



DO TRENDS IN U.S. INEQUALITY MATTER FOR NORMS OF GLOBAL GOVERNANCE?

CONCEPTS AND EMPIRICS FOR DEBATE

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Abstract:

The United States has long been viewed as the “land of opportunity,” where those who work hard get ahead. Belief in this feature of American national identity has persisted even though inequality has been rising for decades. In recent years, the trend toward extremes of income and wealth has accelerated significantly, owing to demographic shifts, the skills bias of the economy and fiscal policy. From 1997 to 2007, the share of income accruing to the top 1 percent of U.S. households increased by 13.5 percentage points, which is equivalent to shifting \$1.1 trillion in total annual income to this group – more than the total income of the bottom 40 percent of households. The precise impact of inequality on individual well-being remains controversial, partly because of the complex nature of the metrics needed to gauge it accurately, but also because why it matters depends on what it signals. If inequality is perceived to be the result of just reward for individual effort, then it can be a constructive signal of future opportunities. However, if it is perceived to be the result of an unfair system that rewards a privileged few, inequality can undermine incentives to work hard and invest in the future. In this sense, current U.S. trends have been largely destructive. Economic mobility, for example, has declined in recent decades and is now lower than in many other industrialized countries. There is also a strong intergenerational income correlation (about 0.5) in the U.S.; children of parents who earn 50 percent more than the average are likely to earn 25 percent above the average of their generation. In a world in which individuals’ fates are increasingly linked and effective governance depends on some kind of consensus on social and distributive justice norms, growing income differentials in one country – especially one that has long served as a beacon of economic opportunity – can affect behavior elsewhere, both in terms of investments in education and the labor market and the propensity to protest. More generally, declining economic mobility in the U.S. could undermine confidence in the principles of market economies and democratic governance that America has espoused for decades – principles that are fundamental to many countries’ development strategies.

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CONTENTS

Introduction	1
Signals, Norms and Changes versus Levels.....	4
Trends in U.S. Inequality from a Comparative Perspective	5
Causes of Inequality Trends.....	7
Mobility Rates.....	9
Inequality and Happiness	12
Why the Signals Matter	12
Norms of Inequality: Adapting to Unpleasant Certainty	17
Changes versus Levels Effects.....	18
Conclusions and Implications for Norms of Global Governance	21
References	23
Endnotes	27

LIST OF TABLES

Table 1: Trends in the U.S. Gini Coefficient, Recent Decades	5
Table 2: Average versus Relative Wealth.....	15
Table 3: The Paradox of Unhappy Growth	19

LIST OF FIGURES

Figure 1: Happiness Gap in Honduras and Chile	14
Figure 2: Political Affiliation by Income Level	17

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INTRODUCTION

There is much debate in economics on the effects of inequality on individual well-being.¹ The lack of consensus on how inequality affects well-being may be due to concerns about relative differences (which economists worry about), to those about absolute differences (which lay people tend to worry about), to transitory changes in the distribution, to long-term differences in opportunities which are transmitted across generations, among other concerns.² The average citizen may not notice inequality at all unless there are significant changes in the distribution; these changes could just as easily be at the local community level, firm level, or the national level.

For example, of the many possible channels by which inequality can affect well-being, compare the U.S. on one hand, to Scandinavian countries such as Sweden, Norway and Denmark on the other. Average levels of well-being are slightly higher in the latter set of countries, while average per capita income is slightly higher in the U.S. Inequality could affect well-being in the U.S. simply because there are more people with lower levels of *absolute* income along with a small

number of individuals with incomes that are far above the average.³ This result would have nothing to do with relative income differences. Alternatively, people may be more bothered by *relative* income differences than they are by absolute differences, and may thus prefer a stagnant economy with greater levels of equality to a rapidly growing one in which there are larger income differentials. There is some evidence (reviewed in the third section of this paper) that these preferences vary across societies. Finally, both social and political institutions reflect those preferences and play a mediating role: people may be more tolerant of lower average levels of income in contexts wherein safety nets and social welfare benefits are more generous (as in Scandinavia versus in the U.S.).

Meanwhile, what inequality signals to people may differ across countries. In advanced economies, changes are often the result of long-term demographic shifts or of changes in reward structures due to skill-driven growth. In rapidly growing developing countries, some cohorts often benefit before others as their economies modernize and integrate into the larger global economy.

In addition to these conceptual complexities, the metrics that are utilized to measure inequality can make a big difference to the conclusions that are subsequently drawn.⁴ For example, conclusions about inequality trends across countries in recent decades depend a great deal on how we account for two very large, fast-growing countries: India and China. Weighting for population size accounts for the dramatic increases in incomes and reductions in poverty in these two countries and, as such, the worldwide distribution of income across countries is converging. However, without population weights and simply treating each country as a single observation regardless of its size, the worldwide distribution of income is diverging. This is due to a number of very small and very poor countries, primarily in sub-Saharan Africa, that are falling well behind the rest of the world.⁵

Within countries, very different conclusions can be drawn about inequality trends, depending on available data. Because the top of the income distribution is typically under-reported, measures of inequality based on household surveys tend to underestimate inequality. Data based on income tax returns are better at capturing trends at the top of the distribution, yet they lack information on the poorest individuals, who do not pay taxes, as well as on the assets of very wealthy individuals. In general, such data are not publicly available in many countries, nor are they always reliable. Another important problem for most countries, including the U.S., is that tax return data only include information on taxable income, thus excluding a great deal of both government transfer benefits (which are often untaxed) and private labor income (health benefits, pension contributions) and capital income (unrealized capital gains). As such, taxable income excludes the possibly important redistributive effects of the tax system itself. Trends for the same country can thus look quite different, depending on the source of data.

Countries also vary a great deal in terms of the generosity of transfer payments, and their metrics of inequality will look very different if these transfers are accounted for (or not). Finally, while most measured inequality is *vertical* - across individuals over an entire distribution, there are also *horizontal* inequalities, which are differences in outcomes across individuals within the same education or skill cohort as a result of divergent economic trends. Despite the focus of economists on vertical inequality, horizontal inequality may be what people notice most. (See Ravallion, 2004).

What inequality signals is even more difficult to assess. These signals are possibly more important to individual welfare than are measured trends. In some societies, inequality is a sign of reward for productivity and innovation - "constructive inequality." In others, it is a sign of persistent advantages for some groups and disadvantage for others - "destructive inequality". This latter variety creates disincentives for disadvantaged cohorts, who have low prospects of upward mobility, to save and invest in the future.⁶

Several decades ago, Hirschman and Rothschild (1973) wrote a seminal article about what inequality signals, in which they nicely described these two kinds of signals and their potential effects. They compared inequality in the development process to a traffic jam in a tunnel. When one lane of traffic begins to move, it initially gives those in the other lanes reason for hope - a signal that they may also soon move forward. Yet if only that first lane continues to move and the others stay stalled, then the drivers in the stalled lanes become frustrated and engage in dangerous behaviors such as jumping the median strip.

Scholars have begun to distinguish between (and measure) "unfair" and "acceptable" inequalities. The former are due to circumstances beyond an individual's

control, while those due to factors for which people can be held responsible, such as effort, are considered “fair”. (See Brunori, Ferreira, and Peragine, 2013). These categories capture, roughly, the difference between inequality of opportunities and inequality of outcomes. Behavioral economists have demonstrated that notions of fairness and justice affect individual choices, and find significant deviations from the behaviors predicted by models based on the assumption of purely self-interested preferences. (See Fehr and Schmidt, 1999).

Meanwhile, perceptions about inequality are not always in line with actual trends - in part because most metrics of inequality are fairly intractable for the average lay person, and in part because of the lack of distinction that is made between trends in relative versus absolute inequality. The U.S., for example, now has the highest level of inequality among OECD economies, with the exception of Mexico. And its mobility rates rank among the lowest in this group (at least among those countries for which we have good longitudinal data). However, these trends coexist with a persistent public perception of inequality as a reward for individual effort in a context of exceptional rates of income mobility. While that perception may have been shaken slightly by the 2009 financial crisis, as evidenced by the Occupy Wall Street movements at the time, there is no consistent evidence suggesting that there have been major changes in overall public attitudes toward inequality. (See Benabou and Ok, 2001; and Alesina, diTella, and MacCulloch, 2004). Latin America, by contrast, has historically had much lower rates of mobility than the U.S. Yet mobility rates in the region have increased over the past two decades while poverty has fallen markedly; even inequality has been reduced in several key Latin American countries. (See Lustig, Pessino and Scott, 2013).⁷ Still, the public maintains a

perception of inequality as a sign of persistent advantage for the wealthy and disadvantage for the poor in that region. (See Graham and Felton, 2006).

