



Globalization and Inequality

Edited by **Branko Milanovic**

Globalization and Inequality

Edited by

Branko Milanovic

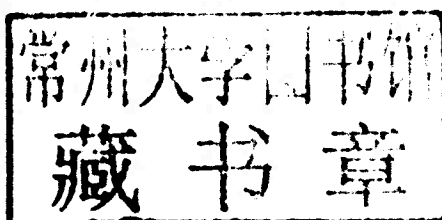
Lead Economist

The World Bank Research Department, Washington, USA

and Visiting Professor

School of Public Policy

University of Maryland, USA



THE GLOBALIZATION OF THE WORLD ECONOMY

An Elgar Research Collection

Cheltenham, UK • Northampton, MA, USA

© Branko Milanovic 2012. For copyright of individual articles, please refer to the Acknowledgements.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the prior permission of the publisher.

Published by
Edward Elgar Publishing Limited
The Lypiatts
15 Lansdown Road
Cheltenham
Glos GL50 2JA
UK

Edward Elgar Publishing, Inc.
William Pratt House
9 Dewey Court
Northampton
Massachusetts 01060
USA

A catalogue record for this book is available from the British Library

Library of Congress Control Number: 2012935280



ISBN 978 1 84980 452 3

Printed and bound by MPG Books Group, UK

Acknowledgements

The editor and publishers wish to thank the authors and the following publishers who have kindly given permission for the use of copyright material.

American Economic Association for articles: François Bourguignon and Christian Morrisson (2002), 'Inequality Among World Citizens: 1820–1992', *American Economic Review*, **92** (4), September, 727–44; Thomas Piketty and Emmanuel Saez (2006), 'The Evolution of Top Incomes: A Historical and International Perspective', *American Economic Review*, **96** (2), May, 200–205; Sudhir Anand and Paul Segal (2008), 'What Do We Know about Global Income Inequality?', *Journal of Economic Literature*, **46** (1), March, 57–94.

Blackwell Publishing Ltd for articles: Branko Milanovic (2002), 'True World Income Distribution, 1988 and 1993: First Calculation Based on Household Surveys Alone', *Economic Journal*, **112** (476), January, 51–92; Ravi Kanbur and Xiaobo Zhang (2005), 'Fifty Years of Regional Inequality in China: A Journey Through Central Planning, Reform, and Openness', *Review of Development Economics*, **9** (1), February, 87–106.

Brookings Institution Press for article: Leonardo Gasparini, Guillermo Cruces and Leopoldo Tornarolli (2011), 'Recent Trends in Income Inequality in Latin America', including comments by Daniel Mejía and Daniel E. Ortega, *Economía*, **11** (2), Spring, 147–201.

Cambridge University Press for article: Andrea Brandolini and Timothy M. Smeeding (2006), 'Patterns of Economic Inequality in Western Democracies: Some Facts on Levels and Trends', *PS: Political Science and Politics*, **39** (1), January, 21–26.

Center for Southeast Asian Studies for article: Matthew Higgins and Jeffrey G. Williamson (2002), 'Explaining Inequality the World Round: Cohort Size, Kuznets Curves, and Openness', *Southeast Asian Studies*, **40** (3), December, 268–302.

Angus Deaton and Jean Dreze for their own work: (2002), 'Poverty and Inequality in India: A Re-Examination', *Economic and Political Weekly*, Sept 7th, 3729–48.

Economic and Financial Publishing for article: Branko Milanovic (2006), 'Global Income Inequality: A Review', *World Economics*, **7** (1), January–March, 131–57.

Elsevier Ltd for articles: Antonio Spilimbergo, Juan Luis Londoño and Miguel Székely (1999), 'Income Distribution, Factor Endowments, and Trade Openness', *Journal of Development Economics*, **59** (1), June, 77–101; Martin Ravallion (2003), 'Inequality Convergence', *Economics Letters*, **80** (3), September, 351–56.

Sebastian Leitner and Mario Holzner for their own work: (2008), 'Economic Inequality in Central, East and Southeast Europe', *Intervention: European Journal of Economics and Economic Policies*, **5** (1), 155–88.

Oxford University Press for articles: Jeffrey G. Williamson (1997), 'Globalization and Inequality, Past and Present', *World Bank Research Observer*, **12** (2), August, 117–35; Bob Sutcliffe (2004), 'World Inequality and Globalization', *Oxford Review of Economic Policy*, **20** (1), March, 15–37; Steve Dowrick and Jane Golley (2004), 'Trade Openness and Growth: Who Benefits?', *Oxford Review of Economic Policy*, **20** (1), March, 38–56; Branko Milanovic (2005), 'Can We Discern the Effect of Globalization on Income Distribution? Evidence from Household Surveys', *World Bank Economic Review*, **19** (1), 21–44; Xavier Sala-i-Martin (2006), 'The World Distribution of Income: Falling Poverty and ... Convergence, Period', *Quarterly Journal of Economics*, **CXXI** (2), May, 351–97; Anthony B. Atkinson and Andrea Brandolini (2010), 'On Analyzing the World Distribution of Income', *World Bank Economic Review*, **24** (1), 1–37.

