

Lugo, Maria Ana; Raiser, Martin; Yemtsov, Ruslan

Research Report

China's economic transformation and poverty reduction over the years: An overview

KCG Policy Paper, No. 8

Provided in Cooperation with:

Kiel Centre for Globalization (KCG)

Suggested Citation: Lugo, Maria Ana; Raiser, Martin; Yemtsov, Ruslan (2022) : China's economic transformation and poverty reduction over the years: An overview, KCG Policy Paper, No. 8, Kiel Centre for Globalization (KCG), Kiel

This Version is available at:

<http://hdl.handle.net/10419/251117>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



KCG Policy Paper

China's Economic Transformation and Poverty Reduction over the Years: An Overview

Maria Ana Lugo, Martin Raiser and Ruslan Yemtsov

No. 8 | February 2022

China's Economic Transformation and Poverty Reduction over the Years: An Overview*

Maria Ana Lugo, Martin Raiser and Ruslan Yemtsov

Abstract: The present document examines the role of social and economic transformation in the process of poverty reduction in China. China's economic growth and poverty reduction over the past 40 years are historically unprecedented both in speed and scale. Between 1978 and 2018 China's economy grew at an annual rate of 9.5 percent, twice as fast as the other developing regions of the World. The proportion of those living in poverty in rural areas fell from 97.5 percent to less than one percent over this period. There are 765 million fewer poor people in China in 2019 than they were in 1980. This means that China alone accounts for three quarters of the total reduction in global extreme poverty in that period. Although China's growth rate will continue to slow in the coming decades, the scope for economic convergence through structural transformation has not yet been fully exhausted. Further urbanization and associated productivity increases can continue to play a critical role for poverty reduction in China. However, for progress to be sustained a number of adjustments to policy will be needed.

Keywords: Poverty reduction, economic transformation, rural-urban migration, China

**This paper is prepared for the sixth Global China Conversation "40 Years of Poverty Reduction in China: What are the Challenges?" that was held by the Kiel Institute for the World Economy on February 3rd, 2022, in cooperation with the Center for Modern East Asian Studies (CeMEAS) of the University of Göttingen, the Swiss Economic Institute (KOF) at the ETH Zürich, and the Technical University Wildau.*

Maria Ana Lugo, Ph.D.*
Senior Economist
EAP Poverty and Equity GP for China, World Bank
mlugo1@worldbank.org

Dr. Martin Raiser*
Country Director for China and Mongolia, and
Director for Korea, World Bank
mraiser@worldbank.org

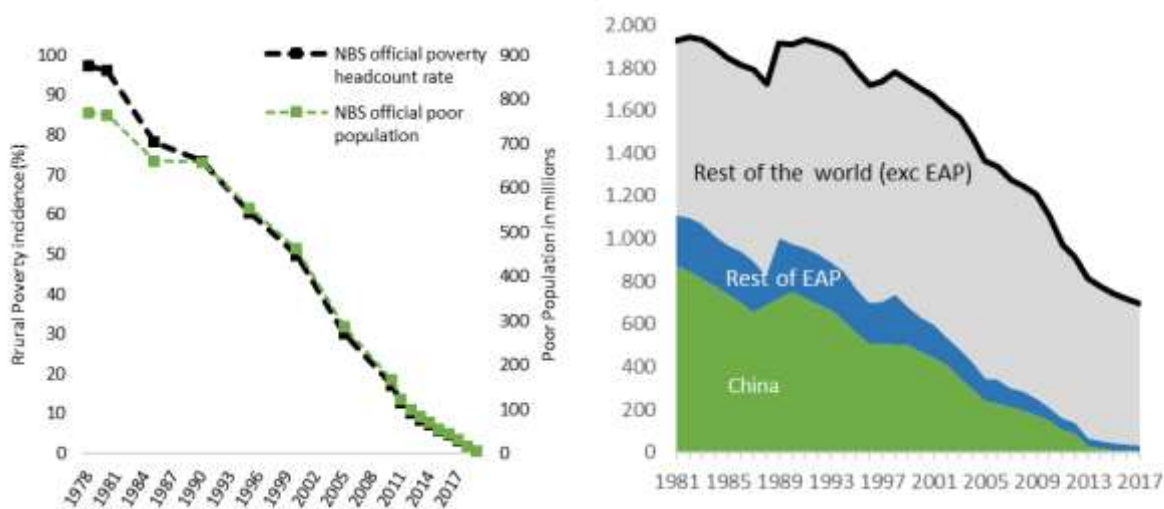
Ruslan Yemtsov, Ph.D.*
Human Development Program Leader for China,
Mongolia and Korea, World Bank
ryemtsov@worldbank.org

**Views reflect those of the authors only and should not be attributed to the World Bank.*

About the Kiel Centre for Globalization (KCG): KCG, initiated by Christian-Albrechts-University of Kiel and Kiel Institute for the World Economy, works on an interdisciplinary research agenda that evaluates the proliferation of global supply chains as an important aspect of globalization. To this end, the KCG brings together researchers from economics, ethics and management science. More information about KCG can be found here: www.kcg-kiel.org.

China’s economic growth and poverty reduction over the past 40 years are historically unprecedented both in speed and scale. Between 1978 and 2018 China’s economy grew at an annual rate of 9.5 percent, twice as fast as the other developing regions of the World. The proportion of those living in poverty in rural areas—as per the official 2010 standard—fell from 97.5 percent to less than one percent over this period (Figure 1, left panel).¹ There are 765 million fewer poor people in China in 2019 than they were in 1980. This means that China alone accounts for three quarters of the total reduction in global extreme poverty in that period (Figure 1, right panel).²

Figure 1: Poverty reduction and economic growth in China over the past 40 years (left) and the number of extreme poor in China and the rest of the world, 1981-2017 (right)



Sources: Left: Official poverty headcount rate for rural areas is from China Statistical Yearbooks (NBS) using the 2010 standard. Right: based on Povcalnet adapted from World Bank (2018a). EAP: East Asia and the Pacific.

