Introduction

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There is a shared sense that globalization is a powerful engine that has already contributed to lifting many out of poverty and that, if properly harnessed, could further promote growth and development to the benefit of all. For many years, however, concerns have been raised regarding certain effects of globalization on jobs, wages, and job insecurity. Recent survey evidence in European countries, for instance, indicates that in most countries a majority of respondents believe that globalization provides opportunities for economic growth but increases social inequalities. A German Marshall Fund (2007) survey shows that about half of Americans and Europeans think that "freer trade" results in more job loss than job creation. Globalization has also been blamed for the recent financial crisis and its effects on employment.

In this context, a number of observers have come to question the sustainability of globalization from a social point of view. Calls for a more inclusive globalization have become more frequent, but only a few concrete proposals have been put forward. This book aims at contributing to the elaboration of relevant policy proposals to make globalization socially sustainable. It is the result of a joint project of the International Labour Office (ILO) and the World Trade Organization (WTO) and has benefited from funding by the International Chamber of Commerce Research Foundation. The nine chapters in this volume have been written by leading academic experts, who were asked to analyse the various channels through which globalization affects jobs and wages in developed as well as in developing countries and to examine whether and how policies related to trade and to labour markets should be accommodated to make globalization socially sustainable.

The chapters in this volume are organized around three main themes that have received significant attention in recent debates on the social aspects of globalization: employment, uncertainty and inequality. These themes have been chosen because arguably they reflect the labour market aspects most relevant for public opinion. Indeed, for the overwhelming majority of households around the globe, labour income represents the main source of household revenue. As a consequence, households are interested in the availability of jobs, the revenue those jobs generate and the stability of revenue from labour. Survey evidence from industrialized countries increasingly reflects public concern about all three of these aspects, and sometimes reference is made to globalization in this context. In the United States, 40 per cent of respondents to a recent survey indicated that they expect the next generation to have lower standards of living and 62 per cent indicated that job security had declined (Anderson and Gascon, 2007).[1] In the same survey, three-quarters of respondents answered that "outsourcing overseas hurts American workers".

To shed light on the relationship between globalization on the one hand, and employment, uncertainty and inequality on the other hand, three chapters have been commissioned on each of the themes. The objective is to provide insights – based on state-of-the-art research – into the mechanisms that link globalization to each of the three labour market aspects and to provide an overview of the available statistical evidence on these linkages. In addition, a discussion of different policy options is provided under each theme. To the extent possible, relevant mechanisms, statistical evidence and policy options have been discussed from both an industrialized country and a developing country perspective.

The result is, we believe, a volume that provides an exceptionally comprehensive overview of the social aspects of globalization based on individual contributions meeting high academic standards. The book contains chapters on standard topics of the trade literature, like the chapter on globalization and inequality by Nina Pavcnik (Chapter 7) and on topics that are rarely explicitly analysed in the context of globalization, like the chapters on globalization and education policies by Ludger Woessman (Chapter 9) or on globalization and redistribution policies by Carles Boix (Chapter 8). Other topics, such as social protection (Chapter 6 by Devashish Mitra and Priya Ranjan), are familiar topics for labour market specialists interested in globalization, but much less familiar for trade economists interested in labour markets. Each chapter is a stand-alone contribution to the book and readers may choose to read individual chapters selectively. Our advice, though, would be to read the book in its entirety to take advantage of the wealth of issues covered and to appreciate the full complexity of the theme at hand.

The volume also has shortcomings, some of which we want to highlight here. From an institutional point of view, WTO experts may be disappointed about the lack of detail when it comes to the description of trade policy options. ILO experts may feel the same concerning issues related to social and labour market protection. Those familiar with the policy debate at the institutional level may sometimes find the terminology confusing, as it tends to be closer to the terminology used in academia than the terminology used in the policy debate. Most of the contributors to this book are economists, which some readers may consider a biased selection.

The structure imposed on the book is also debatable. The three themes, that is employment, uncertainty and inequality, may be appealing to most readers, but they can also be seen as introducing a somewhat artificial distinction between closely intertwined economic effects. Indeed, policies that have an impact on wages – and thus on incomes – are also likely to have an impact on the structure and the level of employment at least in the short run. Treating "employment" and "inequality" separately may thus appear somewhat artificial. Along similar lines, the term "instability" may be interpreted in terms of job instability or earnings instability. Indeed, John Haltiwanger tends to argue in terms of job numbers in Chapter 4, while William Milberg and Deborah Winkler refer to earnings in Chapter 5. The three separate themes in this volume are, therefore, interrelated both in practice and analytically. As a consequence, readers will find the three sections sometimes overlapping. Yet these overlaps and interlinkages also highlight some of the challenges academic experts and policy-makers face when evaluating or addressing the social sustainability of globalization.