Taylor & Francis Ltd (<http://www.informaworld.com>) for article: Julien Gourdon, Nicolas Maystre and Jaime de Melo (2008), 'Openness, Inequality and Poverty: Endowments Matter', *Journal of International Trade and Economic Development*, **17** (3), September, 343–78.

University of Chicago Press for excerpt: Peter H. Lindert and Jeffrey G. Williamson (2003), 'Does Globalization Make the World More Unequal?', and Lant Pritchett, 'Comment', in Michael D. Bordo, Alan M. Taylor and Jeffrey G. Williamson (eds), *Globalization in Historical Perspective*, Chapter 5, 227–71, 271–75.

UNU-WIDER for excerpt: Giovanni Andrea Cornia, Tony Addison and Sampsa Kiiski (2004), 'Income Distribution Changes and Their Impact in the Post-Second World War Period', in *Inequality, Growth, and Poverty in an Era of Liberalization and Globalization*, Chapter 2, 26–54.

Every effort has been made to trace all the copyright holders but if any have been inadvertently overlooked the publishers will be pleased to make the necessary arrangement at the first opportunity.

In addition the publishers wish to thank the Library of Indiana University at Bloomington, USA and the Library of the University of Warwick, UK, for their assistance in obtaining these articles.

Introduction

Branko Milanovic

There are at the beginning of the second decade of the 21st century hardly two more politically charged economic terms than 'globalization' and 'inequality'. It was, of course, not always like that. If we go back into the past, some 30 or 100 years ago, other issues and other terms commanded the attention of the economists: development and growth in the 1960s; ground rent, exploitation and capital in the 1910s.

Both 'globalization' and 'inequality' are useful 'shorthands' for the processes or issues that we 'recognize when we see them' although we might have a hard time defining them rigorously. Both terms are far from being scientifically clear and unambiguous. Globalization which, to an economist, means free circulation of capital, labor, technology and goods across national borders was different in the period 1870–1914 (often referred to as Globalization I) from the one we are experiencing today (Globalization II). The first globalization involved much greater (relative to the then-existing population) movement of labor. Financial integration of the world was much more modest however, and international trade as a share of global output was substantially lower. It is thus not surprising that the effect on inequality of one globalization may differ from the effect of the other.

The term 'inequality' alone without any attributes is even more ambiguous. To take the simplest example: do, under economic or income inequality, we mean inequality between individuals within the same nation, or inequality between property-owning classes and workers within the same nation, or inequality between average incomes between different nations? In the first case, we speak of inequality between people; in the second, between classes, and in the third, of income gaps between nations. At different points in time, it is one or the other type of inequality which matters more empirically and which seizes the attention of economists, politicians and commentators. And when, finally, we put together these several types of inequalities (between people in the same country, and between countries in the world), we get a topic whose importance has increased recently – driven by the process of globalization itself and better availability of data – namely 'global inequality': inequality between all citizens of the world regardless of the nation where they live.

A Short Synopsis

The selection of writings included in this book will address most of the issues linked with globalization and income inequality. The writings on these two topics, and on the intersection of them, are so vast that any selection necessarily involves a lot of personal judgment and weighing of pros and cons for the inclusion of each piece. All articles included here are essentially empirical. In some cases, they combine theory, either implicitly or explicitly, with empirics – but there are no 'theory only' articles. Reasons are twofold: for some issues

discussed here, there is no 'pure' theory, as opposed to empirical research; and in other cases, 'pure theory' has become discredited (particularly after the onset of the Great Recession) due to its detachment from real life and rather extravagant assumptions – things that at times liken it to metaphysics rather than to what a social science like economics should be. I have divided the readings into four groups which, in my opinion, best encapsulate the complexity of the relationship between globalization and income inequality.

Readings in Part I focus on the past: Globalization I and changes in within-national and global inequality in the 19th and the first half of the 20th century. In Part II, we move to the contemporary period which may be of greater interest to the majority of readers. The readings there review and analyze remarkable changes in within-national inequalities that have occurred across the globe, in developed Western economies, as well as in China and Russia, India and Latin America. The articles span the period that can be broadly associated with the unchallenged dominance of neoliberal policies, from the ascent to power of Margaret Thatcher, Deng Xiaoping and Ronald Reagan in respectively Great Britain, China and the United States, to the global financial crisis. That period of some 30 years witnessed the rise and the decline of the neoliberal view of the world, and of the economic policies associated with it which in turn had a tremendous impact on economic inequalities. In Part III, we look at an issue, particularly germane to that period, which attracted a lot of attention: how did greater openness, reflected in increased international trade, direct foreign investments and outsourcing, affect inequality within nations—those that received more foreign investments, traded more or were beneficiaries of outsourcing and those that did not? Finally, Part IV 'wraps up' the issue of globalization and inequality by looking at its most general manifestation: global inequality, that is, economic inequality between (what some authors in a hopeful anticipation of the times to come), call 'global citizens'.