The fast pace of economic growth was the major force in this process. For every percentage point of mean income per capita growth during the past four decades, poverty has declined on average 1.45 percent.³ On average, those at the bottom of the distribution have seen their household expenditure grow around 6 percent per year for almost 40 years. However, incomes of the top three quintiles rose faster and inequality increased until around the Global Financial Crisis – since then there has been a modest decline. Overall, “the poverty agenda has been a growth agenda” (Freije-Rodriguez et al., 2019).

China’s economic growth is the result of rapid structural transformation. The drivers of economic growth have shifted from agriculture to industry and to services over time. The start of economic reforms in agriculture set the stage for an inclusive growth path, as the sector in 1978 employed almost 70 percent of the labor force (Figure 2). From the mid-1980s onward, industrialization caught up quickly to become the main driver of growth in the next three decades. More recently, services have become the leading engine of growth. Structural transformation was accompanied by rapid urbanization with the share of the population living in urban areas rising from 20 percent in 1980 to

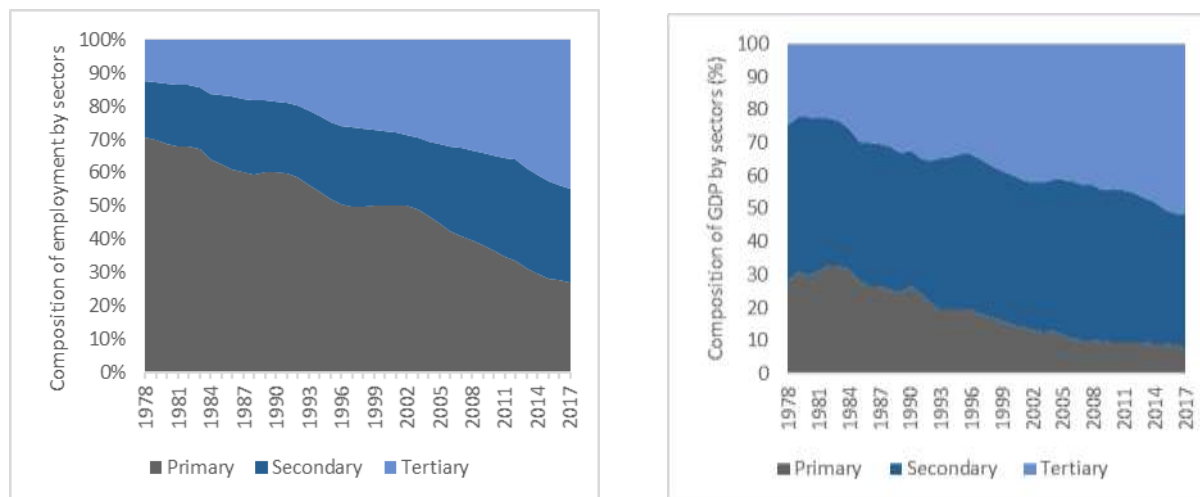
¹ For comparability over time, poverty is measured using the 2010 Poverty standard, as reported by NBS Statistical Yearbook. Yet, it should be noted that two other standards have been used in the past, the 1978 standard and the 2008 standard, that were more relevant at the time. Using these lower lines, poverty has followed a similar pattern of continued decline, although displayed a more noticeable slowdown in poverty reduction towards the end of the 1990s and into mid-2000s.

² World Bank (2018a).

³ Growth elasticity of poverty using Povcalnet data from 1981 to 2018 based on grouped data provided by NBS.

60 percent in 2018.⁴ With structural transformation came accelerated demographic changes, with falling dependency rates contributing significantly to increased incomes.

Figure 2: Rapid structural transformation in both labor allocation and value-added



Source: China Statistical Yearbook 2018 Form 3-2 and 4-2.

The present document examines the role of social and economic transformation in the process of poverty reduction. It is well-established in the literature that high rates of agricultural growth in the first two decades after 1978 translated into impressive rates of poverty reduction.⁵ There is also evidence that the rise of Township and Village Enterprises (TVEs),⁶ government investment,⁷ the restructuring of the industrial sector, and the opening of the economy to global trade⁸ were factors that contributed to family income growth and helped lift millions out of poverty. Other studies stress the role of migration to urban areas as an important mechanism for people to move out of poverty. This document brings these strands together using a uniform framework and consistent data. The paper summarizes three World Bank working papers looking respectively at China's economic transformation and job creation, rural urban migration, and the relative role of labor incomes, demographic changes and private and public transfers in China's poverty reduction.

While the way economic transformation contributes to improved incomes and poverty reduction are fairly intuitive (following essentially the classic development model due to Arthur Lewis), such transformation is not automatic. This begs the question what policy lessons can be learned from China's success. Three lessons stand out.⁹

⁴ NBS 2019 Yearbook.

⁵ Ravallion and Chen (2007) and Montalvo and Ravallion (2010) estimate that in the 1980s and 1990s, agriculture was "the real driving force in China's remarkable success against absolute poverty, rather than the secondary (manufacturing) or tertiary (services) sectors" (Montalvo and Ravallion 2010, p. 13). On the importance of agriculture for poverty reduction, see also World Bank poverty Assessments (1992, 2001, 2009).

⁶ Naughton (2007), Riskin (1987).

