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2 Globalization and poverty

What is the evidence?

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Introduction

This chapter reviews the evidence on the linkages between globalization and poverty, drawing on the collected works of Jagdish Bhagwati and the results of an National Bureau of Economic Research (NBER) project directed by Ann Harrison, *Globalization and Poverty*. We focus on two measures of globalization: trade integration (measured using tariffs or trade flows), and international capital flows. Many economists have used the Heckscher–Ohlin framework in international trade to argue that the unskilled or the poor in countries with a comparative advantage in unskilled labor are most likely to gain from trade reform. Our first conclusion is that such a simple interpretation of general equilibrium trade models is likely to be misleading. Second, the evidence discussed suggests that the poor are more likely to share in the gains from globalization when there are complementary policies in place. Such complementary policies include programs to promote human capital development, infrastructure development, credit and technical assistance to farmers, and macroeconomic stability. Third, we find that trade and foreign investment reforms have produced benefits for the poor, particularly those in exporting sectors or sectors which receive foreign investment. Fourth, financial crises are very costly to the poor. Finally, the collected evidence suggests that globalization produces both winners and losers among the poor. The fact that some poor individuals are made worse off by trade or financial integration suggests the need for carefully targeted safety nets. We emphasize the heterogeneity of results across different countries and settings, but also present cross-country evidence which suggests that the path from globalization to poverty reduction via the growth effects of trade reforms is likely to be important.

Today, thanks to television, we have what I call the paradox of inversion of the philosopher David Hume's concentric circles of reducing loyalty and empathy...What the Internet and CNN have done is to take Hume's outermost circle and turn it into the innermost. No longer can we snore while the other half of humanity suffers plague and pestilence and the continuing misery of extreme poverty.

(Jagdish Bhagwati, *In Defense of Globalization*, 2004, p. 18)

The impact of globalization on the poor has been one of the most intensely fought areas of the globalization debate, and with good reason. Sustainable poverty reduction is one of the most important challenges facing the world today, and globalization is a powerful force affecting the well-being of the world's people. How globalization can be used to promote growth and reduce poverty in developing countries has been an ongoing theme in Professor Jagdish Bhagwati's work. This chapter was written in honor of Professor Bhagwati, who is without a doubt the most influential academic in this field.

One of Professor Bhagwati's many outstanding contributions as an academic has been his commitment and ability to communicate his extraordinary understanding to a broad audience. He has written extensively on the topic of globalization and poverty; including in his most recent book, *In Defense of Globalization*¹ Professor Bhagwati has been particularly effective at reminding his audience of important insights which are at risk of being lost due to either misinformation or misunderstanding of the scholarly debate by the general public.

This essay provides an economic perspective on how globalization affects poverty in developing countries. Our objective is twofold. First, we seek to highlight Professor Bhagwati's writings on the linkages between globalization and poverty reduction. Second, we survey recent empirical evidence on those linkages, drawing primarily from a forthcoming book, *Globalization and Poverty*, commissioned by the NBER. The fifteen studies and fifteen discussions that are part of the NBER project, which was directed by Ann Harrison, ask the following questions: how has global economic integration affected the poor in developing countries? Do trade reforms that eliminate or reduce import protection lead to rising or falling poverty? Has increasing financial integration led to more or less poverty? How have the poor fared during currency crises? Do agricultural support programs in rich countries hurt the poor in developing countries, as some critics argue? Or do such policies in fact provide assistance by reducing the cost of food imports? Finally, does food aid help or hurt the poor? Although the concept of "globalization" is quite broad, we focus on two important aspects: (1) international trade in goods and (2) capital flows—including foreign investment, portfolio flows, and aid. Of course, this definition is not all-encompassing: economic aspects of globalization have also affected information flows, migration, and trade in services. However, we focus primarily on trade and capital flows, as these have been the focus of Professor Bhagwati's voluminous writings and are at the center of intense policy debates.

Several recent surveys seek to identify the relationship between globalization and poverty (see for example, Goldberg and Pavcnik, 2004a, and Ravallion, 2004, Winters *et al.*, 2004). However, the authors of these surveys acknowledge that they can only review the *indirect* evidence regarding the linkages between globalization and poverty. There have been almost no studies which test for the direct linkages between the two. Winters *et al.* (2004) write in their insightful and comprehensive *Journal of Economic Literature* (JEL) survey that "there are no direct studies of the poverty effects of trade and trade liberalization" (JEL, p. 73). Goldberg and Pavcnik's (2004a) excellent review points out that "while the

literature on trade and inequality is voluminous, there is virtually no work to date on the relationship between trade liberalization and poverty.” The few studies which do examine the links between globalization and poverty, including several cited in the Winters *et al.* (2004) survey and Ravallion (2004a, 2004b), typically use computable general equilibrium models to disentangle the complex linkages between trade reform and poverty. However, while such research provides an important contribution to our understanding of the channels through which globalization or future reforms could affect poverty, it is extremely important to be able to look at actual *ex post* evidence of the impact of trade and investment reforms on the poor.

There are several reasons why the links between globalization and poverty have not been adequately explored in the past. One reason is that academic researchers who address questions of poverty and globalization have typically chosen not to achieve mastery of both subdisciplines. Other reasons for the limited evidence are the methodological problems associated with linking trade to poverty outcomes. Simply producing comparable measures of poverty over time within a single country is considered an accomplishment (see Deaton, 2004). On the trade side, measuring and properly identifying the effects of trade policy on growth has spawned an enormous and acrimonious debate. Thus it is not surprise that attempting to directly relate measures of globalization and poverty poses a significant challenge. Yet there is a pressing need for some answers. If globalization is accompanied by increasing inequality but *both* the incomes of the rich and poor are rising, this is a very different picture than if globalization has led to absolute income gains for some income groups but real income losses for others.

What are the mechanisms through which globalization could affect poverty? One important possible mechanism is through globalization’s impact on growth. As we discuss later in this chapter, growth is typically good for the poor: if globalization increases a country’s growth rate, then that growth is likely to reduce poverty. Apart from its impact via aggregate growth, trade reform could directly affect the welfare of the poor by changing the relative prices they face as consumers and producers. If liberalization leads to falling prices for goods purchased by poor consumers, this could reduce poverty. If globalization raises the prices of goods produced by the poor—such as agricultural goods or textiles and apparel—then poverty is also likely to decline. In addition, international trade could affect poverty through its impact on the incomes and employment opportunities of poor wage earners.

What does the evidence show on the linkages between globalization and poverty? Many economists have used the Heckscher–Ohlin framework in international trade to argue that the unskilled or the poor in countries with a comparative advantage in unskilled labor are most likely to gain from trade reform. The first lesson is that the poor do not always gain from trade. Why not? One reason is that labor is not nearly as mobile as simple trade models assume; for comparative advantage to increase the incomes of the unskilled, they need to be able to move out of contracting sectors and into expanding ones. Another reason is that developing countries have historically protected their unskilled-intensive sectors

(although this is less true in the case of agriculture), which implies that in the manufacturing sector trade reforms frequently result in less protection for unskilled workers relative to skilled labor. A third reason is that even sectors which are relatively unskilled-intensive in a global context may require workers with more skills than the poor in developing countries typically possess.

A second lesson that emerges from a review of country case studies is that the poor are more likely to share in the gains from globalization when there are complementary policies in place. Studies prepared for *Globalization and Poverty* on India (Topalova, 2004) and Colombia (Goldberg and Pavcnik, 2004b) suggest that globalization is more likely to benefit the poor if trade reforms are implemented in conjunction with labor market deregulation. In Zambia, poor farmers are only expected to benefit from greater access to export markets if they also have access to credit, technical know-how, and other complementary inputs (Balat and Porto, 2004). The studies also point to the importance of social safety nets. In Mexico, if poor corn farmers did not receive income support from the government, their real incomes would have been halved during the 1990s (Ashraf *et al.*, 2004). In Ethiopia, if food aid had not been well targeted, globalization would have had little impact on the poor (Levinsohn and McMillan, 2004).

