in place for private providers, since consumers who pay for services are not expected to continue enrolling in programs that do not produce results in employment and earnings. The same types of incentives can be put in place for public providers by financing them in ways that hold them accountable for good performance. Performance-based budgeting (PBB), vouchers, and training funds are three instruments that Guangdong province may consider adopting.

PBB replicates for public providers of education and training the incentives available to private providers. Rather than combining quantities and costs of inputs in a budget, PBB calls for agreement first on the results to be achieved—for example, the share of students who can pass national certification exams for the program, or the share who can find work using their skills in a given period of time—or even on targets such as raising the percentage of program completers. The budgeting process focuses on strategies to achieve these objectives and the activities to produce the results. Success is judged by whether key performance outcomes are achieved, and, if they are not, sanctions hold those responsible accountable. At the same time, managers and teachers must be given the tools with which to succeed, including adequate training and operating resources to accomplish the agreed-upon task and achieve the key performance indicators.

Vouchers can be used to shift financing from the supply side of service delivery (that is, schools or training institutes) to the demand side (the end users). Those who receive government training vouchers can shop for training services and pay their service providers with the vouchers. Service providers can then get final payment from the government in exchange for the vouchers they have received. The vouchers thus help the government achieve two goals: first, they subsidize a targeted group of end users, such as young farmers with income below a certain threshold; and, second, they generate competition among providers. Some countries using such vouchers are Australia, Canada, Chile, Denmark, France, Germany, the United Kingdom, and the United States.¹¹ China has its own version, as found in the “Sunshine Program,” which provides

rural migrants with support for training and personal expenses but without promoting competition for delivery of the training services.

Some preconditions must be met for vouchers to meet their objectives. First, the user must have adequate information about the service to be bought. Second, there must be an adequate number of providers to promote competition. These conditions are often difficult to meet, in which case training funds provide an intermediate step to vouchers, using financing and competition to promote better outcomes for skills development. Training funds are used worldwide—Malaysia and Singapore offer good examples—to encourage more enterprises to offer training and to buy training services competitively on the open market from public and private providers (Dar, Canagarajah, and Murphy 2003). The financial sources of training funds often include a tax on employer payrolls of 1 to 2 percent, government budget provided by general taxation, and, in some countries, donors and financing agencies like the World Bank. The funds, in turn, buy training services for target groups, using competitive procedures or levy-grant arrangements in which they disburse funds to enterprises to carry out approved training programs.

Opening the market to nonstate provision. While skills development often requires government financing for reasons ranging from positive externalities to the need to support the poor, services in education and training can be supplied by both state and nonstate providers. Opening the market to nonstate providers reduces pressure on the government as a provider of services and mobilizes nonstate capital in building educational and training capacity. In Guangdong, nonstate providers of both education and training are relatively underdeveloped, with an estimated 7 percent of training capacity in secondary education being privately owned. The available evidence of this capacity highlights its responsiveness to market demand but also raises questions about the quality of services it provides.

The government can take steps to promote the expansion of nonstate capacity and strengthen regulations to safeguard quality. As a starting point, a clear set of regulations that do not discriminate against private providers—including, for example, opening access to public financing for private education and training—is needed. The intent of state regulation of private providers is to protect consumers from exploitation and abuse. Licensing, for example, is an instrument of the state that applies minimum standards for private training activities in return for the legal right to offer these services. Public information on performance and abuses can

serve as a low-cost means of regulating private education and training. Information on accreditation, for example, can help consumers sort good from bad training, both public and private.

Developing market institutions. Guangdong would benefit from giving more attention to strengthening its market institutions. Functions of market institutions—such as producing and disseminating market information, setting competency standards and testing, certifying those who meet them, and licensing and accrediting education and training providers—help guide the decisions made by all participants in labor markets. A provincial qualifications authority, operating independently or under the direction of a provincial training authority, holds promise for improving the quality and relevance of education and training. Countries like Ireland and New Zealand have introduced national qualifications authorities for this purpose. These authorities play a role in defining qualifications, setting competency standards, and testing individuals and certifying skills—functions that are now performed by the Department of Labor and Social Security.