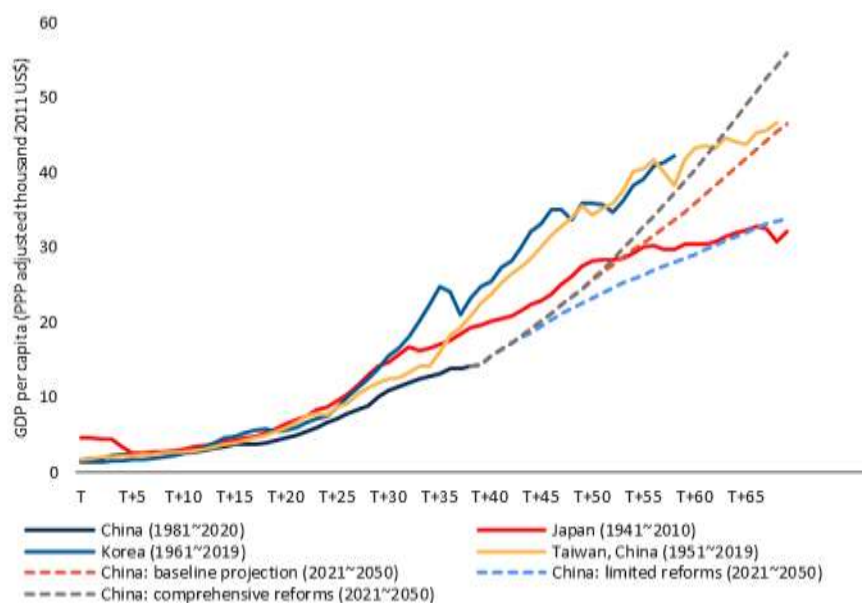
⁷ Fan et al. (2004, 2005).

⁸ Among others, Chen and Ravallion (2004), Hertel et al. (2004) and Sicular and Zhao (2004) present evidence of the likely positive impact that WTO accession may have on household incomes. Yet, there is only weak evidence that it may contribute directly to poverty reduction in rural areas, as most gains were accrued by urban households. Indirect effect through increased migration may be a more relevant channel.

⁹ See also Lugo, Raiser and Yemtsov (2021): <https://www.brookings.edu/blog/future-development/2021/09/24/whats-next-for-poverty-reduction-policies-in-china/>

- First, the fast pace of China's growth post 1980 was to some extent a reflection of the extremely low starting point. With levels of human capital much higher than countries at similar levels of income, declining fertility rates, relatively equal distribution of land, and substantial administrative capacity, China was poised to do well once the distortions of the Mao era were removed (Ravallion, 2021). China has followed the East Asian development model – in this context, its success is still remarkable given its size, but no longer an outlier.

Figure 3: China's Growth post-reform in regional perspective



Source: Maddison Project Database 2020 (MPD2020); National Bureau of Statistics of China (NBS); Penn World Table version 10.0 (PWT10.0); World Bank Group and the Development Research Center of the State Council, P. R. China. 2019 (World Bank & DRC, 2019).

- Second, market-oriented reforms drove the expansion of economic opportunities. China's economic transformation from a largely rural and agrarian country to a predominantly urban, industrial powerhouse followed the country's comparative advantage, using market signals to create appropriate incentives, and competition among regional governments to test policies and among companies to catalyze productivity gains. China introduced market incentives gradually. But its story of transformation and growth is consistent with classical economic theories of development.¹⁰
- Third, while markets were instrumental, the state played an important role. China's government at central and local level was far more than a by-stander and used its high capacity for the provision of public goods and for overcoming collective action failures. Risk sharing in the context of fuzzy property rights, large scale infrastructure investments to help integrate the domestic market, and regulatory interventions to keep wage rates low and resulting savings and investment rates high contributed to the rapid pace of capital deepening and structural change. High powered incentives created a strong performance orientation in China's administration, while a high degree of decentralization made government response to

¹⁰ See also Raiser (2019): <https://www.brookings.edu/blog/future-development/2019/10/17/chinas-rise-fits-every-development-model/>

local conditions (Ang, 2016). China's approach to poverty reduction is a case study in effective governance, as conceptualized by World Bank (2017).

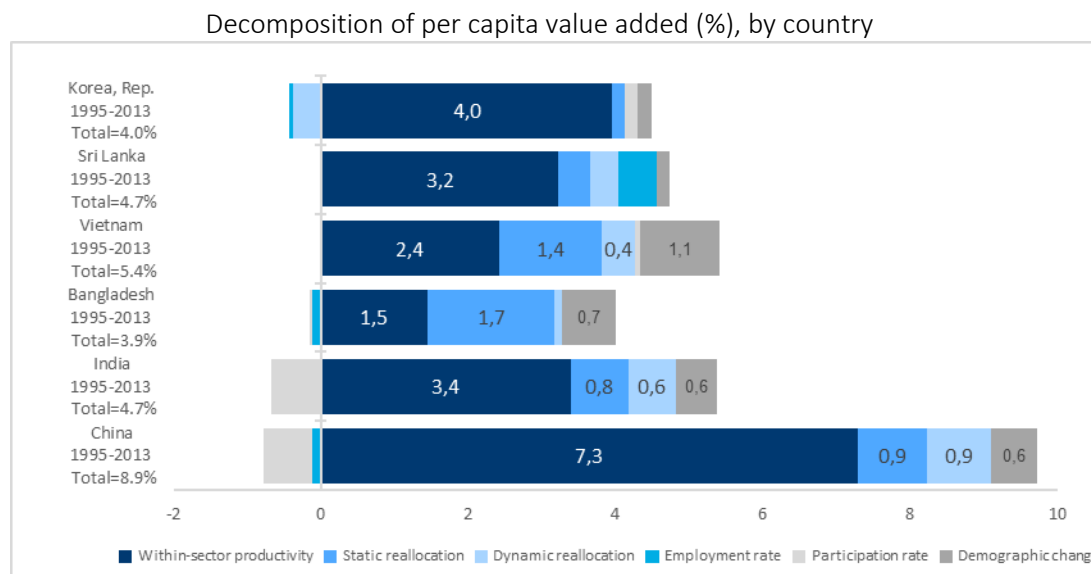
Better jobs for more people

All the standard elements of social and economic transformation are present in the case of China. The country consistently created better urban, waged jobs for more people, drawing on its labor abundance in rural areas and increased demand for goods and services in its cities as well as from the rest of the world. The [first paper](#), authored by Dino Merotto and Hanchen Jiang, entitled "*What was the impact of creating better jobs for more people in China's economic transformation?*" describes China's transformation by looking at the transitions in the jobs people do and the wage-incomes they receive over a quarter of a century in China. In doing so, the paper brings an international comparative perspective.

