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Mobility, Opportunity and Vulnerability: The Dynamics of Poverty and Inequality in a Global Economy

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Introduction¹

Few topics are as widely studied and debated as poverty and inequality. An enormous amount of territory has been covered to achieve better understanding of these complex issues and the interactions between them. Particularly on the latter front, however, much more remains to be done. The world-wide trend towards economic integration, meanwhile, has introduced additional variables such as technology-led growth into the equation that, in addition to macroeconomic and public expenditure policies, have significant effects on trends in poverty and inequality. There is widespread debate about the effects of these trends and about the ability of domestic policies to harness them in a manner that includes the poor in economic growth.

Yet traditional measures of poverty and inequality, such as the headcount ratio and the Gini coefficient, do not capture much about what is happening over time and/or within particular societies' income distributions.² In other words, they do not tell us who is moving in and out of poverty and why, nor do they tell us about differences in access to opportunity among societies with similar income distributions. Two societies with exactly the same Gini coefficient, for example, could be extremely different in terms of how much mobility and opportunity individual members of society had during their lifetimes, and also how much mobility and opportunity children had compared with their parents.

One society could be very static, with little movement up and down the income ladder, and those that began at the top of the distribution remain there over time, and those that began at the bottom stay there. Even worse, that static distribution could be transmitted across generations, with the children of the poor also remaining poor. One can imagine such a society as depicted by society A in the transition matrix in Table 1, where the same people who begin in a certain quintile in time zero are also there in time one. This is a society with no income mobility.

Alternatively, one can imagine a society with complete mobility, where no one ends up in the same quintile in which they started, and some of

TABLE 1. Hypothetical Mobility Matrices

Quintile in T0	Quintile in T1					Total
	1	2	3	4	5	
<i>Society A: no income mobility</i>						
1	100	0	0	0	0	100
2	0	100	0	0	0	100
3	0	0	100	0	0	100
4	0	0	0	100	0	100
5	0	0	0	0	100	100
Total	100	100	100	100	100	100
<i>Society B: perfect income mobility</i>						
1	20	20	20	20	20	100
2	20	20	20	20	20	100
3	20	20	20	20	20	100
4	20	20	20	20	20	100
5	20	20	20	20	20	100
Total	100	100	100	100	100	100

those that begin at the top end up at the bottom, and *vice versa*. This is society B in Table 1. This is the sort of distribution of opportunity envisioned by John Rawls, in which no one has any inherited advantages.³ In reality, it is difficult to imagine a country with this much mobility. Nor it is clear that most people would accept a situation where they could not pass things on to their children, be they genetic endowments, educational opportunities, or used cars. In the real world, a number of parental characteristics do determine their children’s fates. While some of these are beyond our control, such as genetic endowments, and are integral to innovation and diversity, others are the result of economic and social phenomenon over which public policy does have some influence, such as income, education, and employment opportunities.

There is a great deal of debate, and diversity among societies, in terms of how much of a role public policy should play in leveling the playing field. While some societies place a great deal of importance on public school systems as a guarantee of equal opportunity, others emphasize individual effort and parental choices as important individual rights. Some societies tax inheritances almost to non-existence, while in others such intergenerational transmissions are considered as sacred as the transmission of family names or lineage.⁴

There is no correct formula for resolving such debates, nor is there a model society. We can, however, identify the factors that block the opportunity and mobility of the poor and result in the intergenerational transmission of poverty, something that is not desirable in any society. We also know that international economic integration, and the adoption of market reforms in a number of developing countries, provide a number of opportunities to enhance the mobility and opportunity of low-income groups. These trends also introduce new vulnerabilities, however. While the debate on globaliza-

tion and market reforms has centered a great deal on the effects of these changes on poverty and inequality, as captured by static measures, much less if any attention has been paid to the effects on mobility and opportunity.

There are a number of reasons why we think a focus on mobility, in addition to the wide-ranging and ongoing research on poverty and inequality, is warranted. First of all, the concept of mobility is better suited to evaluating the effects of policy changes, such as market reforms, on poverty and inequality than are traditional static measures. Changes in distributions as measured by the Gini coefficient, for example, often take years or even decades. Yet individuals can have substantial movements up and down the income ladder (often as a result of policy changes) in the course of a year or two. Patterns in mobility rates over time, meanwhile, may well provide information about longer term distributive trends. Poverty headcounts and other traditional poverty measures, meanwhile, tell us little about how far out of poverty individuals are able to move, why they are able to move up, and how permanent those movements are.

Finally, with the increasing importance of globalization and technology-driven growth, there have been significant changes in the determinants of mobility, such as increasing gaps between the rewards to skilled and unskilled labor, as well as to higher versus primary and secondary education. Understanding these changes will be critical to addressing poverty and inequality in the future.

The concept of mobility: measuring inequality over time

We are concerned with two distinct aspects of mobility, neither of which is easily captured in conventional measures of income inequality. The first is lifetime income and mobility. The incomes of lawyers in the US, for example, when measured at one point in time, are extremely unequal, as in the early years most law students are heavily in debt while later lawyers' incomes are high relative to other occupations. The lifetime income profiles of lawyers, however, are much more equal. Annual measures of bricklayers' incomes, meanwhile, are likely to be far more equal, but their lifetime profiles will demonstrate much less of a change in distribution, as their earnings opportunities do not increase as much with time as do those of lawyers (Fig. 1). Obviously, in economies undergoing major structural change, the situation is more complicated because many people will change occupation during their lifetime, some occupations will emerge and others disappear, and the lifetime income profiles of different occupations may change dramatically.

Typical measures of inequality of course tell us nothing about lawyers' or bricklayers' lifetime income or mobility. Measures of inequality are like one-time snapshots; they reflect differences in income at a specific point in time — but not whether those at the top or bottom of the income ladder are moving up or down or expect to do so. They therefore tell us little about what is happening to people's opportunities and to their well-being over a prolonged period of policy change.

A second measure of inequality is intergenerational within families of

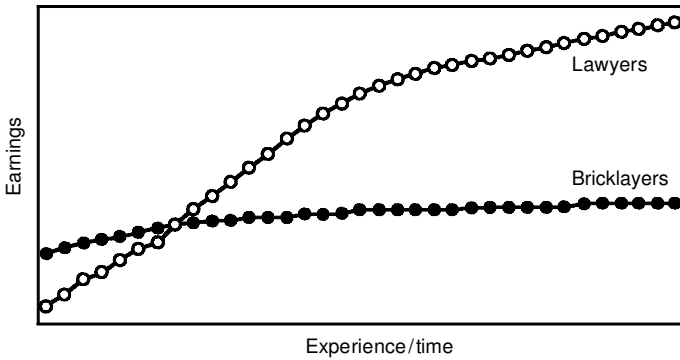


FIGURE 1. Earnings curves of lawyers versus bricklayers.

'dynasties'. Societies differ in the extent of their intergenerational mobility, i.e. the extent to which parents' (and grandparents', etc.) place the income or other ranking of their generation determines the place of their children (and grandchildren, etc.). At one time, land ownership or bloodline mattered. With the global turn to the market, it appears that it is education that matters, and thus some combination of parents' investments in children and public policy determine intergenerational mobility.⁵

Lifetime income mobility is likely to be influenced by business cycle volatility, and intergenerational mobility by such structural changes in economies as the opening of trade markets and divestiture of state-owned enterprises.⁶ In the longer term, patterns of mobility are also influenced by broader secular trends in the global economy; in particular, the transition to high technology-led growth. In the nineteenth century turn to industrialization, economic opportunities and rewards were largely determined by a capital-labor divide. With the turn to high technology growth, a similar divide exists between educated and non-educated workers, enhancing the opportunities and rewards of the former, and decreasing the returns to the labor of the latter.

What do we know about mobility?

While conceptually appealing, accurately measuring mobility is difficult. It requires data about specific individuals over prolonged periods of time, what is known as panel data. While many advanced industrial countries have at least one nationally representative panel survey, these surveys are rare for developing countries. Developing and maintaining panel data is expensive. Nor is it possible to reproduce such data for past time periods for which it does not exist. We do, however, have some panel data for particular periods in individual developing countries. We therefore must infer, where possible, broader patterns and trends from the sparse data that we have.⁷ Based on these inferences, what we see with globalization is an increase in mobility and opportunity, on the one hand, and an increase in vulnerability on the other.

The few studies that examine mobility at the household level are suggestive.⁸ In Indonesia, data on the variability of annual household spending suggests many households in the middle of the income distribution have a high probability of having been poor, or becoming poor. Assuming 20% of households are poor, an additional 30% are ‘vulnerable’ to becoming poor over 3 years. Moreover, separating the sample between urban and rural households, the urban households, on average less poor, are nearly as vulnerable as the rural ones.⁹ In China, in the second half of the 1980s, the distinction between being poor and being non-poor disappears for almost one-half of all households. Although only 6.2% of the population was poor throughout the period, nearly 50% was poor during at least 1 year. The corresponding figures for Zimbabwe (1993–1996) are 11 and 60%.¹⁰

Data following panels of households in Peru also reveal a great deal of movement up and down the income ladder. Opportunities are increasing with market reforms, but so are insecurities. The extent of movement is quite remarkable. The majority of households in the panel (61%) had income increases of 30% or more from 1985 to 1990. Twenty-five percent were relatively unchanged, and 14% had income drops of 30% or more. We demonstrate these trends across income groups using a Markov transition matrix. In this matrix, the population in the panel is divided into income quintiles, with the rows being the quintile of origin in 1991 and the columns being the quintile of destination in 1997. The figures are in percentages; thus, 100% in a same row and column would imply complete immobility, and 20% would be complete mobility.

As one can see from the matrix presented in Table 2, there was a fair amount of mobility for those in our panel — both upward and downward. Those in the fourth quintile clearly experienced the most downward mobility, with 52% moving to lower quintiles between 1991 and 1997. Those that experienced the most mobility and the most intense upward mobility were in quintiles 1 and 2 (the poorest), with 60 and 41%, respectively, moving up, and a significant percent of these moving up two and even three quintiles.¹¹

To gauge the absolute importance of these movements, we analyzed these changes logarithmically, a measure that reflects the greater importance of changes in income for those with lower levels of income. We also find that these mobility trends had greater significance for those at the bottom

TABLE 2. Peru, 1991–1997

Quintile 1991	Quintile 1997					Total
	1	2	3	4	5	
1	41	30	19	11	0	100
2	26	33	15	19	7	100
3	22	15	30	22	11	100
4	11	19	22	26	22	100
5	0	4	15	22	59	100
Total	100	100	100	100	100	100

Source: Graham and Pettinato (1999).