Carrying forward school-based reforms. Along with the measures outlined above, school-based reforms will influence how successful Guangdong is in adjusting the skills of its workforce to the changes taking place in the economy. With support from the World Bank, the province is currently piloting school-based reforms in several public training institutions. The reforms include strengthening links between schools and local industry, improving school management and instructional capacity, introducing a modular competency-based curriculum focused on competencies sought by employers, and upgrading instructional equipment and facilities. Successful implementation can help enhance the quality and relevance of skills training offered by public training institutions across the country and across line ministries, thereby improving the use of public resources.

Providing Adequate Health Care to the Poor and Disadvantaged

Inequality of income and wealth oftentimes stems from inequality of health outcomes. Not only have many of the poor been driven into poverty by illness, but less than satisfactory health conditions also hinder people from exploring economic opportunities for greater income and wealth. Equal access to good health care services is, therefore, crucial to reducing inequality. In this regard, chapter 8 finds a great deal of potential for improvement in Guangdong province, particularly in the financing of health care services.

How can an economy achieve a distribution of health care services that is more nearly equal than its distribution of income? Obviously, income redistribution or subsidies are inevitable. Such redistribution is often carried out in one of two ways. The first is through the government budget, which involves collecting revenue through taxation and spending disproportionately on health care to subsidize lower-income households and regions. The second is through health insurance schemes, which involves collecting revenue in the form of contributions and spending disproportionately on health care to subsidize higher-risk individuals. Substantial room for improvement exists in Guangdong's health financing system in both respects—for example, through the three policy actions described below.

First, the provincial government could review the current situation of inter-governmental finance for health care services to identify gaps and develop an action plan aimed at a much higher degree of equalization. For example, in the current regime, the general transfers from the provincial budget to counties are determined by a formula that has been designed such that counties with faster growth in fiscal revenues receive higher transfers. Although this formula may provide a good incentive for revenue creation, the fact that indicators of social sector development are missing deserves attention. Reducing inequality and building a harmonious society require the allocation of transfers to the needy.

Second, actions can be taken to strengthen the role of the Medical Assistance (MA) system. The MA system is a special program in China's health safety net, designed to provide financial assistance for medical expenses and contributions from the New Rural Cooperative Medical Scheme (NRCMS) to specific groups of the vulnerable population, mostly the neediest. It is therefore a very important instrument for reducing poverty and inequality. In Guangdong, the targeted population includes *Tekun*, *Wubao*, and *Dibao* households and those who suffer from large and potentially impoverishing medical expenses.¹²

However, this instrument appears to be seriously underutilized in Guangdong province. In terms of per capita MA, Guangdong province is the fifth lowest among all of China's provinces. With spending of only 200 yuan per capita, Guangdong falls far behind comparable provinces such as Shandong (984 yuan), Zhejiang (1,073 yuan), and Shanghai (2,184 yuan). Although it would be good news if the need for MA in Guangdong were really almost 5 times lower than in Zhejiang and 10 times lower than in Shanghai, this appears unlikely, given the annual spending on health of 96 yuan among the poorest 20 percent of Guangdong's population. The large number of migrants may have contributed to the

low level of per capita spending, but this factor does not seem significant enough to explain the gap with other provinces, such as Shanghai and Zhejiang, which also have large migrant populations.

In addition, it appears that Guangdong's MA scheme is underdisbursed in some places. In one poverty-stricken county for which data were made available, the county's MA scheme spent 0.05 million yuan in 2005 and ended up with a surplus of 1.4 million yuan. In the following year, spending increased to 0.5 million yuan, while the surplus accumulated to 1.5 million yuan. In 2007, spending fell to 0.2 million yuan, while the surplus was 10 times larger at 2.2 million yuan. It is therefore important for the government to review the functioning of the existing MA system and take necessary action to strengthen its role.