Past Globalizations(s) and Inequality

The opening article in this volume, Chapter 1 by François Bourguignon and Christian Morrisson 'Inequality Among World Citizens, 1820–1990', is a seminal article that estimated global inequality over the long run of history. Bourguignon and Morrisson construct estimates of global inequality at approximately 20-year intervals starting with the early stages of the Industrial Revolution. Their major building block is the series of real GDP per capita estimates made and published by Angus Maddison throughout the 1990s. Without Maddison's quantification of the economic level of development for most countries of the world, an exercise like Bourguignon and Morrisson's would have been impossible. To this building block, Bourguignon and Morrisson add their own estimates of income inequalities in 33 regions of the world over the entire period of 170 years (1820–1990). Because historical income distribution statistics existed, or could be estimated, for only relatively few countries, data for these few countries 'stand' as estimates of income distributions for other, vaguely 'similar', countries. Although Bourguignon and Morrisson have built on very fragile foundations regarding mean incomes, and even more so regarding income distributions, their main conclusions have remained unchallenged. They are two: (1) global inequality has been on the rise since around the Industrial Revolution and until the mid-20th century, and (2) the composition of global inequality has changed from being dominated by inequality within

nations to being dominated by inequality between nations. In other words, (population-weighted) income gaps between nations are much more important today than in the past. These two conclusions shape very much our view of the past, influence our projections of the future, and were, as other papers in this volume will show, hugely influential.

Peter Lindert and Jeffrey Williamson in 'Does Globalization Make the World More Unequal?' (Chapter 2) and Jeffrey Williamson in 'Globalization and Inequality: Past and Present' (Chapter 3) underline the dissimilarities between the two globalizations. One of the major differences between Globalizations I and II was a much greater mobility of labor from poor to rich countries in the past. Lindert and Williamson examine the effects of labor mobility between Europe and the United States (in the golden era of almost free Atlantic migration at the end of the 19th century) on income distributions within the nations, and income gaps between the nations. As economic theory would predict, massive outflow of mostly low-skilled labor from Europe to the United States led to lower unskilled wages in the United States, higher wages in Europe, and reduced wage and income gaps between Europe and the United States. Williamson estimates that migration was responsible for up to 70 percent of the real wage convergence in the 'Northern Atlantic' economy.

Migration also made inequality in the United States higher than it would have been without it, and created a 'desynchronization' in the movement of inequality between Great Britain and the United States: while British inequality peaked around 1860–70, the US inequality, thanks to the continued inflow of cheap labor from abroad, continued rising well past that period, and peaked just before the Great Depression.

Lindert and Williamson highlight an additional effect of globalization, working through greater openness to trade. Large and cheap US grain exports to Britain, made possible thanks to free trade, provided an additional fillip to the British real wage – wage measured in actual command over food. At the same time, lower grain prices reduced land rents which accrued to the richest classes in Britain and elsewhere in Europe. Thus real income inequality in Britain and Northern Europe (that is, in all countries that allowed free trade in grain) was reduced both because real incomes of the poor went up and real incomes of the rich declined.

It is worth emphasizing that the inequality-reducing effect of migration on emitting European countries came both from the changes in the relative scarcity of the factors of production (scarcer unskilled labor pushed its wage rate up), and changes in relative prices of wage and 'luxury' goods. This latter aspect of globalization – changes in relative prices – is often forgotten in the economic analyses which conveniently assume that the change in the consumer price index is the same for both the poor and the rich. Yet, as Lindert and Williamson show, the relative price effect can at times be very important.

The work of Thomas Piketty and Emmanuel Saez ('The Evolution of Top Incomes: A Historical and International Perspective', Chapter 4) has also a seminal character: it opened the doors to the numerous studies of income inequality that use fiscal (tax) data and, instead of examining overall distributions, focus on top incomes. This emphasis is inevitable in fiscal studies since direct taxes, particularly in the past or in the less developed countries today, are paid only by the very rich. Despite the fact that Piketty and Saez's work looks only at one segment of income distribution, it overturned some of the 'nostrums' that have dominated the profession of inequality economics for at least half a century. Piketty and Saez showed that income inequality in the 20th century in the advanced economies (France, USA, Great Britain, etc.) behaved in a way that was exactly the opposite of what was expected until relatively

recently. The expectation, borne out by the facts until the neoliberal revolution in the 1980s, was that the advanced economies, as their income level increases, would continue to register declines in income inequality. That was supposed to be driven both by a greater abundance of more educated labor force, thus reducing the education premium received by the highly skilled, and by the expansion of social welfare policies.¹ This view was known as Kuznets' inverted U hypothesis, whereby inequality was supposed at first (at the early stages of development) to increase, and then, in advanced economies, to go down.

But Piketty and Saez showed that it was rather a U shaped – not the *inverted* U shaped – curve that income inequality charted in advanced economies of Europe and North America during the 20th century. After a long decline that started around World War I in France, earlier in Great Britain, or around the Great Depression in the USA, and lasted until the late 1970s or early 1980s, income inequality shot up almost everywhere in the rich world. To be sure, increases were not the same everywhere. The USA and UK notched up much more dramatic increases than their continental European comparators, leading to the view of Anglo-Saxon exceptionalism.

