

**Assessing the Impact of Globalization on Poverty and Inequality:
A New Lens on an Old Puzzle***

**Carol Graham
Economic and Governance Studies Programs
The Brookings Institution**

Paper Prepared for the Brookings Trade Forum

May 13-14, 2004

Abstract

A persistent puzzle in the debate over globalization is the gap between economists' assessments of the aggregate benefits of the process and the more pessimistic assessments that are typical of the general public. Analyses of trends based on aggregate, income-based measures provide important benchmarks for assessing the impact of globalization on poverty and inequality. This paper provides a complement by using alternative measures to highlight different trends. These include short-term movements in and out of poverty; changes in the distribution over the life or earnings cycle; distributional shifts at the sector, cohort, and neighborhood level; and changes in reported well being. We analyze surveys of income mobility and reported well being in two countries in the process of integrating into the global economy - Peru and Russia. Our analysis reveals significant discrepancies between reported measures of well being and income measures. We rely on the more general framework provided by the economics of happiness to explain these findings and their possible linkages to the globalization process. At minimum, the findings provide new lenses for looking at an old puzzle; suggest some tentative links to policy; and highlight new questions that need to be answered before we are able to fully understand the effects of globalization on poverty and inequality.

* The author is Vice President and Director of the Governance Studies Program at the Brookings Institution. She would like to thank Nancy Birdsall, Gary Burtless, Susan Collins, Andrew Eggers, and Margaret MacLeod for helpful comments.

Assessing the Impact of Globalization on Poverty and Inequality: New Lenses into an Old Puzzle

A persistent puzzle in the debate over globalization is the gap between economists' assessments of the aggregate benefits of the process and the more pessimistic assessments that are typical of the general public – or at least typical of the debate among the vocal sub-set of the public that expresses opinions on the topic. Study after study confirms the benefits for poor countries of integrating into the world economy, albeit placing different degrees of emphasis on the importance of initial conditions and institutional endowments in achieving growth and poverty reduction.¹ Yet public perceptions of the globalization process – reported in opinion polls, and reflected in public demonstrations in cities such as Seattle, Prague, and Porte Alegre - are much more negative.²

Analyses of trends based on aggregate, income-based measures provide important benchmarks for assessing the impact of globalization on poverty and inequality. In this paper we complement these benchmarks by using alternative measures to highlight different trends. These trends include short-term movements in and out of poverty; changes in the distribution over the life or earnings cycle; distributional shifts at the sector and cohort level; the role of relative as well as absolute differences; and changes in reported well being. One objective of our analysis is to shed light on the disconnect between economists' assessments based on income measures and those of the average (or at least vocal average) layman.

Our efforts are exploratory rather than comprehensive. We attempt to provide an initial picture by analyzing surveys of income mobility and reported well being in two countries in the process of integrating into the global economy - Peru and Russia. Our analysis reveals significant discrepancies between reported measures of well being and income measures. We rely on the more general framework provided by the economics of happiness to explain these findings and their linkages to the globalization process. At minimum, the findings provide new lenses for looking at an old puzzle; suggest some tentative links to policy; and highlight new questions that

¹ See, for example: David Dollar and Art Kraay, "Trade, Growth And Poverty", World Bank Working Papers, June 2001; Nancy Birdsall, "Asymmetric Globalization: Global Markets Require Good Global Politics", CGD Working Paper #12, October 2002; Dani Rodrik, "Feasible Globalizations." Mimeo, Harvard University, July 2002.

² There is some evidence that attitudes about globalization are more negative among the publics in developed than in most developing countries. See, among others, Dani Rodrik, "Sense and Nonsense in the Globalization Debate", *Foreign Policy*, Summer 1997. Kevin O'Rourke and Richard Sinott find that public support for free trade is higher among skilled than unskilled labor in the developed economies; Carol Graham and Stefano Pettinato find a similar trend for respondents in Latin America. See O'Rourke and Sinott, "The Determinants of Individual Trade Policy Preferences: International Survey Evidence" in *Brookings Trade Forum 2001* (Washington, D.C.: The Brookings Institution Press, 2002); and Graham and Pettinato, *Happiness and Hardship: Opportunity and Insecurity in New Market Economies* (Washington, D.C.: The Brookings Institution Press, 2002). The Pew Global Attitudes survey, meanwhile, which surveyed 38,000 people in 44 nations (both developing and developed), found that the majority of respondents in the poll thought highly of international organizations, such as the WTO, and multinational corporations, while anti-globalization protestors were held in low esteem. At the same time, the majority of the public felt that many of the problems that the protestors highlight, such as the availability of jobs and the gap between the rich and the poor, are worsening. See *What the World Thinks in 2002* (Washington, S.C.: The Pew Research Center for the People and the Press, 2003). See also: www.people-press.org.

need to be answered before we are able to fully understand the effects of globalization on poverty and inequality.

Why New Lenses?

There are many reasons for the discrepancy between economists' assessments of globalization's impact and those of the average layman. One is differences among the benchmarks that are used to assess the effects of the globalization process as well as the complexity of the analysis that is required. Even the concept of globalization defies simple definition. Most economic studies focus on the effects of globalization on trends which are quantifiable and readily measured, such as economic growth, poverty headcounts, and Gini coefficients. These studies tend to evaluate the effects of the process on overall efficiency and average welfare, while the general public tends to focus on the impact of the process on identifiable classes of workers who incur welfare losses.³ And even among experts, there is a great deal of debate on the design of the measures and the underlying data that they are based upon.⁴ The debate over the effects of globalization on inequality is even more complex than that over poverty – and there is much less consensus.⁵

Most publics do not have the analytical tools or the patience to disentangle the complexities of the debate over how to measure poverty and inequality in poor countries, much less the more difficult problem of assessing the effects of globalization on these measures. In sharp contrast to the detailed and technical debate on the topic that takes place among experts, most public assessments are often poorly informed and influenced by anecdotes that link cause and effect without analytical rigor or empirical evidence.

Yet simple misinformation is only part of the story. The problem runs much deeper. Globalization, which we define simply here as the increasing integration of economies and peoples of different countries, is a multi-faceted phenomenon which has effects on many aspects of people's lives. Public views of globalization are also influenced by non-economic factors – factors which are not adequately captured by income measures. Examples of these are real and perceived insecurity as rewards and incentives systems adapt to structural changes; the state of essential public services, such as education, health, and crime prevention; and norms of fairness and justice. And even the trends that can be measured in income terms, such as poverty and

³ I thank Gary Burtless for raising this point.

⁴ For an excellent analysis of the advantages and disadvantages of different kinds of data used for poverty measurement – e.g. household surveys and national accounts – see Angus Deaton, “Measuring Poverty in a Growing World (Or Measuring Growth in a Poor World)”, *NBER Working Paper* #9822, National Bureau of Economic Research, July 2003.

⁵ In part this is due to the lack of agreement over how to weight large countries such as China and India when discussing inequality among countries. It is also due to the difficulty of disentangling the effects of the process on distributional outcomes within countries from those of other factors which are endogenous to those countries' development trajectories. See Xavier Sala-i-Martin, “The Disturbing “Rise” of Global Income Inequality” *NBER Working Papers*, April 2002; Branko Milanovic, *Inter-National And World Inequality*, 2002; and Milanovic, “True World Income Distribution, 1988 and 1993: First Calculation Based on Household Surveys Alone”, *World Bank Policy Research Working Paper No. 2244*, November 1999; and Shang-Jin Wei, “Globalization and Inequality without Differences in Data Definitions, Legal Systems and Other institutions”, *Mimeo*, International Monetary Fund, 2003.

inequality, have broader dimensions – as well as dynamic elements – which are not captured by headcounts and Ginis.

Gini coefficients, for example, are static, aggregate measures that do not change very much over time, and usually do not reflect distributional shifts among regions and/or among age or skill cohorts. Poverty head-count studies based on cross-section studies conducted every few years often miss short-term movements in and out of poverty.⁶ Such movements are common in developing countries and create widespread insecurity among the middle class as well as the poor.⁷ Panel data which measure income mobility are better suited to capturing shifts among cohorts and short-term poverty movements. Yet these data are rare and only exist for a few developing countries.⁸ Fixed international poverty lines, such as the \$1 or \$2 per day lines, meanwhile, while useful for intra-country comparisons, often have very little to do with public conceptions of poverty within particular countries and regions.

Thus the gap between economists' assessments of the effects of globalization based on traditional measures and the broader realities perceived by those experiencing the process may in part be explained by trends – and broader dimensions of welfare - that those measures are not capturing. This raises a more general question about the capacity of our traditional tools and measures to adequately gauge progress in the complex development process. Few development economists dispute the notion that growth is a necessary but insufficient condition for poverty reduction. It should come as little surprise, then, that measures of poverty and inequality which only capture income and expenditure trends do not provide a complete picture of the many and broader dimensions of poverty and inequality, much less fully depict how they are affected by the complex process of globalization.

The gap between assessments of globalization based on traditional measures and assessments based on broader measures and/or on public perceptions is just one example of a divergence between the manner in which individuals in developing countries assess their own welfare, and assessments based on traditional measures. A separate but related example – and seeming puzzle – is that civil unrest and social protest is more likely to occur in societies that are

⁶ In the first three years of the financial crisis in Indonesia of the late 1990's, 20% of the population was below the poverty line at any given point in time. Yet 50% of the population was in poverty at some point during the three year period. See Lant Pritchett, Asep Suryahadi, and Sudarno Sumarto. 2000. "Quantifying Vulnerability to Poverty: A Proposed Measure with Application to Indonesia." Washington: World Bank (January). A recent IMF study, meanwhile, found developing countries that were more financially integrated in the world economy had greater consumption volatility (but not output volatility) than those that were less integrated. There seems to be a threshold effect, meanwhile, as beyond a certain per capita income level, financial integration actually reduces volatility. Most developing countries are below this threshold, however. See Eswar S. Prasad, Kenneth Rogoff, Hsang-Jin Wei, and M. Ayhan Kose, Occasional Paper 220, International Monetary Fund, Washington, D.C., March 2003.

⁷For a discussion of the extent of drops into poverty during financial market crises, for example, see William Cline, "Financial Crises and Poverty in Emerging Market Economies", Center for Global Development, Working Paper #8, June 2002. For a discussion of insecurity among the middle class, see Nancy Birdsall, Carol Graham, and Stefano Pettinato, "Stuck in the Tunnel: Has Globalization Muddled the Middle Class?", *Center on Social and Economic Dynamics Working Papers* # 13, The Brookings Institution, August 2001.