Although we hope and expect that the contributions to this volume will prove to be of value for experts and policy-makers in the long run, subject choice has admittedly been influenced by events occurring in the period when the chapters were commissioned. This is probably most obvious in the first section of this volume, the one dealing with the interlinkages between globalization and employment. Work on this volume started when the world economy was in the middle of what is by now called the "Great Recession", an event explicitly dealt with in Chapter 3 by David Bell and David Blanchflower. Another phenomenon of that period was that the labour market effects of globalization were debated from rather different perspectives in the industrialized world and in the developing world. In the industrialized world the debate focused strongly on the question of whether offshoring is hurtful for domestic workers; a concern reflected in the survey evidence mentioned above. This question is dealt with by Holger Görg in Chapter 1 of this volume. In the developing world, instead, the successful examples of emerging economies like Brazil and China have led to questions as to the determinants of successful productive transformation in the context of globalization, a theme discussed by Margaret McMillan and Dani Rodrik in Chapter 2.

In the rest of this introduction, we provide a short overview of the chapters in this volume and we point out a number of open questions. The discussion is structured around the three themes highlighted in this book: employment, uncertainty and inequality.

Globalization and employment

The first section of the volume examines three different facets of the linkage between globalization and employment. While Holger Görg reviews the literature on the effects of trade and offshoring on employment in developed countries, Dani Rodrik and Margaret McMillan explore the linkages between globalization, structural adjustment and growth in developing countries. David Blanchflower and David Bell complement these contributions with a discussion of the crisis and its effects on jobs. In all three chapters the policy implications of the main findings are considered. Görg emphasizes the challenges associated with the identification and the compensation of losers from globalization and Blanchflower and Bell discuss the effectiveness of policy responses to the crisis.

Following the approach taken in much of the relevant academic literature, Holger Görg, in Chapter 1 of this volume, discusses the phenomena of trade and offshoring separately. Regarding the trade–employment linkage, he finds that over the last decade the view that there should be no substantial link between employment and trade has slowly changed due to new theoretical developments and new empirical results. These results generally suggest that imports may cause job displacement in the short run, due to adjustment costs. While far fewer studies have been able to consider differences between the long and short run, those that have done so generally find that, in the long run, there appears to be a positive relationship between imports and employment. However, this may not be true for all firms that engage in importing, as suggested by a number of recent studies.

As regards the impact of offshoring on employment, Görg emphasizes that it results from the combination of a number of different effects. Offshoring frequently leads to productivity increases and expanded sales in the company that offshores. The result may be that this same company ends up employing more rather than fewer people. This is the so-called "scale effect" of offshoring. The jobs created may be of a different type, though, than those offshored. In addition, as a consequence of offshoring a company may provide its services to other businesses at lower cost, and the latter may be able to expand activity and employment (depending upon their employment–sales ratio). Finally, if offshoring results in lower prices to final consumers, their real income increases and some proportion of that real income will be spent on domestically produced goods and services, again raising overall employment in the offshoring country.

Görg's review of the literature suggests that just like trade, offshoring is likely to trigger a reshuffling of employment with some workers temporarily losing their jobs and possibly taking time to find a new one. This reshuffling can in theory lead to temporary surges in an economy's level of unemployment, but there is not much evidence that this indeed happens in practice. For the individuals losing their job, though, this is not much of a consolation as the transition may cause significant hardship for them and their family. Also, the employment effects are likely to differ across type of workers. The evidence points in the direction that low-skilled workers are more likely to lose and high-skilled workers more likely to benefit. Very recent work also emphasizes that the effect of offshoring may differ across occupations, with workers in "tradable occupations" being more likely to lose than those in "non-tradable occupations".

Overall, Görg draws four main conclusions from the still relatively scarce literature on globalization and employment. First, globalization and, in particular, offshoring may lead to higher job turnover in the short run. Second, in the long run there is no indication that trade or offshoring leads to higher unemployment (or lower employment) overall, although employment of low-skilled workers may suffer while high-skilled employment may expand. Third, even where effects are statistically significant, the economic magnitude thereof is still debated, with many studies concluding that they are economically negligible. Fourth, there is evidence that the structural change away from manufacturing towards services sectors in advanced economies goes hand in hand with the process of globalization.

While the chapter by Görg tends to focus on the point of view of offshoring countries, the bulk of which are (still) industrialized countries, Chapter 2 of this volume has a strong focus on developing countries. In that chapter, Margaret McMillan and Dani Rodrik discuss the linkages between patterns of structural change and growth and analyse the role played by globalization in driving these patterns. In several cases – most notably China, India and some other Asian countries – globalization's promise has been fulfilled. High-productivity employment opportunities have expanded and structural change has contributed to overall growth. But in many other cases – in Latin America and sub-Saharan Africa – globalization appears not to have fostered the desirable kind of structural change. McMillan and Rodrik argue that part of the reason for this productivity-reducing adjustment is that labour has moved in the wrong direction, from more-productive to less-productive activities, including, most notably, the informal economy. When intensified import competition forced manufacturing industries in Latin America and elsewhere to become more efficient by rationalizing their operations, workers were displaced. In economies that do not exhibit large intersectoral productivity gaps or high and persistent unemployment, labour displacement would not have important implications for economy-wide productivity. In developing economies, on the other hand, the prospect that the displaced workers would end up in even lower-productivity activities (services, informality) cannot be ruled out. That is indeed what appears to have happened in Latin America and Africa.