Piketty and Saez explained these changes not only by impersonal economic forces (new technologies) but by government policies: lower taxation of the rich, or, in the past, by the wars which both destroyed physical assets held by the rich and imposed a much more equitable fiscal burden (strongly progressive taxes) needed to finance the wars. Piketty and Saez's work was not only empirically important; it also highlighted an aspect often overlooked by the economists: the role of political factors that shape income distribution, from taxations of income and inheritance to wars. As current debates in the United States over taxation of the rich, and in particular taxation of inherited wealth, illustrate, these issues are still very pertinent.

National Inequalities in the Current Era of Globalization

Articles in Part II move us, in time, to the present. In the opening piece, Martin Ravallion ('Inequality Convergence', Chapter 5) points to the uncontested fact that within-national income distributions have over the past several decades become much more similar. Most of inequality convergence was convergence 'from below' whereby countries that previously had egalitarian distributions became more unequal. Why this convergence? Ravallion believes that economic reforms had a weak effect on inequality in the countries that were already very unequal, and a strong pro-inequality effect on those that were egalitarian. The key underlying reason is that the variability of economic policies between countries during the neoliberal epoch has diminished. Similar economic policies are, of course, unlikely to produce exactly the same degree of inequality everywhere since endowments (physical capital, skilled labor, and natural resources) differ across countries. But similar policies can still create much more similar inequality outcomes than when economic policies are vastly different, as was the case between the end of World War II and the late 1970s. Perhaps the best 'quick' indicator of the inequality convergence is the fact that the Gini coefficient (the most popular measure of inequality that ranges from the theoretical value of 0 when everyone has the same income to an equally theoretical value of 100 when all income is appropriated by one person) has the value in the mid-40s range in the United States, Russia and China. Only 30 years ago, these

vastly dissimilar countries' distributions were also different: China's Gini was less than 30, Soviet Union's was in the low-30s, and the US Gini was around 35. Inequalities have increased in all three countries while economic policies and ownership structures have also become much more similar.

Giovanni Andrea Cornia, Tony Addison and Sampsa Kiiski in 'Income Distribution Changes and their Impact in the Post-Second World War period' (Chapter 6) make use of a very rich dataset collected by the World Institute for Development Economic Research (WIDER) to analyze the driving forces of inequality over the past half a century. The organizing principle of their review is regional, thus emphasizing commonalities within, and differences between, various parts of the world. What do they find? In Organization for Economic Co-operation and Development (OECD) countries, they found declining inequality between the end of the World War II and the late 1970s and then an upsurge almost everywhere; in post-Communist economies, a huge increase since the end of central planning; in Latin America, remaining high inequality (the article was written before most recent downward changes there); in China, increase in inequality since the reforms in the late 1970s; in Asia, a contrast between the relatively egalitarian Japan, South Korea and Taiwan, and much less equal Southeast Asia; and finally in Sub-Saharan Africa, lack of strong evidence on changes, but remaining high levels of inequality. The only region missing from their survey is the Middle East where the data have notoriously been scarce.

For the explanation of the more or less generalized inequality increase during the neoliberal period, the authors' favorite factors are rising inequality in education and the 'Washington consensus' set of economic policies. The latter hypothesis (the role of the Washington consensus policies), although often implicitly or explicitly put forward in the cases of individual countries, has never been tested across a wide cross-section of countries. Although many econometric weaknesses remain in the paper – not the least that an acceptable reform index capturing Washington consensus policies is not easy to construct, and that reforms may have a different impact in different environments – the sheer scale and single-mindedness of the exercise are impressive. But the results can hardly be viewed as a definitive statement on the topic since such important probable determinants of rising inequality like skill-biased technological change, openness, financial depth and democratization are either too easily dismissed or just plainly ignored.

While Cornia et al.'s paper starts with a broad-brush review of regional evidence, other papers included in Part II each focus on a given specific region, and on two population giants, India and China. Inequality in Western democracies has been most thoroughly studied, both because the data are better than elsewhere, and researchers tend to be more interested in these countries since they seem, through their influence on global politics and economics, to set the global trends. (This was incidentally obvious in the influence exerted by the Reagan–Thatcher revolution.) Andrea Brandolini and Timothy Smeeding in 'Patterns of Economic Inequality in Western Democracies: Some Facts on Levels and Trends' (Chapter 7) highlight the differences in inequality evolutions among developed economies. Even when inequality increased, changes were uneven and countries started from very different inequality levels. Thus, for example, Sweden, a proverbially egalitarian country, has undergone a significant increase in inequality, but this still leaves it far behind the level of inequality in the United States. Brandolini and Smeeding examine, using the data from Luxembourg Income Survey, the best harmonized compilation of national surveys, not only the changes in disposable income, but

also in the underlying (pre-tax and pre-transfer) market income, and thus in the effects of government redistribution. This enables them to describe the variety of OECD experiences, following the changes along the entire income distribution curve in most countries, a feature that the studies that focus on top income shares cannot replicate.