Since the financial crisis in the U.S., inequality has just begun to enter the public debate as a serious issue. However, even now, concerns (or the lack thereof) are very much divided along ideological lines. Some scholars highlight the corrosive effects of inequality in a range of areas, including concentration of political power, the increased prevalence of poverty, linkages to increased macroeconomic instability and increasing expenditure on “positional” goods.⁸ Critics continue to label concerns about inequality as politically driven and a masked attempt to increase taxes on the wealthy. Polarization on the issue is one of the many features of the divided political debate in the U.S.⁹

This paper will review U.S. inequality trends of the past few decades, compared to those in other OECD countries, and juxtapose those trends against the data on inequality and reported well-being for select countries around the world. The 2009 financial crisis was a very visible demonstration of how trends in the world’s largest economy can have vast spillover effects in an increasingly integrated global economy. It is plausible - although far from established - that the effects of inequality on individual well-being, on economic incentives, and on social and political coherence in the U.S. could have implications well beyond its borders. The author is not an expert in global governance questions. Rather, the aim of this paper is to identify the conceptual and empirical linkages between inequality, well-being and related phenomena which reflect norms of equity and social justice (such as attitudes about redistribution). Hopefully, it can serve as a basis for discussion of the possible implications for global governance by those who are.

Signals, Norms and Changes versus Levels

Three themes frame this discussion. The first of these is what inequality signals. If it signals opportunity in a society where the majority of citizens possess the agency and capabilities to take advantage of those opportunities, then it has very different effects on well-being than it would if it signaled persistent advantages for a privileged few and limited ones for the rest.¹⁰ The second and related theme is the extent to which norms and adaptation mediate the effects of inequality on well-being. My research finds that individuals who are accustomed to poor norms of health or high levels of crime and corruption tend to adapt their expectations downward, and therefore report lower well-being losses over time from those phenomena than do respondents with higher expectations. (See Graham, 2011). High and persistent levels of inequality seem to play out in much the same way.

The third theme is that of changes in inequality versus levels of inequality. While individuals seem to be able to adapt to unpleasant certainty, such as high levels of crime and corruption, they are much less able to adapt to change and uncertainty, even that which is associated with progress. (See Graham, Chattopadhyay, and Picon, 2010a). Eduardo Lora and I (in Graham and Lora, 2009) have found a “paradox of unhappy growth” where, when controlling for levels of GDP (which are positively associated with well-being), respondents in countries with higher rates of growth are, on average, less happy. This finding is driven by

rapidly growing middle income developing countries, where high rates of growth are typically associated with increasing inequality and uncertainty as rewards for skills change. Rather ironically, while people seem to be able to tolerate high and persistent levels of inequality when they are static, they are bothered more by changes in distribution even when those are associated with economic progress. This seems particularly important if people do not perceive that they are benefiting from that progress, as is the example of Hirschman’s tunnel.

In the context of the globalized world today, some of the most notable increases in inequality (both absolute increases as perceived by the average citizen, and relative increases as measured by economists) occur within the context of change and transition, even if the changes are associated with drops in extreme poverty. The major decrease in life satisfaction in the context of record levels of economic growth in China during the 1990s is a case in point. There were marked differences in gains within villages and between rural and urban areas at a time that poverty was falling at unprecedented rates. (See Easterlin et al., 2012). Meanwhile, the well-being effects of distributional changes in advanced developed economies like the U.S., which are driven by structural economic changes (such as technology and skill-driven growth) and gradual demographic change, may play out quite differently, not least because they are less noticeable to the public. Yet the latter may have more lasting effects on the distribution of opportunities in the long term.

TRENDS IN U.S. INEQUALITY FROM A COMPARATIVE PERSPECTIVE

There is no doubt that inequality in the U.S. has increased dramatically in recent decades, both over time and in comparison to other countries in the OECD. This holds regardless of what measure of inequality is used: pre- or post-tax income, Gini coefficient or income quintile shares, and/or growth in income across quintiles.

According to the Congressional Budget Office (CBO), which uses pre- and post- tax market income, the pre-tax Gini coefficient in the U.S. went from 0.48 in 1979 to 0.59 in 2007, while the post-tax Gini coefficient went from 0.37 to 0.47 in the same time period. Census data, which include some transfer income, report the Gini going from 0.40 in the 1970s to 0.47 in 2007. Burtless (2009), using after-tax income reported in the Census for his calculations and accounting for public transfers, both of which reduce inequality, finds that the U.S. Gini coefficient grew from 0.295 in 1979 to 0.34 in 2004, an increase of 20 percent.¹¹ Based on CBO data, the market income share of the top 1 percent of households doubled from 10 percent in the 1970s to over 20 percent in 2012, while the real household income of the bottom 10 percent grew by only 3.6 percent over the same time period. (See Dadush et al, 2012; and Table 1 for a summary of these measures.)¹²

Inequality measures typically move very little or not at all for long periods of time. Thus, these are remarkable trends by most countries' standards. They are almost comparable in magnitude to the remarkable increases in inequality in the former republics of the Soviet Union during the transition period, when the very equal (yet inefficient) centrally planned economies shifted to market principles, and Gini coefficients in those countries increased from an average of 0.26 in 1990 to 0.36 in 2008. (See Ortiz and Cubbins, 2011).

Inequality has increased in other countries as well - particularly in the U.K. and Australia - and in part for the same reasons (such as dispersion between the very top of the distribution and the rest, as well as aging populations). That said, trends in the U.S. are by far the most pronounced. Of all countries in the World Top Incomes Database, the U.S. has the highest shares for the top 1 percent, top 0.1 percent and top 0.01 percent of earners - only South Africa and Argentina come close to the U.S. (See Burtless, 2009; and Dadush et al., 2012). Inequality trends in the U.S. have displayed a U-shape curve since the booming 1920s, with inequality decreasing in the Depression and post-Depression years up until the 1970s, and starting to increase again thereafter. While inequality in the early years was driven by differences between the owners of capital and the rest of the population, in more recent decades it has primarily been due to differences between the wages of those at the top and the rest.

Table 1: Trends in the U.S. Gini Coefficient, Recent Decades

	1979	2007
CBO estimates (Pre-tax)	0.48	0.59
CBO estimates (Post-tax)	0.37	0.47
Census Bureau estimates (includes transfers)	0.40	0.47
Burtless estimates (Post-tax, includes transfers)	0.295	0.34*

Sources: Krueger (2012); Burtless (2009).

Note: * 2004 estimate.

The working rich have replaced rentiers at the top of the distribution. (See Piketty and Saez, 2003).

By contrast, in the past decade, several countries in Latin America, a region known for some of the highest and most persistent rates of inequality in the world, have managed to make some inroads into reducing them. Argentina, Brazil and Uruguay have led these trends, followed by Mexico and Peru. At least some (but not all) of these decreases are attributed to progressive social transfer programs, such as *PROGRESA* and *Oportunidades* in Mexico and *Bolsa Família* in

Brazil. (See Lustig, Pessino, and Scott, 2013). Even then, while household surveys show decreases in inequality, the rare studies that exist based on tax return data show a growing gap between the very top of the distribution and the rest of the population. In Chile, a new study finds that the bulk of the country's high levels of inequality is driven by differences between the top 1 percent - indeed, the top 0.1 percent and top 0.01 percent - and the rest of the distribution. In Colombia, the top 1 percent of the distribution accounts for 20 percent of total income.¹³

CAUSES OF INEQUALITY TRENDS

What explains these dramatic changes in the U.S.? Burtless, who has provided perhaps the most encompassing explanation for these trends, focuses on four related demographic explanations, while accepting that trade and skill-driven growth also plays a role. These explanations are: the aging of the population, the increase of single parent homes, assortative mating and migration.