⁸ Even then they usually cover short time periods – say 1 to 3 years – and are rarely nationally representative samples.

developing and growing than in those that are stagnant. Part and parcel of that growth process is, no doubt, greater access to both global markets and global information.

Ted Robert Gurr, in an oft-cited study based on evidence from experimental psychologists, case studies of rebellions, and a large database on conflict-related deaths from 114 countries, cites relative deprivation as “the basic, instigating condition for participants in collective violence. . . . Societal conditions that increase the average level or intensity of expectations without increasing capabilities increase the intensity of discontent. Among the general conditions that have such effects are the gains of other groups and the promise of new opportunities.”⁹ Very few if any of the cases of rebellion that Gurr cites could have been predicted by looking at objective economic measures alone.

A related example is public tolerance for inequality. Years ago, in a classic article, Albert Hirschman compared public tolerance for inequality in the development process to a traffic jam in a tunnel.¹⁰ He noted that when one lane moves forward, it gives those in the stalled lanes hope, as it provides a signal or information about where they might be going in the future. But if only one lane continues to move and the others remain stalled for a long period of time, then those in the stalled lanes become frustrated and are tempted to revert to radical behavior such as jumping the median strip. Note that the frustration and radical behavior comes after a period of growth and development (albeit unevenly shared), not at a time of overall stagnation. There is nothing in our standard measures of growth or inequality that allows us to gauge the timing of such frustration; how the tolerance threshold differs among societies; and how tolerance may be altered by an increase in global information flows.

New Measures Based on Old and New Approaches

If there is merit in pursuing these broader concepts of welfare, as the above discussion suggests, how then can we better measure what traditional tools do not capture? In this paper, we attempt to provide a broader measure by relying on subjective survey data, benchmarked against data on income and expenditure mobility for the same respondents. We then expand our analysis to include a broader sample of respondents for whom we have cross section but not panel data on income and other socioeconomic characteristics.

Panel data on income mobility is rare, as it requires following individuals over a prolonged period of time. Nor is it without flaws. The most obvious drawback of panel data is its scarcity. This scarcity is of two kinds. The first is the mere paucity of the data itself, in large part due to the expense of generating it. Panels are few and far between, and there are only a small number of developing countries where we can rely on nationally representative samples to capture trends over time and therefore fully gauge the effects of particular policies on poverty and inequality.

⁹ Gurr relies on his well known data base, as well as on earlier data for 1948 conflicts. Gurr’s data base can be found at www.bsos.umd.edu/cidcm/mar. The full study is in Ted Robert Gurr, *Why Men Rebel* (Princeton: Princeton University Press, 1970).

¹⁰ Albert O. Hirschman, “Changing Tolerance for Income Inequality in the Course of Economic Development.” *Quarterly Journal of Economics* 87 (November): 544–66, 1973.

The second kind of scarcity stems from the nature of panel data itself. Respondents both age and move away, leading to attrition which reduces the sample size and can also result in bias. Attrition tends to be greatest at the two tails of the distribution, meanwhile, as the wealthiest respondents tend to move to better neighborhoods, and the poorest ones may move in with others or return to their places of origin (for example urban migrants that return to the countryside).¹¹ In addition, as respondents in the panel age, they also may become less representative of the population as a whole. Thus unless panels are inter-generational, as in the U.S. PSID, it is difficult to cover a long period of time without encountering attrition and bias issues (this is less of a problem for rotating panel, where subsets of the sample drop out and are replaced periodically, but this approach has its own drawbacks).

Another problem with any kind of longitudinal data is accounting for error in reporting income, a problem that is gravely aggravated by policy shocks such as devaluations and/or high levels of inflation. One approach is to rely on expenditure data. People who are self employed or employed in the informal sector have a difficult time estimating any sort of monthly or annual salary, in part because their income fluctuates a great deal. Thus expenditure data is more accurate than income data for samples with large numbers of self employed and/or formal sector workers and agricultural workers. It is also more difficult to under or mis-report expenditures.

Yet relying on expenditures misses part of the story, particularly at the higher tails of the income distribution, and also does not capture volatility in income flows as well, as people tend to smooth their consumption where possible by dis-saving. On the other hand, relying on income reports in volatile developing or transition economy contexts is also rife with problems. Regardless of these drawbacks, following individuals over time gives us a much better picture of the distribution of *opportunities* – as well as income – in societies and over time.

We were able to gather data on income mobility for two countries deep in the process of integrating into the global economy: Peru (from 1991-2000) and Russia (from 1995-2000). In a related effort, several colleagues and I have been conducting research on the economics of subjective well being or “happiness” in Latin America and Russia.

Adding perceptions data to longitudinal data has benefits, but creates its own set of methodological problems. Economists who work in the area broadly define happiness and/or subjective well-being as satisfaction with life in general. Indeed, the three sets of terms are used interchangeably in most studies. Most studies of happiness are based on a very simple set of survey questions that typically ask respondents “How satisfied are you with your life?” or “How happy are you with your life?” Answers to this open-ended question incorporate psychological as well as material and socio-demographic factors.

Critics used to defining welfare or utility in material or income terms bemoan the lack of precise definition in these questions. Yet the economists who use these surveys emphasize their advantages in making comparisons across cohorts of individuals—in which they find a surprising consistency in the patterns of responses both within and across countries, such as in the effects of

¹¹ In our studies, we had a 38% attrition rate over a 5 year period in Russia, and a 25% attrition rate for the 3 year period covered by our perceptions survey in Peru (for the 1991-2000 living standards measurement survey, we had less attrition).

age, health, and marriage on happiness—rather than in evaluating the actual happiness levels of specific individuals. Psychologists, meanwhile, find a significant degree of “validation” in subjective well-being surveys, wherein individuals who report higher levels of happiness actually smile more, as well as meet several other psychological measures of well-being.¹²

The questions are usually based on a four point scale; “how happy or satisfied are you with your life”, with two answers above and two below neutral. The correlation coefficient between happiness and life satisfaction questions is approximately .50, and the micro-econometric equations have almost identical forms.¹³ The data are most useful in the aggregate, rather than at the individual level. In other words, how a particular individual answers a question on happiness, for example, can be biased by day to day events, such as the break up of a relationship or a high grade on a test score or the like. Thus the same person could answer such questions quite differently from day to day or year to year. The simple correlation from a regression of happiness in year two on happiness in year one was .2734 for our Russia sample, suggesting a significant amount of fluctuation in happiness levels. (Given the highly volatile economic context in Russia during the period, this correlation is probably lower than the average for other countries.)

Accuracy in reporting is another major issue in using perceptions data.¹⁴ Responses can be very biased by the phrasing or the placement of questions in the survey. Another problem in reporting is bias introduced by different or changing reference norms. If you ask people how much income would they need to make ends meet, and/or to be happy, they usually base their answers on their existing income and increase it by some proportion, regardless of the absolute level.¹⁵ Alternatively, people base their answers on others in their community or others “like themselves”. When we asked people in our Peru survey to compare themselves with others in their community and then with others in their country, we found that most respondents compared themselves much more favorably with others in their community than those in their country, which is a much vaguer concept for most respondents. Yet if the reference point changes – perhaps a result of more information – then this can have significant effects on the answers.

In our analysis, the most compelling results come from Peru and Russia, where we are able to match objective income or expenditure data from panels with subjective survey data. The most useful information comes from the gaps between the two kinds of measures. Yet we also find consistent and potentially policy relevant results from some of our analysis of large cross section subjective well being surveys for both Latin America and Russia. Prior to discussing our research results, however, a brief review of the conceptual frame that we use to analyze them is in order.

¹² See, for example, Ed Diener and Robert Biswas-Diener “Income and Subjective Well-Being: Will Money Make Us Happy?” University of Illinois, Department of Psychology (December) 2000.

¹³ Blanchflower and Oswald get a correlation coefficient of .56 for British data for 1975-1992 where both questions are available; Graham and Pettinato get a correlation coefficient of .50 for Latin American data for 2000-2001, in which alternative phrasing was used in different years. See David Blanchflower and Andrew Oswald, “Well –Being Over Time in Britain and the USA”, *Journal of Public Economics*, forthcoming; and Graham and Pettinato (2002).

¹⁴ Bertrand, Marianne, and Sendhil Mullainathan. 2001. “Do People Mean What they Say? Implications for Subjective Survey Data.” Cambridge, Mass.: National Bureau of Economic Research.

¹⁵ A survey conducted by Richard Webb and Cuanto and Lima in the 1980’s, for example, found that workers of all income levels consistently doubled their current income when asked how much income would be “enough”.

The Economics of Happiness

Central to the findings of much of the happiness literature in the developed economies are numerous discrepancies between reported measures of well being and income measures. Richard Easterlin pioneered the economics of happiness in the mid-1970s.¹⁶ He found that across countries and cultures the way that most people spend their time is similar: working and trying to provide for their families. Thus the concerns that they express when asked about happiness are similar. His finding—that wealthy people tend to be happier than poorer ones within countries, but that there is no such relationship among countries or over time—has since been supported by a number of subsequent studies, and is known as the “Easterlin paradox”.¹⁷ More recently, Stefano Pettinato and I developed data for 17 countries in Latin America and found similar results. [See Figure 1]

This study of happiness, or subjective well-being (terms which are used interchangeably), is a fairly new area for economists, although psychologists have been studying it for years. Some of the earliest economists, such as Jeremy Bentham, were concerned with the pursuit of individual happiness. As the field became more rigorous and quantitative, however, much narrower definitions of individual welfare, or utility, became the norm. In addition, economists have traditionally shied away from the use of survey data because of justifiable concerns that answers to surveys of individual preferences—and reported well-being—are subject to bias from factors such as the respondents’ moods at the time of the survey and minor changes in the phrasing of survey questions, which can produce large skews in results.¹⁸ Thus traditional economic analysis focuses on actual behavior, such as revealed preferences in consumption, savings, and labor market participation, under the assumption that individuals rationally process all the information at their disposal to maximize their utility.

In recent years, however, the strictly rational vision of economic decision making has come under increasing scrutiny. One important innovation is the concept of bounded rationality, in which individuals are assumed to have access to limited or local information and to make

¹⁶ Easterlin used thirty surveys from nineteen countries, including some developing countries. See Richard A. Easterlin, “Does Economic Growth Improve the Human Lot? Some Empirical Evidence.” In *Nations and Households in Economic Growth*, edited by Paul A. David and Melvin W. Reder. New York: Academic Press (1974); “Will Raising the Incomes of All Increase the Happiness of All?” *Journal of Economic Behavior and Organization* 27 (June): 35–48, 1995; “Life Cycle Welfare: Trends and Differences.” *Journal of Happiness Studies*, Vol. 2, pp.1–12, 2001; and “Income and Happiness: Towards a Unified Theory”, *The Economic Journal*, Vol.111, No.473, (July) 2003. He also finds that health is a demographic variable with clear effects on happiness in all societies, a finding that other studies corroborate. For an excellent summary of many of these studies, see the October 4 issue of the *New Scientist* magazine.