The authors decompose labour productivity growth into two components: (i) a "within" component that is the weighted average of labour productivity growth in each sector of the economy; and (ii) a "structural change" component that captures the productivity effect of labour reallocations across different sectors. It is essentially the inner product of productivity levels (at the end of the time period) with the change in employment shares across sectors. Results show that structural change has played an important but very different role in the three developing regions. In both Latin America and Africa, structural change has made a sizable negative contribution to overall growth, while Asia is the only region where the contribution of structural change is positive. In other words, where Asia has outshone the other two regions is not so much in productivity growth within individual sectors, where performance has been broadly similar, but in ensuring that the broad pattern of structural change contributes to, rather than detracts from, overall growth. An examination of sectoral details for specific countries provides further insight into these results, showing considerable heterogeneity between countries.

Because all developing countries in the sample have become more "globalized" during the time period under consideration, it is natural to think that globalization has played an important behind-the-scenes role in driving the patterns of structural change. However, it is also clear that this role cannot have been a direct, straightforward one. First, the detailed results presented in the chapter show a wide range of outcomes: some countries (mostly in Asia) have continued to experience rapid, productivity-enhancing structural change, while others (mainly in Africa and Latin America) have begun to experience productivity-reducing structural change. A common external environment cannot explain such large differences. Second, a large number – perhaps a majority – of jobs are still provided by non-tradable service industries. So whatever contribution globalization has made, it must depend heavily on local circumstances, choices made by domestic policy-makers and domestic growth strategies.

McMillan and Rodrik present the results of some exploratory regressions aimed at uncovering the determinants of differences across countries in the contribution of structural change. They identify three factors that help determine whether (and the extent to which) structural change goes in the right direction and contributes to overall productivity growth. First, economies with a revealed comparative advantage in primary products are at a disadvantage. The larger the share of natural resources in exports, the smaller the scope of productivity-enhancing structural change. The key here is that minerals and natural resources do not generate much employment, unlike manufacturing industries and related services. Even though these "enclave" sectors typically operate at very high productivity, they cannot absorb the surplus labour from agriculture. Second, countries that maintain competitive or undervalued currencies tend to experience more growth-enhancing structural change. In McMillan and Rodrik's view, this is because undervaluation acts as a subsidy on those industries and facilitates their expansion. Finally, there is also evidence that countries with more flexible labour markets experience greater growth-enhancing structural change. This also does not surprise the authors, as rapid structural change is facilitated when labour can flow easily across firms and sectors.

Chapter 3, by David Bell and David Blanchflower, considers the diversity of impacts that the Great Recession has had on labour markets in different parts of the globe. The authors observe that during this recession, the performance of the labour market in the developed world has been weaker than in developing countries. Although there has been some recovery in output in the developed world, any associated increase in employment has been limited. Thus far, the recovery has been "jobless". They argue that the difference in labour market impact can be explained partly by differences in the recovery of output, characterized – for instance – by a significantly stronger recovery in newly industrialized Asian economies than in the European Union and in G7 countries. Labour mobility is another factor explaining cross-country differences. Also, employers in different countries have responded in a variety of ways to a fall in product demand.

Another key feature of the Great Recession that the authors examine is how its effects have been distributed across different groups within the population. The young, the poorly educated and ethnic minorities have borne a disproportionate share of the increase in unemployment during the Great Recession in developed countries. Evidence indicates that the Great Recession has particularly affected the young through: (a) higher unemployment rates, (b) higher levels of underemployment and (c) an increased willingness to accept lower-quality jobs. Youth unemployment is particularly likely to lead to "scarring" effects, referring to the phenomenon that adverse labour market experiences when young lead to further negative market outcomes well into the future.

Bell and Blanchflower also examine how attitudes have changed with the crisis. They find that happiness and well-being have held up reasonably well except in a few countries such as Greece. Survey evidence from 2010 also indicates that in all but one of 43 European countries surveyed the majority of people believe that while globalization is an opportunity for economic growth, it increases social inequalities. In all countries the majority of people surveyed believe that globalization is profitable only for large companies, not for citizens. When taking into account the individual characteristics of interviewees, males, the most educated and the young are most content about the positive impact of globalization on growth. The unemployed are much less likely than the employed to agree that globalization helps growth. Survey-based evidence indicates that the unemployed, the young and the least educated hold most strongly the view that it is the job of the public sector to create jobs in the midst of a financial crisis. A major concern going forward is that if the recovery is jobless there will be growing demands for protectionism, especially in countries where inequalities are widening.