A region with severest, at times dramatic, increases in inequality, was Eastern Europe (including the countries of the former Soviet Union). Sebastian Leitner and Mario Holzner in 'Economic Inequality in Central, East and Southeast Europe' (Chapter 8), examine the forces that have contributed to rising inequality. A wholesale change of the economic system, from plan to market, totally changed incentives. The change favored more entrepreneurial, younger and more skilled groups. But there were darker forces at work too, represented in unjust privatizations, emergence of oligarchs, and, at the other end of the spectrum, among the poor, pensions reduced to a pittance, elimination of subsidies and growing poverty. Using unbalanced panel data for 28 post-Communist countries and including most of the 'usual suspect' variables on the right-hand side, Leitner and Holzer find that privatization, inflation, and the share of fuel in total exports were positively associated with increases in inequality, and trade and foreign exchange liberalizations negatively. Theirs was the first large-N panel data analysis conducted for post-Communist economies. Despite several econometric problems and often doubtful precision of the Ginis used, the key conclusions, and in particular those regarding the positive contributors to inequality increase (privatization, fuel exports), have stood remarkably well the test of time.

A useful counterpart to the developments in post-Communist countries is the recent evolution of inequality in Latin America, a topic of Chapter 9 by Leonardo Gasparini, Guillermo Cruces and Leopoldo Tornarolli, 'Recent Trends in Income Inequality in Latin America'. The two, Eastern Europe and Latin America, are almost mirror images of each other, and illustrate well the points raised by Martin Ravallion about inequality convergence: the equal region became much more unequal, and the reverse. Latin America was, and still remains, the most unequal region of the world (sharing this unenviable position perhaps with Sub-Saharan Africa). But in the past 5 to 10 years, bucking the trend of any other region in the world, Latin America, and in particular, the three large countries, Brazil, Mexico and Argentina, have recorded significant decreases in income inequality. We should be careful not to overestimate the progress made because these countries still remain amongst the most unequal in the world. Yet looking at the facts that were responsible for this unique development is certainly valuable for our understanding of what may help others achieve more equitable development. Gasparini et al. show how pervasive the decrease in inequality was (it affected most countries of the continent), and argue that it was driven by pro-poor policies, exemplified by conditional cash transfer schemes paid to the poor in Brazil and Mexico, and by more accessible primary and secondary education. The latter reduced the notoriously high wage premium enjoyed by the well-educated.

The last two articles in Part II deal with the evolution of income inequality in two giants, India and China. Angus Deaton and Jean Drèze in 'Poverty and Inequality in India: A Re-Examination' (Chapter 10) provide a methodological and empirical overview of the changes in India. Indian reforms, begun in 1991, have jump-started the growth rate as measured by GDP per capita, but the impact on mean consumption, measured by household surveys that provide the only source of information on income distribution, has been much more modest. This has led to a broad debate in India and outside on the reliability of both GDP (national

accounts) and household surveys. If the latter tend to increasingly under-report incomes of the rich, or simply fail to include the rich in the sample, measured inequality may be severely underestimated. To complicate the matters further, the design of the surveys and the reporting periods of consumption used in the surveys have changed, which limited comparability even between household surveys from different years. Deaton and Drèze lead the reader through the thicket of these methodological issues which we shall also find to bedevil global income inequality calculations featured in Part IV; they also show that in the 1990s, inequality increases in India, while not dramatic by international standards, were nevertheless significant and observable in several key dimensions. There was a divergence in state average incomes, with the South and West (Maharashtra, Karnataka, Tamil Nadu) doing better than the rest of the country as well as an increase in inequality within urban areas.

The changes in inequality in India seem to be modest, mild and muted – particularly when contrasted with the changes registered in China, a topic of the last paper included in Part II, by Ravi Kanbur and Xiaobo Zhang, ‘Fifty Years of Regional Inequality in China: A Journey Through Central Planning, Reform, and Openness’ (Chapter 11). Income inequality among individuals in China not only almost doubled (measured by the rather sluggish measure of inequality such as the Gini coefficient) in the period from the introduction of Deng Xiaoping’s reforms to 2008–09, but inequality expanded in all dimensions. In effect, overall inequality has risen so significantly that whatever component we look at, its absolute level has gone up. The income gap between urban and rural areas exploded: it is 3 to 1 in China versus around 2 to 1 for India and Thailand, or 1.7 to 1 in Indonesia; income gaps between booming maritime provinces and the lagging West widened, and generally income differences between provinces increased. Widening inequalities were particularly pronounced after the onset of industrial reforms in the 1990s whose effects were much more disequalizing than those of the early agricultural reforms. Although each way of ‘slicing’ inequality displays an increase in inequality, it can be argued that the most important aspects are two: (1) rising inequality among people in urban areas, and (2) widening gap between average urban and rural incomes. Putting these two things together, one quickly reaches a conclusion that there must be a yawning gap between the richest people in cities and the poorest people in villages. And indeed there is; they almost seem to live in two different worlds.