Third, the evidence suggests that trade and foreign investment reforms in a number of countries have contributed towards reducing poverty. In Mexico, the poor in the most globalized regions have weathered macroeconomic crises better than their more isolated neighbors (Hanson, 2004). In India, opening up to foreign investment was associated with a decline in poverty. The study on Zambia suggests that poor consumers gain from falling prices for the goods they buy, while poor producers in exporting sectors benefit from trade reform through higher prices for their goods. In Colombia, increasing export activity was associated with an increase in compliance with labor legislation and a fall in poverty. In Poland, unskilled workers—who are the most likely to be poor—have gained from Poland's accession to the European Union.

Fourth, both the cross-country and individual case studies suggest that financial crises are very costly to the poor. For the NBER project, Prasad *et al.* (2004) study financial deregulation across countries and find that lower income countries who embark on financial globalization are likely to experience higher consumption and output volatility. Their work reinforces the need for complementary policies, such as the creation of reliable institutions and macroeconomic stabilization policies (including the use of flexible exchange rate regimes). While financial crises resulting from unrestricted capital flows are associated with a higher likelihood of poverty, foreign direct investment inflows are associated with a reduction in poverty. The poverty-reducing effects of Foreign Direct Investment (FDI) are clearly documented in the studies on India and Mexico.

The final lesson from the breadth of cross-country studies and individual country experiences is that globalization produces both winners and losers among the poor. It should not be surprising that the results defy easy generalization. Even within a single region, two sets of farmers may be affected in opposite ways. In Mexico, while small corn farmers saw their incomes fall by half in the 1990s,

large corn farmers gained. Across different countries, poor wage earners in exporting sectors or in sectors with incoming foreign investment gained from trade and investment reforms; conversely, poverty rates increased in previously protected sectors which were exposed to import competition. Within the same country or even the same region, a trade reform may lead to income losses for rural agricultural producers and income gains for rural or urban consumers of those same goods.

Part 2 of this chapter summarizes the results from the cross-country studies, while Part 3 describes the results of the country case studies, which analyze the impact of globalization on employment opportunities and labor income of the poor, as well as on consumption and production opportunities for the poor. The studies which address the impact of capital flows on the poor are summarized in Part 4. Since the evidence suggests that globalization creates winners as well as losers among the poor, this chapter moves in Part 5 to a discussion of why globalization's critics seem all too aware of the costs of globalization and generally fail to see the benefits. We argue that this is due to the use of different methodologies in estimating poverty and inequality, the concerns of globalization's critics about the short term costs versus the longer term gains from trade reform, their rejection of a perfectly competitive framework, and different interpretations regarding the evidence. Another reason is the lack of knowledge on the possible linkages between globalization and poverty reduction, a missing link which Professor Jagdish Bhagwati's books and the forthcoming NBER volume seek to address.

Aggregate linkages and cross-country evidence

Professor Bhagwati has argued in many of his articles, books, and lectures that trade generally enhances growth, and growth reduces poverty. He reminds his readers that for trade to permanently affect growth rates it must act through at least one of two growth fundamentals: accumulation and innovation. He then points out that trade can have a positive impact on both of these fundamentals through a variety of channels, including specialization, scale economies, increased competition, incentives for macroeconomic stability, and increased marginal efficiency of imported capital. Thus, through its impact on growth, trade is on average good for the poor. However, Professor Bhagwati strikes two notes of caution. First, growth was (rightfully) never meant to be an end in itself. Rather, growth is the most broadly effective poverty reduction strategy that has been found. Second, growth can bypass, or even immiserize the poor: not all growth is created equal.² Bhagwati also suggests that government policies can affect income distribution, which has important implications for poverty. In *In Defense of Globalization* he contrasts the outward orientation of the East Asian countries with the inward orientation of the Indian government's policies up until the last decade or so. The former resulted in strong, labor intensive growth; the latter with weak, capital intensive growth. Not surprisingly, the former policy was far more effective at reducing poverty. Some of India's policies since independence

have, however, been great successes for the poor. In particular Bhagwati notes the policies that successfully enabled small farmers to participate in the green revolution. These policies prevented what could have been seriously immiserizing impacts of a major source of growth in the economy. Thus Bhagwati reminds us that a belief in the superiority of markets over bureaucrats as a means of allocating resources is not equal to advocating *laissez-faire*, hands-off, passive strategies for poverty reduction.

What does the evidence on the relationship between openness and poverty indicate? The most direct approach to answering this question would be to examine the aggregate relationship between different poverty measures and globalization. In Tables 2.1 through 2.4, we present evidence on the linkages between openness, GDP growth, and different measures of poverty. We begin by revisiting the evidence on the linkages between trade and growth; these results are presented in Tables 2.1 and 2.2.

We use two different measures of openness to trade: (1) the ratio of trade ($X + M$) to GDP in nominal terms and (2) average tariffs, defined as import revenues divided by imports. We find that an increase in openness—using these two measures—is associated with an increase in aggregate income or an increase in aggregate income growth. To address concerns regarding endogeneity, we measure openness either as the three year lag of trade shares or tariffs or the contemporaneous value for openness instrumented using lagged values. We also explore the robustness of the results to including other controls, such as country fixed effects or policy variables likely to be correlated with trade policies. Additional extensions, using growth of GDP *per capita* as the dependent variable instead of income *per capita*, yielded similar results. The evidence presented here is consistent with Professor Bhagwati's assessment of the enormous literature on cross-country trade and growth regressions. Bhagwati (2004) notes that not all of the literature shows a positive relationship between trade and growth, but that the evidence "by and large, is consonant with the views of the free trade proponents." (*In Defense of Globalization*, p. 64)

In the course of writing this paper and completing the NBER study, we were surprised to learn that there has been almost no research on the association between globalization and measures of poverty based on household survey data (for the problems associated with using national income data—an approach adopted by Dollar and Kraay (2002, 2004) to measure poverty—see Deaton, 2004). One likely reason is that there are very few data points available over time and across countries. In columns (5) and (10) of Tables 2.1 and 2.2, we redo the basic specifications, but restrict the sample to the observations for the country-years where there exists poverty data based on the household surveys. Once we restrict the sample to the observations with information on poverty, the link between openness to trade and GDP *per capita* in levels or growth rates weakens significantly. Other policies continue to matter in the restricted sample, including inflation—which is negatively associated with growth—and currency crises, which also negatively affect incomes *per capita*. The weakness of the association between openness and growth in this small sample suggests that efforts to find

Table 2.1 Incomes and trade shares in a cross-section of countries

	Dependent variable: Ln income per capita (\$1993 PPP)									
	Reduced form					Instrumental variables				
	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) IV	(7) IV	(8) IV	(9) IV	(10) IV
3-year lag trade share	0.907 [0.036]***	0.514 [0.037]***	0.214 [0.038]***	0.203 [0.035]***	0.081 [0.074]	0.978 [0.037]***	0.857 [0.057]***	0.426 [0.067]***	0.402 [0.064]***	0.248 [0.167]
Ln (1 + CPI)			-0.027 [0.013]**	-0.090 [0.018]***	-0.020 [0.019]			-0.035 [0.014]**	-0.094 [0.018]***	-0.034 [0.018]*
Government expenditure/nominal GDP			0.159 [0.174]	0.264 [0.142]**	0.625 [0.261]***			0.230 [0.180]	0.298 [0.142]**	0.840 [0.219]***
Currency crisis			-0.039 [0.011]***	-0.039 [0.013]***	0.013 [0.022]			-0.070 [0.012]***	-0.060 [0.013]***	-0.000 [0.018]
GDI/real GDP			0.298 [0.126]**					0.116 [0.126]		
Fraction of population literate			-0.208 [0.146]					-0.171 [0.146]		
Constant	7.239 [0.028]***					7.173 [0.030]***				
Country fixed effects?	NO	YES	YES	YES	YES	NO	YES	YES	YES	YES
Time fixed effects	NO	NO	YES	YES	YES	NO	NO	YES	YES	YES
Observations	3,294	3,294	1,996	2,657	308	3,288	3,288	1,996	2,657	308
R ²	0.17	0.93	0.96	0.95	0.99	NO	NO	NO	NO	YES
Restricted sample?	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES

Notes
 Restricted sample is country-year observations for which poverty (head count) data is available; All regressions exclude OECD high-income countries; Huber robust standard errors in square brackets. Significantly different from zero at 90% (*) 95% (**) 99% (***) confidence; In IV regressions, trade share instrumented using three-year lagged value.