The movement of more people into better jobs with higher incomes is at the center of China's growth and poverty reduction. Increased earnings and investment in the "modern sector" in China's cities created a virtuous cycle of new investment and employment in new production methods, higher labor incomes, and new demand for more income elastic goods and services. Increased urban labor demand drew abundant labor from the rural "traditional" sector. However, the moderation of urban wage growth resulting from the increased supply of labor through the gradual relaxation of the Hukou system increased returns to capital in China as labor productivity rose to supply buoyant export and consumer demand. This created the incentive for reinvestment in new goods and services for which new markets were opening.

The biggest gains in per capita income growth came from labor productivity increases *within* sectors, driven by strong capital deepening. Compared to the other fastest growing developing economies in the world over the period 1991-2018, China stands out by the large contribution (over 7 percentage points) of within sector labor productivity to total per capita growth (especially from industry) (Figure 4). Structural change added 1.8 percentage points to per capita income growth in China, matching the contribution of structural change in poorer Bangladesh and India. Fast labor productivity growth was driven by strong capital accumulation, financed by a combination of corporate profits and household savings. Production of cheaper manufactured goods for the world market was an important catalyst, but domestic demand has played the dominant role in the past 15 years.

Figure 4: Labor productivity, particularly from industry, drove high economic growth



Chinese workers benefited from three channels of rising productivity: urbanization, diversification, and formalization of jobs. Rapid urbanization brought younger workers of all skill levels to cities. The youth share in rural employment fell from 30 percent in the late 1980s to 11 percent in 2013. With urban transformation came the diversification of jobs into industry, especially construction (primarily among male youth), and into services (particularly among women). The share of wage employment expanded, from 45 percent in 1988 to 73 in 2013, with over 200 million additional wage jobs. The shift into waged employment was accompanied by more jobs in the private formal sector, particularly among the better educated workers. Between 1988 and 2013, the share of workers with at least completed secondary schooling increased 3.8 percent per year. The accumulation of human capital, alongside that of physical capital, contributed to fast labor productivity growth, although public human capital investments trailed outlays for physical infrastructure.

Broad-based wage growth helped to narrow the earnings gaps since 2002. Wages remained higher in urban than rural areas throughout the reform period, but rural-to-urban migration dampened the real increase in labor costs to urban firms, and narrowed wage gaps from the early 2000s. The creation of urban and eventually rural waged jobs in processing industries and services also tightened rural labor markets and consequently increased the labor returns to poorer rural workers. Unlike in other countries, as workers were getting more educated, returns to higher education did not decline appreciably. This suggests that broadly educational content kept pace with changing labor market demand. However, large inequalities in access to quality education persist and may become a binding constraint for further wage convergence going forward (Hell and Rozelle, 2020).

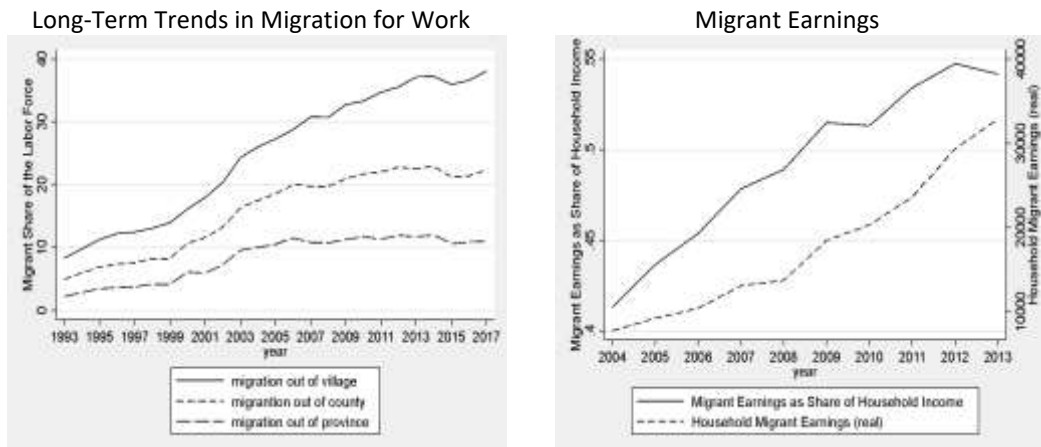
Rural-urban migration

Essential to China’s economic transformation was the progressive movement of workers out of rural areas to cities, following the gradual relaxation of the Hukou system and the increased demand for labor in urban areas. The [second paper](#), authored by John Giles and Ren Mu and entitled “*Migration*,

Growth and Poverty Reduction in China’s Villages: A Retrospective and Discussion of Future Challenges” takes on the issue of migration in China over the past decades. The movement to higher productivity activities in urban areas played a significant role in China’s economic growth, as recognized in multiple studies.¹¹ Despite recognition of the importance of labor mobility for growth, these studies do not address the question of how China’s rural residents have benefitted from improved labor mobility. This paper aims at filling this gap.

Rural to urban migration began in the 1980s but accelerated sharply in the 2000s. China’s residential registration (*hukou*) system and the land tenure system have shaped migration patterns. Population movements between rural and urban areas began to increase in the 1980s with the emergence of the market economy, and the consequent adoption of more flexible *hukou* policies.¹² Since then, rural-to-urban migration has continuously risen over the years (Figure 5, left panel). The total number of migrant workers in 2018 was 288 million.¹³ While many first migration experiences were to urban areas within home provinces, the demand for labor in coastal regions —following the establishment of Special Economic Zones— would draw migrants outside of home provinces. After the mid-1990s private local businesses also became important sources of migrant employment.¹⁴ Since the 2000s, with the Western Development Project aimed at narrowing regional inequality, increased investments opened employment opportunities in western and inland regions, leading to a sustained rise in intra-province migration.¹⁵ Most recent data indicate that migrant labor supply and wage growth of low skilled workers between 2004 and 2014 contributed to an increased share of migrant earnings in total rural household income (Figure 5, right panel).