Reflecting the emphasis on what may be considered political aspects of inequality, as well as because of the lack of long-run individual income distribution data and the unwillingness of the Chinese government to share with researchers the data it collects, Kanbur and Zhang focus on inequality between 28 Chinese provinces and between urban and rural areas. They show that inter-regional inequality peaks occurred during the Great Famine (1960), at the end of the Cultural revolution (1975–76), and in the early 2000s (when the paper was written). To explain changes in inequality over such a long and diverse period that includes the entire existence so far of the People’s Republic, Kanbur and Zhang choose three variables: development of heavy industry (a policy germane to all ‘big push’ strategies of industrialization), economic decentralization (greater economic power of provinces), and globalization or openness to trade. They find, unsurprisingly, that in the pre-reform period, inequality was driven by the emphasis on heavy industry, while in the reform period decentralization and globalization became key driving forces. Higher trade ratios and decentralization also push up the differentials between urban and rural areas. Apparently the unstoppable increase of China’s inequality poses a fundamental problem for the sustainability of her current path of development

as well as for the political stability of the country. Can we envisage a 'harmoniously developing' society with African levels of inequality?

Openness and Inequality

Part III deals with empirical research that addresses directly the relationship between (1) openness, defined as either the size of trade compared to Gross Domestic Product, or the level of tariff protection, and (2) inequality within a nation.² This is an issue that has recently attracted a lot of attention, in part because it was long considered 'solved'. According to factor-price equalization theorem (also known as Heckscher–Ohlin–Samuelson, HOS, theorem), trade is a substitute for movements of labor and capital: if a country exports more skill-intensive goods, that means that the demand for skilled labor will go up, and if we take the wage ratio between skilled and unskilled labor as an indicator of inequality, then inequality would increase too. Based on this theory, globalization was supposed to reduce inequality in low-skill intensive (poor) countries, and to increase it in high-skill intensive (rich) countries – or to put it in even simpler terms, to reduce inequality in China and increase it in the United States. The problem however was that the empirical evidence, as we have seen in Part II, did not conform to that pattern: inequality went up both in poor and rich countries, and often increased more in poor countries like China than in the rich world. Moreover, as we have seen in the review of Jeffrey Williamson's piece on the North Atlantic economy at the turn of the 20th century, migration then indeed played the role 'assigned' to it by theory, helping Atlantic convergence and lowering inequality in Europe. Why did not trade in goods do the same thing at the turn of the 21st century?

Jeffrey Williamson and Matthew Higgins ('Explaining Inequality the World Round: Cohort Size, Kuznets Curves, and Openness', Chapter 12) is one of the earliest articles on the subject. In both cross-sectional and pooled frameworks, the authors find openness to increase inequality at low levels of GDP per capita, precisely where, according to HOS, it should be reduced. Inequality, according to Williamson and Higgins, displays something of an inverted U curve with respect to openness: in poor countries, openness raises inequality, then the effect peaks, and afterwards, for richer countries, openness appears to be pro-equality. It is easy to see that their findings are exactly the opposite from those that the standard neoclassical factor-price equalization theorem would endorse. Williamson and Higgins used statistically a rather rough approach, but they uncovered the problem. Several other papers (not included in this volume) published around the same time also found that inequality in poor countries tended to increase with openness. Why was this? The next wave of the literature would try, by using more sophisticated techniques and better data, to unravel the puzzle.

Antonio Spilimbergo, Juan Luis Londoño and Míguel Székely in 'Income Distribution, Factor Endowments, and Trade Openness' (Chapter 13) set a very complex model where they control for countries' endowments in skilled labor, capital and land, and then look at the impact of openness on distribution. They find that in capital-rich countries openness reduces inequality, and in countries with abundant skilled labor increases it. The former effect is driven by the reduction of capital rents once domestic capital markets open up while the latter effect is consistent with the HOS framework. Both effects however have to do with rich countries because they are typically capital- and skilled labor-rich. And as the two effects pull in the

opposite directions, it is unclear which way overall inequality in rich countries should eventually go. For the poor countries (those that are capital-poor and with abundant unskilled labor), the conclusions are even less clear, reflecting the disconnection between the paper's very complex modeling and rather vague results. However, Spilimbergo et al. also do end up by rejecting 'the simplistic Heckscher–Ohlin framework', a thing that has become somewhat of a cliché, albeit a revealing one, in the recent literature.

Something apparently happened during Globalization II to make our conclusions concerning the impact of openness on domestic inequality different both from elementary theory and from what was observed during Globalization I. Steve Dowrick and Jane Golley in 'Trade Openness and Growth: Who Benefits?' (Chapter 14) argue that the impact of openness on growth, and possibly on distribution, has changed since the beginning of neoliberal reforms in the late 1970s. While in an earlier period, openness was particularly good for poor countries (their growth rate increased thanks to openness more than the growth rate of rich countries), more recently the relationship has reversed. Now the gains from openness, they argue, accrue more to the rich world. This is an empirical fact, grounded in the divergence of GDPs per capita during the period 1980–2000. But, if the decoupling of the growth rates between the emerging economies, continuing on their growth paths more or less as before the Great Recession, and the rich world, mired in long-term stagnation, goes on, it is not clear – to say the least – whether these conclusions would 'survive' in another study that would extend the period of analysis until the present.³ So, perhaps that now openness is again more valuable to poor than rich countries.