Third, the provincial government could consider piloting greater pooling for the NRCMS. The NRCMS is an insurance scheme, and one of the most important functions of a health insurance scheme is to pool the health risks of its enrollees. Through pooling, it transforms the unpredictable risks of large amounts of expenses into predictable small and regular contributions for insurance premiums, which provides protection for its enrollees. In other words, it equalizes health risks among high-risk and low-risk individuals. A larger pool can bring lower costs and greater efficiency.

In this regard, neither Guangdong nor the rest of China has yet fully explored the potential of NRCMS, since the level of pooling remains very low—almost universally at the county level. If the political and economic obstacles—which are admittedly formidable—could be removed, and a greater pooling could at least be piloted, Guangdong could substantially increase the protection of its rural households against health risks without a proportional increase in government spending.

Like labor training services, health services can be financed by the government from the demand side or the supply side. In subsidizing patients, both the MA system and NRCMS are instruments of demand-side financing. With well-functioning demand-side financing, health service providers could find themselves in an environment in which the costs of services—including the costs of fixed assets such as buildings and equipment, as well as the true market costs of health workers—are fully recovered by the payments of users, who are covered by various financing programs. Health service providers would be able to finance their own investments and pay market-level compensation to their staff.

When demand-side financing is not functioning well and health services are underpriced in relation to real costs, health service providers have difficulty raising funds to finance investments. This seems to be the case

in rural Guangdong and the non-PRD regions. For example, an average rural township health center in the PRD region has 2.44 beds per 1,000 population, while in non-PRD regions, this ratio is only 0.79. A clear regional disparity also exists in the density of health professionals among different municipalities and regions in Guangdong province. Out of the 21 municipalities, 12 have a physician density lower than the provincial average, and 8 have a physician density even lower than the mountainous neighboring province of Guizhou, one of the least developed provinces in China.

The Guangdong provincial government has the option to increase its health spending on the supply side in the short run, in which case the government would cover the costs of fixed-asset investments for public health providers in exchange for discounted prices of their services for users. In the long run, along with the scaling up of health insurance schemes as well as the development of purchasing services, the health services in the lagging areas could be fully financed through demand-side financing.

Conclusion

After three decades of continuous, fast economic growth, China has entered a new phase of development in which inequality has become one of the top challenges on its development agenda. Not only does the trend of rising inequality weaken social cohesion and fuel conflicts and instability, but it also undermines the credibility of market-oriented reform and hinders longer-term development.

While the economic downturn caused by the global crisis in late 2008 might have forced policy makers to focus on short-term actions needed to stimulate the economy and maintain growth, it is important to recognize that longer-term issues, such as unbalanced growth whose benefits have not been shared broadly, will determine the ultimate vitality of the economy and the cohesion of the society. Experience suggests that inequality, which tends to constrain domestic consumption, may ultimately hurt economic growth. As a result, GDP growth is forced to follow an unbalanced path, with an increasingly high reliance on investment and exports, until it becomes unsustainable.

As China's powerhouse for economic growth and a pioneer of reform and opening up over the past three decades, Guangdong province has the opportunity—and also bears the responsibility—to lead the nation again by exploring a new pattern of pro-poor and more equitable growth.

To this end, a comprehensive strategy is needed for Guangdong to reduce inequality.

While it is a common perception that reduction in inequality can only be achieved at the expense of efficiency and growth, the truth is more complicated. As described earlier, inequality needs to be viewed as having three aspects: absolute poverty, inequality in opportunities, and inequality in outcomes. Absolute poverty is in fundamental conflict with the social values of most societies, and certainly those of China. Elimination of absolute poverty has, therefore, its own value that is independent from efficiency and growth. Reducing inequality in opportunities enhances, rather than conflicts with, efficiency and growth. Containing inequality in outcomes can also promote efficiency and growth to the extent that it can help ensure an even playing field or prevent theft of public property and abuse of public power through corruption. It is only when the focus is on reducing the “good” element of inequality in outcomes—that is, the inequality in income and wealth that reflects performance variations—that efficiency and growth will be compromised.