TABLE 3. US, 1979-1989

Quintile 1979	Quintile 1989					Total
	1	2	3	4	5	
1	61	24	10	5	1	100
2	23	33	28	14	3	100
3	8	25	30	26	11	100
4	5	13	23	33	26	100
5	3	5	11	23	59	100
Total	100	100	100	100	100	100

Source: Mishel *et al.* (1999).

end of the income ladder, with downward mobility dominating in the recession period from 1985 to 1991, and then strong upward mobility dominating from 1991 to 1997.¹² This latter trend reflects the benefits that stabilizing hyperinflation had for the poor, the government's efforts to redirect public expenditures to the poorest groups, and changes in opportunity generated by high positive rates of growth that followed stabilization.¹³

Comparing the data from Peru with panel data from the US (Table 3) demonstrates the higher levels of both upward and downward mobility in Peru. Tables 2 and 3 show positional mobility (i.e. across groups defined in relative terms) in the two countries. In Peru, those in the richest quintile in 1990 have a probability of 55% of remaining there after 6 years, while 59% of those in the wealthiest quintile in the US stayed there. In Peru, only 43.5% of those that started in the bottom quintile were still there at the end of the period, while 61% of those that started at the bottom were still there at the end of the period in the US. Also, 8.2 and 2.4% of those that started in Peru's bottom quintile made it all the way respectively to the fourth and fifth quintiles.¹⁴ The same percentages for the US are 4.6 and 1.1%, respectively. Alternatively, 4.8% of Peruvians that began in the top quintile fell all the way to the bottom, while only 2.7% of Americans experienced a similar drop.¹⁵

For Russia, we have data from a recent household survey, the Russia Longitudinal Monitoring Survey, for 1995-1998, a period of extensive macroeconomic volatility. This survey covered 1700 households, and included similar questions about subjective well-being and perceptions of past progress in addition to objective income data.¹⁶ In terms of objective mobility, as in Peru, we see extensive movements both up and down the income ladder, although downward trends were more dominant in Russia. Mean incomes went down for all groups over the period by an average of 17.2%. In terms of positional movement, over 50% of those in the fourth quartile experienced downward mobility, with 10% ending up in the bottom quintile and 15.7% in the second quintile (see matrix). Of those in Russia that started the period in the top income quintile, meanwhile, only 42.4% retained their position in that quintile, and 7.4% falling to the bottom income quintile, while in Peru none of those at the top fell to the very bottom¹⁷ (Table 4).

For South Africa, a study of panel data for 1993-1998 examines transitions in and out of poverty. The study finds that 65.2% of those in the sample

TABLE 4. Russia, 1995-1998

Quintile 1995	Quintile 1998					Total
	1	2	3	4	5	
1	39	25	18	10	8	100
2	21	31	20	17	11	100
3	17	20	26	19	17	100
4	15	14	19	28	24	100
5	9	9	17	25	40	100
Total	100	100	100	100	100	100

Source: Graham and Pettinato (2000b).

TABLE 5. South Africa, 1993-1998

Expenditure class, 1993	Expenditure class, 1988					
	< 0.5PL	< PL	< 1.25PL	< 1.5PL	< 2.5PL	> 2.5PL
< 0.5PL	16.7	48.5	7.6	7.6	16.7	3.0
< PL	17.5	48.5	8.8	5.8	16.7	2.6
< 1.25PL	8.9	40.4	13.0	8.2	21.2	8.2
< 1.5PL	7.7	39.4	10.6	10.6	19.7	12.0
< 2.5PL	4.8	19.3	13.7	8.9	28.5	24.8
> 2.5PL	1.9	5.7	7.1	5.2	23.2	56.9

Source: Carter and May (1999).

that were below the poverty line in 1993 were still there in 1998, while 56.9% of those that were in the highest income category, which is having incomes 2.5 times that of the poverty line or more, were still there in 1998. Only 3% of those that were below the poverty line in 1993 reached the highest income category by 1998 (see Table 5). (Note: Table 5 depicts absolute movements in and out of poverty, rather than positional shifts across quintiles.)

The data, and the authors' analysis, suggest that a significant proportion of poverty in South Africa has a more chronic or permanent nature than it does in most of the countries already discussed. Moving out of poverty, meanwhile, with the exception of a few cases in the sample that experienced unexpected exogenous shocks (luck), was directly linked to the ownership of productive assets, such as land, education, or surplus household labor.¹⁸ This is in keeping with the findings of cross-country studies, which find that the ownership of assets reduces the risk of households' falling into poverty as a result of macroeconomic volatility.¹⁹

An obvious related question, which we are unfortunately not able to answer due to the short-term nature of our panel data, is the extent to which the probability of being chronically poor is transmitted intergenerationally. It is plausible that there is some intergenerational component in all countries, but that it varies among them, in part depending on the general level of income mobility and in part on other factors, such as social structure, racial barriers, access to education and other services, and so on.

In the absence of panel data, meanwhile, it is possible to infer trends in mobility with proxy panel data, either by matching cohorts across household surveys, or through recall data (which has obvious problems). These proxy data allow us to obtain a better, if incomplete, picture of the intergenerational component. Nancy Birdsall, Jere Behrman, and Miguel Székely have constructed indices of intergenerational mobility for countries of Latin America and use those indices to explore the effects of economic policies, macroeconomic conditions, and education programs on that mobility.

They rely on 28 household surveys in 28 countries, taken between 1980 and 1996. They calculate the schooling gap per child as the expected years of schooling (i.e. is the number of years of schooling that child would have been expected had she/he entered school at age 6 and advanced one grade each year) minus the number of years the child had actually completed at the time of the survey. They consider schooling gaps separately for four age groups: 10–12 years, 13–15 years, 16–18 years, and 19–21 years, as family background is more likely to matter more for older children. They then calculate family background by dividing households in the sample into five quintiles, according to parental schooling.

Their results confirm for a large number of countries over many years that family background has a significant association with length of children's schooling. As expected, children of higher income and better educated parents everywhere and at all times are likely to do better. But their results also suggest that the implied link is subject to substantial variation across countries and periods, depending on macroeconomic conditions and public policy in education. They find that the depth of financial markets and an emphasis on basic schooling in public spending enhance intergenerational mobility.²⁰ Although the immediate effects of market reforms and education policy reform on current income distribution are not evident, longer-run positive effects of greater mobility on distribution seem plausible.

In a similar effort to measure social mobility trends in the region, Momi Dahan and Alejandro Gaviria construct an index of mobility based on the correlation of schooling gaps between siblings: the between-family variance of mean schooling gaps versus the overall variance of the gaps.²¹ With perfect mobility, family background would not matter and siblings would be no more alike than two people taken at random (barring shared genetic traits). In an immobile society, family backgrounds would dominate and most siblings would fare alike. Dahan and Gaviria compute their index based on household surveys from 16 Latin American countries and find that social mobility is highly correlated with both average schooling and inequality of schooling. They also find a strong relationship between mobility and education expenditures, and only a weak relationship between mobility and Gross Domestic Product (GDP) per capita and income distribution.²² More generally, they find that most countries in the region, with the exception of Mexico, experienced a slight increase in mobility in the early 1980s and mid-1990s.

David Hojman, in a study in Chile, focuses on 'market-driven, medium term mobility': changes in mobility trends that are driven by policy change.²³ After two decades of structural reforms, Chile's highly unequal income

distribution remains very similar to the pre-reform period, despite major strides in reducing absolute poverty. Although income has increased across the board, by far the largest increases have gone to managerial (skilled) personnel. Hojman's findings are also supported by evidence from annual, region-wide cross-sections, which suggest that the rewards to skilled labor have far outpaced those to unskilled labor. The explanation for these trends is twofold. First, trade liberalization has rewarded skilled rather than unskilled labor in the region, contrary to what classic economic theory would predict.²⁴ Second, because education policy has not kept up with demand in the region, skilled labor is in relatively short supply, which has further increased its marginal gains relative to those of unskilled labor.

Katherine Terrell (2000) examines worker mobility and winners and losers in the post-Communist economies.²⁵ She defines winners and losers in terms of changes in relative earnings and employment status. She finds that the winners so far have been young, educated men whose skills enabled them to exploit new opportunities in the private sector. The growth in women's returns to education has lagged behind that of men, and the skills of older workers are much less valued than before the transition. In Eastern Europe and Russia, in contrast to Latin America, there has been significant downward mobility as the result of much more dramatic changes in the structure of economies and welfare systems. At the same time, many educated groups, whose labor was undervalued under state planning, have experienced upward mobility.

What explains patterns in mobility?

The afore-cited studies suggest that mobility rates vary across countries, and that they can also change quite substantially over time within countries. There is a quite a bit of movement up and down the income ladder, and we see in many countries that the poor do indeed move out of poverty, but we also see substantial numbers of people from the middle of the distribution falling into poverty. What explains these movements?

Education, assets, and incentives

A number of variables influence individuals' chances of moving out of poverty, as well as falling into poverty. Most commonly cited, and perhaps the most consistent of these variables, are demographic determinants. Family background matters. Children of wealthier and more educated parents do better across the board, regardless of the particular country and policy contexts, with the exception of extreme circumstances, such as severe hyperinflation.²⁶

In Latin America, for example, there is a strong correlation between the distribution of income and the distribution of heads and members of households of employed workers. The higher the educational level of workers, the higher their income levels. And there is a clear segmentation of the performance of children, depending on the income levels of their

parents. While children from low income stratum households had an average of 46.0% on a grade 4 performance test, those in the medium strata had an average score of 54.1% and those from the high strata an average of 65.5%.²⁷ In addition, there seems to be a very strong link between parents' educational attainment and that of their children, a link that seems to be stronger where public school systems are weak.²⁸

Educational performance, not surprisingly, also has effects on future prospects of moving out of poverty. An average educational level of at least 10 or 11 years of formal schooling is required in the region to have a 90% or higher probability of not falling into poverty (or of moving out of poverty). And just 2 years less of schooling entails a 20% drop in income for the rest of the person's active life.²⁹

Studies of panel data for rural El Salvador (1995-1997) and metropolitan Brazil (1982-1999) support these region-wide statistics.³⁰ In El Salvador, de Ferranti *et al.* found strong and significant effects years of schooling of the household head on income. In Brazil, more years of schooling were associated with a smaller probability of transition into poverty and a larger transition rate out of poverty, both during recessions and growth spurts.³¹

The relevant question for public policy is the extent to which the influences of family background can be mediated and the playing field leveled. While it is unlikely that policy will ever be able to achieve a mobility transition matrix that reflects a Rawlsian distribution of opportunity, one can certainly hope that policy can prevent societies from the distribution of opportunity in matrix B, where there is no mobility at all, and parents' backgrounds completely determine their children's fates.