Table 2.2 Income per capita and average import tariffs in a cross-section of countries

	Dependent variable: Ln income per capita (\$1993 PPP)					Instrumental variables				
	Reduced form									
	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) IV	(7) IV	(8) IV	(9) IV	(10) IV
3-year lag average I tariff	-3.586 [0.377]***	-0.721 [0.142]***	-0.298 [0.117]**	-0.137 [0.119]	-0.250 [0.281]	-4.830 [0.441]***	-4.830 [0.441]***	-0.635 [0.328]*	-0.338 [0.379]	-1.831 [1.563]
Average import tariff										
Ln (1 + CPI)			-0.047 [0.014]***	-0.095 [0.016]***	-0.050 [0.017]***			-0.055 [0.013]***	-0.106 [0.013]***	-0.054 [0.015]***
Government expenditure/ nominal GDP			0.360 [0.224]	0.379 [0.181]**	0.418 [0.290]			0.410 [0.245]*	0.395 [0.161]**	0.676 [0.349]*
Currency crisis			-0.026 [0.013]*	-0.018 [0.014]	0.040 [0.029]			-0.027 [0.014]**	-0.018 [0.016]	0.003 [0.034]
GDI/real GDP			0.345 [0.157]**					0.572 [0.171]***		
Fraction of population literate			0.398 [0.211]*					0.482 [0.216]**		
Constant	8.368 [0.045]***					8.108 [0.194]***				
Country fixed effects?	NO	YES	YES	YES	YES	NO	YES	YES	YES	YES
Time fixed effects	NO	NO	YES	YES	YES	NO	NO	YES	YES	YES
Observations	1,617	1,617	1,261	1,485	212	1,415	1,415	1,125	1,306	189
R ²	0.07	0.96	0.97	0.96	0.99					
Restricted sample?	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES

Notes

Restricted sample is country-year observations for which poverty (head count) data is available; All regressions exclude OECD high-income countries; Huber robust standard errors in square brackets. Significantly different from zero at 90% (*) 95% (**) 99% (***) confidence; In IV regressions, average import tariff instrumented using three-year lagged value.

any direct relationship between openness and poverty reduction are likely to be plagued by limited data availability. Nevertheless, we present those results below.

We examine the relationship between measures of openness, GDP growth, and poverty in Tables 2.3 and 2.4.

Measures of poverty are derived from household sample surveys made available by the World Bank. We use two different measures of poverty: the percentage of households living on less than \$1 a day in purchasing power parity (PPP) terms, and the level of income earned by the poorest decile. The evidence in Tables 2.3 and 2.4 suggest that growth is indeed good for the poor. We use several different measures of income: contemporaneous income, income lagged three periods, and contemporaneous income instrumented using annual average levels of precipitation and temperature. Across all specifications, aggregate income or aggregate income growth (not shown here) is associated with a reduction in the percentage of the population that is poor.

The strong association between aggregate growth and poverty reduction is consistent with Professor Bhagwati's interpretation of the evidence. With regard to empirical evidence on the relationship between growth and poverty reduction, Bhagwati quotes from the work of Xavier Sala-i-Martin (2002). Sala-i-Martin concluded strongly that poverty in Asia fell because Asian countries grew, while poverty in Africa increased dramatically because African countries did not grow. According to Bhagwati (*In Defense of Globalization*, 2004, p. 65) Sala-i-Martin's findings are "as strong a corroboration as I can find of my 1960s conjecture that growth must be reckoned to be the principle force in alleviating poverty."

Although the results presented in Tables 2.1 through 2.4 suggest a strong link from trade integration to aggregate incomes and from income growth to poverty reduction, the evidence on direct linkages between trade shares or tariffs and poverty outcomes is quite weak, and disappears if we control for country fixed effects. Nevertheless, the association always goes in the same direction: greater openness, measured as either an increase in trade shares or a reduction in tariffs, is associated with a reduction in poverty. All the results which are statistically significant suggest that greater openness is associated with reduction in the percentage of the population living on less than one PPP dollar or two PPP dollars a day. However, the results are not robust to instrumental variable (IV) estimation and controlling for country fixed effects. Similar results were found when using different poverty measures—such as the percentage of the poor living on less than 2 PPP dollars per day, or the incomes of the poorest quintile or decile.

To summarize, there is certainly no evidence in the aggregate data that trade reforms are bad for the poor. This is true if one uses trade shares—not an ideal measure of trade policy since trade shares measure outcomes, not policies—or tariffs, which are a more appropriate measure of trade policy. In a comparable exercise using country-level poverty headcounts and trade shares, Ravallion (forthcoming) reaches a similar conclusion; he argues that there is no robust relationship between poverty and globalization in the aggregate data.³

However, the cross-country results presented in this volume and in earlier studies should be considered as a first step in this research.⁴ Due to limited data

Table 2.3 Head count poverty (\$1 per day) and trade shares in a cross-section of countries

Dependent variable: Ln fraction of households living on less than \$1 per day (\$1993 PPP)										
Reduced form						Instrumental variables				
(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS	(7) IV	(8) IV	(9) IV	(10) IV	
3-year lag trade share	-1.921 [0.385]***	-1.772 [0.502]***	-1.517 [0.484]***	0.418 [0.931]	0.685 [1.209]	0.579 [1.086]	-2.164 [0.760]***	-1.767 [0.524]***	-3.609 [2.240]	2.261 [3.576]
Trade share										
Ln (1 + CPI)		-0.348 [0.396]	-0.879 [0.396]**	0.291 [0.382]	-0.022 [0.367]	-0.022 [0.367]	0.824 [0.557]	-0.845 [0.349]**	-0.014 [0.391]	-0.145 [0.366]
Government expenditure/nominal GDP		-2.945 [3.757]	-8.275 [4.172]**	5.299 [4.503]	-3.058 [4.222]	-3.058 [4.222]	-5.266 [5.629]	-7.589 [3.918]*	-1.935 [5.929]	-1.270 [4.237]
Currency crisis		-0.153 [0.402]	0.118 [0.446]	-0.143 [0.455]	-0.281 [0.444]	-0.281 [0.444]	-0.609 [0.624]	0.150 [0.423]	-0.187 [0.375]	-0.386 [0.373]
GDI/real GDP		-0.117 [2.486]		0.696 [5.203]			1.171 [3.606]		4.806 [3.997]	
Fraction of population literate		1.997 [0.912]**		1.673 [6.827]			11.779 [4.606]**		2.397 [7.459]	
3-yr lag ln income per capita		-2.225 [0.252]***		-5.154 [1.646]***			-6.405 [2.070]***		-0.380 [3.926]	
Constant	-1.874 [0.252]***									
Country fixed effects?	NO	NO	NO	YES	YES	YES	NO	NO	YES	YES
Time fixed effects	NO	YES	YES	NO	YES	YES	YES	YES	YES	YES
Observations	349	284	325	349	284	325	229	325	229	325
R ²	0.06	0.38	0.14	0.65	0.67	0.67				

Notes

All regressions exclude OECD high-income countries. Huber robust standard errors in square brackets. Significantly different from zero at 90% (*) 95% (**) 99% (***) confidence; In IV regressions, trade share instrumented using three-year lagged value and income instrumented using precipitation and temperature.