Finally, the authors consider policy responses and find that in many countries public sector intervention has indeed had a significant attenuating effect on the economic and employment impacts of the crisis. The first policy response to the financial crisis has been to adjust monetary policy and to stimulate monetary expansion through means like interest rate cuts. A second response to the crisis has taken the form of the operation of automatic stabilizers. As private demand fell, government spending on a variety of social insurance schemes increased. In the immediate aftermath of the crash this took the form of increased spending on unemployment benefits, above all. The third response was the introduction of discretionary measures to boost aggregate demand, although it has been found that these made a smaller contribution to maintaining output and employment than automatic stabilizers. Last but not least, some countries have made use of new or more generous active labour market policies (ALMPs) during the crisis. Schemes to support short-time working (STW) and so avoid lay-offs have been introduced or reinstated in a number of countries. Also, measures to reduce non-wage labour costs and so encourage employers to substitute labour for capital have been introduced. However, the additional discretionary spending on these ALMPs in response to the recession has been small. It has been shown that these schemes helped preserve permanent jobs during the downturn but that they did not help maintain temporary employment.

Globalization and uncertainty

Another concern often expressed in surveys capturing public perceptions of globalization is the concern that globalization is associated with an increased probability of job loss. The second theme of this book, therefore, deals with the relationship between globalization and uncertainty in the labour market, both real and perceived. John Haltiwanger examines how globalization affects the process of resource reallocation and results in both job destruction and job creation. William Milberg and Deborah Winkler focus on how this process of resource reallocation results in real and perceived economic uncertainty at the aggregate level in individual economies. Last but not least, the third chapter under this theme, written by Devashish Mitra and Priya Ranjan, provides insights into the design of social protection policies that want to address the economic uncertainty related to globalization. Particular attention is paid to the fact that optimal policy intervention may differ across countries with different income levels.

Chapter 4 by John Haltiwanger describes how the process of growth requires ongoing productivity-enhancing reallocation, during which firms are constantly forced to adjust and adapt to changing economic circumstances. Those that reinvent themselves will survive and grow. Those that adapt and adjust poorly will contract and exit. In good economic times and in well-functioning economies, many workers who separate from firms experience either no or a short spell of unemployment and may experience an increase in earnings relative to their previous jobs. This is consistent with the fact that many workers reallocate away from lower-productivity firms to higher-productivity firms. As a result, in well-functioning economies, more-productive businesses end up being larger (static allocative efficiency) and resources are constantly being moved from less- to more-productive businesses (dynamic allocative efficiency). Workers who find themselves displaced from a firm with mass lay-offs (for example, due to a plant closing), however, tend to experience unemployment spells and adverse effects on their earnings. In that respect, the positive findings of improved market selection need to be balanced with the difficulties workers face in separating from bankrupt firms.

Globalization potentially plays a key role in these dynamics and in the ensuing effects on workers' earnings and employment. Empirical evidence shows that in countries that open their markets, less-productive businesses are more likely to exit and more-productive businesses are more likely to survive. This improved market selection contributes positively and substantially to productivity growth. While the economic literature thus provides strong support for the positive role of trade liberalization in improving allocative efficiency and thus growth, both theory and evidence point towards many things that can go wrong and that either mitigate or potentially limit the gains from trade reform.

Haltiwanger argues that in a highly distorted economy, there are second-best problems so that piecemeal trade reform will not be as effective. Infrastructure may not be of sufficiently high quality to ensure that the growth of existing and start-up businesses is not thwarted by bottlenecks in transportation and communications. Competition policy may not be effective enough to prevent large firms from abusing their market power. Financial markets may not be sufficiently developed to fund new and expanding businesses, and to deal with the high rate of failure among start-ups and small businesses. One possible reflection of problems in the functioning of markets and institutions is the existence of a large informal economy.

Reallocation has little chance to enhance productivity in such distorted economic environments. In extreme cases "de-coupling" can take place; a situation in which market reform induces downsizing and exit by the less-productive businesses that is not accompanied by creation and expansion by the more-productive businesses, because the latter process is delayed or derailed. In such cases, the negative effects on dislocated workers can be particularly harsh and can, in particular, take the form of long unemployment spells. All of the potential problems with dislocation are significantly exacerbated in economic downturns even in otherwise healthy economies. The recent economic crisis has also highlighted the fact that heightened uncertainty during such crises can potentially dampen economic recovery. Haltiwanger, therefore, concludes that one of the challenges of economic and in particular trade reform is to address the impact of heightened uncertainty which can either arise as a result of economic crises or of the market reforms themselves.