Figure 5: Migration has increased consistently over time, as have migrant earnings as a share of total household income



Source: Annual Village Surveys from the Ministry of Agriculture, Research Center for Rural Economy (RCRE) Fixed Point Survey.

¹¹ Bosworth and Collins (2008) and Tombe and Zhu (2019).

¹² For instance, in 1985, the Ministry of Public Security established a temporary urban *hukou* system, which provided a local temporary residence permit to individuals with a legitimate job or business in the city. These guest worker permits (or, *zanzu zheng*) were widely available to for migrants starting in 1988 after completing an application to the local public security bureau office. Such policy effectively guaranteed a legal status to migrants, whose presence in cities would otherwise be illegal under the strict *hukou* regulations.

¹³“National Monitoring and Survey Report on Rural Migrant Workers 2018” released by the National Bureau of Statistics, http://www.stats.gov.cn/tjsj/zxfb/201904/t20190429_1662268.html.

¹⁴ Chen and Coulson (2002).

¹⁵ Liang (2016).

Migration increased earning and consumption for rural households. The most credible estimates suggest that households with migrants have per capita incomes 8.5 to 13.1 percent higher than those without migrants, once unobservable factors associated with migration are taken into account.¹⁶ In addition, based on data between 1995 and 2002, a one percentage point increase in village out-migration is associated with poorer households (even considering households not participating in migration directly) seeing their consumption increase by 10 percent, a rate that was higher than for more affluent households in the same villages.¹⁷ The effect is mediated in part by labor reallocation across activities within the village, inducing mobility out of agriculture among the poor.

In addition, outmigration reduces the probability of falling and remaining in poverty.¹⁸ A one percentage point increase in the share of a village workforce employed as a migrant is associated with a 3.2 percentage point decline in the probability of falling into poverty, and among the poor, the same increase in migration is associated with a 3.5 percentage point reduction in the probability of remaining poor.¹⁹

While being a powerful force in boosting living standards of the rural poor, migration also had some negative social consequences, potentially widening inequalities. Some studies have identified a *positive* relationship between parental migration and child material wellbeing, likely reflecting the income effects of migration. In contrast, studies that focus on children's mental health, behavioral issues, and delinquency consistently conclude that the impact of parental out-migration is unambiguously negative. These studies conclude that reduced parental supervision and protection, weakened parent-child bonding and communication, resulting from parental migration, cannot be compensated for through increased economic resources gained through migrant employment. A similar mixed pattern is observed in terms of the welfare of left-behind elderly.

Economic transformation across the distribution

What was the relative importance of increased earnings, demographic changes, and private and public transfers for rural poverty reduction? The [third paper](#), authored by Maria And Lugo, Chiyu Niu and Ruslan Yemtsov and entitled "[China's poverty reduction and economic transformation: a decomposition approach](#)", tries to answer this question by systematically exploiting several waves of household budget survey data.

High economic growth was the major factor behind China's impressive achievements. High productivity growth led to rapid gains in income across the distribution, in rural and urban areas and across regions of the country. The incidence of growth shifted over time, however, with rural income gains lagging urban increases and the Western region lagging the Coast between the mid-1980s and mid-2000s. Demographic changes played a secondary but still important role. Decomposition of poverty changes by income components suggests that changes in the share of the adult population (14 and above) contributed between 2 and 7 percentage points to poverty reduction throughout the decades, with the largest contributions in 1988-2007 period (Figure 6, left panel). In the last decade,

¹⁶ Du, Park and Wang (2005).

¹⁷ De Brauw and Giles (2018).

¹⁸ Kinnan, Wang and Wang (2018).

¹⁹ Giles and Murtazashvili (2013).

public transfers, particularly with the introduction of public pensions for migrant and rural workers, and to a lesser extent private transfers, made important contributions to poverty reduction.

In the early years, within sector income growth, particularly in agriculture, was the most important factor behind poverty reduction. Rising labor income was the largest contributor to poverty reduction between 1988 and 2007 (Figure 6). Rising agricultural productivity was the most important factor behind this. Earnings per worker in the agricultural sector grew at an annual rate of 8 percent between 1988 to 1995 across, and a vast majority of the rural workforce (more than 4 out of 5) remained engaged in agriculture. Richer households were more likely to switch to off-farm activities, favored by the development of township village enterprises in rural areas while poorer households benefited mainly from rising agricultural productivity. Since the mid-1990s, increasing income from non-agriculture activities started playing a more noticeable role in poverty reduction, both due to the shift of workers to industry and services (even among the lower quintiles) and to the growth in earnings per worker in these sectors.

Since the early 2000s, shifts in population from rural to urban areas contributed more directly to poverty reduction. Migration accounted for 20 percent of the overall national poverty reduction from 2002 to 2016. Despite rapidly increasing rural urban migration, private transfers did not contribute significantly to poverty reduction until the last decade as described below.