Table 2.4 Head count poverty (\$1 per day) and average import tariffs in a cross-section of countries

	Dependent variable: Ln fraction of households living on less than \$1 per day (\$1993 PPP)									
	Reduced form					Instrumental variables				
	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS	(7) IV	(8) IV	(9) IV	(10) IV
3-year lag average I tariff	7.543 [1.229]***	0.418 [1.618]	5.606 [1.490]***	0.811 [2.167]	0.741 [4.736]	1.018 [4.305]	-1.038 [2.266]	6.158 [1.801]***	1.549 [22.870]	8.242 [22.706]
Average import tariff										
Ln (1 + CPI)		0.339 [0.305]	-0.021 [0.302]		0.429 [0.378]	0.169 [0.329]	0.687 [0.434]	0.062 [0.290]	0.039 [0.431]	0.018 [0.196]
Government expenditure/nominal GDP		-6.406 [3.812]*	-7.992 [3.763]**		2.795 [5.966]	1.124 [5.750]	-2.080 [3.407]	-9.186 [3.775]**	0.344 [6.494]	-0.402 [4.544]
Currency crisis		-0.411 [0.563]	-0.299 [0.610]		-0.967 [0.601]	-1.083 [0.645]*	-0.302 [0.621]	-0.129 [0.553]	-0.698 [0.604]	-0.730 [0.579]
GDI/real GDP		-1.229 [1.673]			2.870 [4.822]		-1.906 [1.948]		10.863 [9.068]	
Fraction of population literate		0.908 [0.888]			3.717 [7.905]		2.279 [2.113]		-7.041 [14.028]	
3-yr lag ln income		-1.896 [0.263]***			-3.662 [1.666]**		-2.551 [1.044]**		0.843 [6.771]	
per capita										
Constant	-3.966 [0.225]***									
Country fixed effects?	NO	NO	NO	YES	YES	YES	NO	NO	YES	YES
Time fixed effects	NO	YES	YES	NO	YES	YES	YES	YES	YES	YES
Observations	223	202	217	223	202	217	152	194	152	194
R ²	0.07	0.36	0.19	0.70	0.73	0.75				

Notes

All regressions exclude OECD high-income countries; Huber robust standard errors in Square brackets. Significantly different from zero at 90% (*) 95% (**) 99% (***) confidence; In IV regressions, average import tariff instrumented using three-year lagged value and income instrumented using precipitation and temperature.

availability as well as the concerns expressed by Deaton (2004), it should not be surprising that a number of the results using aggregate data are somewhat fragile. The cross-country evidence presented in Figure 2.1, for example, shows that there is a positive relationship between globalization and poverty reduction, but this association disappears in Figure 2.2 if we control for country fixed effects.

Second, it is difficult to find appropriate instruments for trade policy at the country level, or to adequately control for other changes which are occurring at the same time. Even the inclusion of additional controls is likely to be problematic, since other variables—such as the quality of institutions—are likely to be collinear with measures of trade policy. (Some researchers actually define institutional quality or rule of law using trade policy as an input.)

Third, even if cross-country studies point to a positive relationship between globalization and overall growth, such growth may lead to unequal gains across different levels of income. If the growth effects on average are small and there are large distributional consequences, trade-induced growth could be accompanied by a decline in incomes for the poor. Finally, even if cross-country studies overcome this problem by directly testing for the relationship between poverty and

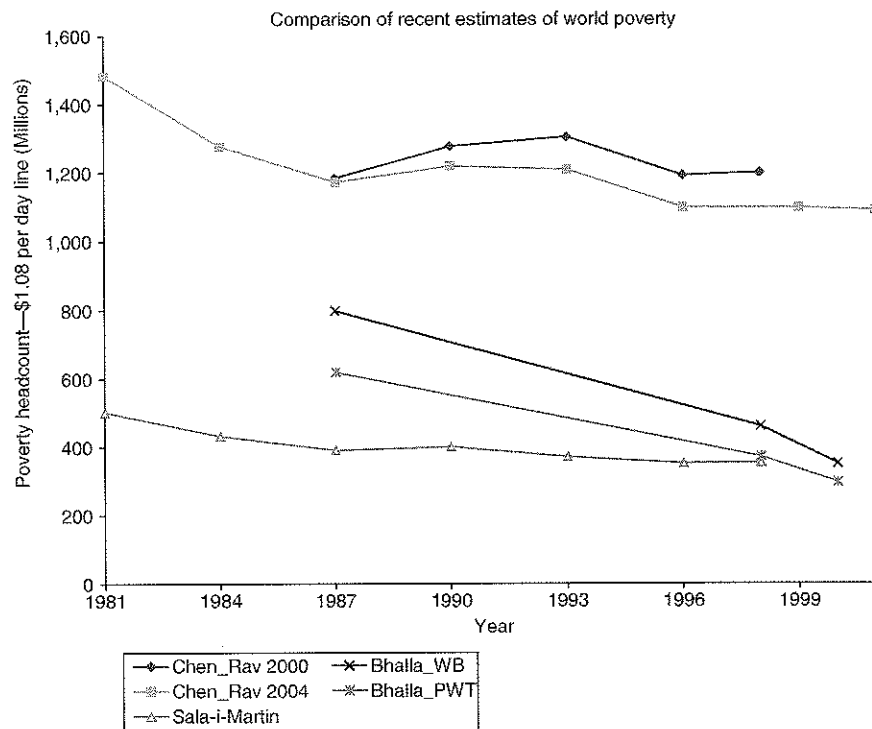


Figure 2.1 Graphical representation of the \$1 per day poverty trends from Table 2.1.

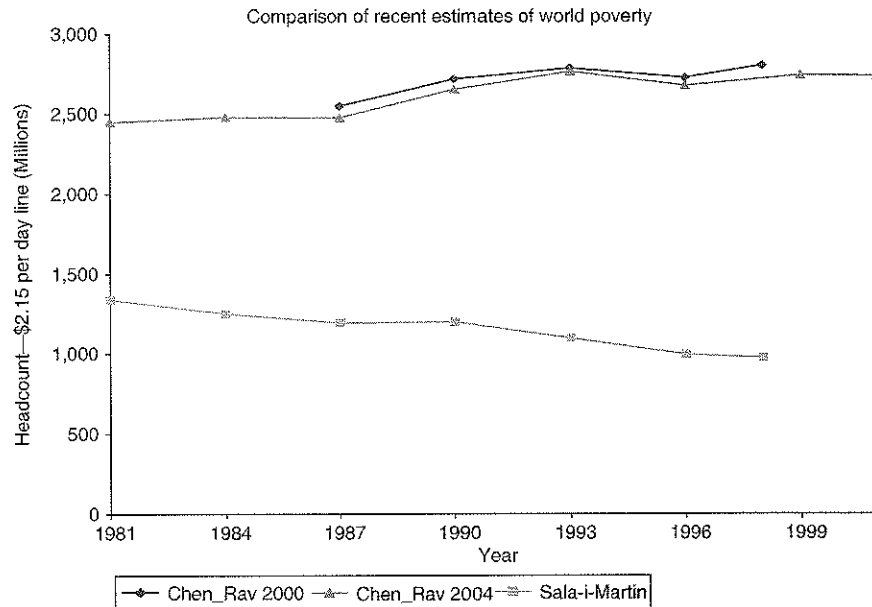


Figure 2.2 Graphical representation of the \$2 per day poverty trends from Table 2.1.

trade reform, there may be significant underlying heterogeneity across different segments of the population. (see also Ravallion, 2004). Aggregate poverty could move in one direction or remain unchanged while poverty increases in some parts of a country and declines in others.

