While emerging economies boom, equality goes bust

Inequality spikes in developing nations around the world

By **Mara Hvistendahl**

SHANGHAI, CHINA—Starting in 1949, the Communist government led by Mao Zedong waged war on inequality of all kinds. The administration seized property from privileged classes, imprisoned intellectuals, and appointed teams of workers to run universities. The revolution upended the class structure, and the party campaigned against inherited wealth and gender discrimination. By the time the Cultural Revolution ended and Mao died in 1976, the government had mandated a bland unisex style of dress and effectively abolished property ownership. Society had ostensibly been "leveled off," even if in practice the new system concentrated resources in the hands of party cadres.

Then, beginning in the 1980s, the country pulled an abrupt about-face. China reintroduced land rights, allowed foreign investment, and spurred private enterprise in a few designated areas. Inequality was no longer the enemy; in fact, the government signaled that it was to become the new norm. The reformist leader Deng Xiaoping disparaged Mao's egalitarianism as "everyone eating from the same big pot." Overturning that failed ideal would bring growth to everyone eventually, he suggested: "It is good for some people to get rich first."

Some people did. China now has more than a million millionaires and more than 200 billionaires. Although no country can quite match this meteoric rise, similar stories have played out across the developing world. For example, the Latin American middle class mushroomed from roughly 100 million in 2000 to about 150 million a decade later, according to the World Bank.

But a rash of new studies—based on longitudinal surveys, better cross-sectional data, and renewed attention from scholars—has also laid bare extraordinarily high levels of inequality in these growing economies. In China, the richest 10% now makes 13 times as much as the poorest 10%, compared with five times as much in the United States, according to data from the China Family Panel Studies, run by Peking University's Institute of Social Science Survey in Beijing. With economic development, "the rising tide has indeed raised all boats," notes University of Maryland, College Park, sociologist Reeve Vanneman. "But the big yachts have done better, so overall income inequality is increasing."

That's not what many 20th century economists would have predicted. In a 1954 speech at an American Economic Association meeting, economist Simon Kuznets proposed that the urbanization that accompanies development inevitably triggers a growing income gap, but that societies become more equal as they democratize and adopt social welfare programs. When inequality was plotted against income levels, Kuznets maintained, the relationship looked like an inverted U curve—first rising, then falling. He won a Nobel Prize for his work.

But his analyses were based on data from the United States, the United Kingdom, and Germany in the 20th century. Kuznets himself cautioned that the hypothesis needed further testing. "The Kuznets curve is a perfect example of taking trends observed in wealthy countries and projecting [them]

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as universal to the world," says Timothy Moran, a sociologist at Stony Brook University in New York.

In fact, the curve's predictions have not held up in many countries. Initial growth between the 1960s and 1990s in the East Asian "tigers"—Hong Kong, Singapore, South Korea, and Taiwan—did not yield a larger income gap. In other industrialized countries such as the United States, meanwhile, inequality is now rising, not falling.

A wave of longitudinal studies tracking income and other metrics has helped flesh out the picture in developing countries like Indonesia, South Africa, India, and China. Those studies reveal growing inequality, which itself may stymie further growth, because poor people without access to good education cannot contribute to economies to their full potential.

But a tour of emerging economies also shows that cultural factors influence how governments react, and whether citizens accept what seems to be an inevitable march toward greater inequality, or protest it.

INDIA: HOW UNEQUAL? India illustrates the daunting task of measuring income and wealth in emerging economies. Half of all households get some income from agriculture, and most receive income from more than one source. A farmer might collect wages or receive payments from a cousin in the city, while a wage earner might also keep farm animals. To capture all earnings, surveyors for the national India Human Development Survey—which examines 41,554 households across the country—personally ask participants about 50 separate indicators of income.


Laborers work on new construction in the booming city of Chongqing, China.

This herculean labor pays off, says Vanneman, a principal investigator on the survey, which is jointly administered by the University of Maryland and the National Council of Applied Economic Research in New Delhi. For example, one previously elusive indicator for India was the Gini coefficient, a common index of income inequality ranging from 0, in which everyone makes the same income, to 1, in which a single rich person would get a country's entire income. Government surveys based on expenditures and excluding income data had found figures in the 0.30s—below the level in the United States of 0.40. Such figures sparked "disbelief" among scholars, Vanneman notes: "Anybody who walks the streets of India cannot believe that inequality in India is as low as the common statistics suggest."

In 2010, the Indian survey found a Gini coefficient of 0.52—close to China's, which scholars most recently estimated at 0.55. At a time when attention is focused on inequality in the developed world, that's a sharp reminder that the worst inequalities are often in emerging economies (see map, pp. 820–821). Inequality in high-income countries "still falls well below levels found in low- and middle-income countries," Vanneman notes.