¹⁷ Easterlin (1974). See also David G. Blanchflower and Andrew J. Oswald, “Well Being Over Time in Britain and the USA.” Warwick University (November) 1999. Ed Diener, “Subjective Well-Being.” *Psychological Bulletin* 95 (3): 542–75, 1984; and Bruno Frey and Alois Stutzer, *Happiness and Economics* (Princeton: Princeton University Press, 2000).

¹⁸ For a summary of the critiques of the use of survey data, see Marianne Bertrand and Sendhil Mullainathan “Do People Mean What they Say? Implications for Subjective Survey Data.” Cambridge, Mass.: National Bureau of Economic Research. (2001).

decisions according to simple heuristic rules rather than complex optimization calculations.¹⁹ A more recent trend, meanwhile, has been the increased influence of behavioral economics, which supplements the methods and research questions of economists with those more common to psychologists.²⁰

Despite the new attention that economists have given to happiness research in recent years, the Easterlin paradox remains somewhat of a puzzle. With economic growth and related improvements in living standards, such as reduced infant mortality and increased life expectancy, people are better off by any number of definitions. Yet these objective improvements do not seem to be captured in people's responses to the happiness questions. Easterlin explained this apparent anomaly by suggesting that absolute income levels matter up to a certain point—particularly when basic needs are unmet—but after that, relative income differences matter more. Decades earlier, meanwhile, Pigou reasoned that because the rich derive much of their satisfaction from their relative, rather than absolute, income, satisfaction would not be reduced if the incomes of all the rich were diminished at the same time, justifying redistributive taxation.²¹

An additional explanation – which Easterlin and others have explored in later work - is that people's norms and expectations also adapt upward with economic progress. Thus the expected gains of income on happiness are mediated by the rising aspirations that accompany the income gains. Later empirical studies support this proposition, showing a much stronger relation between income and happiness at the lower end of the income scale.²²

Studies by psychologists yield similar results. Ed Diener and his colleagues explored whether absolute or relative differences matter more to subjective well-being. They based their analysis on two samples: a cross-section of 18,000 college students in thirty-nine countries (primarily developed economies), and a ten-year (1971–81) longitudinal study of 4,942 adults in the United States. They found a curvilinear relationship between income and happiness, in which there is a stronger relationship at the lower end of the income scale, and a flatter one at higher incomes that are well above subsistence levels. Across countries, they found a moderate relationship between affluence and life satisfaction.²³ Their findings highlight the importance of relative differences but do not discount the importance of absolute levels of income for happiness, even after people have incomes above the subsistence level.

¹⁹ See, among others, John Conlisk "Why Bounded Rationality?" *Journal of Economic Literature* 34 (June): 669–700, 1996; and Herbert Simon "Rationality as a Process and Product of Thought." *American Economic Review* 68 (May, *Papers and Proceedings*): 1–16, 1978.

²⁰ A notable recognition of the behavioralist approach was the awarding of the 2002 Nobel Prize in Economics to Daniel Kahneman, a psychologist.

²¹ A.C. Pigou, *The Economics of Welfare*. (London: Macmillan 1920), p.53.

²² Some scholars also find an additional effect at the very top of the scale, which might be explained by greed or changing preferences resulting from high levels of wealth. See Michael Argyle "Causes and Correlates of Happiness." In Daniel Kahneman, Ed Diener, and Norbert Schwarz, *Well-Being: The Foundations of Hedonic Psychology* (New York: Russell Sage Foundation, 1999), 353–73. Ruut Veenhoven, meanwhile, finds that the correlation between income and happiness is much greater in poor countries. See Veenhoven, "Is Happiness Relative?" *Social Indicators Research* 24: 1-34, 1991.

²³ Ed Diener et al., "The Relationship Between Income and Subjective Well-Being: Relative or Absolute?" *Social Indicators Research* 28: 195–223, 1993.

They also examined income change. Across countries, they found that rapid economic growth is accompanied by less, not more, happiness. When they looked at the effects of income changes at the individual level, they found that these do not yield additional effects on happiness beyond that of income levels. In other words, there are already some effects of income levels, which diminish as income goes up.

There could also be additional effects of *changes* in income. To explain this, they posited that aspirations or "reference" norms may rise as fast as income, and thus objective increases in income make little difference. Although they did not have data on perceptions, they suggested that unhappiness might be driven more by perceived discrepancies in income change (that is, people perceiving that they make less than someone else, even though they might be making the same or more) than by actual income changes.²⁴ While their study did not focus on developing countries, the intuition certainly seems applicable to fast growing developing economies.

The importance of relative income differences to perceived well-being depends in part on social norms, which vary among societies. Under some norms, some societies, such as the United States, are more willing to tolerate higher levels of inequality in exchange for benefits (real or perceived) such as greater freedom or opportunity.²⁵

Easterlin noted that while the aspirations of higher-income people probably exceed those of lower-income people, this dispersion in reference norms is smaller than is the dispersion in the actual incomes of the rich or poor. Thus those at the bottom tend to feel less well off. And as economic conditions improve over time, so do the reference norms, so that the positive correlation between higher income and well-being that shows up within countries appears only weakly, if at all, in comparisons among societies in time or space.²⁶

Adaptation and social comparison seem to affect utility less in the pecuniary than in non-pecuniary domains, meanwhile. Because individuals fail to anticipate the extent to which adaptation and social comparison undermine expected utility in the pecuniary domain, they allocate an excessive amount of time to pecuniary goals and shortchange nonpecuniary ends such as family life and health, thereby reducing their happiness.²⁷

Easterlin's proposition about changing reference norms is supported by James Merton's well known sociological work, based on Stouffer's analysis of the effects of promotions among U.S. military men. Stouffer found that infantry men, for whom promotion was quite rare, were

²⁴ They also make the point that unhappy people may be more likely to perceive these income differences. See also Diener and Biswas-Diener (2000).

²⁵ For different societies' tolerance for inequality, see Gosta Esping-Andersen, 1990. *Three Worlds of Welfare Capitalism* (Princeton: Princeton University Press, 1990). For an excellent overview of trends in mobility and opportunity in the United States, see Daniel McMurrer and Isabel Sawhill, *Getting Ahead: Economic and Social Mobility in America* (Washington, D.C.: Urban Institute Press, 1998). For a brief account of divergences between public beliefs and recent trends, see Carol Graham and Peyton Young, "Ignorance Fills the Income Gulf, *The Boston Globe*, June 23, 2003.

²⁶ In contrast, very little is known about aggregate declines in income on reference norms. For one account of norms shifting downwards, see Branko Milanovic and Branko Jovanovic "Change in the Perceptions of the Poverty Line during the Times of Depression: Russia, 1993–1996." *World Bank Economic Review* 13 (September): 531–60, 1999.

²⁷ See Richard Easterlin, "Explaining Happiness", Inaugural Article Special Series by Newly Elected Members, National Academy of Sciences, Volume 100, No.19, September 4, 2003.

much more satisfied with promotions when they occurred than were air force men, for whom upward mobility was the norm rather than the exception.²⁸

At about the same time that Merton wrote his book, James Duesenberry explored the relationship between income aspirations and social status. His specific interest was in ascertaining how this relationship influences savings behavior, but the empirical work on which he based his analysis was remarkably similar to Merton's work. He relied on sociological research based in public opinion polls in the United States in the 1940s.

A representative sample of 1,165 persons were asked to give their weekly income and answer the question: "About how much more money than that (the stated weekly income) do you think your family would need to have the things that might make your family happier or more comfortable than it is now?" The *percentage* increase people said they would need fell steadily as income increased until the highest group was reached: the lowest-income group (less than \$20 weekly) wanted a 162 percent increase, the fourth highest group (\$60–99 weekly) wanted a 52 percent increase, and the highest group (more than \$100 weekly) wanted a 100 percent increase.²⁹ Duesenberry used this and data from other studies to test his theory that people who associated with others who had more income tended to be less satisfied with their income than were people who associated with others who were at the same income level.

The importance placed on relative income and reference groups can lead to an ever-rising bar of perceived needs. In a classic work, *The Theory of the Leisure Class*, Thorstein Veblen posits that in affluent societies, spending—and in particular conspicuous consumption—becomes the vehicle through which people establish social position. Several decades later, Juliet Schor cites repeated surveys showing that more than half of the population of the United States, the richest population in the world, say they cannot afford everything they really need.³⁰

The concept of changing reference norms and aspirations is also relevant to the economic development process in poor countries. An anecdotal example comes from Peru in the 1960's. Richard Webb of the Instituto Cuanto interviewed a random sample of urban workers. Respondents of many different income levels were asked how much more income than they currently earned would they need to "live well". The vast majority of respondents – across all income levels – responded that they would need twice as much as they currently earned.³¹

At the core of development is the objective of increasing economic growth and income levels. While ideally, all members of society benefit evenly from growth, in practice, the process is quite uneven, particularly in the initial stages. Thus aspirations and reference norms may adapt upwards well before significant sectors of society see the benefits of the process.

²⁸ See Stouffer's account as summarized in Robert Merton, *Social Theory and Social Structure* (Glencoe, Ill.: Free Press of Glencoe, 1957). I thank George Akerlof for pointing me in the direction of Stouffer's work.

²⁹ James Duesenberry *Income, Saving, and the Theory of Consumer Behavior*. (Cambridge: Harvard University Press, 1949, pp.47-50). Kapteyn's more recent work on savings in the Netherlands supports these results. See Arie Kapteyn, "Savings and Reference Groups." Paper presented to MacArthur Network on Inequality and Social Interactions. The Brookings Institution, Center on Social and Economic Dynamics (December 1999).

³⁰ Veblen (1967); Schor (1998).

³¹ Richard Webb survey cited in *Oiga* magazine, Lima, circa 1965.

The increasing integration of global markets, meanwhile, has been accompanied by a marked increase in the availability of global information, including information about the living standards of others, both within poor countries and beyond their borders. Many developing countries, particularly in Latin America, have large gaps in the standard of living between the very wealthy and the rest of society, gaps which pre-date the current wave of global integration. Such inequalities are often exacerbated by the process of integration into global markets, particularly when skilled labor benefits disproportionately from the process, as has been the case in Latin America.³² Narrowing such gaps, which usually requires expanding the pool of skilled labor, is likely to take years and even decades.