Trade, growth, and poverty reduction: single country evidence

Professor Bhagwati is generally skeptical of cross-country studies of the relationship between trade and growth. A series of matching case studies is his preferred method of accounting for both the diversity of experience of different countries, and the important idiosyncrasies of each case. In Chapter 5 of *In Defense of Globalization*, he supports his stated preference for evidence gathered from in-depth case studies over cross-country regressions by referring to several of them. The most substantial of these studies were those by the Organisation for Economic Co-operation and Development (OECD) and NBER in the 1960s and 1970s. Bhagwati himself co-directed the NBER study. He reports that both these studies found overwhelming evidence in favor of outward orientation in trade and FDI, and rejected inward looking, autarkic, or import substitution trade strategies for developing countries. These studies were instrumental in overturning the previous prevailing wisdom in favor of import substitution or 'infant industry' protection policies.

Looking at the most recent experience, Bhagwati suggests that the best way to understand the link between trade and poverty reduction is to examine the last quarter century in China and India. Thus he says

Both [China and India] shifted to outward orientation roughly two decades ago, and this contributed to their higher growth in the 1980s and 1990s. China adopted aggressively outward-oriented economic policies in 1978. India also began opening its insular economy in a limited fashion in the 1980s and more systematically and boldly in the 1990s... real income (gross domestic product) grew at an annual rate of 10 percent in China and 6 percent in India during the two decades ending in 2000... poverty declined from an estimated 28 percent in 1978 to 9 percent in 1998 in China. Official Indian estimates report that poverty fell from 51 percent in 1977–78 to 26 percent in 1999–2000.

(*In Defense of Globalization*, 2004, pp. 64–65)

Consistent with Professor Bhagwati's emphasis on country case studies, this section reviews the evidence from ten country case studies included in *Globalization and Poverty*. These case studies take as their point of interest the distributional effects of globalization. In other words, they emphasize how changes in trade policy or factor flows could have very different effects across different segments of the population. This is an important question not only for the design of social safety nets, but also because even if globalization raises aggregate incomes, it may not raise the incomes of all of the population.

Impact of globalization on employment and labor incomes of the poor

Apart from its impact on poverty via growth, trade policy can directly affect the poor through its impact on wages. The standard story is the following: the poor are assumed to be owners of (generally unskilled) labor, but not of capital. Thus trade will benefit the poor if it increases the relative returns to labor: real wages. This is the Stolper-Samuelson theorem: when a developing country increases its trade with a richer, relatively more capital abundant country, the less skilled in the developing country should gain relative to the more skilled. In other words, we would expect trade reforms in developing countries to be inherently pro-poor, since these countries are more likely to have a comparative advantage in producing goods which use unskilled labor.

As Don Davis and Prachi Mishra point out in their contribution to *Globalization and Poverty*, however, this popular story—which suggests that opening up to trade should increase the incomes of the poor in low income countries—is based on a very narrow interpretation of the standard Heckscher-Ohlin (HO) model. Davis and Mishra show that in a world of many factors and many goods, a poor country might no longer have a comparative advantage in producing unskilled-intensive goods. This idea is easy to understand

in the context of three countries—for example, the United States, Mexico, and China. Although Mexico might have a comparative advantage in producing goods that used unskilled labor *vis-à-vis* the United States, its comparative advantage changes if we allow for the possibility of trade with China.

Many of the contributors to the NBER project do not use the HO model as their framework, but instead refer to the specific sector (SS) model, which may be more appropriate in the short run. In the SS framework, workers or machines may be “attached” to a specific sector or industry, and consequently any reduction in protection to sector X will lead to a fall in the incomes of workers who are unable to relocate elsewhere. The mechanism is the following: a fall in protection is assumed to put downward pressure on the price of the previously protected good, which in turn shifts labor demand downwards. It is important to remember, however, that the reverse is also true: any increase in export activity in sector Y would then be beneficial to workers attached to that sector. The specific sector model suggests that workers may gain from globalization depending on which sectors (import-competing or exporting) they are attached to; this is very different from the HO framework, which suggests that winners and losers from globalization can be identified by their skill levels, regardless of where they work. If the HO assumption of perfect labor mobility across sectors is violated, which the evidence on India and Poland suggests, then the SS model may be the more appropriate framework—particularly in the short run. Milanovic and Squire (2004), in their contribution to that project, also analyze the impact of globalization on inequality in the context of an SS framework.

Four country cases in the NBER study examine the relationship between trade reform and labor market outcomes: the studies on Colombia, India, Mexico, and Poland. Goldberg and Pavcnik (2004b) investigate the impact of a large reduction in average tariffs in Colombia between 1984 and 1998 on a variety of urban labor market outcomes: the probability of becoming unemployed, minimum wage compliance, informal sector employment, and the incidence of poverty. Analyzing the relationship between globalization and these different labor market outcomes is useful since poverty is highly correlated with unemployment, informal sector employment, and noncompliance with the minimum wage.

The Colombian experience suggests that individuals in sectors with increasing import competition are likely to become poorer, while those in sectors where exports are growing are less likely to be poor. Increasing import competition increases the likelihood of unemployment and informality, and is associated with higher incidence of poverty. Export growth is associated with the opposite: falling informal sector employment, rising minimum wage compliance, and falling poverty. These results suggest that workers cannot easily relocate away from contracting towards expanding sectors in the context of trade reforms, contradicting the assumption of perfect labor mobility in the HO framework.

The Colombian trade reforms suggest the importance of complementary reforms for minimizing the adverse effects on the poor. Trade reforms are only associated with negative labor market outcomes in the absence of labor market reforms; when trade reform is accompanied by labor market reforms, the adverse

impact of tariff reductions disappears. This is exactly the conclusion reached by Topalova (2004) in her study relating the impact of trade reform in India to poverty.

Topalova's study for the NBER project on globalization and trade reform in India is a particularly important one. One-third of the world's poor live in India. In the 1990s, India embarked on a remarkable trade reform, reversing decades of protectionist policies which had led to average tariffs in excess of 90%. Using household data which spans the period before and after the reform period, Topalova relates changes in tariffs to changes in the incidence of poverty. In particular, she uses the interaction between the share of a district's population employed by various industries on the eve of the economic reforms and the reduction in trade barriers in these industries as a measure of a district's exposure to foreign trade. Because industrial composition is predetermined and trade liberalization was sudden and externally imposed, she argues that it is appropriate to causally interpret the correlation between the changes in the levels of poverty and trade exposure.

Topalova finds that trade liberalization benefited less those individuals living in poverty in the rural districts where industries more exposed to trade reforms were concentrated. The effect is significant and large in magnitude. A district experiencing the mean level of tariff changes saw a 2% increase in poverty, accounting for a setback of about 15% of India's progress in poverty reduction over the 1990s.

As Topalova points out, she does not study the level effect of liberalization on poverty in India, but rather the relative impact on areas more or less exposed to liberalization. Trade reform was probably associated with the overall decline in poverty in India observed during this same period, but this is an aggregate result which the cross-country studies described earlier are designed to address. However, the evidence on poverty linkages suggests that the rural poor gained less, compared to either other income groups or the urban poor. Topalova's study also discusses why: restrictions on labor mobility in rural areas have impeded adjustment, driving home the point that rural India was more consistent with the SS framework in the short run.

While the studies on Colombia and India suggest that the gains from trade reforms were less likely to benefit the poor, the evidence for Mexico and Poland suggests the opposite. Hanson (2004), in his country study on the Mexican experience, explores the different outcomes for individuals born in states with high exposure to globalization vs individuals born in states with low exposure to globalization between 1990 and 2000. He finds that the income of individuals in high-exposure states increased relative to the income of individuals in low-exposure states. While labor incomes in the 1990s deteriorated in both regions, caused in part by Mexico's peso crisis in 1995, the deterioration was much less severe in states with high exposure to globalization.