In the fifth chapter of this volume, William Milberg and Deborah Winkler analyse how labour market uncertainty triggered by offshoring is reflected at the aggregate level in changes in the labour share of income. They argue in favour of using the labour share of income as a measure for economic insecurity experienced by the workforce because it captures both employment (for instance, job loss) and earnings (for instance, wage reduction) effects. The authors report evidence showing that in many industrialized countries, the increase in the labour share of income observed during the 1970s began to level off in the 1980s and turned into a downward trend at the end of the 1990s. In their chapter they analyse whether offshoring and labour market policies are among the determinants of changes in the labour share of income.

Using data for 15 OECD countries, they find that offshoring had a positive effect on the labour share over the period 1991–2008, a result that seems to be driven by the period 1991–98. When conducting the same analysis by individual countries, they find that the effect of offshoring on the labour share depends crucially on national labour market institutions. In particular, they find that offshoring is associated with a reduced labour share in sectoral value added in countries with low and medium labour support. In countries characterized by strong labour market support in terms of spending on active labour market policies and short-term unemployment replacement benefits, instead, they find that offshoring results in positive effects on the labour share of income.

As mentioned above, recent surveys show an increasing concern about income and job security in industrialized countries. In the United States, 40 per cent of respondents to a recent survey expect that the next generation will have a lower standard of living, 62 per cent said job security had declined and 59 per cent said they have to work harder to earn a decent living. Most strikingly, 75 per cent of US respondents said that “outsourcing work overseas hurts American workers”. Another survey shows that about half of Americans and Europeans think that “freer trade” results in more job loss than job creation. In France, 66 per cent of respondents in a recent survey consider that free trade leads to more social and economic inequality.

In their chapter, William Milberg and Deborah Winkler compare cross-country survey evidence on the perception of globalization with the actual effect of offshoring on the labour share of income they estimated in the empirical work presented in this volume. Their findings indicate that perceptions of globalization being a threat to employment are more prominent in countries characterized by a negative estimated employment effect of offshoring. These findings are consistent with earlier findings by Scheve and Slaughter (2003) indicating that US workers more sceptical about globalization are those more likely to be negatively affected, because of their lower skill level. They are also consistent with the evidence reported by David Blanchflower and David Bell in this volume. Milberg and Winkler conclude from this evidence that popular resistance to globalization reflected in surveys is not based on misinformation or irrationality, and that it can be mitigated by protective labour market policies.

In Chapter 6 of this volume, Devashish Mitra and Priya Ranjan focus on the possible role of social protection in ensuring that freer trade leads to an improvement in the well-being of some without hurting anybody else in the economy. They also study conditions under which social protection leads to greater political support for (or less opposition to) trade reforms. It is in this context that their chapter also deals with the choice and the design of social protection policy instruments. In their discussion, they distinguish two types of globalization-related shocks to which workers are exposed. First, changes in trade policy are themselves a form of "shock" as they trigger a reshuffling of production factors to more productive activities. Second, it has been argued in the literature that openness increases economies' exposure to external shocks as illustrated during the Great Recession.

In their chapter, Mitra and Ranjan support the idea that social protection can lead potentially to increased support for freer trade, but they emphasize that one needs to be careful in making this argument. First, decisions on social protection will have to be finalized prior to carrying out trade reforms in order to influence voter support on trade reform. Second, a focus on trade-displaced workers alone may not be enough to raise sufficient support for freer trade, as workers stuck in a declining sector may also have to be provided with transfers to win their support for trade liberalization. Policies that aim at increasing political support for trade reform may therefore need to take equity concerns into account in addition to concerns about possible job losses related to the adjustment process following trade liberalization.

The Great Recession, and the East Asian crisis before it, provide some insights into the type of policies that are likely to work in the context of the second type of shocks mentioned above, that is, unpredictable employment disruptions caused by globalization. During both crises a range of policies were introduced to mitigate the consequences of crises. Those include labour-intensive public infrastructure projects, skill-training intervention, provision of employment services and wage services. Social protection systems already existing before the crises also acted as automatic stabilizers.

Consistent with Milberg's and Winkler's findings, Mitra and Ranjan find that social protection systems based on "flexicurity"-type arrangements – combining generous unemployment benefits with strict monitoring of job search – do well in providing protection demanded by workers but also the flexibility necessary for a smooth functioning of adjustment and growth processes. They find that those systems perform well on both the equity front and the efficiency front when it comes to smoothing possible negative labour market effects of external shocks. In their chapter Mitra and Ranjan also examine different approaches to funding social protection systems and find that they do not vary significantly across developed countries. In particular, it is the case that firms tend to contribute to the funding of social protection with the tax on firms ranging from flat to mildly progressive in the extent of worker turnover.

Mitra and Ranjan also highlight that flexicurity-type systems as known in northern European countries will be difficult to implement in most low- and even middle-income countries, in particular because of the size of the informal sector in those countries. Based on the experience in numerous East Asian countries during the financial crisis of the late 1990s, they argue that public works programmes can be very successful in mitigating the consequences of crises in low-income countries. Introducing other types of social protection systems would notably require improvements in income tax collection infrastructure; an effort the authors consider worth making.