The concepts of rising aspirations and relative deprivation are not at all new to the study of development economics. They are highlighted in the works of Hirschman and Gurr (cited above), among others. Yet these concepts are not well incorporated into our existing measures of progress, even though they may have significant effects on individuals' assessments of their welfare. And aspirations and reference norms are, no doubt, affected by the process of globalization, both via the changing rewards to different skill and income cohorts, and via the marked increase in the availability of global information.

The broader question posed by the Easterlin paradox – why countries do not get happier as they get wealthier – is also very relevant to this discussion. At minimum it introduces a rather different element into the discussion of the tradeoffs involved for developing countries when they opt to pursue objectives other than growth, such as more equitable distribution and better social welfare systems. It may also shed light on the seeming paradox that globalization yields very clear aggregate benefits as measured by income growth, yet public assessments of the process are much more mixed. A review of the results from our research on happiness in the developing countries allows us to address at least some aspects of these questions in greater detail. Finally, we find the Easterlin paradox – and the broader framework provided by the economics of happiness – extremely relevant in explaining our results from surveys of income mobility and respondents' perceptions of those trends in Peru and Russia.

New Ways of Evaluating Well Being in Emerging Market Economies: An Initial Exploration

Our work began as an attempt to better understand the effects of integrating into the global economy on the determinants of income mobility in developing countries.³³ As discussed above, we expanded our approach to examine the role of perceptions of past and future mobility. We matched data on subjective well being to detailed over time data on income mobility for the same respondents. We introduced this approach to data collection in Peru, and were subsequently

³² For trends in inequality related to the opening of capital markets and the liberalization of trade in Latin America, see Jere Behrman, Nancy Birdsall, and Miguel Szekely, "Economic Reform and Wage Differentials in Latin America", Carnegie Endowment Working Papers, November 2001.

³³ For detail on the data and the underlying methodology, see Graham and Pettinato (2002) and Carol Graham, "Happiness and Hardship: Lessons from Panel Data on Mobility and Subjective Well Being in Peru and Russia", Paper presented to DFID-ODI-DPU Conference on Longitudinal Data, London, May 2003. For an excellent summary of the few mobility studies that do exist in the LDCs, see Bob Baulch and John Hoddinot, "Economic Mobility and Poverty Dynamics in Developing Countries." *Journal of Development Studies* 36 (August): 1–24 (2000).

able to apply it to data from Russia. Unfortunately we did not have similar mobility data for the larger, Latin America-wide sample, which is a large cross section survey of respondents in 17 countries.³⁴

In Peru, we re-interviewed a sub-sample (500) of respondents in a large, nationally representative panel for 1991-2000, and asked a number of questions about their perceptions of their past progress and for their future prospects. We repeated this perceptions survey three years in a row. The most significant and surprising finding was that almost half of the respondents with the most upward mobility reported that their economic situation was negative or very negative compared to ten years prior. [See Figure 2] We conducted a similar analysis based on comparable data for Russia, and found an even higher percentage of frustrated respondents – or “frustrated achievers” as we now call them. [Figure 3]

A closer look at these frustrated achievers (FA’s) shows that they are at or near to average income (and therefore not the poorest in the sample), and that they are more urban and slightly older on average than non-frustrated respondents with upward mobility. There are no significant gender or education differences.³⁵

Our frustrated achievers scored lower on a whole host of perception questions, such as their perceived prospects of upward mobility, and their position on a notional economic ladder. In keeping with the direction of these findings, the FA’s also had a higher fear of being unemployed in the future. In addition, the Russian FA’s were more likely to want to restrict the incomes of the rich, and were less satisfied with the market process and with democracy (we did not have the same questions in the original survey for Peru).³⁶

In Peru, the likelihood of having upward mobility and being frustrated (a frustrated achiever) is negatively related to initial income levels. [Table 1] In other words, the frustrated achievers started from lower income levels, on average, even though they were not the very poorest in the sample at the time that they answered our survey. This is not surprising, as thus even large percentage increases in their incomes will seem insufficient to reach the levels of wealthier groups. The FA’s were also more likely to be urban, and therefore more informed about the lifestyles of others, including those of the very wealthy.

³⁴ The Latinobarometro survey consists of approximately 1000 interviews in 17 countries in Latin America, providing 17,000 observations for statistical analysis. The samples are conducted annually by a prestigious research firm in each country, and are nationally representative except for Brazil and Paraguay. The survey is produced by the NGO Latinobarometro, a non-profit organization based in Santiago de Chile and directed by Marta Lagos (www.latinobarometro.org). The first survey was carried out in 1995 and covered 8 countries. Funding began with an grant from the European Community and is now from multiple sources. Access to the data is by purchase, with a 4 year lag in public release. Graham has worked with the survey team for years and assisted with fund raising, and therefore has access to the data.

³⁵ For a complete picture of the statistically significant differences between frustrated and non-frustrated upwardly mobile respondents, see Graham and Pettinato (2002), Chapter 4.

³⁶ In an initial and at this point cursory analysis of the 2003 Peru survey data, Graham and Margaret MacLeod (Mimeo, The Brookings Institution, 2003) find that the frustrated achievers are less likely to favor democracy, but there is no link with market policies. Yet the results are also not fully comparable as a much lower number of respondents had upward mobility during this latter period and thus there was a far lower percentage of frustrated achievers.

What explains these frustrations? Relative income differences could certainly be a plausible explanation. Both Peru and Russia have high degrees of inequality. The FA's were more likely to score lower on the notional economic ladder in both surveys, as well as to compare their situations negatively to others in their community and their country in Peru (this latter question was not in the Russia survey).

A lack of adequate social insurance and insecurity could be another explanation. As noted above, the FA's had a higher fear of unemployment than non-frustrated achievers. Thus even though the FA's are doing well by objective income measures, they perceive that there is no guarantee of stability or maintaining their levels of earning. This is not surprising, given that both surveys were conducted in very volatile economic contexts, and the objective mobility data reveal a remarkable degree of vulnerability. A higher percentage of respondents went from "rags to riches" – or from the bottom to the top quintile in a ten year period in Peru (5%) than in a similar period in the United States (1%), for example.³⁷ Yet a surprising 11% of respondents in the middle of the distribution (quintile 4 in Peru) fell back all the way to the bottom quintile during the same period, which is analogous to falling from the middle class into extreme poverty.

We explored whether the frustrated achievers suffered more from this volatility, which in turn might drive some of their frustrations. Yet in Peru, the FA's have less volatility in their income trajectory, as measured by the coefficient of variation, a puzzling result if uncertainty or volatility is an explanation for the frustrations. In Russia the coefficient of variation is higher, which at first glance seems a more intuitive finding. Andrew Clark's work on tolerance for inequality in Britain is helpful in interpreting our results. He finds that respondents with greater income variance (controlling for levels) are more tolerant of inequality, presumably because the variance signals that great gains or opportunities are possible.³⁸ This is the opposite of our initial intuition, in which volatility produces insecurity and reduces well being. It may be that some combination of both interpretations is at play: while our frustrated achievers may be concerned about inequality and unemployment, they may also view income variance as a reflection of new opportunities, at least in Peru. Studies comparing Europe and the United States (discussed below) have found that tolerance for inequality varies across societies. There may be similar differences in tolerance for volatility related to inequality.

The fact that most of the FAs were at mean levels of education is probably relevant to the discussion of volatility versus opportunity. In Latin America, with the opening of trade and capital markets in the 1990's, those with higher levels of education are gaining high marginal returns compared to the rest of society, while those with secondary education are seeing decreasing marginal returns compared to those with primary education.³⁹

Lastly, it is quite plausible that some of the frustrations that we find are driven by individual character traits. There is probably some percent of every sample that will always be negative or unhappy, regardless of objective conditions. That led us to ask if our population

³⁷ In both these cases, some of the mobility that we find could be driven by newly educated individuals entering the labor force. Yet as neither study controls for this, the rates are comparable – if perhaps slightly higher than they would be if we were able to implement such controls.

³⁸ Andrew Clark, "Inequality-Aversion and Income Mobility: A Direct Test", Mimeo, DELTA, Paris, June 2003.

³⁹ See Behrman, Birdsall, and Szekely (2001).

samples were significantly different from other population samples. Unfortunately, we do not, at this point, have similar income mobility and perceptions data for a broader sample of countries, which would allow us to compare the percentage of frustrated achievers across countries. However, we were able to explore the broader question of whether the determinants of happiness differ in the developing economies from those in the advanced industrial economies.

There are very few studies of happiness in the developing economies, and to the extent they exist, they tend to cover individual countries. As far as we know, our study of reported well being in Latin America and Russia is the first such study in a large sample of developing countries.⁴⁰ Our results strongly support the important role played by relative income differences, reference norms, and other non-income factors highlighted above. Indeed, we found that for the most part, the determinants of happiness were very similar in the developing economies to what they are in the advanced economies.

We compared the determinants of happiness in Latin America and in Russia with those of the United States. For the U.S., we used the pooled data for 1973-1998 from the GSS. For Russia, we used the most recent available survey (2000) from the Russian Longitudinal Monitoring Survey (RLMS). For Latin America, we relied on the 2001 Latinobarometro survey because it is the one year for which we have variables for both self reported health status and for being a minority, which makes it comparable to the U.S. and Russia surveys. [See Tables 2,3,4]

We find a remarkable degree of similarity: there were similar age, income, education, marriage, employment, and health effects.⁴¹ In all contexts, unemployed people are less happy than others. Self employed people, meanwhile, are happier in the U.S. and in Russia on average, while in Latin America, they were less happy. This makes intuitive sense. While in the U.S. self employment is a choice, in Latin America the self employed are often in the informal sector by default.

Another difference is that women were happier than men in the U.S., while in Russia men were happier than women (due to disparities in status?) and in Latin America there was no gender difference. Blacks are less happy than other races in the United States, and similarly, those that identify as minorities in Latin America are less happy. In contrast, minorities living in Russia are happier than ethnic Russians.