While poverty was falling dramatically in India during this period, between 1990 and 2000 poverty in Mexico increased. In the states with low exposure to globalization, poverty increased from 32% to 40%; in the states with high

exposure, poverty increased only slightly, from 21% to 22%. If we take the difference in the increase in poverty within each region over the 1990s, we find that poverty increased by 8% in low exposure states and by only 1% in high-exposure states. The “difference-in-difference” estimator is the differential in these two changes (i.e. $8-1$ equals 7 percentage points) and is the basis for Hanson’s conclusions that the incidence of wage poverty in low exposure states increased relative to that in high-exposure states by approximately 7%. During Mexico’s globalization decade, poverty increased less in the more globalized states.

How can we reconcile the findings on Mexico and India? As pointed out by Hanson, the peso crisis in Mexico in 1995 is one major reason for the aggregate increase in poverty, in contrast to India which experienced no major adverse macroeconomic shock during this period. In addition, Hanson defines high globalization states to include those with a high proportion of *maquiladoras*—production activities designated for exports—and foreign direct investment. Topalova also finds, consistent with Hanson, that activity associated with exports and FDI is positively correlated with poverty reduction. Consequently, both studies consistently show that export activity and FDI is correlated with beneficial outcomes for the poor.

Goh and Javorcik (2004) examine the relationship between tariff changes and wages of workers in Poland. Controlling for a variety of firm and worker characteristics, the authors exploit the significant trade reforms which occurred in Poland during the 1990s, when the country moved from a closed to a very open economy, particularly *vis-à-vis* the European Union. One advantage of choosing Poland is the fact that the changes in its tariffs can be treated as exogenous, as they were stipulated by the Association Agreement between the European Community and Poland signed in 1991. This agreement also predetermined the schedule of tariff reductions, which took place during 1994–2001.

Goh and Javorcik demonstrate that labor mobility is fairly restricted in Poland, placing their analysis also in the context of a specific sector framework. Their results suggest that workers in sectors that experienced the largest tariff declines experienced the highest increases in wages, after controlling for worker characteristics such as education and experience, as well as sector-specific and time-specific effects. These results are remarkable. They posit that the reason why tariff declines led to wage increases is that firms were forced to increase productivity, and that those productivity increases were shared with the workers in the form of higher wages. They also present evidence showing—consistent with Topalova and previous productivity studies—that tariff reductions were indeed accompanied by significant increases in total factor productivity.

These micro-level results showing a positive relationship between tariff reductions and productivity increases are consistent with the more aggregate evidence on the positive relationship between openness to trade and aggregate growth. Their results are also consistent with the other country studies which show that increasing export activity is correlated with wage increases. In a diversity of country settings—Poland, Colombia, India, and Mexico—this volume documents that exporting activities are associated with increasing incomes for the unskilled and the poor.

Impact of globalization on poverty via prices of production and consumption goods

In many developing countries, wage income is not the primary source of income for the rural poor. In their contribution to the NBER study, Balat and Porto (2004) calculate that in Zambia wages accounted for only 6% of income for the rural poor in 1998. In Zambia, where 72% of the population was living below the poverty line in 1998, most of the rural poor either consumed their agricultural output, sold their crops, or derived income from other sources. Consequently, globalization could affect poverty by affecting the prices of goods consumed by the poor (the consumption channel) and goods produced by the poor (the production channel).

In many cases, the urban poor are net consumers of agricultural products and the rural poor are net producers of those same products; in this case, an increase in agricultural prices caused (for example) by a removal of export taxes could lead to an increase in urban poverty but a decline in rural poverty. As an illustration, China's accession to the WTO, which is associated with liberalization of the agricultural sector, is expected to contribute to an increase in rural poverty but a decline in urban poverty over the next several years (Ravallion, 2004).

These linkages are explored to various degrees in the studies on Ethiopia, Mexico, and Zambia. In Mexico, Ashraf *et al.* (2004) explore the impact of liberalizing Mexico's corn market on the incomes of the poor rural farmers. The evidence suggests that during the 1990s, imports of both white and yellow corn increased, and prices of Mexican corn fell. The income from corn production among poor farmers also fell, both as a share of total income and in absolute terms. The 50% decline in income from corn production would have translated into an equivalent decline in real income if poor farmer incomes had not been supplemented with remittances and transfers through government programs such as Progressa.

In their study of Ethiopian rural grain producers, McMillan and Levinsohn (2004) explore the impact of food aid on both consumption and production of the rural poor. This is an important contribution because some critics have argued that food aid further exacerbates poverty by depressing incomes of rural producers. While McMillan and Levinsohn confirm that a more optimal arrangement would be to buy food from local producers and distribute it to poor consumers, they also show that the net impact of food aid on the poor in Ethiopia has been positive. This is because the poor in Ethiopia are primarily net consumers, rather than net producers of food, and consequently food aid has alleviated poverty. As pointed out by Pande in her excellent discussion of this paper, these results are contingent on food aid actually reaching the poor. Levinsohn and McMillan show that this is often the case.

For Zambia, Balat and Porto calculate the impact of liberalizing the market for maize, which was heavily subsidized to both consumers and producers. They find that the resulting price increase led to consumption losses, which were offset by domestic market liberalization. They also measure the potential increase in income due to switching from production for home consumption to production

and wage activities associated with production of cash crops. Balat and Porto estimate that rural Zambians would gain substantially from expanding into the production of cash crops, particularly in the production of cotton, tobacco, and maize.

However, Balat and Porto also caution that such gains can only be achieved if other complementary policies are in place. These would include extension services, infrastructure, irrigation, access to credit and finance, education, and health services. Balat and Porto also point to the fact that Zambia needs to have access to international agricultural markets in order to realize potential gains.

Another paper in the NBER volume explicitly addresses the issue of industrial country distortions by measuring the impact of OECD support policies for domestic agriculture on incomes in developing countries. Ashraf *et al.* calculate a country-specific measure of OECD support to measure whether industrial country policies directly affect income and poverty in developing countries. The vast majority of least developed countries have historically been net importers of food, particularly cereals, which are among the most heavily subsidized crops. As net food importers, they may be hurt by higher commodity prices and could possibly gain from rich country subsidies (see also Panagariya 2002, 2004; Valdes and McCalla, 1999). Even within exporting countries, the poorest members of society may be net purchasers of food. Ashraf *et al.* find that for countries with food export shares greater than 48%, OECD subsidies reduce income *per capita*. Again, the picture is decidedly mixed, with net consuming countries gaining from subsidized imports and net producing countries losing as a result of the same subsidies.

Capital flows and the poor

Another avenue through which globalization could affect the welfare of the poor is via the liberalization of international capital markets. In the 1980s and 1990s, developing countries became increasingly open to international capital flows, measured either using policy instruments such as capital controls or *ex post* capital flows. In theory, openness to capital flows could alleviate poverty through several channels. If greater financial integration contributes to higher growth by expanding access to capital, expanding access to new technology, stimulating domestic financial sector development, reducing the cost of capital, and alleviating domestic credit constraints, then such growth should reduce poverty. Access to international capital markets should also allow countries to smooth consumption shocks, reducing output or consumption volatility. However, as the evidence will show, access to capital flows can also exacerbate volatility.

In his discussion of the impact of capital flows on poverty reduction in chapter 12 of *In Defense of Globalization*, Professor Bhagwati is careful to distinguish between FDI and shorter-term portfolio investment. He argues strongly for the advantages of foreign direct investment to developing countries, and particularly to low-skilled and thus poor workers. Despite this, he does not favor current proposals for a multilateral investment treaty. Such a treaty, he argues, would have

little positive impact on investment flows reaching developing countries. Its primary impact, therefore, would be to increase the share of the benefits for foreign investment that accrue to the investor, rather than the host country.