Branko Milanovic in 'Can We Discern the Effect of Globalization on Income Distribution? Evidence from Household Budget Surveys' (Chapter 15) goes back to the puzzle of increased inequality in poor countries and tries to unravel it using detailed data from household surveys. Milanovic divides each country's distribution into ten income deciles (from the poorest to the richest), and runs regressions with the same explanatory variables (income, openness, foreign direct investments, democracy, etc.) on each decile share. He is thus able to go beyond a synthetic measure of inequality, like a Gini coefficient, to a much richer measure where one looks at how income shares at different parts of the distribution are affected by openness. At very low levels of GDP per capita, openness reduces the share of the poorest 70 percent of the population, and increases the share of the top two deciles. The pro-inequality effect of openness is lessened as GDP per capita increases, and reaches a turning point around the income levels of Spain and Israel. After that point, openness appears pro-poor (that is, reduces domestic inequality). The outcome is thus again a total reversal of the HOS theorem. While empirically the result seems to hold, it is more difficult to square it with theory. One explanation was suggested by Winters et al. (2004): 'If reform boosts demand for labor-intensive products, it boosts the demand for labor, and wages ... will increase. However, if the poor are mostly in completely unskilled families, while it is semi-skilled labor that receives the boost, poverty will be unaffected' whereas inequality would increase.⁴

In other words, the usual model with two types of labor (skilled and unskilled) is perhaps too simplistic to expect that its prediction will apply to the real world. And indeed, once we allow for the existence of at least three types of labor, the gains that, thanks to globalization, are realized by workers with the middle level of skills, can leave totally unaffected the real wage of the least skilled workers, and thus increase inequality. It has been noted that an increase in

demand for off-sourcing labor in India is not going at all to help the position of illiterate workers – and when we look at income distribution, inequality may indeed look worse.

One problem highlighted indirectly by this and similar panel data analyses is that they fail to explain, using the same coherent framework, increase in inequality in both poor and rich countries during globalization. This is also a problem with simplistic $2 \times 2 \times 2$ models because in them poor and rich countries are mirror images of each other, and if economic forces push for higher inequality in one set of countries, they must automatically push for lower inequality in another. But this is not at all what we observe.

Julien Gourdan, Nicolas Maystre and Jaime de Melo in 'Openness, Inequality and Poverty: Endowments Matter' (Chapter 16) and Nicolas Maystre in 'Sorting Out the Impact of Trade Liberalization on Income Distribution' (not included in this volume, but on which the Gourdan et al. paper is heavily based)⁵ take the Milanovic approach one step further. They enrich the dataset by including factor endowments and measures of trade policy liberalization (rather than an outcome variable like trade/GDP ratio used by Milanovic), and they improve the precision of the conclusions. For policy stance, the papers use two variables: a trade liberalization measure developed by Wacziarg and Welch,⁶ and the average tariff rate. Milanovic's results are not robust to the use of the Wacziarg and Welch indicator, but his key result, namely that openness does not benefit the poor in poor countries, is confirmed when using tariff rates. This is however true only with a caveat because the turning GDP per capita point, at which liberalization becomes pro-poor, occurs at a much lower income level than estimated by Milanovic. In effect, Maystre finds that trade liberalization is bad for the lowest income deciles only in very poor (mostly African) countries, while, according to Milanovic, it is pro-inequality all the way to upper-income countries like Spain.

These conclusions raise not only the issue of the empirical validity of one approach or another, but of the deeper meaning of what 'trade' or 'openness' or 'globalization' really mean when we try to assess their impacts on inequality. Gourdon et al. rightly point out that the use of an indicator such as trade over GDP may be misleading because changes in the trade ratios may simply result from exogenous shocks like better or worse terms of trade. But that point, while valid if we are asking the question of what is the effect of a policy stance, is wrong if our concern is with the effects that trade, regardless of the reasons for its expansion or contraction, has on income distribution. The question asked by Gourdon et al. is a more narrow, policy-oriented, one, but the question asked when we contrast simply trade to inequality is a broader, and perhaps in the era of globalization, a more relevant one.⁷

Global Inequality

Part IV leads us to perhaps one of the key issues at the time of globalization: inequality among all the citizens of the world. Here, we entirely change our perspective, and from asking, as we did before, what the effects are of openness (or globalization) on income distributions in individual poor or rich countries, now or in the past, we ask what the impact is of globalization on income distribution across all individuals in the world. This is an enormously more difficult question, and due to its complexity, it has hardly begun to be answered. We are still at the time of measurement, of trying to find out how to estimate global inequality, to figure out how it

has evolved in time. The issue of causality (impact of globalization on global inequality) has yet to wait.

That we are dealing with an entirely different level of complexity becomes obvious as soon as we realize that when we speak of globalization and global inequality, we have to account for at least two different effects: on the one hand, globalization may affect income distributions within different countries differently, and also globalization may affect growth rates of average incomes of different countries differently. This is why the findings of the studies such as Dowrick and Golley's, although they deal with growth, for us enter under the topic of inequality. Now this second (growth) effect, by raising or lowering most individual incomes in a given country, can totally offset the first effect. Thus, as it were, we have to be constantly juggling two variables: within-national inequalities and average growth rates. To illustrate this, take the most famous example of China. If globalization has a positive effect on Chinese growth rate, most Chinese, while starting very poor, will climb up the ladders of global income distribution, will boost the middling ranks of global income distribution, and the effect would be pro-global equality. But some, or even most, of that effect can be negated if within China income distribution becomes more unequal as a result of globalization. Then some Chinese will remain stuck at the very bottom of global income distribution, while others will shoot up straight to the top. As we have seen above, both are empirically true: China has certainly benefited from increased openness, and China's income distribution has become more unequal probably because of it. Which effect will predominate on the global scale?