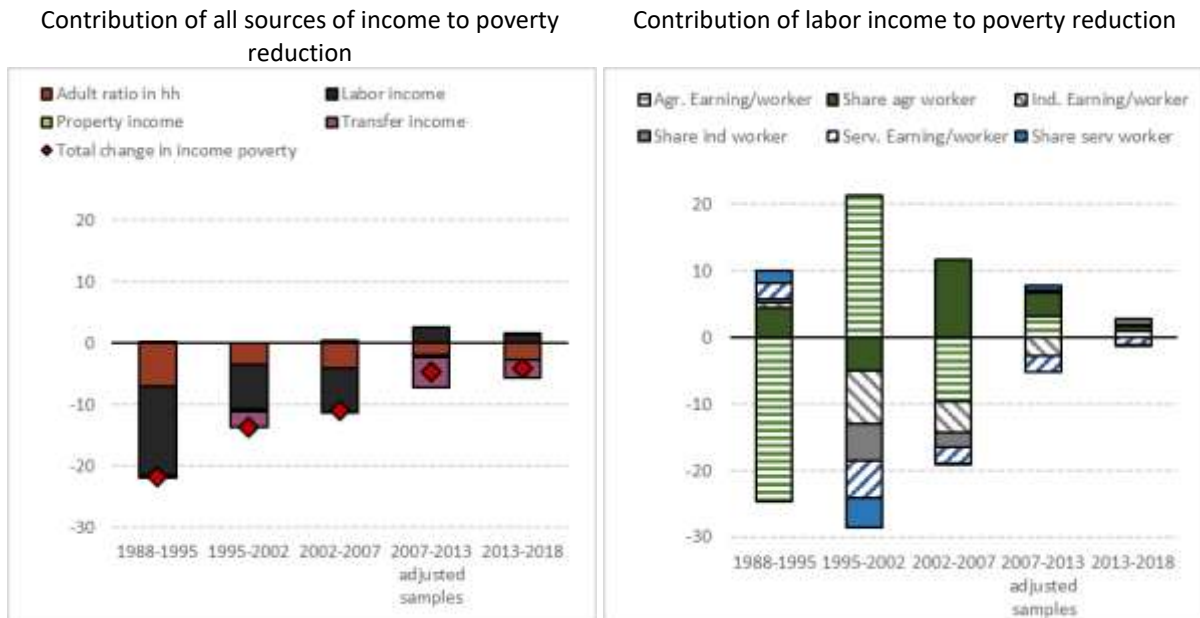
Over the years, the regional contributions to poverty reduction shifted from Coastal areas to the Western and Central regions. The establishment of Special Economic Zones and the Coastal Development Strategy in the mid-1980s focused the government's attention on developing the country's more prosperous coastal provinces. By 1999, the Eastern region's GDP was twice as high as the rest of the country. Despite having only a quarter of the poor in 1995, the region contributed to 40 percent of the total rural poverty reduction between 1995 and 2002, with 79 million fewer poor people. In the 2000s, the government implemented the Western Development Strategy ("Go West") and poverty reduction shifted to the Western region, accounting for 50 percent of the total decline in rural poverty between 2002 and 2007 (while representing less than one quarter of the country's population).

By the late 2000s, rural poverty fell below 10 percent and became increasingly concentrated in remote areas in the Western and Central regions. Earnings per worker for those in industry in rural areas grew fast across the distribution, but reallocation of employment out of agriculture and growth of earnings in services among those in the bottom quintile slowed. As a result, overall labor income did not contribute to poverty reduction between 2007 and 2013 (Figure 6). A similar dynamic is observed in 2013-18, when non-agricultural earnings per worker continued to grow across the distribution but the decline of earnings in agriculture (per worker) among the poorer quintile led to an overall null contribution of labor income to poverty reduction in the period.

Instead, private and public transfers started to play an increasing role in eradicating remaining rural poverty. As migration to urban areas accelerated, family transfers (remittances) became increasingly important to the relatively worse-off rural households at the end of the 2000s. Basic education fees were also waived for rural households since the mid-2000s. Moreover, a new rural collective medical scheme was piloted in 2002 and scaled up in 2006. Since 2011, the central government has strengthened social policy by extending the coverage of a basic non-contributory pension to rural areas and scaling up other social assistance transfers, which were complemented after 2012 by additional cash and in-kind support under the targeted poverty alleviation campaign. Consequently, public transfers became increasingly important in 2013-18 to lift the most deprived out of poverty. The share of public transfers in total household income doubled (from 10 to 20 percent), driven by the increased coverage of rural pensions, the introduction of universal health care with a basic reimbursement

package extended to rural areas, the expansion of social assistance, and social insurance and social assistance benefits (albeit benefit levels remained low).

Figure 6: Labor income has been the largest driver of poverty reduction until 2013.
Decomposition of poverty changes by income sources



Source: based on Chinese Household Income Project (CHIP) surveys. Note: Shapley decomposition of poverty changes by income sources following Azevedo, Sanfelice and Minh (2012). The figure on the right, decomposes further the labor income component by economic sector. 2007-2013 adjusted sample refers to the adjustment made to consider break in comparability over time, as sampling frame changed from being hukou-based (place of registration) to census-based (place of residence).

The future agenda

China’s growth rate will continue to slow in the coming decades, but the scope for economic convergence through structural transformation has not yet been fully exhausted. Adopting a poverty threshold (US\$ 5.5 per day) more appropriate for upper middle-income countries such as China, it can be shown that increases in labor incomes continued to account for the bulk of household transitions out poverty even over the past decade. Around 250 million Chinese are still vulnerable to poverty by this standard, and many of them still live in rural areas. Further urbanization and associated productivity increases can continue to play a critical role in China. However, for progress to be sustained a number of adjustments to policy will be needed.

- **At the poverty standard for upper-middle income countries, around a third of China’s poor are now urban, requiring a shift in the focus of policy from rural poverty reduction to a more comprehensive framework.** The urban poor are more integrated in the modern economy, face greater risks of informality and intermittent service employment and thus require different forms of support. China’s poverty reduction agenda remains a growth agenda, but it should be expanded to include an urban lens.
- **Urban services are likely to play a bigger role in future income gains and replace industrialization as key engine of poverty reduction.** China’s services sector is considerably smaller than in

comparable countries, a consequence of past manufacturing export-led growth and sustained investments in infrastructure and real estate. These drivers are unlikely to be as strong going forward, putting greater emphasis on service-led growth. China's policy makers have been concerned that service-led growth could result in lower productivity gains, a phenomenon sometimes referred to as "Baumol's disease". However, World Bank research across emerging markets suggest modern services can be an engine of productivity growth, both through the "servicification" of manufacturing exports and through growing opportunities in digital services (Nayyar, Hallward-Driemeier and Davies, 2021). A rebalancing of domestic demand from investment towards consumption would help generate additional demand for such services and new urban employment opportunities.