⁴⁰ See Graham and Pettinato (2002); Graham and Pettinato, "Frustrated Achievers: Winners, Losers, and Subjective Well Being in Emerging Market Economies, *Journal of Development Studies*, Vol. 38, No.4, April 2002; and Graham and Pettinato, "Happiness, Markets, and Democracy: Latin America in Comparative Perspective", *Journal of Happiness Studies*, Vol. 2, 2001). There have been some smaller studies in particular countries, such as Ceema Namafie and Peter Sanfey in Kyrgyzstan, Mariano Rojas in Mexico, and Martin Ravallion and Misha Lokshin in Russia. See Namafie and Sanfey, "Happiness in Transition: The Case of Kyrgyzstan." Discussion Paper 40. London School of Economics, Distributional Analysis Research Programme, July 1998); Rojas, "Happiness and Public Policy: Political Economy Considerations", Paper presented to the Fifth Conference of the International Society for Quality of Life Studies (ISQOLS), Frankfurt, July 2003; and Ravallion and Lokshin in Russia. (See "Subjective Economic Welfare." Policy Research Working Paper 2106. Washington: World Bank, April, 1999). As far as we know, there are no other region-wide studies in the developing countries. Berndt Hayo has recently completed a study in the transition economies in Eastern Europe (see "Happiness in Eastern Europe: Paper Presented to the Fifth Conference of the ISQOLS, July 2003).

⁴¹ The coefficient on marriage for Latin America is positive but short of significant for the 2001 sample. For other years for which we have data, the coefficient on marriage is positive and significant.

Even these subtle differences in the determinants of well being suggest that the analysis of reported well being highlights policy issues, such as employment opportunities and gender rights, which are (or should be) on the policy agendas of many developing countries. While these issues often enter the public debate as a result of pressure from special interests such as unions or NGO's, it is novel to find strong backing for them in individual assessments of welfare.

Taking our analysis a step further, we found that in both Latin America and Russia happier people were more likely to support market policies, to be satisfied with how democracy was working, and to prefer democracy to any other system of government. Happier people, on average, had higher prospects for their own and their children's future mobility; were more likely to believe that the distribution of income in their country was fair; placed themselves higher on a notional economic ladder; and had lower fear of unemployment.⁴² In contrast, the negative perceptions of our frustrated achievers in Peru and Russia are correlated with lower life satisfaction (happiness) scores; lower scores on a notional societal economic ladder (compared to non-frustrated respondents of comparable income levels); lower perceived prospects of upward mobility; higher fear of unemployment; and less satisfaction with market policies and a lower probability of preferring democracy as a system of government.

We are not aware of surveys in the OECD economies which take our approach and compare objective trends in income mobility with reported trends. However, there are some studies in the U.S. and Europe which link people's perceptions about mobility – such as perceived prospects of upward mobility – with voting behavior and views about redistribution.⁴³ Most of these studies suggest that societies with widely held faith in prospects for upward mobility are more tolerant of income inequality than those where social mobility is more limited. Roland Benabou and Efe Ok develop a model which they apply to income data from the panel study on income dynamics (PSID) that shows that even though the majority of Americans are well below mean income, they do not vote for redistribution. This is because they believe that they will be above the mean in the future (even though this is an unrealistic expectation for the median voter).⁴⁴

Alberto Alesina, Rafael di Tella, and Robert MacCulloch compare views about inequality in the United States and Europe. They find that inequality has a negative effect on all respondents in Europe, and it is particularly strong for the poorest. In contrast in the U.S., the only group that is made less happy by inequality are left-leaning wealthy respondents! They posit that differences in views about the prospects of upward mobility between the two continents

⁴² The ELQ question asked respondents to place themselves on a 9 step ladder representing their society, where the poor are on step 1 and the rich are on step 9. Support for market policies was measured by an index based on several scaled questions about the private sector, foreign investment, free trade, and privatization. For detail, see Graham and Pettinato (2002).

⁴³ See, for example, Roland Benabou and Efe Ok, "Social Mobility and the Demand for Redistribution: The POUM Hypothesis." Working Paper 6795. Cambridge, Mass.: National Bureau of Economic Research, 1998; and Thomas Piketty, "Social Mobility and Redistributive Politics." *Quarterly Journal of Economics* 110 (August): 551–84, 1995.

⁴⁴ Benabou and Ok (1998).

explain their results.⁴⁵ This is something noted centuries ago by de Tocqueville in comparing the U.S. and Europe. In our own analysis of GSS data, we find that U.S. respondents that support redistribution are, on average, less happy than others.⁴⁶

While similar studies are not available for the developing economies, our preliminary analysis suggests that there may be a similar relationship between views about upward mobility and tolerance for inequality. We examined responses to several questions related to redistribution in the 2001 and 2002 Latinobarometro. A question in the 2001 survey asks respondents to place themselves on a nine point scale, where 1 is preferring more freedom and more money and 9 is preferring more rules and more equality. Respondents that had higher prospects of upward mobility scored lower on the scale and were less likely to prefer equality and regulation.⁴⁷ This finding is similar to those for the U.S. Yet in contrast to the U.S., the Latin American respondents that supported more equality were also happier, on average.

Rather surprisingly, wealthier people were more likely to support more rules and more equality, (which may also explain the correlation with higher happiness levels). Yet we found consistent results on wealth in a question in the 2002 survey, which asks respondents if taxes should be lower even if social welfare spending suffers. A surprising 23% of respondents opt for the “strongly agree” response, and 44% agree. As in the case of supporting more equality in 2001, those with higher levels of wealth and education (and respondents over age 33) were less likely to agree with low taxation at all costs.⁴⁸

At least some of these results reflect Latin Americans’ mistrust of the state’s ability to redistribute fairly rather than widely held beliefs about prospects for upward mobility (only 13% of Latin American respondents believe that the income distribution is fair or somewhat fair).⁴⁹ To the extent that there is support for redistribution, it seems to be among wealthier rather than poorer groups. A positive interpretation is that this reflects enlightened self interest. Yet a more realistic one may be that the poor typically receive fewer benefits from state spending than do wealthier groups in the region.

Rather surprisingly, we found that a remarkably similar percentage of respondents in the United States and Latin America thought that their children would live better than they (57 and

⁴⁵ See Alberto Alesina, Rafael di Tella, and Robert MacCulloch, “Inequality and Happiness: Are Europeans and Americans Different?” Harvard University and London School of Economics, December 2000.

⁴⁶ See Carol Graham, “The Role of Government in Enhancing Opportunities for the Poor: Economic Mobility, Public Attitudes, and Public Policy” in Gary Fields and Guy Pfeffermann, eds., *Pathways Out of Poverty: Private Firms and Economic Mobility in Developing Countries* (Kluwer Academic Publishers, 2003).

⁴⁷ In a regression with the variable EQUALSUP as the dependent variable, the coefficient on our prospects of upward mobility variable – POUM – was negative and significant. The coefficient on the wealth index was positive and significant. It even remained positive when we squared it to see if there were differences in the attitudes of the very wealthy. Results available from the author.

⁴⁸ We also split the sample (according to two different methods) into those respondents that were likely to pay taxes and those that were not, but did not get results that were significantly different. See Graham and Sukhtankar (2003).

⁴⁹ In an earlier study we found that support for redistribution was lower in poorer, more unequal countries in the region than in the wealthier ones, while within countries wealthy people were more likely to favor productivity over redistribution. This finding is based on a question in the 1998 Latinobarometro asking respondents if what their country needs most to get ahead is more redistribution or more productivity. For detail, see Graham and Pettinato 2002, chapter 3.

58% respectively). In contrast, far fewer Latin American respondents than U.S. respondents felt that they lived better than their parents did.⁵⁰ Views about the causes of poverty were also remarkably similar (even though the questions are not fully comparable). In the U.S., 36% of respondents say that lack of effort on the part of the poor themselves is a “very important” cause of poverty, while 43% say that it is “somewhat” important and 21% say not important. In Latin America, 36% of respondents say that poverty is a result of lack of effort on the part of the poor themselves, while 63% of respondents say that it is the result of bad circumstances.

Our results suggest that there is still a remarkable amount of faith in the region in individual effort and prospects for getting ahead.⁵¹ Some of this faith is, no doubt, based on realistic assessments by respondents and the awareness that their children are likely to have, at the least, access to more and better quality education than they did. Some reflects hope and expectations as much as anything else. For our smaller Peru sample, we found that some of the same respondents that assessed their own situation more negatively than was warranted by objective income measures still assessed their children’s prospects in a positive light.

Those with higher prospects for upward mobility were also more likely to favor market policies, to support democracy over any other system of government, and to place themselves higher on the notional economic ladder.⁵² In contrast, our frustrated achiever respondents in Peru and Russia, who on average had higher fear of unemployment and lower POUM scores, tended to be less supportive of market policies and of democracy.⁵³ Our findings yield notable public frustration, frustration which is linked to concerns about income differentials and unemployment and with reduced support for markets and democracy. Our findings do not, however, suggest that there is widespread public support for redistribution. If anything, they suggest that the public’s faith in the state’s capacity to redistribute fairly is quite minimal.

Causality Questions and Issues

While the frustrations and unhappiness that we find are indeed linked to policy relevant questions, the direction of causality is not fully clear. We do not know whether policies and/or environments drive the frustrations, or underlying character traits (such as lower innate levels of happiness) drive more negative assessments of policies and environments. In other words, it may well be that happier people assess whatever policy environment they live in more favorably, and that more frustrated or unhappy people are more likely to be pessimistic about the future and concerned about relative income differences or insecurity.

At least some of the explanation for patterns in reported well being is related to inherent character traits. Indeed one of our studies finds that only 3% of the variation in happiness is explained by socioeconomic and demographic variables; the rest is either behavioral or error

⁵⁰ The U.S. data are from the General Social Survey (GSS) while the Latin American data are from the 2001 Latinobarometro. For a detailed discussion, see Graham, “Crafting Sustainable Social Contracts in Latin America: Public Attitudes and Political Economy”, *Center on Social and Economic Dynamics Working Papers #29*, The Brookings Institution, July 2002.

⁵¹ Authors’ calculations based on GSS data and on the 2000 Latinobarometro survey.

⁵² See Graham and Pettinato (2002).

⁵³ See Graham and Pettinato (2002).

driven.⁵⁴ Yet there is also a role for factors that policy can influence, such as income inequality, macroeconomic volatility, and large gaps in rewards to different education and skill cohorts, in the explanation of the frustrations.

In a very recent study, we tried to get a better understanding of the interaction between contextually driven attitudes and behaviorally driven ones, as well as the channels of causality. We conducted an additional analysis – based on Russian data for which we had observations on both happiness and income at two points in time, as well as on a number of perceptions variables. We found that these behavioral traits have a role in explaining differences among individuals’ performances and outcomes.

As reported in Table 5, we found that happier people earn more income in later periods, on average, than less happy people.⁵⁵ Our method of analysis entailed calculating the residual or unexplained happiness for each respondent in the first period – e.g. the happiness that was not explained by the usual socio-economic and demographic variables. We posit that this must be close to the behavioral component of reported happiness. We included that residual as an independent variable with second period income as the dependent variable. Controlling for first period income, we found that our residual had positive and significant effects on second period income. We also found that happier people were healthier in future periods.