Education matters a great deal in virtually all contexts — although there can be differences in marginal rewards to different levels of education — and it is an obvious focus for public policy. Second, a number of studies show that having some stock of assets also matters, both in terms of protection from downward mobility and in terms of being able to make productive investments in human and physical capital.³²

While education is extremely important, it is not the only factor determining intragenerational and intergenerational mobility. Rigid social structures, racial and/or gender discrimination, unequal access to other critical services such as health, and unequal access to political rights could all serve as factors that limit or even block the upward mobility of disadvantaged groups. While a full discussion of such factors is beyond the scope of this paper, it is important to note their existence in many societies, both developed and developing.

Finally, the structure of incentives also matters. If rewards to labor are extremely low, for example, poor parents will have low incentives to save and invest in their children's education. Birdsall, Pinkney, and Sabot attribute higher level savings and growth in East Asia than in Latin America to a labor-intensive growth model in the former, in which the poor had incentives to invest in their children's education, versus a capital-intensive growth model with low returns to labor in Latin America, which discouraged similar investments by the poor.³³ Similarly, tax structures matter. The myth (if not

the reality) of the US having higher mobility rates than Europe is based in large part on a less onerous tax regime in the former making rags to riches stories more possible.³⁴

Market failures and government failures

In many countries, particularly developing economies, a number of market and government failures either introduce perverse incentives or block the ability of the poor to accumulate education and other productive assets. Inequality in some instances acts as a distortion. Sheahan and Iglesias (1998) make a distinction between constructive and destructive inequality: the first kind of inequality rewards productivity and innovation; and the second blocks the productive potential of the poor. A wide body of research suggests that high inequality and low growth in Latin America reflect and reinforce the lack of productive opportunities for the poor, the second kind of inequality.³⁵

With low income and few assets, in economies where opportunities are limited to those with privileged access, the poor have neither the capacity nor the incentive to make human capital investments.³⁶ In part, and particularly for the very poor, this lack of capacity stems from sheer inadequacy of income and assets. Yet it also stems from the negative incentives and low expectations that result from persistent and high levels of inequality. Without human capital, itself a critical productive asset, the poor (in a vicious circle) stay poor and, as their productive potential is squandered, overall economic growth suffers.³⁷

Both market failures and government failures perpetuate the negative effects of inequality on investment in human capital and, more generally, on growth. Because of imperfect capital markets, access to capital depends on collateralizable wealth. Thus, an individual's initial assets may be an important determinant of his/her ability to finance high-return investments. This poses a particular problem for human capital investments because future earnings cannot be used as collateral. And as education plays a central role in determining mobility and opportunity, this market failure is particularly negative for the poor's opportunity to attain upward mobility and move out of poverty. The implication is that initial assets determine productive potential, and high initial inequality results in both high subsequent inequality and slower growth. In a cross-country analysis, Birdsall and Londoño find that the greater the initial inequality in land and education, the lower the growth rates across countries.³⁸

Financial market failures also limit the opportunities of the poor. In most developing countries, and certainly those with shallow financial markets, businesses primarily use banks for payment transactions. In contrast, banks are the primary vehicle that low-income and middle-income consumers have to accumulate assets. When capital markets are repressed, controls on interest rates result in negative real rates of interest. While large businesses and wealthy consumers can usually transfer assets abroad, less wealthy consumers and small-sized businesses either absorb the costs or stop using

the banking system. The access of the poor to a very important productive asset (credit) is then severely constrained, as is their upward mobility.³⁹

Insurance market failures can also limit mobility and opportunity for low-income groups. In the absence of other adequate mechanisms to insure against risk, workers seek to offset risk by 'legislating' job security through labor laws. Yet rigid labor laws discourage job creation and limit the incomes and opportunities of the poor. And the tendency of the poor to rely on informal insurance arrangements, which emphasize family or community ties and shared incomes and responsibilities, can be a poverty trap. Participation in the risk-sharing arrangements may reduce their aggregate income, savings and investment, but the poor cannot risk removing themselves from the collective help of the group.⁴⁰

Over time, demographic effects tend to exacerbate the effects of these market imperfections. For example, women with less education have higher fertility rates, which in turn contributes to lower public expenditures per eligible child. For example, while public expenditure on education take about the same proportion of GDP in Latin America as in East Asia, in Latin America, where fertility is much higher, those expenditures have been divided among increasing numbers of children. The result is a decline in the quality of education for the poor, an increase in inequality of access, and an increase in drop-out rates, which ultimately had negative effects on the mobility of the poor, as well as on aggregate growth.⁴¹

Government failure also contributes to the perpetuation of inequality and of the kinds of distortions that block the potential of the poor. Classical welfare views government as a benign actor whose role to is correct for market failure by funding public goods, subsidizing goods that generate externalities, and compensating for market or insurance failures. Yet the reality in most countries is that the behavior of governments, and thus the allocation of public goods, reflects the distribution of political power and the organizational capacity of different societal groups.⁴²

Unequal distribution of political power can lead to a perpetuation or concentration of asset inequality. The so-called 'median voter' approach does not withstand critical scrutiny. The distribution of political voice as well as that of income appears to be skewed towards the wealthy in highly unequal societies. This unequal access to political rights can increase the likelihood of 'steady states' of inequality, which hinder economic growth. Alternatively, high levels of inequality at times encourages voters to opt for more redistribution and/or populist economic policies, which can also hinder growth.⁴³

High levels of inequality can also impede the evolution of the kinds of government policies that level the playing field for the poor, such as through promoting education and technology, supporting the financial sector, investing in infrastructure, preventing environmental degradation, and creating and maintaining social safety nets.⁴⁴ Instead, high levels of inequality can distort the allocation of public expenditures, and lead to the misallocation of public investments and to ineffective public services, as the benefits of key services are captured by privileged elites. In the education sector, for example, the elite, who benefit the most from public expenditures on

university education, influence decisions about how education expenditures are allocated and skew expenditures toward tertiary education. This is a particularly negative outcome given the strong link between education and mobility.

Government monopolies that provide universally subsidized public services, such as water, become targets for rent-seekers or influence-peddlers, as they are often free from the discipline of competition and have no clear standards or performance-based incentive systems. Because these enterprises are loss-making, they find it impossible to keep up with demand. Supply is rationed and it is the politically influential (and wealthier) groups who maintain access to services and subsidies. The poor have to rely on informal services, such as buying water from trucks, for which they pay above-market costs. Introducing competition (and regulation) can thus have the unexpected outcome of providing the poor with both more accessible and better-priced services, which allows them more time and disposable income with which to accumulate the productive assets necessary for upward mobility.

A common assumption is that macroeconomic reforms are bad for the poor. While the effects of market reforms on inequality is unclear at best and the subject of a great deal of debate, the positive effects of such reforms for the poor are quite clear.⁴⁵ The elimination of high levels of inflation, for example, has important and positive effects for the poor, who are least able to protect themselves from its costs. And the elimination of the kinds of distortions already discussed can be critical to opening new opportunities for the poor.

In contrast, interventions designed to specifically help the poor with redistributive transfers often have perverse outcomes, such as the capture of the subsidies by the non-poor. Market reforms emphasize productivity-enhancing measures that are sustainable in fiscal terms and avoid the kinds of disincentives at the micro-level that create dependence or disrupt the autonomous efforts and coping strategies of the poor.⁴⁶ The emphasis is on introducing incentives that encourage the poor to make investments in human capital and to contribute to as well as benefit from the growth process, providing them with new opportunities for upward mobility.

The elimination of distortions can also foster the potential of the private sector to provide such opportunities. In Mexico, for example, a country that has made a great deal of progress implementing market reforms, the private sector created over 12 million new jobs from 1987 to 1998, while the public sector created 143 000 jobs, a ration of 87 : 1. In contrast, in a number of countries that have made less progress implementing reforms, such as Kenya, Guatemala, Uruguay, and Gabon, that ratio is less than 15 : 1.⁴⁷ A recent survey in Venezuela found that, during a period of economic downturn, finding a job was the single most important factor in explaining transitions out of poverty. The sources of new jobs for those that escaped poverty, meanwhile, were the public sector (11%), the formal private sector (31%), and the informal private sector (58%).⁴⁸

Thus, the turn to the market and to global integration can indeed create

new opportunities for the poor. Yet it also introduces new vulnerabilities. And, as the previous section on mobility trends suggests, vulnerability is linked both to the availability of adequate safety nets and to individuals' ability to participate in a global economy that increasingly rewards those with skills and education. Removing market distortions is, without a doubt, a necessary step to creating new opportunities for the poor to move out of poverty. It is not, however, a sufficient one.

Winners and losers in a technology-based economy

Getting ahead in today's globalized, technology-driven economy is, without a doubt, enhanced by having not just education, but higher levels of education. Increasingly, a secondary education is insufficient to guarantee a decent (and stable) standard of living. There is a rising wage premium to skilled, educated workers — a result of some combination of skill-biased technological change, and trade-induced changes in demand for skills.⁴⁹ In Latin America, for example, the differential between the incomes of professionals and technicians and those of wage earners in low-productivity sectors swelled by 28%, on average, between 1990 and 1997.⁵⁰

Directly related to this, the single most important characteristic that defines top decile households in Latin America is that most adults in those households have at least some university education.⁵¹ In Brazil, for example, the average 25 year old in the tenth decile (of the distribution defined in terms of household income per capita) has 11 years of education; the average education in the ninth decile is only 8 years (implying that many 25 year olds in this decile have not attended secondary school), and the average in the middle two deciles is not even 5 years.⁵² On average, there is a 2 : 1 ratio between mean schooling of 25 year olds in the top decile and those in the middle. The difference in the US is much smaller: adults in the top decile have only 1.2 times the mean number of school years as those in the middle deciles.⁵³

These trends in education illustrate a more general point. Wherever there is a history of low enrollment, recent increases in enrollment will increase inequality in the distribution of education. If demand for the relatively skilled increases faster than supply, those with scarce skills will enjoy increasing returns to those skills in the labor market. Latin America is an extreme case. Within Latin America, however, even a country like Costa Rica, with a longer and deeper history of widespread education, has nearly a 2 : 1 ratio between the education of adults in the top and middle deciles.