- **China's rapidly aging population could be a drag on growth unless policy shifts to encourage longer and more productive working lives.** China's demographic window has been closing since 2010 and based on current trends, by 2050 the demographic dependency rate in China will reach 67.3 percent of the population, above the level projected for the US (64 percent). To maintain income growth in the face of rising dependency ratios, China will need to lengthen working lives and make them more productive. One solution is to increase the retirement age, which is low at 60 years for men and 55 years for women. To ensure that longer working lives are also productive ones also requires reforms to promote adult education and retraining programs to allow workers to upgrade their skills and keep up with changing technologies.
- **Investments in human capital will also be needed to improve economic opportunities for the more vulnerable.** Inequality has increased in China and social mobility has declined over the past four decades. A key reason are the large and persistent gaps in access to quality education and healthcare in rural areas but also for migrant worker families (see also Hell and Rozelle, 2020). Closing these gaps will be key to improving economic opportunities for those at the bottom of the income distribution.
- **Fiscal policies could play a more important role in reducing inequality and addressing vulnerability.** Changes in inequality contributed negatively to poverty during the first three decades of reform but the effect became mildly positive since 2010. Further improvements are possible. For example, China's tax system contributes little to reducing inequality in China.²⁰ Progressive personal income tax accounts for only 5 percent of revenue in China, while yielding close to 15 percent on average in the OECD. Fiscal reforms – such as the introduction of property taxes and revamping inter-governmental fiscal transfers to absorb more of the cost of essential public services and social protection by higher levels of government – would also be critical to close service access and coverage gaps.
- **A more integrated social protection system would better protect households from shocks and prevent relapses into poverty.** Integrating poverty reduction efforts with a revamped social assistance system will be key. At present, parallel registries exist for poor households identified as part of the "precision targeting poverty eradication" campaign and other vulnerable households captured by social assistance, such as DiBao. While the registries communicate with one another, errors of exclusion and the weak coverage of migrant workers in particular mean that some among

²⁰ Lustig and Wang (2020).

the poor may receive no or relatively little assistance. As a result, temporary shocks could turn into long-term scarring and persistent vulnerability.

- **Coverage of social safety nets and social insurance is especially limited for informal and migrant workers, and rural elderly.** As of 2017 only 17 percent of migrant workers were covered by unemployment insurance. Coverage of China’s major social assistance programs is relatively low, with only 56.7 million or about 4.1 percent of the total population registered as beneficiaries.²¹ While benefit levels under the largest social assistance program – the DiBao – have increased, targeting errors remain significant. Pension coverage is high, at 85 percent of the labor force, but rural pension benefits are only a fraction of the poverty line. Moving towards a unified, fiscally sustainable national pension system that provides adequate old age income support is crucial to mitigating risks of old-age poverty.
- **The indirect impact of a revamped social protection system on labor mobility, risk-taking and hence future productivity growth may be just as important.** The Hukou system has been modified and reformed to accommodate internal migration and urbanization processes in China. However in the large cities, it continues to promote segmentation of the labor market and limit access to social protection for migrants. Ensuring portability of social security benefits across jurisdictions, for instance, could encourage greater labor mobility. Social security, including unemployment and pension benefits can also encourage risk taking and entrepreneurship, making the economy more dynamic, and reduce the need for precautionary savings, thus encourage rebalancing towards consumption.
- **To address persistent rural poverty risks the specific needs of the “left-behind” population deserve more attention.**²² This calls for targeted, place-based interventions in addition to horizontal reforms of social service provision. The authorities are looking to the creation of rural non-farm jobs as a means to attract migrants back to their hometowns, including to look after their children and elderly. The efficiency of such efforts should be carefully evaluated. Additionally, innovations in community-based care for those unable to move will need to be developed.

²¹ World Bank (2020).

²² Biao (2007); Zhou et al. (2015).