Happier people earn more income, perform better in the labor market, and are healthier. Psychologists attribute traits such as positive outlook and high self-esteem (so-called positive cognitive bias) to happier people. It is not surprising that these traits also contribute to productivity and health. We also found that the effects of happiness on future income were greater for those at lower levels of income, while the effects of first period income were more important for future income for those at higher levels of income. [See Table 5] One interpretation is that for those with less assets or income, a positive outlook and high self-esteem are probably very valuable traits in the labor market, particularly for those who provide services. These traits probably matter less for those who have sufficient income or assets to leverage in making future gains.

We found that our perceptions variables had effects which were very similar (and indeed stronger) than those of residual happiness – the effects of which were rendered insignificant when perceptions variables were included. In other words, having a high POUM or placing oneself high on the notional economic ladder (ELQ) in the first period was positively and significantly correlated with higher levels of income in the second period. In contrast, having higher fear of unemployment was negatively correlated with future income. [See Table 6] This suggests that Peruvian and Russian frustrated achievers are likely to perform less well than their non-frustrated counterparts in the future. Respondents’ views or attitudes about their future prospects have a statistically significant correlation with their future outcomes and may indeed play a role in determining those outcomes. It is likely that both unexplained happiness and perceptions variables are picking up similar behavioral traits, such as optimism and self esteem.

⁵⁴ See Carol Graham, Andrew Eggers, and Sandip Sukhtankar, “Does Happiness Pay? An Exploration Based on Panel Data from Russia”, *Journal of Economic Behavior and Organization* (forthcoming).

⁵⁵ See Graham, Eggers, and Sukhtankar (forthcoming).

It is also plausible that some of what we find is explained by people's abilities to forecast or predict their future income, and thus first period attitudes merely reflect people's knowledge of the future.⁵⁶ The highly unstable nature of the Russian context, however, renders this unlikely as the entire explanation. The results suggest that having a positive attitude in general, as well as a positive attitude about future opportunities, is linked to better earnings – and health – outcomes. It may be that behavioral or attitudinal variables may be more important in extremely uncertain contexts such as in Russia, where it is more difficult to predict the future. Research based on comparable data for other countries is necessary to test such a proposition.

Thus causality seems to run in both directions: from policy relevant variables or factors such as economic performance to happiness, as well as in the other direction. What, then, are the implications for theory and for policy?

At a minimum, it is clear that using longitudinal data on both mobility and on subjective well-being gives a very different picture of how people are faring in developing countries that are opening up to the global economy than does looking at standard income or distribution data in isolation. While it is fairly standard to equate well being or utility with income, our research and that of many others suggests that there are very important non-income determinants of well being, a finding which is in keeping with the broader questions raised by the Easterlin paradox. These elements of well being also seem to have a correlation with – and perhaps even a causal effect – on labor market performance and on future earnings outcomes. An unanswered question which remains for future research, however, is how can we most usefully – and prudently – incorporate these novel approaches and new kinds of data into the analysis of developing economies and into the policies that stem from that analysis.⁵⁷

Conclusions Lessons and Questions from New Lenses

Looking at the impact of globalization on poverty and inequality through novel lenses yields a different, albeit complementary, picture to that painted by analysis based on standard, income based measures. We focused, in particular, on income mobility and on reported well being as a way to gauge distributive trends across time and across cohorts within countries, as well as to assess the importance of relative as well as absolute differences. We collected data on two very different countries in the process of integrating into the global economy – Peru and Russia. Perhaps the most notable finding from this research is the consistent gaps between measures of welfare as gauged in standard terms such as earned income or consumption expenditures, and those reported in surveys of well being.

⁵⁶ I would like to thank a number of participants at the Brookings Warwick Conference on: “Why Inequality Matters: Lessons for Policy from the Economics of Happiness”, June 2003, for discussing this insight, and in particular Gary Burtless for raising the point.

⁵⁷ Indeed, in a paper in which we explored the effects of regional unemployment rates on happiness in Russia (and get a positive effect on the happiness of both employed and unemployed respondents) we caution against making rapid judgements about policy relevance based on subjective assessments during volatile economic times. See Andrew Eggers, Clifford Gaddy, and Carold Graham, “Unemployment in Russia: Can Society's Suffering Provide Individuals' Solace?”, under review for special issue of the *Journal of Socio-Economics*.

One problem is that it is difficult to cleanly separate cause from effect when assessing the importance of these gaps. In other words, the differences between measured and reported welfare may be driven by the effects of non-income variables which our standard measures do not capture – such as job insecurity, relative income differences, and health and marital status. Yet it is also quite plausible that less happy people are more likely to attribute importance to these insecurities and differences, as well as less likely to be healthy and to get married. Research attempting to disaggregate behavioral from contextual determinants of welfare is only in the nascent phases.

Despite our inability to definitively separate the behavioral from contextual determinants of discrepancies between measured and reported well being, the determinants of reported well being seem to be consistent across countries and time. As the Easterlin paradox suggests, there are limits to the extent that income growth alone can increase happiness. Yet most development objectives cannot be achieved without growth. And, at least in the aggregate, globalization is a major engine of growth. Determining at what point in the development process it is worth making tradeoffs in terms of growth to achieve other objectives remains a challenge, and the answer is likely to vary across countries and cultures.

In addition to growth, globalization either introduces or exacerbates other trends that affect people's well being as much if not more than income. An important such trend is the increasing flow of information about the living standards of others, both within and beyond country borders, which can result in changing reference norms and increased frustration with relative income differences, even among respondents whose own income is increasing. It also includes increased volatility and insecurity for many cohorts, particularly those that are not the best positioned to take advantage of new opportunities created by the opening of trade and capital flows. This insecurity, not surprisingly, contributes to negative perceptions of the globalization process, particularly in countries where there are very weak social insurance systems or where existing systems are eroding.

Our results also suggest that reported well being and individual perceptions have effects on economic outcomes. Many of these perceptions, such as people's perceived prospects of upward mobility (which are highly correlated with subjective well-being), have documented effects on economic and political behavior. The contextual determinants that seem to affect these perceptions, such as large relative income differences, insecurity related to rapid and/or extensive economic change, poor job quality, poor health, and unequal gender rights, are all variables which can be influenced by policy. Improvements in virtually all of these policy areas are likely to have positive effects on aggregate economic outcomes as measured in standard income measures. Better functioning labor markets and more effective safety nets, for example, could both increase growth and reduce the long term costs associated with short term poverty spells.⁵⁸

⁵⁸ Dani Rodrik, for example, shows that the developed countries that devote higher percentages of their GNP to trade spend more per capita on safety nets and social insurance mechanisms than those that trade less. See Rodrik, "Why Do More Open Economies Have Bigger Governments?", Working Paper Number 5537, National Bureau of Economic Research, 1996. Ishac Diwan, meanwhile, shows that the poor often face longterm, non-recuperable costs from short-term poverty spells. Children missing years of school during crisis years is a case in point. See Diwan, "Debt as Sweat: Labor, financial crises, and the globalization of capital." World Bank, Mimeo, 2001.

The research also shows that the same psychological factors that affect subjective evaluations of well being also explain individuals' abilities to adapt to tremendous adversity and/or negative shocks and often even to return to previous levels of happiness. This process of adaptation – to either negative shocks or to the disruptions and changes that often accompany economic progress and development – is very much influenced by peoples' norms about equity and perceptions of fairness. This helps to explain why there is often unexpected social stability in very poor societies, and at the same time unexpected outbreaks of violence and social unrest in societies where there is a great deal of economic progress – but differential rewards to different cohorts. Our upwardly mobile frustrated respondents are a case in point.

Thus our results highlight a need to better understand and incorporate the interaction between norms about fairness and equity with economic progress and change – including integration into global markets and information systems. Norms about what is fair are endogenous to policy choices in the long run. The importance accorded to unions, for example, has long run effects on their bargaining power and thus wages in the sectors that they represent.⁵⁹

The evidence suggests that tolerance for inequality is much higher in contexts where there are perceived (even if not real) prospects for upward mobility.⁶⁰ Downward mobility, meanwhile, or the threat thereof, is more likely to cause frustration and social unrest than is persistent poverty, as in the case of our frustrated achievers in Peru and Russia, or more generally as in Argentina in the late 1990's.

Relying on income measures of well being alone can mask a tremendous amount of latent social unrest. Income measures would not have captured the frustrations that we found among upwardly mobile individuals, for example. These frustrations are closely linked to and may even determine respondents' views about market policies and democracy, as well as views about redistribution, and thus ultimately to political support for continued integration in the global economy.

Our research also suggests – very tentatively - that we may be underestimating the effects of several variables on the well being of countless individuals in the developing economies. The most prevalent among these are the negative effects of macroeconomic volatility, unstable employment, and highly unequal income distributions and/or changes in distributions that are perceived to be unfair. The most positive variables are the effects of good health and stable marital status.

The role of instability in undermining well being suggests that more and better social insurance and social policies, which are not only directed at the very poor, but also at those in the middle or lower middle of the distribution, could have welfare enhancing effects. Those in the middle group are at times very vulnerable to falling into poverty, particularly in countries that integrate into international financial markets before their financial and regulatory institutions are

⁵⁹ Tony Atkinson makes the point that the loss of union power played a role in the reduced relative wages of blue collar workers, and now a bigger gap has become more acceptable. See Atkinson chapter in Vito Tanzi, Ke-Young Chu, and Sanjeev Gupta, eds., *Economic Policy and Equity* (Washington D.C., International Monetary Fund, 1999).

⁶⁰ For a short critique of the gaps between perceived equality of opportunity in the United States and the empirical evidence, see Graham and Young (2003).

adequately developed.⁶¹ In addition, we may not have paid enough attention to distributional questions as a range of countries integrated into global trade and financial markets. While these policy conclusions are hardly novel ones, what is novel is their strong backing in individual welfare assessments rather than in a more general political or public policy debate, as is usually the case.