Figures 2a and 2b illustrate that, over the past several years, returns to higher education in Latin America have risen dramatically relative to returns to secondary and primary education.⁵⁴ The figures also show a general trend of decreasing relative marginal returns to secondary education. It seems the reference bar has shifted upwards.⁵⁵ While in the 1960s and 1970s a secondary education was sufficient to attain a stable job and a 'middle-class' (and, indeed, fairly privileged) standard of living, by the 1990s it neither guaranteed a well-paying job nor protection from falling into poverty. As

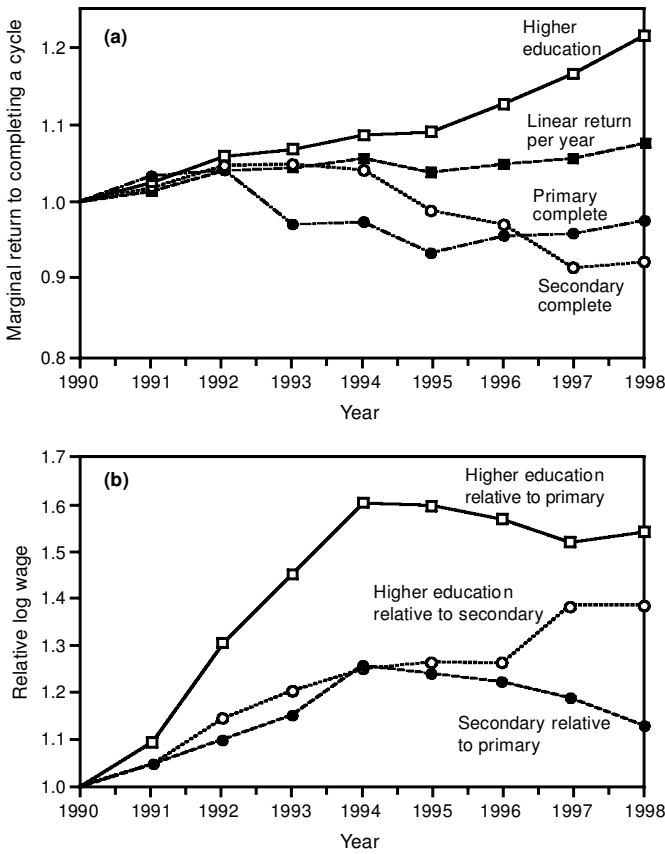


FIGURE 2. (a) Marginal returns to education in Latin America in the 1990s. (b) Wage differentials in Latin America in the 1990s. *Source:* Behrman *et al.* (2000).

already noted, many of those with completed secondary schooling (rather than higher levels) were public sector workers; in 1990, there were far fewer public sector jobs, and they were also less desirable.⁵⁶

A recent study on intergenerational mobility in Brazil is consistent with relative losses of secondary school graduates. It suggests that workers in 1973 were much better off than their parents, almost independently of their education. In those years, a new working urban class was benefiting from rapid growth. In contrast, Brazilian workers in 1996 were only better off than their parents to the extent that their educational level had increased substantially. In the early stages of industrialization, mobility was structural in nature: opportunities were created by a fast growing economy. More recently, mobility has become more ‘circular’: a consequence of more competitive labor markets and larger wage gaps based on education and skills.⁵⁷

Findings from an anthropological study of households in three Rio de Janeiro shantytowns, surveyed in 1968 and re-visited in 1999, support the

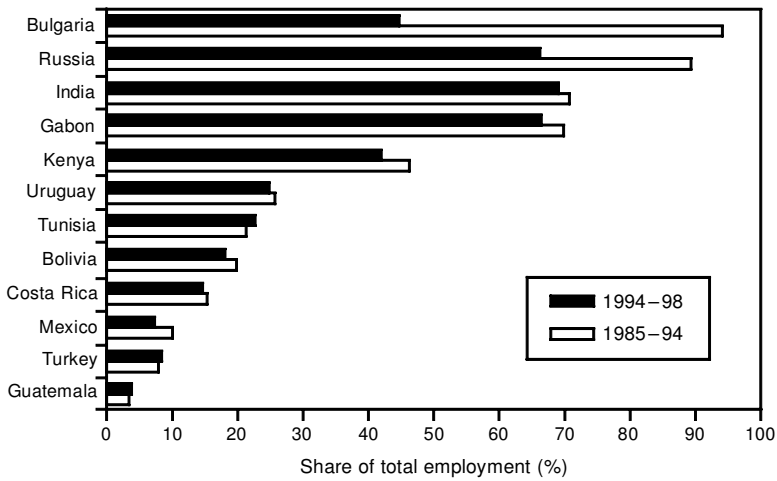
same conclusion. Most parents felt that their children had a better life than they did because they had more education and a higher standard of living. Yet children's responses demonstrated substantial frustration because, despite higher levels of education and access to consumer goods, they were unable to break out of their parent's occupational categories. The latter usually hinges on obtaining a university education, an objective that is elusive for most low-income Brazilians.⁵⁸

Thus, the technology-driven economy has certainly rewarded those with skills. What about the rest? The poor, for most part, have benefited from the reduction in high levels of inflation, the removal of a number of market distortions, and from the restoration of economic growth.⁵⁸ They have also benefited, at least in some countries, from a re-orientation of public expenditures in their direction. In some countries, the middle-income group has also been affected by less visible trends in public expenditures, as the focus of public expenditure shifted from universally available public services to targeted programs for the lowest income households.

The effort to ensure that public expenditures reach the poor is important. But in countries where the shift has occurred and provided very clear benefits for the poor, as in Chile and Peru, it has come as much at the expense of middle-income households as of wealthy households, as increased expenditures on programs for the poor have been financed largely by the value-added tax, which is not progressive, or by a re-allocation of existing expenditures.⁶⁰ In other countries (Czech Republic, Egypt, Mexico, and Brazil, for example), where the middle class was the main beneficiary of social spending on such programs as secondary and university education, these and other services deteriorated in quality as public funding failed to keep up with enlarged programs. Wherever the wealthy for the most part do not rely on public services, such as transportation and emergency hospital care (as in many countries in the developing world), reductions in quality and coverage of services have a stronger impact on middle-income groups.⁶¹

Another trend related to the new economy, which has also had mixed effects for the poor and the middle income, is the reduction of public sector employment. White-collar occupations for which a secondary education was sufficient and that guaranteed a 'middle-class' standard of living for large numbers of people in most developing economies were primarily, but not exclusively, found in the public and parastatal sectors. Many developing countries have trimmed their public sector to achieve fiscally sustainable growth and to remain competitive at an international level.

Reductions in the size of the civil service and privatization of state-owned enterprises resulted in the elimination of millions of secure jobs in the Past decade. Figure 3 suggests, that since 1985, the percentage of workers employed in public sector jobs has been decreasing for most countries. Not surprisingly, transitional economies (in our sample for Figure 3, Bulgaria and Russia) had the highest initial levels as well as the most dramatic decline. With the exception of Tunisia and Guatemala, all the countries in the sample show decreasing shares in public sector employment.⁶²



Source: Birdsall et al. (2000)

FIGURE 3. Public sector employment share, 1985-1994 and 1994-1998 in selected countries.
Source: Birdsall et al. (2000).

Other evidence from Latin America indicates that the loss of secure jobs in government and state-owned enterprises has not been compensated FOR by increases in private sector jobs. Unemployment rates were higher in the mid-1990s compared with the early 1990s in most countries (the exceptions are Central America, where the *maquila* industries have grown, and Peru and Bolivia).⁶³ Even those public sector workers that kept their jobs probably lost ground in relative terms. In Peru, gains in income in the period 1989-1996 were three times greater for private sector compared with public sector workers.⁶⁴

In addition, International Labour Organization (ILO) data show an increase in 'unprotected' jobs in the 10 countries, with comparable figures covering the past decade or so.⁶⁵ Unprotected jobs are those in which workers have no written contract and no social benefits. The increases do not necessarily that imply workers are worse off — they may receive higher hourly wages. However, they do imply workers enjoy less security. In Latin America, the decline in 'protected' jobs has probably affected middle-income rather than poor workers most, as those in the 40% of poor households were never among those protected in the first place.

The combination of these trends has led to a shrinking in the size and the income share of the middle class in many countries. Even in the US, traditionally known as the land of mobility and opportunity, there are more people moving out of the middle class (into higher or lower income categories) than into it, at least as shown by a study of transitions into and out of the 'middle class' in the US by Greg Duncan. Using absolute level thresholds based on common income-to-needs ratios (the ratio between the household income and the poverty line), he concludes that the US middle

class shrank in the 1980s and the beginning of the 1990s.⁶⁶ He reports elsewhere that middle-income families became more likely to move up and down in the 1980s, but that correspondingly fewer poor families moved up or rich families down into the middle groups than in previous decades.⁶⁷

Birdsall *et al.* (2000), in a recent paper, developed an income-based measure of the middle class, which is the population sector with incomes between 125 and 75% of the median income. This income-based measure, distinct from the usual class-based or occupation-based measure relied on by sociologists, which literally captures the middle strata in income terms, allows comparison of the size of the group across countries and within countries over time, at least for countries for which comparable household level income data is available. It also allows comparison of the absolute income levels held by this group across countries (see Table 6).

This group's share in total population depends on the extent to which the tails of the income distribution are large relative to the middle; a higher share implies a larger middle group. The group's share of income will not necessarily correspond to their share of the total population. Finally, the households in this group are not necessarily households of 'average' per-capita income; in countries with a high share of households below a poverty line and a highly skewed distribution at the top, this group will typically have income below the average, and it may even include some households defined in their country as 'poor'.⁶⁸

Table 6 demonstrates how the middle strata compare across countries using information from the most recent available household survey for each country.⁶⁹ The share of population is lowest, at about 22%, in Latin America and highest, at about 42%, in the transitional economies. The share of income, given population, is systematically lower in Latin America. Table 7 shows per-capita Gross National Product (GNP), average household per-capita income and the absolute income range of the group in the middle.⁷⁰ The income of a 'middle'-income individual in low-income Brazil is obviously lower in absolute terms than that of one in Taiwan.