CHINA: SURFING A RISING TIDE. In China, the market reforms of the past few decades have yielded some spectacular successes, giving rise to the lucky billionaires and also lifting the standard of living for the middle class. Between 2004 and 2009, the percentage of Chinese owning color TVs shot up from 80% to 96% and the percentage owning refrigerators swelled from 37% to 54%, according to surveys by sociologist Martin Whyte of Harvard University and colleagues at Peking University's Research Center for Contemporary China.

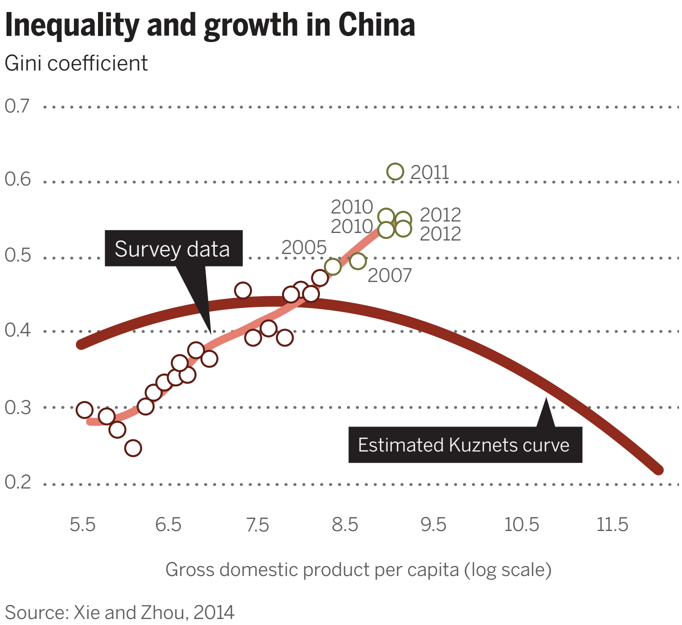
Even so, the middle classes in China or India are "still rather poor within global comparisons," Moran cautions. And the dramatic boost in inequality in China now presents a powerful challenge to the Kuznets curve. In a paper published online last month in the *Proceedings of the National Academy of Sciences*, sociologists Yu Xie and Xiang Zhou, both of the University of Michigan, Ann Arbor, plot China's rising income inequality, represented by the average Gini coefficients found by seven independent household surveys, against a Kuznets curve.

In 1980, after the storms of the Cultural Revolution, China was well below the level of inequality predicted by the curve, with a Gini coefficient of merely 0.28. But in 2002, the country's Gini intersected the curve and then shot beyond it, Xie and Zhou found (see graph). The relationship between inequality and development in China looks more like a straight diagonal line than an inverted U, with no sign of flattening. Fearing a backlash, Chinese officials have suppressed publication of the Gini coefficient (*Science*, 31 May 2013, p. 1037) and challenged estimates of it that they consider high.

But in fact Chinese appear remarkably tolerant of income gaps. The 2004 round of the survey by Whyte and colleagues polled 3267 Chinese on their attitudes as well as their income. Although respondents valued equality and believed the national income gap was excessive, only 30% supported redistributing wealth from rich to poor. Asked why people are poor, 61% said a lack of ability was an important cause, far higher than in any other country.

In the next round of the survey, done in 2009, the researchers found that despite the rising Gini, even fewer respondents viewed existing inequality as excessive. The findings challenge the notion that "rising income gaps are a major, or even the primary, threat to social order and political stability in China," Whyte says. In a separate study, Xie, who also directs the Center for Social Research at Peking University, found that Chinese largely believe Deng's assertion that development and inequality are necessarily linked—even though economists have mostly disproven that statement.

In 2006, Xie and colleagues polled residents in six provinces, asking them to separately rate levels of development and inequality in five countries: Brazil, China, Japan, Pakistan, and the United States. For level of development, respondents came up with rankings that closely mirrored U.N. estimates. But their guesses for inequality were way off. Instead of corresponding to Gini coefficients for the various countries, respondents believed that the most developed countries have the greatest inequality. Thus, many Chinese view inequality as the price of economic growth and accept it "as a fact of life," Xie says. "That's why there's not as much resentment."



STRAYING FROM THE CURVE. Surveys taken during the last 10 years show that as China continues its rapid economic growth, its inequality continues to shoot upward, in contrast to what a Kuznets curve would predict.

SOUTH AFRICA: ECHOES OF APARTHEID. Halfway around the world from China, South Africa faces similar economic challenges, but has a very different response, perhaps because the countries' starting points were so different. For decades under apartheid, black South Africans faced discriminatory barriers to mobility. As those barriers fell after 1994, expectations for a more level playing field soared. "This is the new South Africa," says Murray Leibbrandt, an economist at the University of Cape Town and a principal investigator on the South African National Income Dynamics Study. "There was almost this irrationality that things were going to be much better moving forward."

By some measures, things did get better: As in China, absolute mobility rose, and most people are better off economically than they were 20 years ago. The share of people living below the poverty line—defined as $60 a month—fell from 57% in 2006 to 46% in 2011. Some expected reshuffling occurred, as skilled black Africans moved up the ladder and low-skilled whites moved down.