Globalization and inequality

A significant number of countries have experienced important increases in income inequality in recent years. The evolution of incomes in the top percentiles of the income distribution has received a lot of attention in the public debate and globalization has often been pinpointed as one of the possible causes of diverging revenues. The third section of this volume is therefore dedicated to the relationship between globalization and inequality. It starts with a chapter by Nina Pavcnik, who summarizes evidence on the evolution of within-country inequality for a large set of developed and developing economies and surveys evidence on the links between inequality and difference measures of economic openness. In Chapter 8, Carles Boix examines whether and how globalization affects governments' capacity to pursue autonomous redistribution policies at home. Last but not least, in Chapter 9, Ludger Woessmann discusses the possible role of education policies in making globalization more inclusive by increasing the number of winners from globalization.

Chapter 7 by Nina Pavcnik reviews the literature on the impact of globalization on within-country income inequality. To set the scene, Pavcnik surveys recent studies that have analysed the long-term evolution of the share of total income held by individuals positioned in the top 1 per cent of a country's income distribution for a significant number of developed and developing countries. Almost all countries had experienced a sharp decline in the top share of income in the first half of the twentieth century. For a majority of countries for which information is available the decline continued after the Second World War. In many countries, however, both developed and developing, the trend was reversed in the 1980s when the share of the top 1 per cent started to increase. The underlying reason for the differences in the increase in the top 1 per cent share across countries since the 1980s continues to be a topic of academic debate. The literature, however, highlights a possible role of globalization in the evolution of the top incomes through changes in commodity prices or wage income.

In the 1990s and early 2000s, economists focused their analysis on the links between merchandise trade and wage inequality as predicted by the workhorse model of trade, the Heckscher–Ohlin model. Pavcnik finds that the large body of empirical research in this field, however, finds little evidence that international trade in final goods – induced by relative factor endowment differences – can account for much of the observed increase in skill premiums in developed and developing countries. The lack of evidence of wage inequality increases induced by Hecksher–Ohlin type mechanisms is often cited in support of the idea that the main driver of growing wage inequality is skill-biased technological change and not trade.

While many economists now agree that skill-biased technological change plays an important role in accounting for recent trends in wage inequality, Pavcnik reviews recent research that has uncovered evidence on new channels through which trade could have contributed to observed increases in wage inequality in developed and developing countries. In particular, the growing skill premiums in developed and developing countries could in part be driven by increases in offshore outsourcing. An increasing share of trade occurs in intermediate goods and firms increasingly engage in "global production sharing". In the mid 2000s, trade in intermediate goods accounted for two-thirds of world trade. Several theory papers have argued that the expansion of "global production sharing" could account for part of the growing wage gap between skilled and unskilled workers in both developed and developing countries. The latter would be the case because offshoring can contribute directly to skill-biased technological change in developing countries. A number of empirical studies have found evidence consistent with this theory.

Also, the recent literature on trade with heterogeneous firms suggests that trade could contribute to wage inequality via residual wage inequality, by influencing differences in wages paid to workers across firms within industries. Not much is known, however, of the relative importance of the new trade channels relative to the effect of skill-biased technological change in explaining the observed increases in wage inequality.

Overall, Pavcnik concludes that the large literature on the link between trade and wage inequality indicates that the fact that wage inequality increased significantly in a period in which many developing countries implemented large trade liberalizations does not necessarily imply that trade has been a major driver of increased inequality. Indeed, the literature on the topic has shown that the effect of international trade on wage inequality is rather nuanced and depends on the specific country in question, the nature of trade liberalization and/or the type of trade that countries engage in.

Another channel through which globalization can affect income distribution is through its effect on governments' capacity to redistribute wealth within an economy. This effect is the focus of Chapter 8 in this volume. Carles Boix structures the discussion in that chapter around three questions. (1) In the face of possible changes in the level of domestic income inequality and of a growing cross-border mobility of factors (and its associated threat of capital flight), can (and do) states develop fiscal policies to compensate those made worse off by further economic integration? (2) Are there any particular strategies that can make economic globalization and fair social policies at home (designed to share the gains from trade) compatible? (3) Does globalization erode welfare states in the medium to long run?

Regarding the first question, Carles Boix points to evidence that the size of the public sector as a percentage of gross domestic product (GDP) is correlated with the level of trade openness across the world. One is, therefore, tempted to answer the first question in the affirmative. Yet, Boix acknowledges that the correlation, which is especially well-established in the sample of developed countries, may decline under certain conditions. Because the process of globalization increases the mobility of factors and, particularly, the mobility of capital, it may jeopardize the ability of states to meet social demands for compensation (or for more redistribution in general) because the factors that would face higher taxation have the possibility to move abroad. In fact, for sufficiently high levels of capital or factor mobility, governments may simply lack the fiscal tools to offer a public spending package that makes sufficiently large numbers of voters feel comfortable with openness. As a consequence economic openness may fail to take place altogether.