As populations age, as in the U.S., and the percentage of people past the retirement age grows larger, an increasing number of adults depend solely on pensions and public transfers for support. Since pensions and public transfers are typically lower than pre-retirement wages, the annual incomes of many families are typically very small, pushing up inequality.

At the same time, other changes in the composition of the population have also had notable effects on inequality. A growing percentage of non-elderly adults and children live in single person-headed households, in which they are more likely to be poor than they would be in families headed by two adults.

Meanwhile, on the other side of the spectrum, rising female employment rates have coincided with a higher correlation between spousal earnings, as similarly educated and skilled individuals seem more likely to marry each other (assortative mating). At the top end of the income distribution, high earning individuals are more likely to have two income earners in one household, while there is a higher likelihood of single-headed households at the bottom of the distribution, driving up inequality. A number of studies agree that changes in family living arrangements and other demographic traits account for approximately one-quarter of the upward trend in U.S. inequality.

Finally, migration also pushes up inequality, as it increases the numbers of low-skilled, low-earning workers at the bottom end of income distribution. In 1970, less than 5 percent of the resident U.S. population was born abroad and recent immigrants earned 17 percent less than natives. By the end of the 1990s, 11 percent of the US population was born abroad and recent immigrants earned 34 percent less than natives. While these workers are typically earning markedly higher wages than they were in their home countries (and came to the U.S. voluntarily), they contribute to the demographic drivers of inequality. (These effects could be quite different in other countries where skilled immigration is the predominant trend).¹⁴

Of course, there are other significant factors in addition to demographic trends. Many economists highlight the role of skill-biased technological change over the past three decades, which drives up the wage gap between those with and those without a college education. (See Acemoglu and Autor, 2012; and Autor and Dorn, 2012). Recent research by Mishel, Scmitt, and Shierholz (2013) contends that the role of skill-driven technological change was more important in the 1970s and 1980s, while other factors have played a larger role since. One such factor is the proliferation of high salaries earned in the financial sector: in 2005, finance and real estate executives constituted one-quarter of the income in the top 0.1 percent of the distribution. (See Krueger, 2012). Globalization has also played a role, although it is difficult to measure it precisely. While some American workers have benefited from increased demand for goods and services produced domestically, others have been left behind as the products they once produced have been outsourced to those produced more cheaply and efficiently abroad, particularly as countries like China have rapidly adopted competing cutting-edge technology.

Based on a worldwide dataset that looks at mean wages across cohorts of workers, Galbraith (2012) highlights the role of financial deregulation, the information technology boom and the fiscal effects of the wars in Afghanistan and Iraq contributing to inequality trends in the U.S. (and to the roots of the 2008-2009 financial crisis). He notes that these factors all played a role in raising inequality - driven by a small number of people getting ahead of everyone else (often termed "top-driven inequality"). Similarly, Krueger (2012) notes that not since the Roaring Twenties has the share of income accruing to the very top of the distribution reached such high levels, with the share accruing to the top 1 percent of the distribution increasing by 13.5 percentage points from 1979 to 2007. This is the equivalent of shifting \$1.1 trillion of annual income to the top 1 percent of families. This increase in income at the top exceeds the total amount of income received by the bottom 40 percent of all households.

Krueger highlights another institutional factor. Union membership in the U.S. has declined from 20 percent of employees in 1983 to 12 percent today. In a perhaps not unrelated development, the real value of a minimum wage fell in the 1980s. Tax policy has also contributed. While nominally progressive, tax changes in the early 2000s benefited the very wealthy much more than other taxpayers - compounding the existing gap in pre-tax earnings. Tax rates for the wealthiest 0.1 percent of the population have been declining for the past five decades. Finally, in general, the U.S. income tax code is less progressive than that in most other OECD countries. Of all OECD member states, only Chile, Korea and Switzerland have tax codes that reduce inequality by less than that in the U.S.

MOBILITY RATES

An obvious question is whether or not these trends matter. If they are simply an increase in “constructive” inequality, rewarding productivity and innovation, then they should not cause concern. If they are, however, destructive, concentrating rewards and opportunities in the hands of a privileged few while creating disincentives for investments in education and labor markets for other cohorts (in other words, inequality of opportunities resulting in inequality of outcomes), then they should be of great concern. For the most part in recent years in the U.S., the latter has been the case. While the U.S. possessed exceptionally high mobility rates when compared to countries of comparable income levels for decades, a number of studies suggest that this is unfortunately no longer the case, in part due to recent trends in inequality.¹⁵ Still, the mobility story remains complex.

Krueger (2012), for example, cites recent work which finds that a worker’s initial position in the income distribution is highly predictive of how much he or she will earn later in their career. Additionally, men’s income mobility has fallen since the 1970s, while women’s has increased (largely due to changes in labor force attachments over the career). A new study by Auten, Gee, and Turner (2013) based on 1987 Statistics of Income (SOI) data and 2007 tax return data from the IRS Compliance Data Warehouse finds that there is still meaningful movement across income quintiles in the U.S. While those in the highest quintile in 1987 have the highest probability of remaining in the top quintile in 2007, there are individuals that start from the bottom or middle and move to the top (and vice-versa). 4.5 percent of those that started in the bottom quintile in 1987 moved to the top quintile, and some even reached the top 1 percent of the distribution. Similarly, nearly one-fourth of those in the top quintile moved down one quintile and 6.4 percent fell to the lowest quintile.¹⁶

Research on intergenerational income mobility is rare, as complete and comparable time series data for intergenerational mobility are available for only a handful of rich countries: the Scandinavian countries, the U.S., the U.K. and possibly Canada. The remaining OECD countries - including Germany, France, Italy, Spain and Japan - do not have good intergenerational income data covering long time periods. The better the income data in countries like the U.S., the higher is the estimated correlation of parent-child income. However comparisons between countries with poor data from, such as France, with countries with better data, such as the U.S. - could produce a spurious result. Indeed, the initial sociological studies from the 1970s that highlighted exceptional rates of mobility for the U.S. were not based on extensive cross-country data.¹⁷ Therefore, conclusions about trends in intergenerational mobility and comparisons across countries must be read with caution.

Long and Ferrie (2013) using longitudinal data for the 19th century in the U.S. and Britain, find that the U.S. indeed had more intergenerational mobility than Britain during this time. Yet, by the second half of the 20th century, that difference had disappeared and intergenerational mobility rates were essentially identical in the two countries. The gap was closed due to decreasing mobility rates in the U.S. rather than increasing mobility rates in Britain. The authors explain the “exceptional” 19th century period in U.S. mobility rates, to the extent that they can, in part attributing it to the high levels of residential mobility in the U.S. compared to Britain (and greater returns to internal migration in the U.S.). In the U.S., the 19th century was the height of population growth in urban areas, while that peak had already occurred in Britain. Another component of the story is the growth in the advantage of white-collar workers in the U.S. over time (and the increasing linkages between white-collar, high-skill jobs and access to high-quality education). In the

19th century, the son of a white-collar worker than of a farmer was 11 times more likely to also get a white-collar job rather than a farm job. By the 20th century, that advantage had grown nearly eight-fold.¹⁸

These data, meanwhile, do not capture mobility trends among migrant workers coming to the U.S. from other countries (or among their children). Yet, as noted by Burtless, the majority of migrants (and illegal migrants in particular) come into blue-collar rather than white-collar jobs. As a result, they tend to earn lower wages than natives. An exception is provided by the privileged few workers who are able to come to the U.S. on H1-B (high-skilled worker) visas.¹⁹ However, the latter group is not large enough to significantly alter these broader trends.

Accepting the limitations, the available data for the U.S. highlights a strong correlation between parents' and children's income – a correlation coefficient of around 0.50. The statistic on intergenerational income mobility, the Intergenerational Income Elasticity (IGE), puts the U.S. at approximately 0.40. As such, if someone's parents earned 100 percent more than the average (or double the average), their child can be expected to earn 40 percent above the average for their generation. Furthermore, parental income matters more in the U.S. than in the other countries for which we have data, challenging the traditional image of the U.S. as the land of opportunity. The IGE, meanwhile, is higher when income inequality is higher. In the U.S., the IGE is predicted to increase from 0.47 to 0.56 as a result of recent inequality trends. (Krueger, 2012).