Based on this conceptual framework, this study recommends that Guangdong province adopt a three-pillar strategy of reducing inequality: eliminating absolute poverty, reducing inequality in opportunities, and containing inequality in outcomes. Central to this strategy, and indeed central to the economic reform over the past three decades, is the role of the state. Defining the appropriate role of the government in relation to private individuals and the market is critical to the success of every aspect of this strategy.

The appropriate role and level of government intervention differs among the pillars of the strategy. Eliminating absolute poverty is a responsibility that falls squarely on the shoulders of the government. While the involvement of private individuals and civil society is to be promoted, and while social protection programs should be designed in a way to encourage individual efforts, the state should assume the ultimate responsibility. Reducing inequality in opportunities, however, requires the proper combination of government intervention with market forces. The high degree of complexity notwithstanding, the most frequently observed pattern is a coexistence of inadequacy and excessiveness of government action—inadequate in areas where the government has the responsibility to fulfill, such as financing social services and ensuring quality, and excessive in areas where the government has some power to exercise. A greater emphasis on accountability in government actions is the key to improvement.

With its strong will to reform and its solid economic foundation, Guangdong is well positioned to take on these new challenges and implement such a comprehensive approach to reducing inequality. A range of policies recommended in this study can be considered to eliminate absolute poverty, boost rural income by giving people opportunities, and invest in people through more equitable service delivery. Guangdong's success in fostering shared growth will not only position it again as the leader of China's new phase of development; it can also provide a valuable example to other countries that are grappling with similar challenges.

Notes

1. The PRD region comprises nine municipalities: Dongguan (DG), Foshan (FS), Guangzhou (GZ), Huizhou (HZ), Jiangmen (JM), Shenzhen (SZ), Zhaoqing (ZQ), Zhongshan (ZS), and Zhuhai (ZH). The five municipalities in the northern region are Heyuan (HY), Meizhou (MZ), Qingyuan (QY), Shaoguang (SG), and Yunfu (YF). The three municipalities in the western wing are Maoming (MM), Yangjiang (YJ), and Zhangjiang (ZJ). The four municipalities in the eastern wing are Chaozhou (CZ), Jieyang (JY), Shantou (ST), and Shanwei (SW).
2. For more detailed discussion of poverty lines, refer to World Bank (2009).
3. This poverty line is the median of all 75 national poverty lines for developing countries used in the World Bank (2009) study.
4. See chapter 1, box 1.1, for a description of the data. A two-stage probability proportionate to size (PPS) sampling approach, in which the probability of selecting a sampling unit is proportional to the size of its population, was used to draw samples of counties (cities) and rural (urban) households. The national sample is representative at the national level. The difficulty in capturing the migrant population has been a challenge for analysis of related subjects.
5. The only PRD city with a hospital delivery rate below the provincial average was Zhuhai, which has a relatively developed economy and good performance on health services. Its lower hospital delivery rate was mostly due to a different recording and monitoring approach. A hospital delivery rate is the number of hospital deliveries in a year as a percentage of the number of pregnant women recorded by health institutions in a city, including those who are recorded in one city and deliver their children in another. Zhuhai has pioneered a more effective approach to recording the number of pregnant women, which makes the number of pregnant women appear larger than otherwise.
6. This section draws on Zhang 2009.