Professor Bhagwati's position on capital controls (relating primarily to shorter-term investments) is more controversial, and one in which he was a pioneering voice in the 1990s. In 1998, Professor Bhagwati began arguing that full and rapid capital account liberalization was not in developing countries' best interests.⁵ Indeed, he placed much of the blame for the Asian financial crisis on the International Monetary Fund's (IMF) efforts to make these countries liberalize their capital accounts too quickly. The emerging evidence on this issue provides support for Bhagwati's keen insights. In this section, we summarize the results of two studies on capital flows and poverty outcomes that will appear in the NBER study *Globalization and Poverty*.

The first study, by Prasad *et al.*, begins by examining the relationship between financial integration and growth. Reviewing over a dozen studies and examining the data themselves, they find that there is no clear relationship between the two. This suggests that the impact of financial integration on poverty outcomes—via possible growth effects—is likely to be small. They suggest that since there are no clear linkages between financial integration and growth in the aggregate cross-country evidence, that the direct linkages between financial and poverty are also likely to be difficult to find.

They also explore another link: whether financial integration has smoothed or exacerbated output and consumption volatility. They point out that greater macroeconomic volatility probably increases both absolute and relative measures of poverty, particularly when there are financial crises. Since the poor are likely to be hurt in periods of consumption volatility, such income smoothing could be beneficial to the poor. However, Prasad *et al.* find evidence that suggests the opposite: financial globalization in developing countries is associated with higher consumption volatility, not lower volatility. More specifically, the data suggests that more financially integrated developing countries have experienced an increase in consumption volatility, relative to both industrial countries and to other developing countries. They posit the existence of a threshold effect: beyond a certain level of financial integration (50% of GDP), financial integration significantly reduces volatility. However, most developing countries are well below this threshold.

Much of the increases in consumption volatility identified by Prasad *et al.* for less financially integrated countries occurred in the context of currency crises. In recent years, a number of countries have experienced a massive and largely unanticipated collapse of their exchange rate. One study in the NBER volume, by Duncan Thomas and Elizabeth Frankenberg (forthcoming), examines the impact of such a crisis on the poor. Using longitudinal household survey data from the Indonesia Family Life Survey (IFLS), Thomas and Frankenberg examine the immediate and medium term effects of the East Asian crisis on multiple dimensions of well being. In IFLS, the same households were interviewed a few months before the onset of the crisis, a year later and again two years after that, which

provides unique opportunities for measuring the magnitude and distribution of the effects of the crisis on the population.

Thomas and Frankenberg demonstrate that in the first year of the crisis, poverty rose by between 50% and 100%, real wages declined by around 40% and household *per capita* consumption fell by around 15%. However, focusing exclusively on changes in real resources is complicated by the fact that measurement of prices in an environment of extremely volatile prices is not straightforward. Moreover, it misses important dimensions of response by households. These include changes in leisure (labor supply), changes in living arrangements (household size and thus *per capita* household resources), changes in assets and changes in investments in human capital. These responses are not only quantitatively important but also highlight the resilience of families and households in the face of large unanticipated shocks as they draw on a wide array of mechanisms to respond to the changes in opportunities they face.

While the volatility of bank borrowing and portfolio flows may be costly to the poor, many of the authors in *Globalization and Poverty* emphasize the benefits from another type of inflow: FDI. Prasad and his co-authors emphasize that the composition of capital flows can have a significant impact on a country's vulnerability to financial crises. They also document that FDI flows are significantly less volatile than other types of flows. Studies on Mexico (Hanson), India (Topalova), Poland (Goh and Javorik), and Colombia (Goldberg and Pavcnik) all demonstrate that incoming foreign investment is associated with a significant reduction in poverty.

Criticism: continuing in spite of the evidence?

The previous sections of this chapter have considered the relationship between globalization and poverty from a number of different perspectives. In the current section we review the broad trends in poverty and relate the trends to the vigorous public debate on globalization and poverty.

Trends in poverty

Table 2.5 provides a comparison of the most widely cited current estimates of the world poverty headcount and incidence. Table 2.5 shows that different authors have produced very different estimates for the level and trend in poverty headcounts.

The sources of these differences are methodological, with key issues including whether national accounts data or household survey data is used to calculate average income; how PPP is calculated; and whether world population or only developing country population is used in the denominator for calculation of poverty incidence. Other important issues that lead to differences in reported world poverty figures and trends include the choice of base year, poverty line, and time span. These issues are discussed in some detail in Aisbett's forthcoming chapter in the NBER study.

Table 2.5 Comparison of recent world poverty estimates

1998 Headcount (billion)	1998 Incidence (%)	Average change in headcount 1987– 1998 (million p.a.)	Average change in incidence 1987–1998 (% p.a.)	Poverty line (\$/day)	Source
1.20	24.0	+1.4	–0.40	1.08	Chen and Ravallion (2000), Table 2
2.80	56.0	+22.9	–0.46	2.15	Chen and Ravallion (2000), Table 3
1.10	22.1	–6.8	–0.55	1.08	Chen and Ravallion (2004), Table 3
2.71	54.8	+21.8	–0.48	2.15	Chen and Ravallion (2004), Table 4
0.35	6.7	–3.3	–0.19	1.08	Sala-i-Martin (2002a), Table 3a
0.97	18.6	–20.0	–0.77	2.15	Sala-i-Martin (2002a), Table 3a
0.46	9.2	–30.8	–0.90	1.08	Bhalla (2003), Table 1, PWTv6
0.37	7.4	–22.6	–0.67	1.08	Bhalla (2003), Table 1, WBPPP

Notes

Average Change—total change in the headcount over the period 1987–1998, divided by 11 years.

WBPPP—World Bank Purchasing Power Parity conversion using base year 1993. Uses Elteto, Kovcs and Szule method.

PWTv6—Penn World Tables Purchasing Power Parity conversion using base year 1996. Uses Geary-Khamis method.

Chen and Ravallion (2000, 2004) are the “World Bank” figures referred to below. 1998 values for Chen and Ravallion (2004) are the linear combination of their reported numbers for 1996 and 1999. For a discussion of the differences in method between Chen and Ravallion’s 2000 and 2004 estimates, see Chen and Ravallion (2004).

Total Headcount and Average Change for Bhalla (2003) were calculated from his reported incidence figures, using the same population size as Chen and Ravallion (2000).

Sala-i-Martin’s incidence is based on the total world population, rather than the population of developing countries as used by the other authors.

Second, Table 2.5 shows that despite the differences in headcount trends and incidence levels, all authors agree that the incidence of poverty was falling in the world over the period 1987–1998. The difference between the unambiguous progress when poverty is measured as incidence, and the highly ambiguous “progress” when poverty is measured as headcount is of some importance to the globalization debate. As pointed out by Aisbett, there is a diversity of opinions on whether headcount or incidence is the appropriate measure of poverty. She further argues that this diversity of opinion, combined with the sometimes contradictory trends that headcount and incidence suggest, is one of the reasons that there is so much disagreement about whether world poverty has been increasing during the period of globalization.

Globalization's critics

In light of these trends, which suggest falling poverty, why does there continue to be so much criticism of globalization? This is the central question of Aisbett (forthcoming), and she argues that there are several parts to the answer. The first part is that people have a natural tendency to weight the information that they receive according to their prior beliefs and values. Thus evidence which is objectively “mixed” is quite likely to be interpreted by one type of person as very positive, and by another as very negative. The mere fact that the evidence on globalization's impact on the poor is not unequivocally positive will lead people with negative priors to believe it is negative.

The second part of Aisbett's answer is to examine what types of beliefs and values lead people to a more negative interpretation of the evidence on globalization and poverty. The values which she identifies include concern over inequality, independent of poverty. In particular, globalization's critics feel differently about the polarization of the income distribution and inequality in the gains that different groups receive from globalization.