In Latin America, where the distribution of income is highly concentrated at the top, the difference between mean and median income is so great that even the most well-off of our middle group of households have income well below the average. But even in high-income countries, most households in this middle group have below-average income.⁷¹

Shifts in the size and share of the middle class across countries, as well as the limited data that we have on mobility trends in particular countries, suggest that there is a great deal of movement up (and down) the income ladder, and that at least part of this phenomenon is driven by trends in the global economy. A dramatic shrinking of the middle group during the 1990s shows up in the transition economies. In contrast to the transition economies, the middle group in Latin American countries has experienced a substantial increase in its size as well as in its income share. These countries started, of course, from a much lower base. During the observed period, most countries in Latin America have transformed their economies — from state-led to market-driven. While these trends are surely creating new opportunities for

TABLE 6. The size of the middle strata (latest available observed year)

Country	Year	MC		(A)/(B)
		population share (A)	MC income share (B)	
High income		37.2	31.6	0.843
Australia	1994	28.6	23.5	0.822
Austria	1987	46.3	43.6	0.942
Belgium	1992	45.7	42.6	0.932
Canada	1994	36.0	31.8	0.883
Denmark	1992	46.5	41.3	0.888
Finland	1995	49.1	39.4	0.802
France	1994	36.6	30.6	0.836
Germany	1994	38.8	36.2	0.933
Ireland	1987	36.1	28.1	0.778
Israel	1992	30.3	23.7	0.782
Italy	1995	32.5	26.5	0.815
Luxembourg	1994	41.3	36.8	0.891
Netherlands	1994	36.6	30.8	0.842
Spain	1990	36.0	30.0	0.833
Sweden	1995	38.0	31.6	0.832
Switzerland	1992	34.5	31.4	0.910
Taiwan*	1995	36.6	28.8	0.787
UK	1995	33.1	26.0	0.785
US	1999	24.2	17.6	0.727
Transition economies		41.7	34.5	0.801
Czech Republic	1992	60.6	54.7	0.903
Hungary	1994	43.8	35.0	0.799
Polnad	1995	36.0	31.6	0.878
Russian Federation	1997	28.6	16.9	0.591
Slovak Republic	1992	58.2	54.6	0.938
Latin America		21.7	13.2	0.608
Brazil	1996	20.7	9.6	0.464
Chile	1996	21.5	14.2	0.660
Costa Rica	1997	24.5	17.6	0.718
Mexico	1996	22.4	13.5	0.603
Panama	1995	19.4	11.4	0.588
Peru	1997	21.4	13.1	0.612

Source: Birdsall *et al.* (2000).

'Middle Strata' are made of those households with per-capita income between 75 and 125% of the median income. MC, Middle class.

many people, it is also creating insecurity for others, even those that are upwardly mobile. The changing nature of the social contract in many countries is also reinforcing those insecurities.

These stresses and insecurities are exacerbated by two other globalization-driven trends: top-driven inequality, and the globalization of consumption standards. Top-driven inequality is inequality that is driven by a skew at the top of the distribution, i.e. high levels of wealth of those at the top of the distribution compared with the rest of society, where income is not that unequally distributed. In Latin America, for example, where inequality rates

TABLE 7. Middle strata income levels (latest available observed year)

Country	Year	GNP per capita	Average income	Middle strata income* thresholds	
				Bottom	Top
High income		18 775	10 909	6 935	11 558
Australia	1994	18 210	10 264	6 282	10 470
Austria	1987	14 880	8 644	5 941	9 902
Belgium	1992	19 970	9 161	6 251	10 418
Canada	1994	20 190	13 671	8 684	14 474
Denmark	1992	19 300	10 369	7 076	11 794
Finland	1995	18 510	10 129	6 760	11 267
France	1994	20 310	11 704	7 279	12 132
Germany	1994	19 710	11 024	7 202	12 004
Ireland	1987	8 850	3 332	2 939	4 899
Israel	1992	14 530	8 608	5 065	8 445
Italy	1995	19 590	9 047	5 692	9 488
Luxembourg	1994	27 990	15 097	9 870	16 450
Netherlands	1994	19 050	10 284	6 553	10 921
Spain	1990	12 220	5 707	3 548	5 913
Sweden	1995	18 500	10 454	7 483	12 472
Switzerland	1992	23 540	15 980	10 149	16 916
Taiwan	1995	12 838	8 587	5 296	8 826
UK	1995	19 450	11 739	6 989	11 648
US	1999	29 080	23 478	12 699	21 165
Transition economies		5 555	3 632	2 732	4 552
Czech Republic	1992	8 590	3 701	2 520	4 200
Hungary	1994	6 190	2 797	1 779	2 965
Poland	1995	5 700	3 082	1 942	3 237
Russian Federation	1997	4 280	5 978	5 309	8 849
Slovak Republic	1992	6 050	2 672	1 897	3 156
Latin America		7 200	4 697	1 649	2 748
Brazil	1996	6 250	4 563	1 326	2 211
Chile	1996	11 620	8 803	3 016	5 027
Costa Rica	1997	6 510	4 326	1 926	3 210
Mexico	1996	7 660	2 883	1 000	1 666
Panama	1995	6 580	5 373	1 718	2 864
Peru	1997	4 580	2 232	908	1 513

*Household per-capita income, converted from local currency units into PPP\$.

**Due to the lack of data, we used US\$ exchange rate for the thresholds, and 1996 GNP per capita in US\$.

Source: Birdsall *et al.* (2000).

are especially top-heavy, the trend is driven primarily by gaps between the top decile and the rest of the distribution, including the ninth decile.⁷²

Top-driven inequality is driven in part by the rising wage premium to skilled, educated workers — as a result of some combination of skill-biased technological change, and trade-induced changes in demand for skills, a trend that has already been discussed.⁷³ It may also be driven by a possible increase in wealth at the top, because more open capital markets enhance opportunities for high returns. In addition, taxes on mobile capital (to the

extent they were effective) are probably declining, while in developing countries, shallow financial sectors and underdeveloped capital markets may be limiting investment opportunities for small savers and borrowers.⁷⁴ Yet given the limited knowledge we have about these trends, among other reasons, top-driven inequality is difficult to measure.⁷⁵

While it is difficult to measure top-driven inequality, the limited evidence that we have about the effects of such inequality is that it can reduce the subjective well being of even those that are well-off in absolute terms, but whose living standards are far from the highest income earners. Most of the literature on subjective well-being, for example, finds that after a certain level of absolute income individuals' subjective well-being is determined by relative rather than absolute income levels. These findings hold across countries, regions, and development levels, other than for the very poorest countries.⁷⁶ Concern for relative income differences, meanwhile, can lead to an ever-rising bar of perceived needs, as well as to conspicuous consumption or risky economic behavior, such as gambling, to demonstrate wealth or make increases at the margin.⁷⁷

The second trend contributing to insecurity and middle-income stress is the widespread diffusion of information about consumer goods and consumption standards across countries and cultures. Prior to global economic integration, the dividing line between the rich and the middle class was based on income standards within individual societies. Yet the spread of information and the opening of markets allowing imports of many more consumer goods have introduced absolute standards of consumption that cross national boundaries, and are visible if not attainable for the majority of citizens in new market economies. Most citizens have access to television (and increasingly the internet), and are deluged on a daily basis with advertisements for imported products, such as designer jeans, Nike shoes, and McDonald's hamburgers, as well as with television shows that depict lavish lifestyles as the norm (even though most of them, in reality, are far from the average for the US or any other industrialized economy). In the 1990s, multinationals producing and exporting 'global consumption goods' have significantly expanded their sales and operations in developing countries.⁷⁸

Consumption standards are probably rising faster than have average real incomes in many new market economies. Reaching the global standard is obviously much more difficult for middle-income households (defined as in the 75-125% of the median income) in a poor country than in a middle-income one. The absolute income differences among countries add to the pressures of relative income differences within countries.

Related to this, there is also a new international market for skilled labor. Young Ph.D. students and technocrats in many emerging market countries are often able to obtain high-paying jobs in finance or in universities in the developed countries at salaries that are much higher than those in similar sectors at home. Multinational companies, meanwhile, are increasingly outsourcing entire production lines to the new market economies, such as computer programming to New Delhi or state-of-the-art hardware manu-

facturing to San Jose, and pay wages that are typically higher than the average for the home country. As in the case of rising consumption standards, relative differences within countries become less important than absolute differences in skill and education levels among them in determining individuals' potential to participate in this sector of the globalized economy.

Not surprisingly, all of the trends determining the fates of both winners and losers in the new global economy also affect people's perceptions of how they are faring.

Frustrated achievers? Perceptions of past progress and future opportunities

While not the usual focus of analysis, people's perceptions or assessments of their well-being (and of how their well-being compares with that of others) are as likely to influence the future direction of market economies as are objective trends. While most economic models assume that wealth and utility are virtually synonymous, recent research on life satisfaction finds a seeming paradox: aggregate levels of life satisfaction do not increase as societies grow wealthier even though, within countries, wealthier individuals are, for the most part, 'happier' than poorer ones.⁷⁹

These findings highlight the importance of relative rather than absolute differences in wealth, particularly after societies cross a certain absolute level of income. This by no means discounts the fundamental importance of economic growth in reducing poverty and attaining a wide range of other development objectives. Yet it does suggest that factors other than income growth affect individuals' assessments of their own welfare, and that these same factors may influence their responses to incentives and policies.⁸⁰

Concern for relative differences can, under certain circumstances, lead to seemingly 'non-rational' economic behavior. Concern for relative income differences can lead individuals to opt for conspicuous consumption, rather than investing in their children's education, for example, to demonstrate wealth status.⁸¹ Concern for relative income differences and perceptions of past economic progress can also have political ramifications and, in particular, result in persistent attitudes about redistribution.⁸²

Not surprisingly, the issue of relative income differences is a particularly salient one for the emerging market countries, where macroeconomic policy frameworks are in flux and there is wide debate over who the winners and losers are. In addition, as already discussed, the new opportunities and increased mobility that accompany the turn to the market also come with new insecurities.⁸³ Our preliminary work suggests that even the winners may be reluctant to assess their situation positively and, in line with the general direction of the happiness literature findings, that the relationship between wealth and happiness is not straightforward.⁸⁴ Yet, to date, we know very little about how the turn to the market and related changes in mobility trends affect individual perceptions of well-being and, in turn, how those aggregate at the country level.

Sound time-series data on perceptions in the developing economies are

rare. We report here results of analyses panel studies in two settings: Peru, 1985–1999; and Russia, 1995–1999. In Peru, the data permit the comparison of respondents' subjective assessments of their well-being with their actual experience of household expenditure change between 1985 and 1997.⁸⁵ For Russia, we performed the same analysis, comparing 1995–1999 income mobility patterns with 1999 perceptions of mobility and well-being.

In both Peru and Russia, a surprising finding is that a large proportion of respondents who enjoyed income gains report that they were not better off. Of those respondents in Peru that had income increases during the period of 100% or more, 63% responded that their current economic situation compared 'very negatively' or 'negatively' with that of the recent past and with that of their parents. Only 11% of those with the greatest income gains assessed their economic situation positively compared with that of the past.⁸⁶

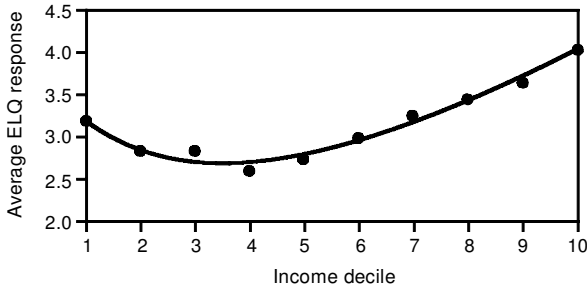
In Peru, across income quintiles defined in 1997, the middle groups are the most frustrated. In terms of absolute income trends, 29% of those in the bottom two quintiles and 60% of those in the third and fourth quintiles had income gains. Of these upwardly mobile respondents, 43% of the poorer respondents assessed their situations negatively, compared with 71% of middle-income respondents, and 47% of the richest (Table 7).