One way to avoid such a situation is, according to Boix, to channel an increasing amount of public spending into productivity-enhancing economic policies, like increased spending on infrastructure, human capital or the quality of public institutions. The timing of such policies will, however, matter. In particular, it may be necessary to invest in human and physical capital formation before opening the economy as this will increase voter support for liberalization and minimize the threat that production factors leave the economy after liberalization. Boix also acknowledges that pure policies of social compensation may reduce incentives for production factors to leave, as they have the potential to reduce social conflict.

Carles Boix thus answers the second question, mentioned above, in the affirmative: strategies to make globalization and fair social policies at home compatible do exist. He acknowledges, though, that it may be hard to implement them from a political point of view. Indeed, an influential part of the literature argues that globalization triggers a tax and spending race to the bottom. Forced by the competition of emerging economies, the advanced world will have to adjust its welfare state downward. In turn, the emerging world will also have little incentive to introduce any social and labour regulations that could derail it from catching up with wealthier economies. Boix, however, argues that this scenario is relatively unlikely to happen. The historical trajectory of advanced countries shows, in his view, that as soon as developing countries have reached a certain level of prosperity, they expanded political rights and democratized. That, in turn, led to the creation of a social insurance system and the expansion of the labour income share. Boix further argues that if all countries develop along a similar institutional path, they will reach an analogous economic and political steady state. Factor returns will converge across all economies, and globalization and welfare states will be compatible, at least in the long run. Still, this may not be true in the short run: a disjointed timing between economic and political transformations in emerging economies may put considerable pressure on welfare states and the generation of employment among certain economic sectors in advanced countries.

The theme of human capital formation, already raised above, is the focus of Ludger Woessmann's chapter, the last chapter of this volume. Education and skill policies take centre stage in increasing the social sustainability of globalization. They determine whether people acquire the capabilities required to share in the gains from globalization. Currently, many low-educated people in rich countries tend to be excluded from this. Despite the large possible gains from the reuse of ideas that globalization opens up, many poor countries are excluded because they lack the skills required to adopt new technologies from abroad and to deal with the rapidly changing conditions that globalization brings about.

Recent research shows that basic cognitive skills, measured by tests in mathematics and science in primary and secondary school, are a leading predictor of economic growth. This suggests that these basic skills learned in school are a good predictor of the ability to address the constant need to adapt to new technologies and changing conditions in a globalizing world. At any given point in time, an economy clearly needs additional skills more specifically linked to certain occupations and sectors. This raises the question to what extent education systems should provide general vs. specific skills. While evidence on this topic is limited, Woessmann argues that there is an obvious rationale to expect that a general type of education provides a better foundation for sustained growth than specialized vocational education in times of globalization when new technologies emerge at a rapid pace.

Woessmann therefore argues in favour of developing specialized programmes of vocational and technical education, where they exist, in ways that provide generalizable skills – ones that will not become obsolete immediately with the changes in technology and industrial structure that globalization processes bring about. He also argues in favour of educational policies that create incentives for better educational outcomes, and that focus on the knowledge and skills actually learned rather than on the mere attendance of schools. The relevance of early childhood education receives particular emphasis in his chapter because it is a valuable input into learning processes at following stages in life. When the focus is on socially sustainable globalization, education policies in rich countries should, in Woessmann's view, aim to ensure that children from disadvantaged backgrounds receive a high-quality education. Education policies in poor countries should aim to lift the skill level of their populations in a way that allows them to profit from the international flow of ideas, which may require improvements in educational outcomes throughout.

Open questions

The contributions in this volume provide a comprehensive overview of the economics literature on the labour market effects of globalization. They contain a lot of valuable information and insights, but also show that important knowledge gaps remain. The chapters, for instance, illustrate how economists have focused their attention on a certain number of specific questions such as, for instance, the issue of the effect of trade on the skill premium leaving other dimensions largely unexplored. For example, as noted by Holger Görg, economists have for a long time paid little attention to the possible effects of trade on unemployment. This was mainly due to the fact that traditional models of trade are based on the assumptions that labour markets are perfectly competitive and that there is full employment. Under these assumptions, it is the wage rate which adjusts and while there may be some unemployment in the short run, the long-run rate of unemployment should not be affected by trade. The view that there should be no substantial link between employment and trade has changed progressively due to new empirical results and theoretical developments. Empirical evidence regarding the link between trade and employment, however, is still relatively scarce. More research on this link is clearly needed in both developed and in developing countries.

In the case of developing countries, several contributions in this volume suggest that the analysis of the labour effect of globalization should not be limited to the formal part of the labour market. The role of the informal sector in the adjustment process following opening appears to be both important and under-researched.[2] Part of the reason for limited research is the lack of appropriate data on informal sector employment and wages. This suggests that research efforts in this area will have to start with an important data collection effort. In developed countries, there is a need for further research on both the effects of trade and of offshoring. Görg suggests that cross-country comparisons of these effects using common methodologies would help understand the important differences in results.