But despite significant investment in education and a government vocally committed to fighting inequality, whites continued to earn more than blacks, and income became more concentrated in the top 10th. Between 1993 and 2008, overall income inequality actually increased, with the country's Gini coefficient rising from an already high 0.66 to a staggering 0.70, one of the highest in the world. Demand for highly skilled workers at the top increased, while black citizens at the bottom, burdened with poor education and health, remained relatively worse off. "The disadvantages of apartheid just linger," Leibbrandt says.

South Africans may be less accepting of inequality than the Chinese. In the past 5 years, millions of South Africans have taken to the streets to protest everything from high crime rates to a lack of affordable housing. About 91% say income differences are too large, and two-thirds say the country is going in the wrong direction, according to the South African Social Attitudes Survey.

And yet, the hopefulness that dominated post-apartheid has not yet died. The survey also found that 42% of respondents believe that life will improve over the next 5 years. Given trends in absolute mobility, they are probably right.

LATIN AMERICA: SEEKING THE SWEET SPOT. In Latin America, as in South Africa, a colonial past primed nations for inequality. Institutions established by colonial governments allowed elites to consolidate power and excluded indigenous and black populations from land ownership, education, and politics. Thus, the region has historically had very high Ginis: 0.59 for Brazil in 1998 and 0.55 for Mexico in 1996, according to a recent working paper from the World Bank.

Added to this historically large gap between rich and poor is the fact that people born poor tend to stay poor. In Mexico, children of managers are a whopping 15.6 times more likely to hold on to their class status than to change it, according to data from the Mexican Social Mobility Surveys. Those are "near caste-like conditions," wrote sociologist David Grusky of Stanford University in California and colleagues in a working paper last fall. In the United States, by contrast, children of managers are only 2.3 times more likely to end up in the same class. In every category except farming, Mexicans are less mobile than Americans. New York University sociologist Florencia Torche has found a similar lack of social mobility in Chile.

Nevertheless, the gulf between income classes in Latin America has gradually nar-

An elderly man holds out his begging cup in bustling Hong Kong.

PHOTO: AFP/GETTY IMAGES

rowed, resulting in an impressive decrease in inequality across the region. In Mexico, the Gini coefficient fell 0.07 units between 1996 and 2010, to 0.48. In Brazil, the Gini coefficient dropped 0.05 units from 1998 to 2009, to 0.54. Throughout the 2000s, Ginis fell in 13 of 17 Latin America countries for which the World Bank has reliable data.

So although the region is still battling inequality, such countries are now at something of a sweet spot, says Timothy Smeeding, an economist at the University of Wisconsin, Madison: As with the Asian "tigers" before them, the economy is growing, while inequality is falling. Even if it remains hard for people to move up relative to each other, many people are better off than before because absolute mobility is rising.

GROWTH FOR ALL. Policy measures helped achieve such "pro-equity growth," and scholars from countries like South Africa are studying how it was done. For example, the Brazilian government used grants to boost education. Average years of schooling shot up even among the poor. So when strong economic growth hit in the 1990s, marginalized citizens could get better jobs. From 2002 to 2009, the income of the bottom 10% grew at almost 7% a year, while that of the wealthiest 10% inched up by only 1.1% a year. The lesson for other developing nations, Leibbrandt notes, is the importance of job creation: Improvements in education and health may be good on their own, but they "don't narrow the income distribution until you get some feedback into the labor market."

Bucking theories put forward by proponents of the Kuznets curve, research now suggests that inequality may be a trap for developing countries. Far from boosting development, a large income gap can slow growth and stymie poverty reduction (see p. 851). In an entirely equal society, an increase in gross domestic product benefits everyone to the same degree, explains J. Humberto Lopez, an economist in the World Bank's Latin America and Caribbean region. In an unequal one, those at the top accumulate more income, leaving fewer dollars to boost households at the bottom. So to achieve the same reduction in poverty, highly unequal Brazil now needs to grow at least twice as much as a more equal country like Poland.

Growth suffers as well; in unequal societies, talented people born into poverty have fewer opportunities to contribute. "It's a perfect storm," Lopez says. "High inequality is bad for poverty, high inequality is bad for poverty reduction, and high inequality is not good for growth."

From Latin America's success at easing this trap and other cases, one thing now seems certain: Where inequality does decline, government involvement is key. Without substantial improvements in education and the social welfare system, "it's not natural" that inequality falls on its own, says Gan Li, an economist at Texas A&M University, College Station, and the Southwestern University of Finance and Economics in Chengdu, China.

In China, now that Deng Xiaoping's prediction about some getting rich first has come true, economists hope it, too, will adopt a more "pro-poor" strategy.

Over the past decade, China has boosted investment in social welfare programs, but it hasn't yet reached the spending necessary to begin leveling the playing field, Gan says. "China is at a crossroads," he says. The government could follow the status quo, or it could "follow many other successful countries' paths—and change the system." ■