The Economic Mobility Project, undertaken by the Pew Charitable Trust and the Brookings Institution, estimates that 40 percent of children born to parents in the bottom quintile of the distribution will remain there and 60 percent will move up (but not likely far above the bottom quintile). By contrast, a child

born into a family in the top 5 percent of the income distribution has a 22 percent chance of remaining in the top as an adult. One of the most important linkages to upward mobility in the U.S. is access to high-quality higher education which, in turn, is highly correlated with parental incomes. (See Isaacs, Sawhill, and Haskins, 2008; and Dadush et al., 2012). There are also large racial differences. White workers are 10 times more likely than African-American workers to make it into the top 25 percent of the income distribution.

Auten, Gee, and Turner (2013) discover modestly higher rates of mobility for a shorter and more defined period of time: 1987-2007. They find that 30 percent of dependents from families in the lowest quintile in 1987 were themselves in the lowest quintile relative to those of the same age in 2007. Approximately one-fifth rose to each of the next three quintiles, 11 percent rose to the top quintile, and some made it to the top 1 percent. Meanwhile, 41 percent of those from families in the top quintile were themselves in the top quintile in 2007 (again, relative to those of the same age in 2007), while 25 percent, 16 percent and 9 percent moved down one, two or three quintiles, respectively.

The World Bank's Index of Economic Opportunity (IEO) attempts to deepen our understanding of intergenerational mobility trends by unbundling inequality into two distinct components: that which people can control and is the result of differential skills and efforts, and that which is associated with circumstances that people do not control, such as their race, gender, place of birth or family background. Populations are divided into various sub-groups, each of which is homogenous in terms of predetermined circumstances (called "types"). In a world of equal opportunities, there would be no differences between income distributions characterizing each of these subgroups.

The IEO accounts for the share of overall inequality that stems from inequality between the mean incomes of those sub-groups (types). It has been computed for a number of countries, with the most equal being Norway (2 percent) and the least equal being Guatemala (34 percent). The U.S. falls somewhere in the middle of the distribution: above Spain, India, Great Britain, Brazil and Peru; but well below Norway, Poland, Hungary and Italy, to name a few. (See Ferreira, 2013; and Brunori, Ferreira, and Peragine, 2013).

Despite these trends, public perceptions of inequality in the U.S. have not changed significantly, although there are some modest signs of change that I discuss below. That may be, in part, due to strongly held beliefs in the value of individual effort. Indeed, beginning

with de Tocqueville, America was seen as the land of opportunity. It may also be because millions of immigrants still come to the U.S. seeking and finding opportunities that they do not have at home. Finally, it may be partly due to the highly visible, successful (and often generous) individuals such as Bill Gates, Warren Buffet and Michael Bloomberg, among others, who remain iconoclasts in U.S. society.

As a result, inequality is still, to some extent, a signal of successful individual effort, at least in the U.S. Yet for increasing numbers of Americans, it is a disincentive to making investments in a future that is strongly determined by their starting point in the income distribution. As the next section of the paper shows, what inequality signals is also an important mediating force in its effects on individual well-being.

INEQUALITY AND HAPPINESS²⁰

Why the Signals Matter

The relationship between inequality and well-being is mediated by what the former signals. In a well-known theoretical work, Benabou and Ok (2001) highlight the importance of individual attitudes about upward mobility in the U.S. They posit that, because of the long-held public perception of inequality as a sign of future mobility, voters will not vote for redistribution because they do not want to tax themselves or their children in the future. Additionally, because of these beliefs, the majority of voters think that they will have above mean income in the future, even though such an occurrence would be a mathematical impossibility.

Empirical data on well-being and inequality bear out this hypothesis (with the caveat that the data are for the years prior to the 2009 crisis; we do not yet have comprehensive data on inequality attitudes for the post-crisis period). Alesina, diTella and MacCulloch (2004) examine the relationship between inequality (relative inequality, as measured by the Gini coefficient) and happiness in the U.S. and Europe. They find that inequality has a modest negative effect on happiness in Europe, with the effects being the strongest for the poor. In the U.S., by contrast, the only group made unhappy by inequality is left-leaning rich people! In another exercise, Graham and Young (2003) looked at attitudes about redistribution and inequality at the time of the Bush Administration tax cuts in 2002-2003 and were surprised to see that polls showed that, while only one-half of the top 1 percent of Americans in the income distribution actually benefited from the tax cuts, 19 percent of Americans thought they would benefit from the proposed cuts.

These attitudes seem to have persisted throughout several decades when inequality in the U.S. increased

markedly. This persistence is a sign of hysteresis in public attitudes which may be, in part, driven by adaptation over time to high rates of inequality. The same levels of inequality would likely be intolerable in societies accustomed to more equality, such as the Scandinavian countries and much of Europe.

More recently Deaton and Stone (2013) finds a more nuanced picture. They use ZIP code data and the Gallup Healthways data for the U.S. and look at well-being within its two distinct dimensions: evaluative, which includes how individuals compare their lives to the best possible life (a relative component), and hedonic well-being, which assesses how people are experiencing their lives at the moment (see footnote 2 for additional details). They find that both individual-level income and average ZIP code-level income are positively correlated with evaluative well-being. In other words, controlling for individual levels of income, there is a positive effect of living in a place where average income levels are higher and, therefore, so are the differences between at least half of all individuals and the average. This makes sense if living with wealthier people provides better public goods and other externalities that enhance well-being over the long term. By contrast, hedonic well-being, as measured by happiness yesterday, is either negatively correlated or insignificant with average zip code-level incomes, and the coefficient on individual-level income is an order of magnitude smaller. Thus, hedonic well-being is less affected by income in general, and possibly negatively affected by higher income differentials.

Deaton and Stone find a similar pattern across the world based on Gallup World Poll data. The evaluative best possible life measure is consistently correlated with both individual and average (per capita income by country) incomes. By contrast, experiencing happiness yesterday is insignificantly correlated with

average levels of income across countries and the importance of individual income is, again, an order of magnitude smaller within countries. Deaton and Stone posit that transitory income changes, which are better captured by differences between one's income at the moment and that of one's peers or neighbors, may matter more to daily experience and assessments of life at the moment, while permanent income, which plays a more important role in determining welfare (and the availability of opportunities) over the entire life cycle matters more as individuals assess their lives as a whole. Indeed, Deaton's earlier work (Deaton, 2011) suggests that much of what studies of well-being pick up as negative effects of relative income is simply an over-time effect of people adapting to higher levels of income and expecting more income, as well as comparing themselves to others who have also gained (e.g., the transitory income component).

A related and plausible explanation is that, because the best possible life question is more framed and poses life satisfaction in a relative sense, it heightens the importance of income (and related status) for respondents. Experience of happiness in the previous day is a much more open measure and captures the influence of a range of unobserved experiences and values that could influence responses. In more technical terms, happy yesterday likely picks up more unobserved "noise" in the data (and people's lives and experiences), which may or may not be related to income. Indeed, in earlier research based on Gallup World Poll data for Latin America, we also found that income correlated much more closely with best possible life (both within and across countries) than did any of the experience-based measures of well-being. (See Graham, Chattopadhyay, and Picon, 2010b).