Our 'frustrated middle' in Peru (the upwardly mobile respondents in the third and fourth income quintiles that responded negatively) were, on average, slightly less educated than the non-frustrated upwardly mobile group in the same quintiles, but had experienced more absolute income gains than the non-frustrated group. This highlights the extent to which negative responses are driven by factors other than absolute income gains. It also suggests that there is an awareness of the limitations that lack of education, and in particular higher education, may pose to further upward mobility.

In Russia, as in Peru, a similar negative view held among the upwardly mobile, with 72% of those (very few) with income gains of 100% or more reporting negative assessments.⁸⁷ Yet the highest degree of frustration is among the poorest respondents, perhaps reflecting the extent to which downward mobility has been the predominant trend in Russia, in contrast to Peru.⁸⁸

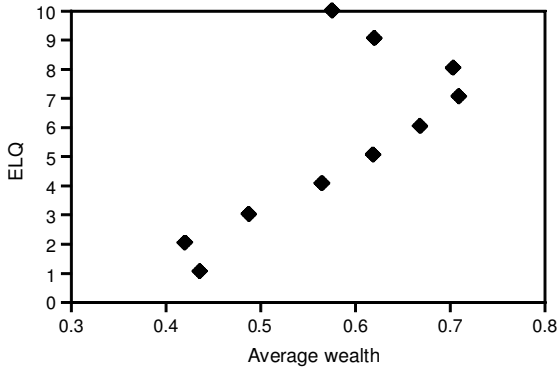
The Russian survey also included a question that asked respondents to place themselves on a ladder representing their society, with the poorest being on the first step and the wealthiest being on the ninth step. Those in deciles two to six tended to place themselves lower on the ladder than did those in the first (lowest) income decile. Figure 4 summarizes the results for Russia, and suggests that frustration is higher among groups in the lower middle of the distribution than at the very bottom.⁸⁹

We also have similar information about a notional national economic ladder for a region-wide survey of 17 countries in Latin American, the Latinobarometro. Responses to the Economic Ladder Question (ELQ) revealed some evidence of a similar perceptions gap. The mean wealth levels of those that placed themselves on the lowest rung of the ladder were actually higher than those of respondents that placed themselves on the second rung. And at the top end of the ladder, mean wealth levels of those



*Calculated using declared individual income gained in the last month
 Source: Graham and Pettinato (2000a)

FIGURE 4. Average ELQ by income decile in Russia in 1999, calculated using declared individual income gained in the past month. Source: Graham and Pettinato (2000a).



Source: Graham and Pettinato (2000a)

FIGURE 5. Average wealth by ELQ response in Latin America in 2000. Source: Graham and Pettinato (2000a).

that placed themselves on the top two rungs of the ladder were lower than mean wealth levels of those respondents that placed themselves in rungs 6–8 (Fig. 5). Those who place themselves on the bottom of the ELQ ladder are, on average, underestimating their actual wealth, and those who place themselves on the top of the ladder are overestimating their wealth.⁹⁰ Where respondents are on the income ladder and who their reference group is seems to influence their how they evaluate their economic situation.⁹¹

What explains the frustrations of our upwardly mobile achievers? There are several possibilities, including: recall problems in assessing past earnings, particularly for non-salaried workers; differences among rural and urban respondents, with the latter much more willing to make extreme statements; and the effects of non-economic events, such as elections. Also, the high levels of volatility in both countries during the periods observed no doubt highlighted risk and the absence of guarantees that even large income gains were permanent in nature.

An additional factor may be the pressures of global markets. In unequal societies that have adopted international consumption standards, the reference norm for the upwardly mobile may seem unattainable regardless of absolute income gains. Most studies of subjective well-being find that, except for the very poor, relative income differences matter more than absolute ones. It is no surprise that the middle strata rather than the poor in our sample are the most frustrated with their gains.⁹²

The negative perceptions of upwardly mobile respondents may be relevant to the political sustainability of market policies. Studies in Eastern Europe, for example, find that subjective perceptions are more important in influencing voter behavior than are objective trends.⁹³ The same studies find that higher levels of education and upward mobility determined by a shift in occupation from public to private sectors (rather than within a public bureaucracy) were more likely to result in support for market policies. The differential perceived fates among our upwardly mobile respondents could well result in different levels of support for the market among their ranks.

It is interesting to compare Latin America and Russia, where the trend is for respondents to underestimate their income and/or to consider themselves poor, with the US, where the majority of surveyed respondents tend to place themselves closer to a perceived middle-class 'norm' even though a minority is really in the middle strata in income terms.⁹⁴ One possible explanation for the difference is the extent to which the belief in the US as the land of opportunity still holds for the majority of Americans, even those well below the median income. Indeed, many years ago, de Tocqueville posited that the prevalence of this myth was one of underpinnings of American democracy.⁹⁵

More recently, Benabou and Ok posit that the continued prevalence of this belief is the explanation for Americans' reluctance to vote for redistribution (even though empirical data shows that this belief is less and less a reality).⁹⁶ They demonstrate theoretically how, even when a large majority is below the mean income, they will not vote for redistribution if they believe they will be above it in the future. More generally, Piketty shows how past mobility experiences can have persistent attitudes towards redistribution at given current incomes.⁹⁷ These differences in attitudes, in turn, can have lasting effects on the allocation of public expenditures across countries.⁹⁸

In Latin America, where neither the myth nor the reality of social mobility is as prevalent as in the US, where the gap between the middle and the poor is very small, and where macroeconomic volatility and uncertainty are combined with inequality driven by very high incomes at the top of the distribution, a plausible political economy implication is that support for redistribution should be very high.⁹⁹ Yet reported support for increasing redistribution in Latin America is lower (44% of respondents in the sample) than is support for increasing productivity (53% of respondents), support for redistribution is higher in wealthier than in poorer countries, and there is no systematic electoral trend in the region in favor of increased redistribution.¹⁰⁰ In Russia, in contrast, where there is a similar negative skew on perceptions, a much higher percentage of respondents (75%) favor increased redistribution.¹⁰¹

While this does not imply that there is not support for redistribution in Latin America, nor that the region could not benefit from more efficient and effective redistributive policies, it suggests that the perceptions gap does not necessarily translate into support for redistribution, at least at this point in time. However, we do know that pro-market attitudes tend to be more prevalent among wealthier and more educated respondents in both Latin America and in Russia, as well as for those with positive perceptions of their past mobility. In Latin America, meanwhile, the same characteristics that accompanied pro-market attitudes (higher levels of wealth and education, and positive perceptions of past mobility) were also correlated with higher levels of satisfaction with democracy. In Russia, respondents with positive assessments of their past economic progress were less likely to support a return to socialism.¹⁰²

While far from definitive, these results suggests that our frustrated achievers are less likely to support the market than are their less frustrated counterparts, even though they may be more upwardly mobile. In addition to standard bias driven by character-specific traits among respondents, we posit that the frustrations of our upwardly mobile achievers are driven by high expectations, the raising of standards for reference groups due to top-driven inequality and the globalization of consumption standards, and the new insecurities that have accompanied new opportunities in the emerging market countries.

Policies for enhancing mobility and opportunity

It is difficult to make policy recommendations in an area where we have limited information about trends over time and across countries. Yet a number of patterns are sufficiently consistent and clear to allow us to at least suggest a framework of policies that can, on the one hand, enhance mobility and opportunity and, on the other, minimize risk and insecurity.

Two kinds of policies are critical to the enhancement of the mobility and opportunity of the poor. The first and most obvious is improving the access of the poor to good-quality and higher levels (beyond secondary) of education. While the long-term benefits of such a policy shift are evident, it will take a long time before results are evident, and it will take sustained political commitment, institutional development, and substantial resources.

In addition to supply-side policies, there may also have to be an effort to address the demand side. A wide body of literature addresses the ways in which inequality patterns can be perpetuated by persistent social norms, identity, and low expectations.¹⁰³ In some societies, where the poor have no tradition of reaching higher level education, there may indeed be a need for policies to educate and encourage low-income people to make new kinds of investments in their children's future.¹⁰⁴ Without addressing both demand and supply sides, it will be very difficult for any one set of policies to break the strong intergenerational determinants of educational achievement, which in turn is critical to mobility over the long term.

The second set of policies must address existing distortions in markets

and failures in government policies. Many countries in the developing world, particularly in Latin America, have made major strides in improving their macroeconomic frameworks and reducing such distortions. And, not surprisingly, Latin America is one of the few regions in the world where the middle class is growing rather than shrinking.

Yet, as in the case of improving education systems, removing distortions alone is not enough. If poorly performing public monopolies are merely replaced with private ones, as has occurred in some countries, the outcome is likely to be persistent or even increased inequality, and few, if any, new opportunities for the poor. Also, given that the removal of distortions and the opening to free trade is clearly rewarding the most educated groups the most, there is much margin for improving the education and skills of the poor so that they can take advantage of new opportunities that arise. As in the case of education, supply-side and demand-side policies must reinforce each other.

Related to this, addressing the issue of inequality should also be part of the same policy package. In addition to the well-documented costs of excessive concentration of income and assets, high levels of inequality, particularly top-driven inequality, make perceptions gaps worse and result in frustration even among the upwardly mobile. These frustrations, in turn, may well have effects on political support for the kinds of market-enhancing policies that can delivery sustained growth and poverty reduction.

A perception as well as a reality of enhanced equality of opportunity and a more level playing field for all should result in sustainable political support for market policies and integration in the global economy. At the same time, if the poor perceive that the playing field is level and that opportunities do indeed exist, they will be much more likely to invest in their children's education and therefore their ability to take up those opportunities in the future.

Another issue that is essential to both enhancing opportunities and public perceptions of the existence of those opportunities is the provision of adequate safety nets, both for those who take risks to get ahead and run into trouble and for those that fall behind because they are unable to take up new opportunities. The absence of adequate insurance mechanisms and safety nets can themselves result in market distortions, as those who are employed seek to minimize risk and guarantee employment security through whatever mechanisms are available, even though they may be extremely inefficient (such as excessively rigid labor laws). In addition, the insecurity caused by weak insurance mechanisms in the face of exogenously driven volatility and constantly changing rewards to labor sectors is, no doubt, one of the factors that drives the negative skew on the perceptions of our frustrated achievers.