The answer to that question is not so difficult to make for China because of its extraordinary high growth rate, and the fact that, when it opened up, it was extremely poor so it was overall pro-equality. But when we ask the same question for other countries, say Mexico or South Africa, the answer is much less obvious. It is therefore in the interaction between these two forces – growth rates and national income distributions – that we shall find the overall effect of Globalization II on global inequality.

The first paper in this part, Branko Milanovic's 'Global Income Inequality: A Review' (Chapter 17), presents an accessible introduction to the topic. It deals with a number of issues, like the just explained interaction between growth rates and national income distributions; moves on to the problems of household surveys which are the key 'matériel' from which, by 'collating' as it were national surveys to obtain a global one, we glean our picture of global income distribution; looks at the problems of conversion of national currencies into an international (PPP) dollar and a number of other methodological problems. It ends with estimates of current income inequality in the world, showing that it has been broadly stable or slightly increasing in the period 1988–2002, but – what matters much more – that its level is around 65 Gini points, a level much higher than that of any single country, including such paragons of inequality as Brazil and South Africa. It focuses on the fact that the gap in income between the top and the bottom is enormous, nay, that what we think of as the bottom really covers about 20 percent of world population that lives at the level of absolute poverty with around one PPP dollar per person per day. People belonging to the top 1 percent in the world make at least 100 times more.

Milanovic's second paper in this part ('True World Income Distribution, 1988 and 1993: First Calculations Based on Household Surveys Alone', Chapter 18) is the paper which (as indicated in the title) for the first time presented global income inequality estimates using individual (and in some case grouped) data from household surveys alone. It was a progress

made possible by two almost simultaneous developments: (1) much greater availability of household surveys which for the first time either covered some parts of the world (Africa) or became available to researchers (China, countries of the former Soviet Union), and (2) availability of estimates of relative price levels in most countries of the world which enabled the derivation of purchasing power parity (PPP) exchange rates, and thus the conversion of local currency incomes into a single currency (PPP dollar) that has the same purchasing power in any place on the globe. The second development created a numeraire that made possible, for the first time ever, a direct comparison of welfare levels between different parts of the world. Two key conclusions of Milanovic's paper are: (1) an extremely high existing level of inequality between citizens of the world, and (2) dominant share of inter-country inequality (that is, differences in population-weighted country mean incomes) in total inequality. The latter differentiates global inequality at the end of the 20th century very sharply from inequality some 150 years earlier when the dominant 'force' or 'cause' driving global inequality were within-national inequalities.

Xavier Sala-i-Martin's paper ('The World Distribution of Income: Falling Poverty ... and Convergence, Period', Chapter 19) is both very different from and similar to other papers included in Part IV. Its results regarding the level of global inequality are quite similar to those from other papers: global inequality is estimated to lie between 62 and 65 Gini points. (These are the results obtained before the most recent 2005 PPP exchange rates were published; the new PPP numbers pushed global inequality up by some 5 Gini points.)⁸ On the other hand, methodologically it departs strongly from the other papers by using income distribution data (often fragmentary, and of dubious quality) and by scaling them up by GDP per capita. This brought to a head an already existing methodological discussion about the permissibility of using distributional shares, say, income deciles, from one source (household surveys), 'throwing away' the mean income from that source, and replacing it with a mean from a different, and not comparable, source (GDP per capita). The justification often given for this choice is that household surveys may miss incomes of the very rich and thus underestimate the mean. GDP per capita is, according to this view, more accurate. But, clearly, if that reason holds, then distributional shares should also be corrected, and not used (as Sala-i-Martin does) without any correction. Moreover, by definition GDP per capita is not the same as disposable income, normally collected by surveys. GDP per capita includes a number of components that have nothing to do with the current welfare of the population (e.g., investments, depreciation, build-up of enterprise stocks, etc.) and is therefore almost never used in the analyses of poverty and inequality within nations. Thus, for example, the US household survey (Current Population Census) is used as a source from which to calculate poverty and inequality statistics for the United States; no one 'upgrades' these numbers by using an entirely different mean (GDP per capita).⁹ There is no more compelling reason to do it in the analysis of global poverty and global inequality. And indeed most authors do not.¹⁰

Despite its shortcomings and mistakes, Sala-i-Martin's paper is a valuable addition to the discussion because it raised a number of important issues, and displayed an impressive numerical/econometric technique whose objective was to remedy the chronic shortage of reliable inequality data.

The methodological and calculation issues are carefully covered in a critical survey of the literature by Bob Sutcliffe ('World Inequality and Globalization', Chapter 20). When it comes to measuring global inequality, the choice is not only between household survey means and