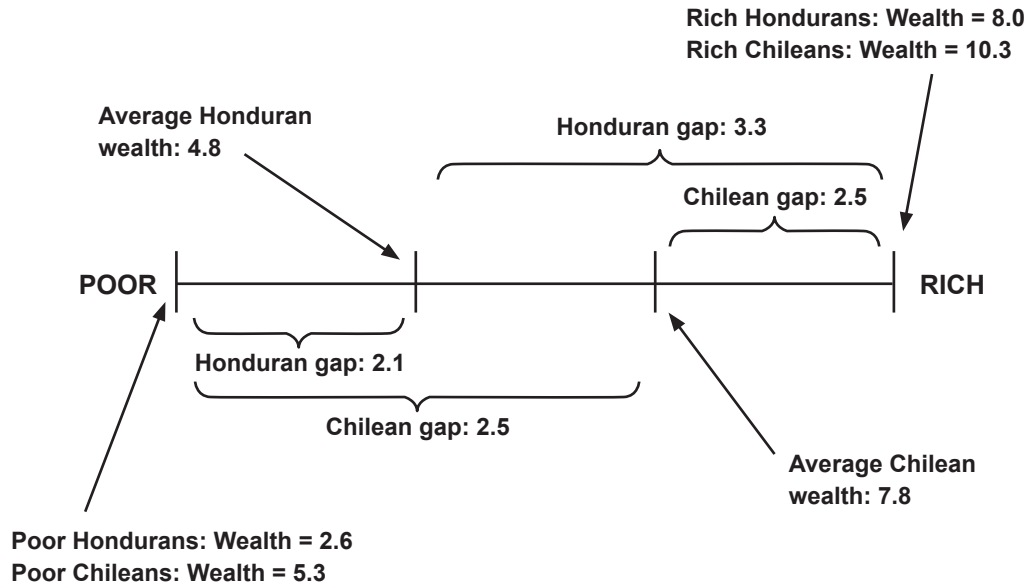
In Latin America, poverty and inequality rates have decreased in recent years and, to the extent that we have data, there are signs that mobility rates have

increased. Here too public perceptions here have not caught up. (See Lopez-Calva and Lustig, 2010). Andrew Felton and I (Graham and Felton, 2006) looked at the relationship between inequality and happiness in Latin America, based on a large, region-wide data set, the *Latinobarómetro*.²¹ In contrast with the findings for the U.S., we find that inequality (defined as each respondent's distance from average income for their country, controlling for average per capita income in each country) has strong negative effects for the happiness of the poor and positive effects for the happiness of the rich [Table 2]. Meanwhile, average per capita income has no significant effect on happiness. Thus, at least in the Latin American context, relative income differences had far more important effects on reported happiness than did absolute income levels.

Figure 1 provides an illustration of the results, via a comparison of Honduras and Chile. Even though average per capita income is almost twice as high in Chile as it is in Honduras, it does not have significant difference in happiness between countries. Instead, because the average Chilean poor respondent has a larger gap between his or her personal income and mean income than the average poor Honduran, the latter is happier than the former! This is likely a result of narrower income differentials, although some may also result from lower aspirations in Honduras. While anecdotal, it is perhaps not coincidental that some of the most significant public protests in the region have been in big cities in the wealthiest countries, which also have high levels of inequality, including student protests in Chile in 2011 and more general public protests in Brazil in 2013.

We also looked at respondents in different sized cities (small, or less than 5,000 inhabitants; medium, from 10,000 to 100,000 inhabitants; and large, of over 100,000 respondents) to see if our results varied

Figure 1: Happiness Gap in Honduras and Chile



$$\text{Happiness Gap} = \text{Wealth gap} * \text{Coefficient} / 4$$

Calculated Happiness Gap

	Poor	Rich
Chile wealth gap	-2.489	2.521
Honduras wealth gap	2.74	3.15
Chile-Honduras difference	2.77	3.17
Difference*Coefficient/4 =Honduran happiness differential	2.94	3.13

Wealth quintile	Mean Happiness (1-5 scale)			Mean Wealth (1-11 scale)		
	Chile	Honduras	Overall	Chile	Honduras	Overall
1	2.54	3.11	2.73	5.26	2.64	3.12
2	2.74	3.15	2.85	7.00	4.00	5.00
3	2.77	3.17	2.91	8.00	5.00	6.00
4	2.94	3.13	2.97	9.00	6.00	7.46
5	3.08	3.30	3.08	10.27	8.04	9.63
Total	2.79	3.17	2.88	7.76	4.78	5.81

Source: Graham and Felton (2006).

when we used different reference groups. We found, indeed, that the unhappiness effects of inequality were greater in larger cities, as one would expect, as both wealth differences and aspirations are greater. In addition, we found that the only context where average incomes were positively related to well-being was that of small cities [Table 2]. One can imagine that in smaller places, where people are more connected with one another and poverty is still a widespread concern, that higher levels of average incomes may have positive signaling and spillover effects which counter the usual comparison effects. However, the effects of relative income differences were still negative for those below mean income in the small cities.

In Latin America, inequality still seems to signal persistent disadvantage for the poor and persistent advantage for the rich, in sharp contrast with the U.S. In each case, the empirical trends do not support the public perception, again suggesting hysteresis in public attitude. One reason for the misalignment between perceptions and actual trends in both contexts is the complex nature of most income inequality data, which makes it quite difficult for the average citizen to discern. It is hard to imagine that the average person on the street will find a meaningful difference between a Gini coefficient of 0.43 and 0.47, for example. He or she is much more likely to notice if the neighbors build a much bigger house, as they might have in the pre-

Table 2: Average versus Relative Wealth						
	Average wealth of individual calculated by					
	Country	Country	Country and city size	Country and city size	Country and city size	Country and city size
Individual wealth	0.112** (5.44)		0.112** (6.90)		0.097** (7.96)	
Average wealth	-0.052 (-0.70)	0.059 (0.78)	0.054 (0.92)	0.058 (0.99)	-0.081* (-2.19)	0.016 (0.42)
Relative wealth		0.112** (5.44)		0.112** (6.90)		0.097** (7.96)
Country dummy variables^(a)	No	No	No	No	Yes	Yes
City size dummy variables^(b)	Yes	Yes	Yes	Yes	Yes	Yes
Regression clustered by country	Yes	Yes	Yes	Yes	Yes	Yes
Regression clustered by city size	No	No	Yes	Yes	Yes	Yes

Notes:

(a) When calculating average wealth at the country level, country dummies cannot be included in the regression due to multicollinearity. When we run split sample regressions, by city size, average wealth is positive and significant for small cities.

(b) Small city is the control group.

(c) t-statistics underneath coefficients in parentheses

(d) ** denote statistical significance at 5 percent level; * denotes statistical significance at 10 percent level.

(e) Demographic variables in all regressions: age, age squared, years of education, marital status (married versus the rest), gender, health, employment status (with dummy variables for unemployed, self-employed, retired and student)

Source: Graham and Felton (2006).

crisis boom, and/or lose their house to foreclosure, as they might have in the post-crisis period.

These findings resonate with recent research by Clark and Senik (2013) in China. They find that average village income is positively correlated with financial satisfaction in general, but being in a low rank in the distribution within the same village is negatively correlated. Knight and Gunatilaka (2013) find that rural respondents in China typically compare their current financial situation to that of their own household in the past year, while urban respondents compare their situation with the average for their city or large village. Recent migrants, meanwhile, are the respondents who are most bothered by inequality, likely because they have just become aware of how much lower their incomes are in comparison with the average person in their new cities. (See also Kingdon, and Knight, 2007).

Cojocar (2012), based on a comparison of Western and Eastern Europe and using the EBRD's Life in Transition survey, tests the signaling hypothesis explicitly. He compares respondents based on their past mobility trends and on their attitudes towards fairness of income distribution. He finds that respondents with a recent trajectory of upward mobility are less likely to support redistribution, as are those who believe that success is a result of hard work (rather than due to luck and connections). Cojocar also tests the mediating effects of different reference norms. He finds that, with a reference norm that is imposed by the researcher (in this case, distance from the Census Enumeration Area mean income), inequality in that area has inconsistent effects on reported well-being. By contrast, with a self-assessed reference group - the respondents' reported position on a notional societal economic ladder - inequality has a strong and significant correlation with well-being. The Economic

Ladder Question asks respondents to rank their position in society compared to the rich (at the top) and the poor (on the bottom).²² In this instance, the signals that inequality sends, as well as the particular reference group that is used, seem to be important mediating channels for its effects on well-being.