Two kinds of safety nets are necessary. One safety net is of a social insurance nature, such as unemployment insurance and other forms of social insurance, which allow workers to take risks to take up new opportunities by protecting them from unexpected income shocks due to macroeconomic volatility and other exogenous shocks. The second kind of safety nets must

address the needs of the poorest who fall behind, either because of low skills or because of health and other shocks that do not allow them to participate even in the low-skilled sector of the economy.

In addition to these two sets of policies, attention must also be paid to broader legal, political, and cultural contexts and the resulting institutional framework. Racial and/or gender discrimination, unequal access to political rights, and inferior access to public services ranging from health care to the judiciary persistently block the upward mobility of disadvantaged groups in many societies.

Finally, another important objective that is less directly linked to policy, but in the end is essential to informing it, is the gathering of more and more complete data on mobility trends, rates, and their determinants. The fast-paced nature of change in the global economy and of technology-driven growth compels us to take a more dynamic view of the issue of poverty reduction by better understanding mobility and the movement in and out of poverty. We cannot design policies to enhance the opportunities of the poor if we do not have adequate data about mobility and its linkages to the global economy.

Notes

1. This paper draws heavily on four publications, where many of the themes introduced in the present paper are explored in much greater detail. For more detail on concepts and measures of mobility, see Birdsall and Graham (2000). For more on the costs of inequality and the distortion-reducing benefits of market-oriented reforms, see Birdsall, Graham, and Sabot (1998). For the effects of globalization on the middle class versus the poor, see Birdsall *et al.* (2000). For more on public perceptions of past progress and future opportunities, see Graham and Pettinato (2000a,b).
2. The Gini coefficient measures the extent of a country's inequality based on the gap between its Lorenz curve and the 45° line representing a perfectly equal distribution. It does not capture short-term movements or those between adjacent income deciles very accurately. The Wolfson polarization index measures the degree to which income is concentrated at the top and bottom. Income skewness, as defined by Lindert (1996), is the difference between the size of the gap between the rich and the middle versus that between the middle and the poor.
3. See Rawls (1971).
4. See Stiglitz (2000).
5. There is a wide literature on this issue. For detail and references, see the chapters by Isabel Sawhill and by Jere Behrman, Nancy Birdsall, and Miguel Szekely in Birdsall and Graham (2000).
6. See Behrman in Birdsall and Graham (2000).
7. For a comprehensive review of the literature and of the kinds of data that we have on mobility, see the background paper for this same report by Shahin Yakub (2000).
8. The study of mobility is an area that has been much further developed by sociologists than by economists. For a study of the state of the art in economic mobility studies and how the existing concepts and measures apply to the emerging market countries, see Birdsall and Graham (2000).
9. Pritchett *et al.* (2000).
10. Ethiopia more closely fits the commonly, although wrongly conceived, pattern. The figures there are 25 and 30%, 1994–1997 (Baulch and Hoddinott, 2000). Several other countries are covered in this study, but the length of the panels (under 1 year) or the more limited nature of the data (rural Chile only) precluded their being discussed in detail here.

11. A comparison of these movements with data from the US highlights their extremity. Census data show that 81.6% of those families who were in the bottom quintile of the income distribution in 1985 were still there the next year, while the fraction that remained in the top quintile for that period was 76.3%. About one-half of the families that start in either the top or bottom quintile of the income distribution are still there after a decade, and only 3-6% rise from the bottom to the top or fall from top to bottom. See Krugman (1992).
12. To do this, we utilized a measure developed by Gary Fields (see Fields, 2000). The average fall in log income in Peru from 1985 to 1991 was 1.172, while the average increase in log income from 1991 to 1994 was 1.255. The average was lower but still positive for the 1994-1997 period, at 0.366. The differences in log changes for the 1991-1994 period were far greater than were the differences in absolute averages (which were calculate in constant soles for the starting year), suggesting that the continued positive changes that occurred were more significant for households in the lower part of the distribution. Trends in poverty support this: extreme poverty continued to fall from 1994 to 1997, while non-extreme poverty increased.
13. A recent comparative study of the effects of insecurity on different income groups finds that, while the poor fare the same as other income groups during short and/or mild recessions, they fare worse during long and/or severe crises, as they deplete their (smaller) stock of assets and then must resort to survival strategies that have negative effects in the long term, such as taking their children out of school. See de Ferranti *et al.* (2000).
14. The data show strong upward positional mobility in Peru for the bottom quintiles and a relative deterioration for the middle quintiles. In part, this reflects the benefits that stabilization had for the poor, who were least able to protect themselves from the negative effects of hyperinflation of the late 1980s, as well as changes in opportunity generated by positive rates of growth that followed stabilization, and indeed the highest rate in the world (14% in 1994) for 1 year of the period. It may also reflect the government's efforts to re-direct public expenditures to the poorest groups, although those increases in real income would not show up in these data on household money income.
15. See Mishel *et al.* (1999).
16. The survey, the Russia Longitudinal Monitoring Survey, has been conducted in Russia since 1995 by the Russian Institute of Nutrition, the University of North Carolina at Chapel Hill, and the Institute of Sociology of the Russian Academy of Sciences, with support from the World Bank, US AID, and the National Science Foundation, among others.
17. Our calculations based on Russia Longitudinal Monitoring Survey data.
18. Carter and May (1999).
19. See de Ferranti *et al.* (2000).
20. In contrast, expenditures on higher education were inversely related to enhanced intergenerational mobility, as in the Latin American context, higher education expenditures overwhelmingly favor the highest income deciles. See Behrman *et al.* (1999).
21. See Dahan and Gaviria (1999). For a similar approach and findings for Brazil, see Lam and Schoeni (1993).
22. The authors do find a high correlation between inequality and assortative mating in the region. This is in keeping with the findings of Gary Burtless for the US, which point to changing family composition as one of the key explanatory variables for increasing inequality in the US. See, for example, Burtless (1999).
23. See Hojman (2000).
24. For a discussion of the effects of trade opening on differential rewards to labor, see Robbins (1996). For a discussion of empirical evidence of differential returns to labor in Latin America, see Lora and Londoño (1998). See also Londoño *et al.* (1997).
25. For a discussion of changes in occupational mobility, see Mateju (2000).
26. Under extreme circumstances such as hyperinflation, even the rewards to education can be severely eroded. Using panel data from Peru for 1985-1990, Glewwe and Hall

(1998) find that, during the crisis and hyperinflation years, even higher education was insufficient to prevent individuals from falling into poverty, while the one variable that did consistently provide such protection was access to transfers from abroad.

27. See Economic Commission for Latin America (2000).
28. For Latin America, see Behrman *et al.* (2000). McMurrer and Sawhill (1998) find that, in the US, while the importance of family background matters less for mobility than it used to, access to good quality higher education matters more. And access to good quality education is in turn strongly linked to parental income levels.
29. See Economic Commission for Latin America (2000).
30. See de Ferranti *et al.* (2000).
31. Results for a panel in metropolitan Mexico (1994–1997) were more mixed, as households headed by college-educated males suffered larger proportionate falls in income as a consequence of the 1995 crisis than did those with primary or secondary education. When coping variables were included in the regressions, however, defined as namely entry into the labor force of an additional family member, the advantage of the uneducated became insignificant. These results echo those of Herrera (1999) for urban Peru, where he finds that household heads with secondary education had a lower probability of exiting poverty than did those with either primary or higher education. To some extent, these results may be driven by trade and technology-driven changes in the global economy, which are changing the rewards to different levels of education (discussed later).
32. See de Ferranti *et al.* (2000) and Carter and May (1999).
33. See Birdsall *et al.* (1999).
34. See, among others, Solon (1992) and McMurrer and Sawhill (1998). A number of sociological studies, meanwhile, that compare mobility rates between the US and Europe in the past few decades find no significant difference between the two. See, for example, Erikson and Goldthorpe (1985).
35. See, for example, Birdsall *et al.* (1995).
36. While much of the literature describing the effects of human capital investments on growth focus primarily or solely on the effects of education, we define human capital broadly here, to include investments in education, health, and occupational skills.
37. For a detailed description of how asset inequality has constrained growth in the region, see Birdsall and Londoño (1997).
38. The impact of inequality in these two productive assets on income growth more than doubles when the sample is restricted to the poor (Birdsall and Londoño, 1997).
39. For example, using a simple regression model on our sample of Peruvian respondents, we found that, controlling for other variables such as level of education and age, access to credit had significant effects on upward income mobility.
40. Women who work in communal kitchens in exchange for their children's receiving free meals, for example, may not seek out better-paying jobs because they do not want to risk losing the benefits for their families.
41. See Birdsall *et al.* (1996).
42. See Birdsall and James (1990).
43. For details on how high inequality can lead to 'populist' voting patters, see Alesina and Perotti (1994). For a view that questions median voter theory, in which the poor have equal political voice, see Benabou and Ok (1998).
44. See Stiglitz (1997).
45. For empirical evidence, see Londoño and Székely (1997). The earlier work of Samuel Morley (1994) hints at the beginnings of this trend. Others, such as Albert Berry (1996), do not agree about these positive trends.
46. For a review of such strategies, see Graham (1994).
47. See International Finance Corporation (2000).
48. See Freire in International Finance Corporation (2000).
49. On the US, see Burtless (1999). On Latin America, see Duryea and Székely (1998).
50. See Economic Commission for Latin America (2000).
51. See Inter-American Developmental Bank (1998). A recent study of Latin American