References

- Ang, Y. Y. (2016). *How China escaped the poverty trap*, Cornell University Press.
- Azevedo, J. P.; Inchauste, G.; Olivieri, S.; Saavedra, J.; Winkler, H. (2013). Is Labor Income Responsible for Poverty Reduction? A Decomposition Approach. Policy Research Working Paper 6414. World Bank, Washington, DC
- Christopher B. B.; Christiaensen, L.; Sheahan, M.; Shimeles, A. (2017). On the Structural Transformation of Rural Africa. *Journal of African Economies*, 26(suppl_1): i11–i35, <https://doi.org/10.1093/jae/ejx009>
- Biao, X. (2007). How far are the left-behind left behind? A preliminary study in rural China. *Population, Space and Place* 13(3): 179–191.
- Bosworth, B.; Collins, S. M. (2008). Accounting for Growth: Comparing China and India. *Journal of Economic Perspectives*, 22(1): 45–66.
- Christiansen, L. (2012). *The role of agriculture in modernizing society. Food, farms and fields in China 2030*. World Bank.
- Chen, A.; Coulson, N. E. (2002). Determinants of Urban Migration: Evidence from Chinese Cities. *Urban Studies*, 39(12): 2189–2197.
- Chen, S.; Ravallion, M. (2004). Household welfare impacts of China's accession to the World Trade Organization. In Bhattasali, Li and Martin, eds., *China and the WTO: Accession, Policy Reform and Poverty Reduction Strategies*. New York, NY: Oxford University Press, pp. 261-282. de Brauw, A. and Mu, R. (2011). 'Migration and the overweight and underweight status of children in rural China', *Food Policy*, 36(1): 88–100.
- Du, Y.; Park, A; Wang, S. (2005). Migration and rural poverty in China. *Journal of Comparative Economics*, 33(4): 688–709. doi: 10.1016/j.jce.2005.09.001.
- Fan, S.; Chan-Kang, C. (2005). Road Development, Economic Growth, and Poverty Reduction in China: 138. Research Reports. International Food Policy Research Institute (IFPRI).
- Fan, S.; Zhang, L.; Zhang, X. (2004). Reforms, Investment, and Poverty in Rural China. *Economic Development and Cultural Change*, 52(2): 395–421.
- Fang, C. (2017). Reform effects in China: A perspective of labor reallocation. *Economic Research Journal*, 7: 4–17.
- Fang, C.; Garnaut, R.; Song, L. (eds) (2018). *China's 40 years of reform and development, 1978-2018*. Canberra: ANU Press
- Freije-Rodriguez, S.; Hofman, B.; Johnston, L. (2019). Forty Years of China's Reforms, Poverty Reduction and the World Bank. Forthcoming in World Bank Policy Research Working Paper Series.
- Giles, J.; Murtazashvili, I. (2013). A Control Function Approach to Estimating Dynamic Probit Models with Endogenous Regressors. *Journal of Econometric Methods*, 2(1): 69–87. doi: 10.1515/jem-2012-0010.
- Hell, N.; Rozelle, S. (2020). *Invisible China: How the Urban-Rural Divide Threatens China's Rise*. University of Chicago Press.
- Hertel, T.; Zhai, F.; Wang, Z. (2004). Implications of WTO Accession for Poverty in China. In Bhattasali, Li and Martin, eds., *China and the WTO: Accession, Policy Reform and Poverty Reduction Strategies*. New York, NY: Oxford University Press, pp. 283-303.
- Kinnan, C.; Wang, S.-Y.; Wang, Y. (2018). Access to Migration for Rural Households. *American Economic Journal: Applied Economics*, 10(4): 79–119. doi: 10.1257/app.20160395.
- Li, S.; Zhan, P.; Shen, Y. (2017). New Patterns in China's Rural Poverty. CHCP Working Paper. London (Ontario): The University of Western Ontario, Centre for Human Capital and Productivity (CHCP), 2017. <http://hdl.handle.net/10419/180862>.
- Li, S.; Xing, C. (2017). China's Key labor Market Trends, Challenges and Policy Implications: Employment, Wage Structure and Labor Productivity. Background paper for World bank Programmatic ASA on Social protection and Jobs, 2017.
- Liang, Z. (2016). China's Great Migration and the Prospects of a More Integrated Society. *Annual Review of Sociology*, 42(1): 451–471. doi: 10.1146/annurev-soc-081715-074435.
- Long, C.; Zhang, X. (2011). Cluster-Based Industrialization in China: Financing and Performance. *Journal of International Economics*, 84(1): 112–23.

- Lustig, N.; Wang, Y. (2020). The Impact of Taxes and Transfers on Income Inequality, Poverty, and the Urban-Rural and Regional Income Gaps in China, Commitment to Equity (CEQ) Working Paper Series 93, Tulane University, Department of Economics.
- Montalvo, J. G.; Ravallion, M. (2010). The pattern of growth and poverty reduction in China. *Journal of Comparative Economics*, 38(1): 2–16.
- Moretti, E. (2012). *The New Geography of Jobs*. Houghton Mifflin Harcourt.
- Naughton, B. (2007). *The Chinese Economy: Transitions and Growth*. MIT Press Books. The MIT Press.
- Raiser, M. (1994). Lessons from Whom for Whom? The transition from socialism in Eastern Europe and China compared. Kiel Institute Working Papers 630.
- Ravallion, M.; Chen, S. (2007). China's (uneven) progress against poverty. *Journal of Development Economics*, 82(1): 1–42.
- Ravallion, M. (2021). Poverty in China since 1950: A Counterfactual Perspective. NBER Working Paper No. 28370 January 2021
- Riskin, C. (1987). *China's Political Economy: The Quest for Development since 1949*. Oxford University Press.
- Sicular, T.; Zhao, Y. (2004). Earnings and Labor Mobility in Rural China: Implications for China's Accession to the WTO. In Bhattasali, Li and Martin, eds., *China and the WTO: Accession, Policy Reform and Poverty Reduction Strategies*. New York, NY: Oxford University Press, pp. 239-260.
- Tombe, T.; Zhu, X. (2019). Trade, Migration, and Productivity: A Quantitative Analysis of China. *American Economic Review*, 109(5): 1843–1872. doi: 10.1257/aer.20150811.
- Weber, I. (2021). *How China Escaped Shock Therapy: the Market Reform Debate*. Routledge, London.
- World Bank. (1992). China - Strategies for reducing poverty in the 1990s. Washington, DC: World Bank.
- World Bank. (2001). China: Overcoming Rural Poverty. A World Bank country study. Washington, DC.
- World Bank. (2009). China - From poor areas to poor people: China's evolving poverty reduction agenda - an assessment of poverty and inequality (English). Washington, DC: World Bank.
- World Bank. (2017). World Development Report 2017: Governance and the Law. Washington, DC: World Bank.
- World Bank. (2018). *Poverty and Shared Prosperity 2018: Piecing Together the Poverty Puzzle*. Washington, DC: World Bank.
- World Bank (2019a). Jobs and Economic Transformation (JET) – Drivers, Policy Implications and World Bank Group Support. Washington, DC: World Bank.
- World Bank (2019b). Balancing Workers' Protection and Labor Market Flexibility in China. Ed. by Achim Schmillen, Dewen Wang and Josefina Posadas. Washington, DC: World Bank.
- Zhou, C.; Sylvia, S.; Zhang, L.; Luo, R.; Yi, H.; Liu, C.; Shi, Y.; Loyalka, P.; Chu, J.; Medina, A.; Rozelle, S. (2015). China's Left-Behind Children: Impact of Parental Migration on Health, Nutrition, And Educational Outcomes. *Health Affairs* 34(11): 1964–1971.
- Zhu, X. (2012). Understanding China's Growth: Past, Present, and Future. *Journal of Economic Perspectives*, 26(4): 103–24.