7. It should be noted that in most OECD countries, the GMIs are of very modest level and coverage, as they usually represent one basic component of a broader social assistance system.
8. A Chinese unit of land area, one *mu* equals 0.16 acre.
9. These are admittedly very simplified simulations based on 2007 revenue data, since full data for 2008 are not yet available.
10. Cities in the Guangdong sample included Dongguan, Foshan, Guangzhou, Huizhou, Jiangmen, Maoming, Shantou, Shenzhen, and Zhuhai.
11. See, for example, Bruttel (2005); Gasskov (2000); West et al. (2000); Finkelstein and Grubb (2000); and Carnoy and McEwan (2001).
12. The term *Tekun* refers to households in extreme poverty identified by local authorities and therefore eligible for basic social assistance provided by the government. *Tekun* programs operated as the basic social assistance scheme in localities where basic living allowance programs did not exist. *Wubao* refers to households without income, family support, or working capacity, and therefore eligible for guaranteed protection by the local government in the form of support for food, clothing, medical care, housing, and burial expenses.

References

- Bruttel, Oliver. 2005. "Delivering Active Labour Market Policy through Vouchers: Experiences with Training Vouchers in Germany." *International Review of Administrative Sciences* 71 (3): 391–404.
- Carnoy, Martin, and Patrick J. McEwan. 2001. "Privatization through Vouchers in Developing Countries: The Cases of Chile and Colombia." In *Privatizing Education: Can the Marketplace Deliver Choice, Efficiency, Equity, and Social Cohesion?* ed. Henry M. Levin, 151–77. Cambridge, MA: Westview Press.
- Dar, Amit, Sudharshan Canagarajah, and Paud Murphy. 2003. "Training Levies: Rationale and Evidence from Evaluations." Unpublished paper. World Bank, Washington, DC.
- Finkelstein, Neal D., and W. Norton Grubb. 2000. "Making Sense of Education and Training Markets: Lessons from England." *American Educational Research Journal* 37 (3): 601–31.
- Gasskov, Vladamir. 2000. *Managing Vocational Training Systems*. Geneva: International Labour Organization.
- Gottret, Pablo, and George Schieber. 2006. *Health Financing Revisited: A Practitioner's Guide*. Washington, DC: World Bank.
- Green, Stephen. 2008. "China—If Guangdong Were a Country . . ." Global Research, Standard Chartered Group. August 26.

- Guangdong Provincial Bureau of Statistics. 2009. *Guangdong Statistics Yearbook (2008)*. Guangzhou: Guangdong Statistical Publishing House.
- Ravallion, Martin, Shaohua Chen, and Prem Sangraula. 2008. "Dollar a Day Revisited." Policy Research Working Paper 4620, Development Research Group, World Bank, Washington, DC.
- West, Anne, Jo Sparkers, Todor Balabanov, and Sarah Elson-Rogers. 2000. *Demand-Side Financing: A Focus on Vouchers in Post-Compulsory Education and Training: Discussion and Case Studies*. CEDEFOP dossier. Thessaloniki: European Centre for the Development of Vocational Training.
- World Bank. 2005. *World Development Report 2006: Equity and Development*. Washington, DC: World Bank; and New York: Oxford University Press.
- . 2006. *Governance, Investment Climate, and Harmonious Society: Competitiveness Enhancements for 120 Cities in China*. Beijing: China Fiscal and Economic Publishing House.
- . 2008. *World Development Report 2009: Reshaping Economic Geography*. Washington, DC: World Bank.
- . 2009. *From Poor Areas to Poor People: China's Evolving Poverty Reduction Agenda: An Assessment of Poverty and Inequality in China*. Washington, DC: World Bank.
- Xing, Shaowen, and Hua Mi. 2008. "Behind the 3.5 Million Migrant Workers Stuck in Guangdong: Pearl River Delta Remains the Largest Destination of Migrant Workers." *China Business News*, February 28. <http://finance1.jrj.com.cn/news/2008-02-28/000003338349.html>.
- Zhang, Chunlin. 2009. "'Ride with the Tide': Facilitating the Spatial Transformation of Guangdong Industry." Unpublished policy note. June.