As first pointed out by Kanbur (2001), critics of globalization also tend to focus on shorter term impacts, while globalization's proponents are more concerned about the longer term. Critics of globalization also focus on the losses experienced by subgroups of the poor, even when at the country level poverty has declined. Aisbett suggests a number of explanations for this value preference, including recent evidence from behavioral experiments. She notes that the results of these experiments suggest that people concerned for subgroups may simply be displaying a very common human characteristic. After conducting experiments based on hypothetical allocation decisions (unrelated to globalization), Baron (2003, p. 1) finds that

People are reluctant to harm some people in order to help others, even when the harm is less than the forgone help (the harm resulting from not acting). The present studies use hypothetical scenarios to argue that these judgments go against what the subjects themselves would take to be the best overall outcome.

Of more relevance to Bhagwati's work, however, is what Aisbett refers to as "beliefs about the process of globalization." She argues that many people believe that the current form of globalization is based on processes which distill both political and market power upward and away from the poor. In particular they believe that corporate and commercial lobbies have disproportionate access to the international organizations such as the WTO and IMF, and that rich countries exploit their power within these international organizations. This belief about the processes through which globalization occurs is partly what predisposes them to interpret the available evidence negatively.

The belief that globalization favors the rich and powerful is fuelled by a number of key examples of successful lobbying on the part of corporate interests. They include the Trade Related Aspects of Intellectual Property Rights (TRIPs) agreement, proposals for a multilateral agreement on investment, and the IMF push for capital account convertibility. What makes these examples interesting is that many economists and proponents of globalization actually agree with the critics on both their causes and consequences for the poor. Few, however, have recognized the threat that they pose to globalization. Just as the excesses of early capitalism may have contributed to the communist movement, so too could the excesses of globalization lead to a backlash and return to protectionism.

The prime exception, of course, has been Jagdish Bhagwati. He has both identified and responded to the threat that these negative manifestations of globalization represent; and his response has been appropriately targeted towards a nonacademic audience. His efforts include many books on this issue, including *In Defense of Globalization*, as well as letters and articles in *Foreign Affairs* and *The Financial Times*.⁶

Conclusion

In the last two decades, the percentage of the world's population living on less than \$1 dollar a day has been cut in half, falling from 40% to 21%. Many countries, including China, have made tremendous strides in reducing not only the percentage of the population living in poverty but also the absolute number of individuals living on less than \$1 a day. While the income gap between the richest and poorest countries has increased, population-weighted measures of inequality show a significant decline. At the same time, developing countries increased their trade shares and slashed their tariffs. To what extent can we claim that increasing globalization is responsible for the fall in the incidence of poverty?

The first theme that emerges from the forthcoming book, *Globalization and Poverty*, is that the relationship between changes in globalization and changes in poverty is a complex one. In many cases, the outcome depends not just on trade reform or financial globalization but on the interaction of those policies with the rest of the environment. It is misleading to examine the impact of trade reform on poverty without taking into account the complementarity between trade or financial globalization and other changes in the environment. Financial globalization

is more likely to have a benign impact on growth and poverty reduction if it is accompanied or preceded by the development of good institutions and governance, as well as macroeconomic stability (including the use of flexible exchange rates). In India and Colombia, trade reforms have been associated with an increase in poverty only in regions with inflexible labor laws. Consequently, reaching any conclusions without taking into account the role of labor market legislation—and its contribution to inhibiting labor mobility in those countries—would be highly misleading.

The importance of complementary policies in ensuring that globalization benefits all segments of a population has long been a theme in the writings of Jagdish Bhagwati. In his discussion of growth and poverty, he points out that the relationship between growth and poverty reduction is generally a positive one, but that governments play an important role in affecting the strength of that association.⁷ He suggests that key government policies which can make growth more pro-poor include ensuring access to credit and political voice.⁸ Professor Bhagwati also uses the success of the East Asian Tigers to illustrate the importance of complementary policies. He notes that these countries were particularly successful at achieving growth and poverty reduction through their outward-oriented trade policies because of their complementary emphasis on high rates of investment, high literacy rates, expansion of higher education, and the use of export income to import capital that embodied advanced technology.

A second lesson that emerges from our review of the evidence is that globalization leads to clearly identifiable winners among the poor. Across several different continents, export expansion has been accompanied by a reduction in poverty. The evidence also points to the beneficial effects of FDI. While the macroeconomic evidence suggests that FDI is a less volatile source of capital than other types of inflows, the microeconomic evidence for India, Mexico, Poland, and Colombia indicates that higher inflows of foreign investment are associated with a reduction in poverty.

Third, it is also possible to identify some losers from globalization among the poor. Poor workers in import-competing sectors—who cannot relocate possibly due to the existence of inflexible labor laws—are likely to be hurt by globalization. Financial crises also affect the poor disproportionately, as indicated by the cross-country evidence and the erosion of real wages following currency crises in Indonesia and Mexico. In Mexico, poor corn farmers have been negatively affected by increasing import competition. However, transfer programs which redistribute income have been successful in preventing the erosion of their real income.

Professor Bhagwati pointed out many years ago that increased trade can, in theory, reduce incomes. Indeed, this very paradox was coined “immiserizing growth” by Bhagwati in his seminal 1958 paper on the topic. This work was particularly relevant to developing countries that feared that their increases in exports were in fact causing immiserizing growth by leading to a large fall in their

export prices.⁹ In his most recent book Bhagwati's suggestion is, once again, that there is a role for government intervention. As he says

So when you depress your export prices by selling more because you are a major supplier, restrain yourself; push in other directions. A suitable policy can always nip the immiserizing growth paradox in the bud.

(In *Defense of Globalization*, p. 55)

The fourth lesson that emerges from a review of cross-country evidence and country case studies is that simple interpretations of general equilibrium trade models such as the Heckscher–Ohlin framework are likely to be incorrect. Many economists predicted that developing countries with a comparative advantage in unskilled labor would benefit from globalization through increased demand for their unskilled-intensive goods, which in turn would reduce inequality and poverty. The theoretical discussions as well as the empirical evidence presented in this paper suggest that this interpretation of trade theory is too simple and frequently not consistent with reality. Cross-country evidence (see Easterly (forthcoming) and Milanovic and Squire (forthcoming)) suggests that globalization has been accompanied by increasing inequality within developing countries. However, the micro studies are more mixed, with evidence from Colombia consistent with rising inequality accompanying trade reforms, the evidence on India suggesting no relationship between trade reform and inequality, and the evidence on Poland suggesting that trade reforms have contributed to falling inequality.

The heterogeneity in outcomes suggests that careful targeting is necessary to address the poor who are likely to be hurt by globalization. This includes the poor in countries hit by financial crises, as well as the smallest farmers who cannot compete with the more efficient larger farmers or with expanding import competition. Clearly, the concerns of globalization's critics have been heard, but much remains to be done.

Notes

- 1 See also his recent article co-authored with T. N. Srinivasan that appeared in the *American Economic Review* (2002), entitled "Trade and Poverty in Poor Countries."
- 2 See *In Defense of Globalization*, Chapter 5.
- 3 Possibly the only exception to these general conclusions is Agenor (2002b), who finds that that poverty increased in countries more open to trade. However, his sample is limited to a sample size of 30 observations. In a similar paper using a somewhat larger sample, Agenor (2002a) finds no significant relationship between trade shares and a headcount measure of poverty.
- 4 See, for example Dollar and Kraay (2002, 2004), and Ravallion (forthcoming).
- 5 Bhagwati (1998a).
- 6 See for example IDG pp. 82–83, 165, 182–185, 199–207; Bhagwati (1998a); Bhagwati (1998b).
- 7 See *In Defense of Globalization*, pp. 54–60.
- 8 With regard to the provision of credit, however, Bhagwati suggests that markets should be used wherever possible (*In Defense of Globalization*, 2004, p. 58). Markets, he says, are more egalitarian allocation mechanisms than corrupt officials.

- 9 The possibility that a large negative terms of trade shock could lead to losses from trade has recently been revived by Samuelson in an article that appeared in the *Journal of Economic Perspectives*.

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