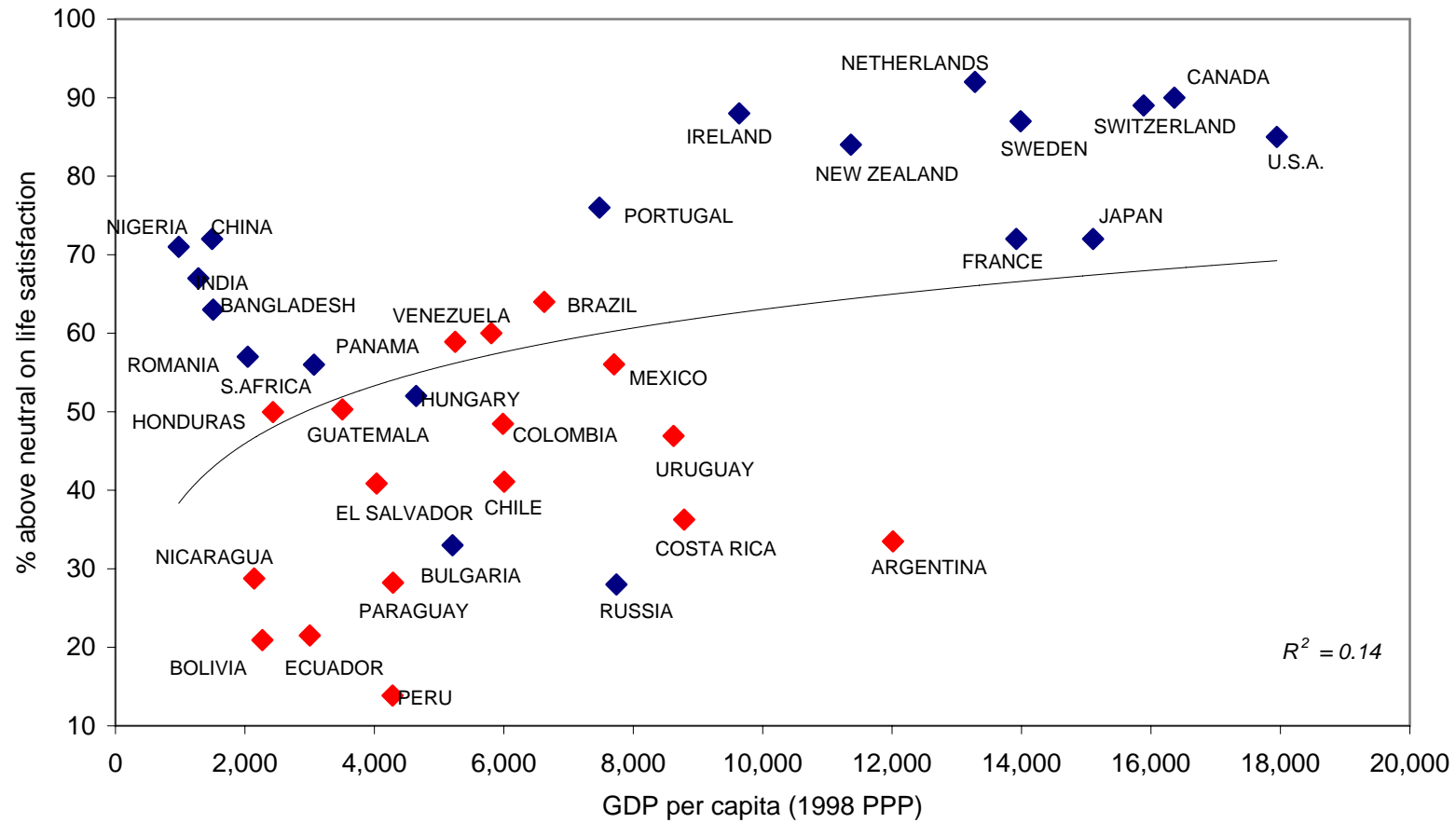
The list of possible policy applications is long and potentially endless – from better social insurance policies to efficiency enhancing redistributive measures to better health and education policies. The more fundamental point is that relying on broader measures of welfare gives us a more complete picture of the impact of globalization on the welfare of countless individuals, and helps to explain the gap between empirical and technical assessments of the benefits of the globalization process and those of the average citizen (or at least the vocal proponents who claim to speak in the interests of the average citizen) in both developed and developing countries. An important caveat is that surveys of reported well being can contribute to such measures but alone are insufficient. Their potential contribution increases markedly when they can be matched with objective income data for the same respondents.

In the end, the results from surveys of reported well being – or put more simply, from asking people what is important to their own welfare – drum home an old saw that seems to need constant reinforcing: growth is a necessary but not sufficient condition for poverty reduction. Other key factors - such as public investments in health; institutions that can ensure adherence to basic norms of equity and fairness; and collective investments in social insurance to protect workers from the volatility that often accompanies integration into global markets - are essential to sustaining the development gains that globalization helps bring about.

⁶¹ For the effects of short-term financial crises on poverty trends in emerging market countries, see Cline (2002). For the effects of financial market integration on countries with different levels of institutional development, see Eswar Prasad, Kenneth Rogoff, Shang-Jin Wei and Ayhan Kose, “Effects of Financial Globalization on Developing Countries: Some Empirical Evidence”, IMF Occasional Paper 220, 2003. For the proximity of the near poor to the poor in terms of indicators such as infant mortality, see Nancy Birdsall, “Open Economy Social Contract”, *Economia*, forthcoming.