The foreign direct investment (FDI)–trade linkage is a very important phenomenon, reflected in the fact that the majority of trade currently takes place within firms. The phenomenon is being discussed in a growing body of literature around the theme of offshoring. While this literature has already delivered interesting insights,[3] it remains at times confusing. At a technical level, a more consistent way of dealing with offshoring could be useful. In "new-paradigm models" it is modelled as "trade in tasks" paired with technological transfer restricted to the multinational. From the point of view of the host country this would be incoming FDI and exports of intermediate goods. Also, offshoring is often measured as trade in intermediate goods, which is clearly unsatisfactory. The different combinations of FDI and trade used to capture offshoring – in both the theoretical and the empirical literature – also lead to the question whether it still makes sense to talk about trade policies separately from FDI policies.

Another question which appears to need more attention from economists is that of structural adjustment and its linkages with globalization. Not much is known about the role of trade in driving structural adjustment in developing countries or more specifically deindustrialization in developed economies. It would be useful to assess the extent to which increased globalization has affected sectorial specialization patterns. The contribution by McMillan and Rodrik points at a number of factors that seem to affect the linkage between globalization and growth-enhancing structural adjustment, but more work is needed to get a better understanding of the role governments should play in order to maximize the benefits from globalization.

As already mentioned, the linkages between trade opening and inequality have attracted considerably more attention from researchers in the last decades than the linkages between trade and jobs. There is now a rich literature that analyses the effect of trade on the skill premium. Nina Pavcnik's review of the trade and inequality literature, however, points at a number of research gaps. One question that arises, for instance, is how much of the overall increase in inequality that can be observed in many countries is explained by global production sharing or by differential effects of trade on wages of workers across heterogeneous firms within industries in comparison with other factors such as skill-biased technical change. More research would also be needed on the linkages between trade and skill-biased technical change. If they are too closely linked, it might not be possible to identify separately their contribution to changes in wage inequality. Another question which should remain on the agenda concerns the role of labour market institutions in mediating the effect of globalization on inequality and the effect of globalization on those institutions.

Yet another area that would need further exploration is the interaction between globalization, economic downturns and labour markets. As suggested by John Haltiwanger, little is known about the impact of globalization on the volatility associated with economic crises and the effect of this volatility on workers when markets are globalized. This is particularly true for emerging economies where the effects of heightened uncertainty associated with economic downturns and restructuring are likely to be particularly important. A priority for future research should be to understand the effects of such heightened uncertainty on workers in emerging economies. Given the particularly harsh effects of unemployment spells on the young highlighted in Bell and Blanchflower's chapter, a focus on young workers may be warranted in relevant future work.

The various contributions in this volume do not only shed light on the social effects of globalization, they also provide valuable information on the effectiveness of various policy options available to governments to make globalization socially sustainable. Yet, here again, research has focused on certain linkages leaving others almost untouched. For example, there is a rich literature on the role of labour market policies providing useful guidance to policy-makers. On the other hand, the literature on the linkages between globalization and redistribution policies or education policies is relatively thin. The discussions in Chapters 8 and 9, however, show~~s~~ that these policies have an important role to play and that more research in these areas may be warranted. More generally, as suggested by John Haltiwanger's contribution, several conditions need to be in place for opening to enhance productivity without imposing high costs of reallocation on businesses and workers. The papers in this volume draw a number of useful lessons, for instance on labour market regimes, social protection or education policies. However they leave a number of questions open and raise a number of new questions. Clearly more work is needed to understand the sort of skills education systems should provide in a world where jobs can be offshored.

It has been mentioned before that the three themes discussed separately in this volume are in practice interconnected. This interconnection poses significant challenges for researchers and policy-makers alike. The discussion in this book notably leads to the question of whether the traditional focus on the wage effects of trade is justified and whether it would not be appropriate to pay more attention to employment effects both in terms of level and structure of employment. Milberg and Winkler propose to use the wage share in GDP as a measure for the labour market impacts of globalization. This measure, indeed, captures both revenue and quantity effects, but has other shortcomings. Further discussions on appropriate ways to measure labour market effects could therefore be useful.

Several chapters in this book shed light on three policy areas relevant for making globalization socially sustainable: social protection, redistribution and education policies. Together these chapters provide important insights for coherent policy-making. They highlight the possibly important role of governments in making globalization socially sustainable. A future volume of this nature should, therefore, perhaps also include a more extensive discussion of public finance questions.

Endnotes

1. See also the discussion in Milberg and Winkler, Chapter 5 in this volume.

2. See also the discussion on trade and the informal economy in an earlier joint ILO–WTO publication by Bacchetta et al. (2009).

3. Think, for instance, of the parallels drawn between the effects of offshoring and "shadow migration" in Baldwin and Robert-Nicoud (2007).

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