Cojocar's findings are analogous, in a way, to trends seen amongst Democrats and Republicans in the U.S. Democrats have traditionally perceived outcomes to be more a result of a systemic bias rather than personal effort, and are more likely to be concerned about injustice, while Republicans are more likely to believe that outcomes are a result of personal effort in the labor market. Not surprisingly, Democrats are both less happy about inequality and less happy in general than are Republicans. (See Graham, Chattopadhyay, and Picon, 2010a). However, as with many other trends since the 2009 financial crisis, for which data are still incomplete, there are signs of change. A 2012 Pew Center poll reports that, while low income earners in the U.S. are more likely to consider themselves Democrats (34 percent) than Republicans (16 percent), the percentage of high earners who affiliate with either party is the same (31 percent) - a declining trend for Republicans in the past decade. The percentage of respondents who report to be independents has increased in the same time period (reaching 38 percent in 2012)²³ [see Figure 2]. While we cannot attribute these trends to inequality, they are, nevertheless, suggestive of some signs of shifts in support for these polarized perspectives.

Relative income differences also seem to affect job satisfaction. A recent study based on panel data from Australia finds significant effects of relative income differences on job satisfaction, but these effects are asymmetric. While the richer individuals who earn incomes above those of their reference group have

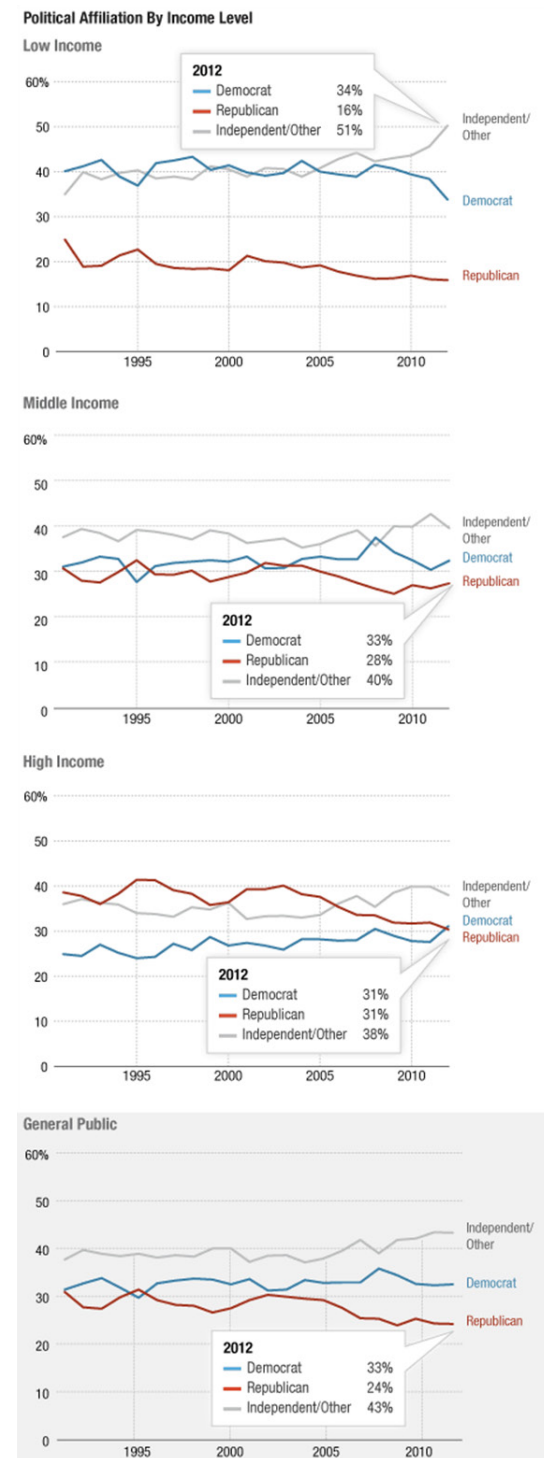
some gains in job satisfaction, the losses in job satisfaction for those who earn below their reference group incomes are much greater. (See Kifle, 2013). It is plausible that those earning incomes below those of their reference group perceive unfairness in compensation, while those earning above reference group incomes attribute their success to their own efforts. While the authors do not test this interpretation directly, validation would provide yet another example of how signals mediate the effects of inequality on well-being.

Norms of Inequality: Adapting to Unpleasant Certainty

Adaptation may also play a mediating role. People seem to be able to adapt much better to unpleasant certainty than to uncertainty, even to that which is associated with progress. We find, for example, that during the economic crisis in the U.S., there were very large and negative effects on well-being at the time of the free-fall in the markets. National average happiness (in this case, evaluative well-being, as measured by the best possible life question) fell by 11 percent in six months. Given that average national happiness levels in the U.S. were flat for over three decades of strong growth performance, this is an impressive drop. Equally remarkable, though, was that as soon as the markets established some semblance of stability in March 2009, average happiness levels recovered to and surpassed their pre-crisis levels, even though the same respondents reported to have less income than they had before the crisis. (See Graham, Chattopadhyay, and Picon, 2010; and Deaton, 2011).²⁴

An analogous phenomenon occurs at times of rapid economic growth. Stefano Pettinato and I (Graham and Pettinato, 2002) examined life satisfaction across respondents in Peru and Russia, some of whom were

Figure 2: Political Affiliation by Income Level



Source: Pew Research Center for the People & the Press

upwardly mobile and some of whom were not. We found, rather remarkably, that over half of those respondents with upward mobility (who were more likely to be urban) had lower levels of life satisfaction than poorer respondents with no mobility. We explained the difference between these “happy peasants and frustrated achievers” based on the higher expectations of the latter, as well as the precarious and uncertain context in which they made their gains. We also found that the frustrated achievers were more concerned about inequality than were the non-frustrated respondents. While it may well be that less happy people are more likely to be unhappy with any gains that they make, as well as more concerned about inequality and unfairness, it is also likely that changing norms and expectations along with increased awareness of how even wealthier urban respondents live, drive some of the frustration. We tested the reference norms that each group used as a comparator and found that the frustrated achievers were more likely to compare themselves to others in their country, while the non-frustrated rural respondents were more likely to compare themselves to others in their community.

Norms and expectations mediate the adaptation phenomenon. Respondents in Guatemala are more satisfied with their health than those in Chile, even though objective conditions in the former are at roughly sub-Saharan African standards, while those in Chile are at the top of OECD standards. Yet respondents in Guatemala have different norms of what defines good health which, in turn, colors their expectations. Respondents in Kenya, meanwhile, report to be just as satisfied with their health as those in the U.S. which, again, makes no sense if based on objective conditions rather than a consideration of differences in norms and expectations.

Gradual changes in aggregate distributive trends are not easily perceived by the public, at least in stable economic times. In the same way that people seem to be able to adapt to poor norms of health or to stable (if unpleasant) situations of poverty, they seem to also be able to adapt to persistent (if unfair) distributions. Latin America is a case in point. Even if remarkably high and persistent levels of inequality have had negative effects on individual well-being over time in the region, they have rarely resulted in concerted public action for change.

By contrast, changes in individual positions in the distribution, as well as increased awareness of existing differences related to those changes, seem to have more direct effects on perceptions and welfare. Furthermore, highly visible examples of distributive injustice - such as the exposure of corruption in the privatization process or, as in the case of the recent U.S. financial crisis, in the causes and consequences of financial sector management - seem to spark more public reaction or discontent. The widespread protests in cities around the world following the crisis - from Occupy Wall Street to the London riots to the protests in Greece, Turkey and Brazil, among others - are good examples. So, too, were the public protests surrounding visibly botched and unequally shared gains of particular privatizations, such as in Argentina and Bolivia in the 1990s. (See Graham, 1998).

Changes versus Levels Effects

A related issue is that of changes versus levels in the development process. While, on average, people are happier when they have higher levels of income and in contexts with higher levels of GDP per capita, the process of change associated with achieving higher

levels of prosperity - e.g., the process of acquiring agency - seems to be an unhappy one. In addition to the individual-level "happy peasants and frustrated achievers" phenomenon, there is also "the paradox of unhappy growth" (discussed above), in which, when controlling for average levels of GDP per capita, which have a positive correlation with reported life satisfaction, higher rates of growth are negatively correlated with life satisfaction [Table 3].