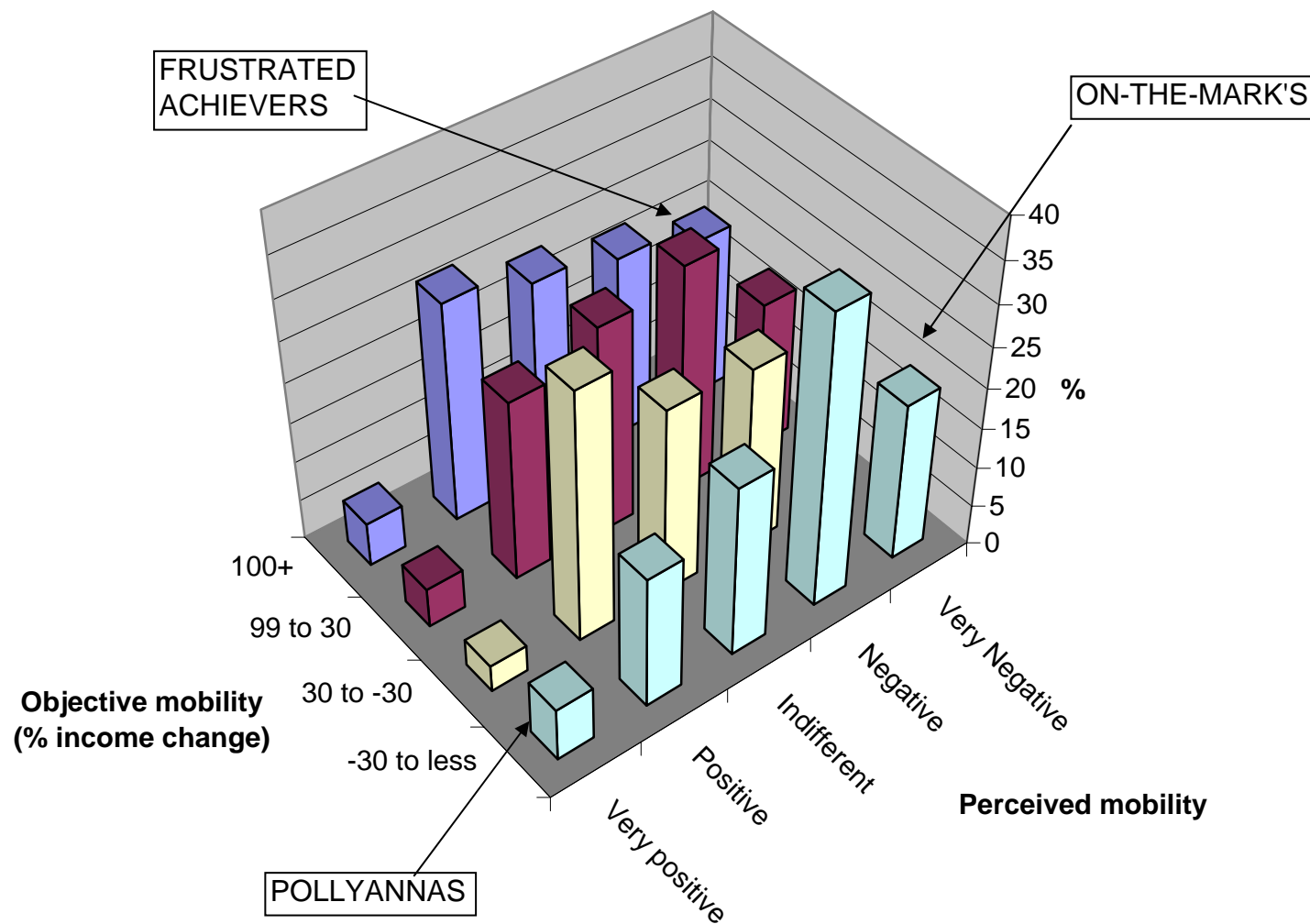
Figure 1

Happiness and Income Per Capita, 1990s



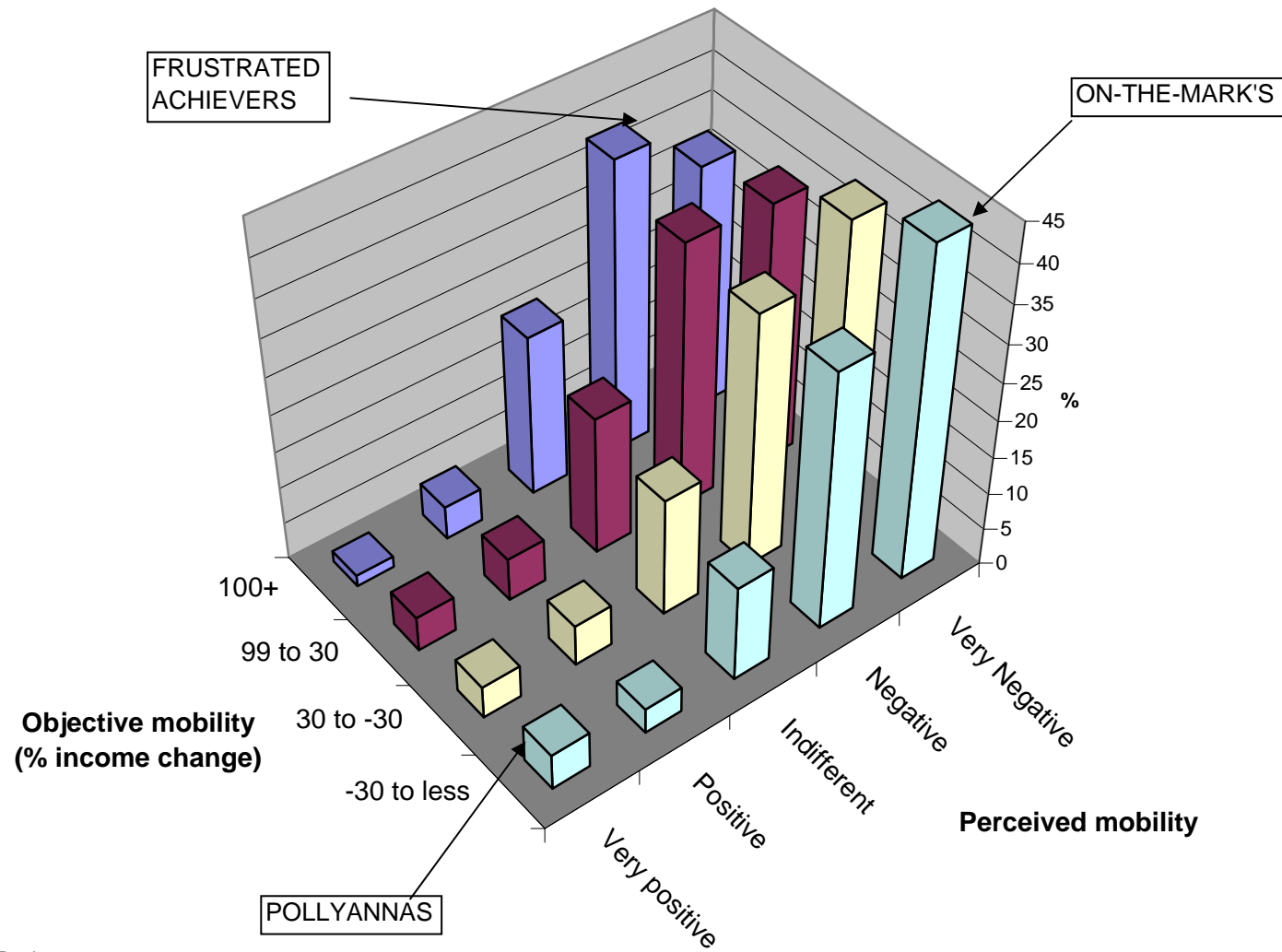
Source: Graham and Pettinato, 2002.

Figure 2: Long term Perceived Mobility vs. 1991-00 Income Mobility
Peru 2000



Source: Graham and Pettinato, 2002.

Figure 3: Perceived Past Mobility vs 1995-99 Income Mobility
 Russia, 1999



Source: Graham and Pettinato, 2002.

Table 1: Peru, 2000

	Whole Sample (N=500)		Frustrated Achievers (N=128)		Non-Frustrated Achievers (N=160)		Difference FA v. NFA
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	
Age	52.95	15.29	55.67	15.09	49.49	14.90	**
Area (Urban=1)	0.86	0.35	0.93	0.26	0.78	0.42	***
Gender (Male=1)	0.53	0.50	0.51	0.50	0.57	0.50	
Education	8.02	4.66	8.03	4.52	8.12	4.68	
Equivalence Household Expenditure '00	8922	7314	9885	6144	10809	9957	
Coefficient of Variation (91, 94, 96, 00)	0.42	0.19	0.43	0.19	0.48	0.19	**
Economic Satisfaction	2.91	0.80	2.53	0.78	3.21	0.64	**
Job Satisfaction	2.58	1.16	1.88	0.90	3.15	1.03	***
Perception of Economic Opportunities Opportunity	3.03	0.75	2.74	0.71	3.28	0.65	***
Economic Ladder Question	3.82	1.52	3.73	1.47	3.98	1.59	*
Prospect of Upward Mobility	3.29	1.03	3.03	1.13	3.54	0.89	**

Significance in the difference of the means between Fas and non-FAs: * at the 10%, ** at the 5%, *** at the 1% level.

Table 2: Russia, 1998

	Whole Sample (N~2289)		Frustrated Achievers (N~217)		Non-Frustrated Achievers (N~90)		Difference FA v NFA
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	
Age	54.47	15.40	51.58	13.97	50.37	16.09	
Gender (Male=1)	0.21	0.41	0.24	0.43	0.25	0.43	
Education	8.41	2.35	8.62	2.13	8.91	1.97	
Equivalence Household Income '98	2698	2935	4753	5964	6114	5574	***
Coefficient of Variation (95, 96, 97, 98)	0.56	0.38	0.64	0.62	0.55	0.23	***
Life Satisfaction	1.91	1.00	1.82	0.88	2.45	1.25	***
Economic Ladder Question	2.93	1.48	3.00	1.56	3.72	1.52	***
Prospect of Upward Mobility	2.06	1.00	2.07	1.02	2.58	0.97	**
Pro-Democracy Attitude	0.53	0.54	0.45	0.53	0.70	0.51	***
Satisfaction with Market Reform Process	0.74	0.55	0.65	0.59	0.96	0.57	***
Fear of Unemployment	3.96	1.37	4.15	1.22	3.57	1.56	***
Restrict the Rich	3.22	0.79	3.16	0.82	2.89	0.94	**

Significance in the difference of the means between Fas and non-FAs: * at the 10%, ** at the 5%, *** at the 1% level.

Table 3: Happiness in Latin America, 2001

Dependent Variable: Happiness

Independent variables	Coef.	z
Age	-0.025	-4.21
Age squared	0.000	4.72
Male	-0.002	-0.07
Married	0.056	1.63
Log wealth index	0.395	10.56
Years of education	-0.003	-0.64
Minority	-0.083	-2.49
Student	0.066	1.01
Retired	-0.005	-0.06
Homemaker	-0.053	-1.04
Unemployed	-0.485	-7.54
Self employed	-0.098	-2.33
Health (self-reported)	0.468	24.58
<i>Pseudo R²</i>	<i>0.062</i>	
<i>Number of obs.</i>	<i>15209</i>	

* Ordered logit estimation; country dummies included but not shown

Source: Latinobarometro, 2001. Author's calculations.

Table 4: Happiness in Russia, 2000

Dependent Variable: Happiness

Independent variables	Coef.	z
Age	-0.067	-7.42
Age squared	0.001	7.15
Male	0.152	2.80
Married	0.088	1.40
Log equivalent income	0.389	11.48
Education Level	0.015	0.96
Minority	0.172	2.46
Student	0.199	1.59
Retired	-0.378	-3.97
Housewife	0.049	0.33
Unemployed	-0.657	-6.51
Self employed	0.537	2.23
Health index	0.446	3.82
<i>Pseudo R²</i>	<i>0.033</i>	
<i>Number of obs.</i>	<i>5134</i>	

* Ordered logit estimation

Source: Graham, Eggers, Sukhtankar (forthcoming).

Table 5: Happiness in the U.S., 1972 - 1998

Dependent Variable: Happiness

Independent variables	Coef.	z
Age	-0.025	-5.20
Age squared	0.038	7.53
Male	-0.199	-6.80
Married	0.775	25.32
Log income	0.163	9.48
Education	0.007	1.49
Black	-0.400	-10.02
Other race	0.049	0.59
Student	0.291	3.63
Retired	0.219	3.93
Housekeeper	0.065	1.66
Unemployed	-0.684	-8.72
Self employed	0.098	2.29
Health	0.623	35.91
<i>Pseudo R²</i>	<i>0.075</i>	
<i>Number of obs.</i>	<i>24128</i>	

* Ordered logit estimation; year dummies included but not shown.

Source: GSS data, Author's calculations.

Table 6: The effects of happiness and other perceptions on income in Russia, 1995-2000

Dependent Variable: Log equivalence income, 2000 (OLS)

Independent variables	a		b		c		d	
	coef	t	coef	t	coef	t	coef	t
Age	-0.013	-3.00	-0.013	-2.97	-0.015	-3.25	-0.009	-0.78
Age squared	0.000	3.18	0.000	3.15	0.000	3.52	0.000	1.24
Male	0.010	0.42	0.010	0.42	0.000	-0.02	-0.008	-0.23
Married	0.205	7.84	0.205	7.84	0.205	7.84	0.241	6.15
Education level	0.030	4.51	0.030	4.51	0.030	4.44	0.032	2.44
Minority	0.121	3.98	0.123	4.03	0.122	4.00	0.081	1.80
Student	-0.034	-0.34	-0.030	-0.31	-0.037	-0.38	0.427	1.07
Retired	-0.191	-4.85	-0.190	-4.83	-0.166	-4.18	-0.273	-4.60
Housewife	-0.249	-3.90	-0.249	-3.90	-0.239	-3.73	-0.166	-1.60
Unemployed	-0.345	-8.16	-0.344	-8.12	-0.343	-8.07	-0.373	-5.82
Self employed	0.142	1.46	0.141	1.46	0.128	1.33	0.094	0.72
Health index	0.060	1.11	0.059	1.09	0.056	1.04	0.061	0.84
Log equiv income 95	0.242	18.11	0.243	18.12	0.224	15.69	0.230	11.55
Log equiv income 95, poor**	*	*	*	*	0.009	2.60	*	*
Log equiv income 95, rich**	*	*	*	*	0.018	4.36	*	*
Unexplained happiness, 95***	0.030	2.64	0.063	2.32	0.027	2.38	-0.002	-0.11
Unexp. happ., 95***, 2nd quint	*	*	-0.044	-1.14	*	*	*	*
Unexp. happ., 95***, 3rd quint	*	*	-0.036	-0.95	*	*	*	*
Unexp. happ., 95***, 4th quint	*	*	-0.063	-1.71	*	*	*	*
Unexp. happ., 95***, 5th quint	*	*	-0.023	-0.65	*	*	*	*
Fear of unemployment, 95	*	*	*	*	*	*	-0.014	-1.22
Family better off next year, 95	*	*	*	*	*	*	0.041	2.27
Economic ladder question, 95	*	*	*	*	*	*	0.027	2.17
constant	5.833	36.35	5.823	36.19	5.936	34.62	5.533	17.49
<i>number of observations</i>	4457		4457		4457		2296	
<i>adjusted R-squared</i>	0.134		0.133		0.152		0.126	

* omitted

** "poor" is defined as bottom 40% of the income distribution in 1995; "rich" is the top 20%

*** the residual of basic happiness 1995 regression

Regression a: no income quintile distinctions

Regression b: testing for a diff. in the effect of unexplained happ. on 2000 income, by '95 income quintile

Regression c: testing for a diff. in the effect of '95 income on 2000 income, by '95 income quintile

Regression d: testing the effect of happiness and other 1995 perceptions on 2000 income

Independent variables are from 2000 unless otherwise noted.

Source: Graham, Eggers, and Sukhtankar (forthcoming).