- households finds that the profile of the average individual in the top 10% of the distribution is closer to the prototype of a highly educated professional earning labor income than it is that of a capital owner living on profits. While this does not imply that Latin American inequality is not driven by a small number of individuals at the top of the distribution earning profits from capital investments (particularly as household surveys do not document this type of income very accurately), it suggests the extent to which skilled labor has gained relative to other groups. See Székely and Hilgert (1999).
52. See Inter-American Developmental Bank (1998, Appendix Table 1.2.III).
 53. For this comparison, we use household survey data for Latin America (see Table 1) and the Current Population Survey (CPS) (March Supplement, 1998) for the US. Data here refer to all adults; the difference in the ratios would be greater for 25 year olds, as education levels have increased substantially in Latin America in recent decades. Data from the CPS are calculated after constructing an equivalence scale for educational attainment categories: below ninth grade = 6 years, 9th-12th grade = 10.5 years, high-school = 12 years, some college = 14 years, B.A. = 16 years, M.A. = 18 years, professional degree = 19 years, Ph.D. = 24 years.
 54. On changes in returns to education in Latin America, see Duryea and Szekely (1998), and Behrman *et al.* (2000). Differentials in returns to education are also rising in Eastern Europe (see Vecernik, 1996; Rutkovski, 1999; Terrell, 2000).
 55. This shifting of the reference bar is probably based on the nature of education as well as its level, with most students in the region attaining the kind of skills necessary to participate in the new technology economy in university or in post-secondary vocational education, rather than in secondary school. I am grateful to Selim Jahan for pointing out the distinct effects of nature and level of education.
 56. Finally, in a context of extreme levels of macroeconomic volatility, even education may be an insufficient buffer from significant downward mobility. Indeed, the only variable that was sufficient to prevent downward mobility during this period in Peru was access to income transfers from abroad (Glewwe and Hall, 1998; Herrera, 1999).
 57. See Pastore and do Valle Silva (2000).
 58. The 1999 survey was a pilot that interviewed only a subsample of the original 200 households. See Perlman (1976) and Perlman and Vainer (1999).
 59. See, among others, Bruno *et al.* (1996). A recent paper by Dollar and Kray (2001), meanwhile, shows that the poor (defined as the bottom quintile of the population across countries) benefit as much as other groups do. At the same time, they were the least able to negotiate market distortions via the usual means, which include bribes, international bank accounts, and/or political clout.
 60. Cowan and de Gregorio (2000, Table 8.4) show, for Chile, income gains due to public social spending of 39 and 28% for the two poorest quintiles, compared with 20 and 10% for the third and fourth quintiles. For a summary of the targeting approach and its effects, see Van de Walle and Nead (1995).
 61. For details, see Graham (1998).
 62. The authors are grateful to Guy Pfeffermann of the International Finance Corporation for providing these data.
 63. Inter-American Developmental Bank data cited by Rodrik (1999).
 64. Authors' calculations based on data for Lima only in Saavedra, 1998.
 65. Rodrik (1999) compiled the International Labor Organization (ILO) data.
 66. The thresholds for the definition of the middle strata are constructed using arbitrary ratios between income levels and the poverty line. See Duncan *et al.* (1996)
 67. Unpublished Duncan paper, referred to by Krugman (1992).
 68. This is not the case for any country for which we have data (Table 2), but could be the case in South Asia and Africa, using our definition.
 69. With the possible exceptions of Russia, and the US, these surveys are reasonably comparable across countries; the income variable has been constructed the same way from household survey information.
 70. We use income in purchasing power parity terms, which minimizes differences between rich and poor countries since it corrects for the lower costs of non-tradables in the latter.

71. Another finding from Table 2 is the large difference between GNP per-capita figures, obtained at the aggregate level, and average income ones. The latter have been calculated from household surveys, and are consistently smaller than the former, by an average ratio of 1:1.7. This has been observed also in the past and is a consequence of the differences in the definition of *product* and *income*. A large amount of this discrepancy is unexplained, even though corporate earnings may play an important role.
72. While in many Latin American countries the richest 10% earn three times what the next richest 10% earn, in the US, the UK, and Canada, this difference do not exceed 1.6. If one compares points other than the top tail of the distribution for Latin America to other developed countries, meanwhile, the region has lower inequality than much more equal developed countries (Székely and Hilgert, 1999).
73. On the US, see Burtless (1999). On Latin America, see Duryea and Székely (1998).
74. See Tanzi and Zee (2000).
75. A number of problems arise in adequate measurement of top-driven inequality. The first is that labor income is poorly measured at the top. For Latin America, Székely and Hilgert (1999) report that, on average in the 16 countries for which information is available, the total income of the 10 richest households in the survey is very similar to the average wage of a middle manager. Studies of tax administration in developing countries also suggest substantial under-reporting of labor income, often through extensive use of legal exemptions and deductions. Second, in all countries, income from wealth is undercounted, if counted at all. Third, typical measures of income distribution do not reflect changes in the income of middle relative to high-income households. See Shome (1999) and Tanzi and Zee (2000).
76. Work in this area was pioneered by Richard Easterlin (1974). Since then the general direction of his findings have been confirmed by several other authors, including Blanchflower and Oswald (1999) and Frey and Stutzer (1999b). More recently, Graham and Pettinato (2000a) found that very similar determinants of subjective well-being, as well as similar concerns for relative income differences, held for a 17-country sample in Latin America.
77. Juliet Schor (1998) documents the effects of this rising consumption bar on consumers in the US. Robson (1992) shows the effects of relative income differences on attitudes towards risk and consumption. Hojman (2000) shows how consumption driven by top-driven inequality leads to non-optimal investments by the poor in Chile.
78. This trend involves not only production (cheap labor), but more recently the exploitation of new consumer markets. In 1995-1998, for example, Nike revenue grew by 6% in Europe, and 23% in the US, compared with 82% in Asia/Pacific and 91% in America/Canada and other regions. Also, between 1991 and 1996, the number of McDonald's increased by 60% in the industrial countries, and by 307% in the developing countries. Data from the Nike, Inc. (1996), and the United Nations Development Programme (1998).
79. The economics research on happiness was pioneered by Richard Easterlin in the mid-1970s. See Easterlin (1974, 1995, 2000). For a recent study on the US and UK, see Blanchflower and Oswald (1999); and for Switzerland and for measurement issues, see Frey and Stutzer (1999a,b). For an excellent summary of the psychological work on the subject, see Kahneman *et al.* (1999). For a review of much of this literature, see Graham and Pettinato (2000b).
80. Decades ago, Pigou (1920) wrote that what could be measured with money, economic welfare, was only one component of individuals' welfare, and thus our capacity to assess welfare was largely determined by our capacity to measure it.
81. Cole *et al.* (1995) develop a model that captures concern for relative standing or status, in which individuals do not obtain utility from their relative status, but rather the concern is induced because relative status affects consumption of standard commodities. They show that concern for relative wealth can generate conspicuous consumption when wealth is not directly observable. Hojman, meanwhile, develops a model of consumption driven by inequality in Chile, where poor households make non-optimal consumption decisions at the expense of long-term human capital investments, behavior

- that is driven by conspicuous consumption among wealthier groups. See Hojman in Birdsall and Graham (2000). Robson (1992) develops a model of utility that is concave in wealth itself, but convex at some range when the indirect effects via status is included. Schor (1998) notes how American's debt service as a percent of disposable income has increased in the past decade along with a major consumption boom.
82. See Benabou and Ok (1998), Piketty (1995), and Clifford and Heath (1993).
 83. For a description of these insecurities and their causes, see Rodrik (1999).
 84. See Graham and Pettinato (1999). See also Webb (2000).
 85. The perceptions study was conducted in 1998 and repeated in 1999. The periods covered in both countries were periods of substantial macroeconomic instability and policy change.
 86. For more details, see Graham and Pettinato (2000b).
 87. The survey, the Russia Longitudinal Monitoring Survey, covering around 2000 households in 1995-1998, has been conducted in Russia since 1991 by the Russian Institute of Nutrition, the University of North Carolina at Chapel Hill, and the Institute of Sociology of the Russian Academy of Sciences, with support from the World Bank, US AID, and the National Science Foundation, among others.
 88. Also, the upwardly mobile poor (over 33% income increases) may still be recovering from steep, pre-1995 income declines (Table 7).
 89. The U-shaped result in Figure 4 seems to be driven by responses among adults younger than age 30 and older than age 50.
 90. It is possible that some of this result is driven by standard bias, i.e. those respondents that give extreme responses are also more likely to be incorrect in their assessments. The overall results, meanwhile, do not seem to be driven by a particular country. When we ran regressions on the determinants of ELQ responses, the results were very similar, with and without country fixed effects.
 91. As in Hirschman's well-known 'tunnel effect', people's evaluations of their own progress seem to be very much influenced by how much those around them are progressing, and frustration arises when everyone else seems to be moving faster. Hirschman (1973) draws an analogy to the lanes in a traffic jam.
 92. Cross-country studies conducted in the 1980s and a more recent study conducted in Switzerland find a greater importance for relative income differences, and accord little importance to absolute increases over time. See Easterlin (1974), and Frey and Stutzer (1999b).
 93. See the chapter by Mateju on Eastern Europe in Birdsall and Graham (2000).
 94. The General Social Survey in the US found that there is a question that asks respondents to place themselves in a particular class. Five percent of the sample placed themselves in the lower class, 45% in the working class, 45% in the middle class, and 3% in the upper class. While a sociological analysis of the class composition of the US is well beyond the scope of this paper, the objective data on income trends in recent years suggests a real shrinking of those in the middle-income categories and a skew towards the upper tail. As defined by Birdsall *et al.* (2000), the population share of the middle class in the US fell by 9.2% from 1992, while the income share fell by 11.6%. For general trends in distribution, see Burtless (1999) and Sawhill (2000).
 95. See de Tocqueville (1969).
 96. For trends in mobility and opportunity in the US, see McMurrer and Sawhill (1998). On redistribution and voting, see Benabou and Ok (1998).
 97. See Piketty (1995). See also Clifford and Heath (1993).
 98. Lindert (1996) finds that differences among advanced industrial countries' political tendencies to spend on social transfers and insurance (social spending as percentage of GDP) are largely explained by income skewness: the size of the gap between the rich and the middle income versus that between the middle income and the poor. A wider lower gap means less affinity of the middle class for the poor, and therefore less social spending. The US, which has a large gap between the middle income and the poor, has the lowest level of social spending of the countries in the sample.
 99. For what little evidence there is on income mobility in Latin America, see Behrman,

Birdsall, and Szekely (2000); and Birdsall *et al.* (2000). See also Dahan and Gaviria (1999). This nascent literature suggests that reforms may enhance mobility and reduce the strong effects of family background on children's occupational and education outcomes, in particular by improving financial markets and schools. And while some evidence suggests that there is a great deal of movement up and down the income ladder, it is not yet clear how much of it is permanent improvements in income and how much of it is 'churning', i.e. short-term movements. For an account of the persistence of family background on educational outcomes, see Economic Commission for Latin America (2000).

100. For details, see Graham and Pettinato (2000b).
101. As already discussed, the questions on redistribution are not exactly the same in the two surveys.
102. For details on how the variables are constructed and the regression results, see Graham and Pettinato (2000b).
103. See, for example, Durlauf (2001), Young (1994), and Akerlof (1997).
104. Previous research on reforms to social service provision, such as vouchers in education and local management boards in education, for example, suggests that the poorest tend to be the least likely to participate, due to marginal but preclusive transaction costs, the high opportunity costs of their time, and to low expectations. See Graham (1998).

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