Of course, it could also be that respondents in fast-growing but poorer countries were already less happy at the beginning, precisely because of those lower income levels, and that our results are simply capturing those relatively lower levels of well-being when we compare them to wealthier, happier countries in the

cross-section in the second period. However, when we split the sample into countries above and below the median income level for the sample, and above and below median growth rates, we find that the results are driven by fast-growing middle income countries, rather than by the poorest countries. If one considers the changes taking place in countries like China, Brazil and Korea, the findings may be less of a paradox. While levels of well-being are indeed improving as a result of growth over time, the initial stages of rapid growth are often accompanied by uncertainty, changing rewards for different skill sets, increases in inequality and (possibly) new opportunities for corruption, all of which seem to drive unhappiness. The public protests in fast-growing Chile and Brazil in recent years come to mind.

Table 3: The Paradox of Unhappy Growth		
	OLS regressions ^(a)	
	GDP per capita ^(b)	GDP growth ^(c)
Life satisfaction ^(d)	0.788***	-0.082***
Standard of living ^(e)	0.108***	-0.018***
Health satisfaction ^(e)	0.017*	-0.017*
Job satisfaction ^(e)	0.077***	-0.006
Housing satisfaction ^(e)	0.084***	-0.006

Source: IADB-RES using Gallup World Poll, 2007 and reproduced from Graham and Lora (2009).

Notes:

- (a) OLS regressions on 122 country averages: Dependent variable is average life satisfaction per country.
- (b) GDP per capita: The coefficients are the marginal effects: "How much does the satisfaction of two countries differ if one has two times the income of the other?"
- (c) GDP growth: "How much does an additional percentage point of growth affect satisfaction?" GDP growth rates are averaged over the past five years.
- (d) Life satisfaction is on a 0-10 scale
- (e) All other satisfaction variables are percent of people that are satisfied.
- (f) Asterisks denote level of statistical significance: *=10 percent, **=5 percent, ***=1 percent

When sample is split between those above and below median income and growth rates, the effect holds for those above but not below median incomes.

New Easterlin/PNAS work argues that time frame issues matter a lot when looking at effects of growth on well-being.

Graham and Chattopadhyay find similar effects for Latin America, based on individual data rather than on country averages.

Knight and Gunatilaka (2013) describe how such trends are undermining happiness and the benefits of growth in China, and are now the focus of government concern. Mean happiness levels are higher in rural areas even though urban income levels are three times as those seen in rural areas. They attribute these results to the insecurity that urban migrants live with (and the loss of rural community support mechanisms), to their higher aspirations and to changing reference norms. The U-shape in well-being that Easterlin et al. (2012) find in life satisfaction over time in China fits this explanation. They find that average well-being levels fell in China during the initial stages of growth in the 1990s, and then increased after 2000 (with the exact year depending on the source of the survey data). The stark unhappiness revealed among urban migrants in China, noted above by Clark and Senik (2013), fits in with this story.

We recently attempted to test whether change produces unhappiness or whether unhappiness is necessary to produce change. For most places in which migrants are compared to non-migrants in their place of destination, migrants are less happy than non-migrants. Yet it is not clear whether the act of migration itself produced the unhappiness, due to changing reference norms and loss of safety nets, or whether unhappiness produced the decision to migrate. These are, of course, not exclusive scenarios.

In two separate papers, Chindarkar (2012), Markowitz and I (Graham and Markowitz, 2012) explored data from Latin America on intent to migrate. We found a significant "frustrated achievers effect." Those who intend to migrate from the region are, on average, wealthier and more educated than the average. At the same time, they are less happy and more critical of their economic situation when compared to the

past and when compared to others (i.e., they are more concerned about relative income differences). Thus, in this instance, it seems that unhappiness (and concerns about relative status) seem to drive migration, and may at least in part explain the unhappiness of migrants at their destination point when compared to non-migrants. In a later and still preliminary exercise, we created a pseudo-panel of recent migrants in the U.S., based on the New Immigrant Survey, and matched them with our cohort in Latin America that indicated an intent to migrate. We found that recent migrants are slightly less happy than non-migrants in the U.S., but the mean happiness levels of the U.S. migrants (after a few years in the U.S.) are higher than those of the respondents that reported an intent to migrate *ex ante*. While far from a perfect exercise, this suggests that unhappiness and concerns for relative income differences may drive change, rather than change simply resulting in unhappiness.

Over time, however, there is a clear positive relationship between well-being and the higher levels of prosperity (and available opportunities) that those changes are intended to achieve. What is less understood is whether the concerns about rank, along with other relative income differences that underlie migration decisions and other attempts to seek new opportunities and prosperity, also dissipate. There is evidence - as in the case of Democrats versus Republicans in the U.S. - suggesting that some cohorts are more inclined to be concerned about inequality and injustice, regardless of the context, and that these attitudes persist. At the same time, the immigration evidence suggests that some of these concerns - or at least the welfare effects of income differentials - may dissipate as conditions stabilize and/or respondents adapt to the differences.

CONCLUSIONS AND IMPLICATIONS FOR NORMS OF GLOBAL GOVERNANCE

It is not surprising that the relationship between well-being and inequality is complex, given the measurement challenges and the many different channels simultaneously at play. Despite these complexities, distributive justice and income differentials are phenomena that many people care deeply about and which, in turn, influence behavioral outcomes, such as investments in future education and the labor market, and the propensity to protest and revolt. Despite our inability to draw definitive causal conclusions due to data constraints, the recent trends in inequality – in the U.S. and beyond – that have been identified by a wide range of scholars are worthy of attention. The data that we have suggest that attitudes about inequality are deeply divided across ideological lines in the U.S., with a large part of society still maintaining the belief in the U.S. as the land of opportunity, regardless of the empirical trends.

It is difficult to imagine that these trends are not relevant to a global community in which the fates of individuals in different countries are increasingly linked, and whose governance entails some degree of consensus on norms of social and distributive justice. Yet the significance of these complex inequality trends for global governance remains a topic for discussion rather than for empirical conclusion.

This paper highlights the various ways in which inequality and well-being relate and how, in turn, they can erode the generally positive relationship between well-being and income. The results that I review here suggest that people care about both relative and absolute differences, and also provide striking evidence of how concerns about these differences are heightened by the process of development and change.

The higher levels of prosperity that the development process seeks to achieve are indisputably associated with higher levels of well-being. However, the process of change, and the necessary search for agency that accompanies it, is not necessarily a happy one, due to both the uncertainty and the distributional changes that typically accompany it.

What is less clear is how changes in inequality in a much more stable, developed economy such as the U.S. affect well-being. In such countries, for the most part, inequality changes signal the stagnation of opportunities for many and disproportionate gains for a few (migrants likely exempted), rather than more general economic progress. Although they are less noticeable to the public than the changes in rapidly-growing developing countries, they may have effects on well-being and social and political coherence over the longer run. We do not yet have comprehensive data on well-being and inequality in the post-crisis period in the U.S. Yet anecdotal evidence suggests divided public attitudes, with increasing concerns about inequality among some cohorts and a continued lack of concern among others.

The U.S. traditionally has been a beacon of mobility and opportunity for its own citizens and for migrants and potential migrants from around the world. The increasingly visible erosion of that image could erode confidence in the strongly held principles of market economies and democratic governance that the U.S. has attempted to uphold in the international community for decades (although not always successfully). Stiglitz (2012) recently warned about the erosion of America's "soft" power: "The extent to which the global economy and polity can be shaped in accord with our values and interests will depend, to a large extent, on how well our economic and political system is performing for most citizens."²⁵ There is increas-

ing evidence, much of which is reviewed in this paper, that the system performs much better for wealthier citizens than for poorer ones. Those same principles of markets and democracy are fundamental to the development strategies of many developing countries, where inequality is also increasing and is linked to significant declines in well-being.

An increasingly prevalent theme in the international development debates is “universalism.” Universalism highlights the extent to which challenges such as poverty, vulnerability, jobless growth and political stagnation (to name a few) are shared by countries with both developed and developing economies. (See Melamed, 2013). Furthermore, at the same time that many major economies in the OECD are suffering from divided government, unprecedented levels of unemployment and unsustainable social insurance systems, the social welfare and social insurance policies pioneered by developing countries such as Mexico and Chile, ranging from cash transfer schemes to national identity cards for welfare benefits, are now highlighted as generic examples of effective policy innovation that can be adopted by countries of all development levels.

These trends highlight the extent to which the world is becoming a “smaller” place, in which the collective good—ranging from global public goods to the state of the world economy to the fate of citizens within countries around the world—is increasingly relevant. While attitudes about distributive justice and trends in inequality and opportunity will surely differ across national borders, overall consensus on many collective issues will be difficult to obtain without some degree of consensus on the underlying norms of what is acceptable and desirable for just societies.

The way in which the world’s traditional beacon of equal opportunity manages a visible decline from that position will likely influence whatever consensus is reached across international borders. It is less evident that America’s deeply divided polity will find the consensus necessary to address the issues of inequality and opportunity in a relevant time frame. While it is difficult to precisely identify the effects of this decline, it seems unrealistic to presume that it will go unnoticed in a world where markets, politics and information flows are so closely connected.

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ENDNOTES

1. "Well-being" is defined here as the income and non-income determinants of human welfare. An entire new branch of the social sciences is dedicated to measuring and better understanding the causes and causal properties of well-being. There is fairly wide consensus that well-being has two distinct dimensions. The first is *hedonic* or *experienced well-being*, which pertains to the quality and nature of people's daily living experiences, and is typically measured in two discrete dimensions: positive experiences, as assessed by the frequency of smiling or absence of sadness, and negative experiences, such as worry and stress. The second dimension is *evaluative well-being*, which captures how people think of and assess their lives as a whole; this dimension implicitly includes *eudemonic well-being*, which is the purpose or meaning in people's lives. Evaluative well-being is typically measured via questions about life satisfaction, or comparisons between the respondent's life and the best possible life they can imagine. The focus in this paper is on the second (evaluative) dimension of well-being. For more details, see Graham (2011).
2. On absolute versus relative differences, compare two individuals who earn \$100 per month and \$1,000 per month respectively. If their incomes double to \$200 and \$2,000 per month respectively, economists would say that there was no change in (relative) inequality, as the former still earns one-tenth of the latter's income. However, most people would notice that the absolute difference between their earnings had increased from \$900 to \$1,800 per month.
3. Thus, even if average per capita income is higher in the U.S. than in Sweden, there are more people with lower absolute incomes in the U.S., precisely because inequality is higher and the distance between mean and median incomes is larger.
4. See, among others, Milanovic (2005), Milanovic (2010), Burtless (2009), Piketty and Saez (2003), Birdsall, Ross, and Sabot (1995), Birdsall, Graham, and Sabot (1998) and Alesina, di Tella, and MacCulloch (2004).
5. See Milanovic (2005). While several countries in sub-Saharan Africa had very good economic performance during 2000-2012, there are still a sufficient number of failing states and/or stagnant economies which, when given equal weight compared to China or India, for example, drive the dispersion in the worldwide distribution.
6. For a fuller discussion of these concepts, see Birdsall and Graham (1999).
7. Still, as in the case of the U.S., the rare and recent studies based on tax data for Latin America (in Chile and Colombia) find persistent top-driven inequality (between the top 1 percent and the rest of the distribution). For Colombia, see Alvaredo, and Londoño Vélez (2013) and for Chile, see López, R.E., Figueroa, and Gutiérrez (2013).
8. While the evidence on macroeconomic instability and inequality is rather new and arguably controversial, there is much work on the micro-level effects of inequality on worker morale and productivity, and on individual decisions about savings and investing in the future. See Dadush et al. (2012), Krueger (2012), Birdsall, Ross, and Sabot (1995); and Frank (2011). The evidence on the effects of inequality on political representation, meanwhile, is more mixed. A recent study of how well constituent interests are represented, based on data from ballot propositions in California, found that, rather than richer voters being better represented, as is often claimed, representation by income varies by legislator party. Republican legislators more often vote the will of their higher income constituents over those of lower income ones, with Democrats generally doing the reverse. See Brunner, Ross, and Washington (2013).

9. For example, the same Gallup 2011 poll reported that the percentage of Americans who feel that "there is not much opportunity" has increased from 17 percent in 1998 to 41 percent in 2011 and, at the same time, reported that just 1 percent of respondents said that inequality was America's most important problem, ranking well below issues such as "respecting each other" and "foreign aid." The first result is reported in Dadush et al. (2012), and the second in Winship (2013).
10. "Agency" suggests a person's capacity to pursue a fulfilling life and the opportunity to exercise choice (Graham, 2011). For a discussion of the links between agency and capabilities and more general well-being, see Graham and Nikolova (2013).
11. One reason for the discrepancy between the two figures is that CBO has access to both Census and IRS data. Census data under-report incomes at the top, while IRS data under-report incomes at the bottom (as non-tax payers are excluded). I thank Gary Burtless for this clarification.
12. Not surprisingly, studies based on consumption metrics rather than incomes find smaller increases in inequality, although the time trend lines are roughly similar. See Fisher, Johnson, and Smeeding (2013).
13. For Colombia, see Alvaredo, and Londoño Vélez (2013) and for Chile, see López, Figueroa, and Gutiérrez (2013).
14. See Burtless (2009) for details and a summary of studies that support these explanations.
15. See Isaacs, Sawhill, and Haskins (2008); Sawhill and Morton (2007); Kopczuk, Saez, and Song (2007) and Congressional Budget Office (2011) for data and analysis of recent trends in income mobility rates in the U.S.
16. The authors warn about the effects of attrition, which is highest in the lowest quintile where the probability of dying during the time period was higher.
17. I thank Gary Burtless for raising this point. For a more recent review, see Corak (2006).
18. Some of these changes were driven by differences in levels of economic development in the U.S. and Britain in the 19th century; while the flight out of agriculture was complete by then in Britain, it was not in the U.S. Thus, in the U.S. in the 19th century, the farm sector was relatively larger, and selective exit from farming was less apparent in Britain than it was in the U.S. Another possible factor in the 19th century U.S. was the existence of a public alternative to private education.
19. For detailed trends on H1-B visa workers, see Ruiz and Wilson (2013).
20. While happiness is the most commonly used colloquial term, the emerging "science" of well-being distinguishes between several dimensions of well-being: *life evaluation*, or how people think of their lives as a whole (happiness falls within this category); *hedonic well-being*, or how people experience their daily lives; and *eudemonic well-being*, or the purpose or meaning that people derive from their lives and their activities. For a fuller discussion, see Graham (2011).
21. The *Latinobarómetro* (1997-2008) survey consists of approximately 1,000 annual interviews in each of 18 countries in Latin America. The samples are conducted by a prestigious research firm in each country and are nationally representative except for Chile, Colombia and Paraguay. The survey is comparable to the Eurobarometer survey for European countries in design and focus; both surveys are cross sections rather than panels. A standard set of demographic questions is asked to each respondent in each survey. The usual problems are the inability to accurately measure income in developing countries - where most respondents work in the informal sector and cannot record a fixed salary. Many surveys rely on reported expenditures, which tend to be more accurate (if less good at capturing the assets of the very

wealthy). The *Latinobarómetro* has neither, and instead relies on the interviewer's assessment of household socio-economic status (SES), as well as a long list of questions about ownership of goods and assets, upon which we compile our wealth index. The index is based on ownership of 11 types of assets, ranging from access to drinking water and plumbing to ownership of computers and second homes.

22. The variable is actually the respondent's score in the last year of the survey minus the respondent's score in the first year of the survey. As with any study based on perceptions and well-being, there is an endogeneity problem, as less happy respondents may be more likely to perceive injustice or to compare themselves negatively to others. As a robustness check, Cojocarú uses an instrumental variables strategy, based on the interviewer's assessments of each household's rank in their community; his findings still hold.
23. See results from the Pew Center for People and the Press reported in Vo (2012).
24. Deaton finds that the inclusion of political questions prior to the happiness questions during some parts of the Gallup survey biased happiness responses down prior to the crisis. Even applying Deaton's corrections, though, we get a similar U-shaped trend in happiness levels in our analysis of the data. We find similar dynamics in the health realm, where respondents are much better able to adapt to conditions associated with unpleasant certainty, such as mobility, than they are to those associated with uncertainty, such as pain and anxiety. See Graham, Higuera, and Lora (2011).
25. See Stiglitz (2012), p. 144.



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