This paper begins by observing that both national welfare and individual happiness are determined by more than just absolute income. Relative income is a crucial input to happiness, but according to accumulating evidence from “behavioral” economists, so also are status, endowments, cultural context, and even income in kind. These findings have policy implications that can be profoundly disturbing to most economists if they take them seriously. The paper concludes with suggestions for research. An appendix outlines a simple framework for research on the relationship between happiness, absolute income and relative income.

Key words: income distribution, national welfare, happiness, positional goods, endowment effects, goods-in-kind

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1 I am grateful for very useful comments to William Baumol, to my Simon Fraser colleagues Herb Grubel, Jack Knetsch and Richard Lipsey, and to my Western Washington colleague Allan Sleeman.

2 One recent reference among thousands on this subject is Kahneman et al. (2006).
for research. An appendix outlines a simple framework for research on the relationship between happiness, absolute income and relative income.

Relevance

In the U.S., Democrats plan to make income distribution a top issue in the 2008 elections.\(^3\) The starkest statistics that highlight the issue are these: since 1995, U.S. labor productivity has increased by more than 15%. But real incomes in the bottom half of the distribution have either barely increased or declined. During the past decade, the gap between mean and median income, long since the widest in the rich world, has widened still further. See Box 1.

INSERT BOX 1 HERE

Internationally, income distribution is also worsening within countries that have “globalized”. Virtually all countries that have opened up to international trade and capital flows in recent decades have seen dramatic increases in per capita incomes.\(^4\) Moreover the gap in average income between rich countries and most ‘globalized’ poor countries has narrowed. But within such countries, incomes of rich people have risen much faster than those of the poor, even though the incomes of both poor and

\(^3\) One indication of how the wind was blowing early 2006 was the founding of the “Hamilton Project”, a Washington-based think tank that is supported by Robert Rubin and other moderately right-of-center Democrats. Its mission is to devise market-friendly policy proposals to address, \textit{inter alia}, income distribution, job security and pension reform, and, implicitly, to usurp the left wing of the party, which is flirting with proposals like trade barriers against China which could kill the globalization goose that has laid so many golden eggs.

\(^4\) This is not to say that globalization was the primary cause of dramatic increases in income: what is closer to the truth is that over the past 50 years it has been a necessary condition. The root cause of increased productivity has been, and remains, technology.
rich have risen absolutely. This phenomenon is dramatically evident in China, but is also evident in most other countries, both developing and developed.\(^5\)

*National welfare*

National welfare is conventionally measured rather arbitrarily “top-down” by various official agencies, rather than built “bottom-up” from hypotheses about individual happiness. The narrowest economic index in common use is *mean* national income, which simply measures per capita income. A second simple measure is *median* national income, which lies below mean income as long as the distribution of income is positively skewed.\(^6\) US mean income usually tops rankings\(^7\), but its median income ranks about 10\(^{th}\) since US income distribution is relatively skewed toward the rich.

The most oft-cited non-economic index of national welfare is the United Nations’ “Human Development Index”. The HDI derives from measures of longevity and literacy as well as mean income, but remarkably leaves out income distribution altogether. See Box 2. The U.S. ranks 8\(^{th}\) on the 2006 HDI, after Norway, Iceland, Australia, Ireland, Sweden, Canada and Japan.

\[\text{INSERT BOX 2 HERE}\]

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\(^5\) Notable exceptions in the rich world are Belgium, Finland, Germany, Japan, Norway and Switzerland, all of which saw labor income distribution become more equal between 1980 – 2001. See Dean (2006), which analyzes this and a dozen other “paradoxes of globalization”.

\(^6\) The definitive methodological explication of income distribution measures is a new, prize-winning book by Salvatore (2006), which is both lucid and concise.

\(^7\) With the exception of Luxembourg, which is heavily populated by bankers and well-paid EU bureaucrats.
Welfare, income distribution and happiness

It is not self-evident that national welfare deteriorates as income distribution becomes more unequal. To the extent that national welfare derives from the sum of individuals’ happiness, welfare is likely maximized when national income distribution is less than equally shared. This is so on the demand side both because most people whose income is above the median derive pleasure from their relative status, and also because many people whose income is below-median prefer a society with some inequality in order to keep alive their prospects – or at least dreams – of becoming richer. And it is so on the supply side because incentives to work and innovate and therefore raise average national income are maximized by preserving some inequality. Toward the end of this paper, I will formalize these propositions.

Over the past decade, theoretical and empirical measures of individual happiness have burgeoned, thanks largely to the efforts of “behavioral” economists, so called because they actually study human behavior rather than assume, as some economists do tautologically, that it always maximizes “utility”\(^8\). Happiness researchers have now convinced all but the most die-hard economists that relative income belongs in utility functions. But many of their findings are much more surprising, and potentially quite disturbing for policy makers concerned about income distribution.

\(^8\) I am not suggesting that utility-maximization is necessarily an un-testable hypothesis, merely that some economists make it so by assuming that all observed behavior is utility-maximizing. The new ‘happiness’ research, and ‘behavioral economics’ in general, has decisively broken through this barrier.
Three such findings – some would call them merely ‘claims’ – are that positional goods and reference goods both belong in utility functions, and that transfers of goods-in-kind often make people happier than transfers of equally-valued cash.

**Positional goods**

The term “positional goods” was coined by the late Fred Hirsch (1977). In contrast to what he called “material goods”, their relative value depends largely on their unavailability to most people. Examples are leading-edge fashion, elite education, homes located near the rich and famous, fame itself, professional prizes, and prestige in general. Their supply cannot be increased by raising their prices, increasing average incomes, or redistributing income.

Would aggregate welfare increase or decrease if public policy successfully suppressed positional goods? Such goods cease to be “positional”, and contribute much less to each individual’s happiness, once they become available to all and sundry. Even if measures of happiness were cardinal rather than ordinal, it is not clear *a fortiori* that the elites’ loss of their enjoyment of exclusivity would be less than the gain of smaller amounts of happiness for a larger number of people. Occasionally such a calculation is clear: for example consider the Indian government’s continuous attempts since 1947 to outlaw and suppress the caste

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9 Modern democracies and free markets foster a proliferation of ‘status’-creating opportunities that are available to all and sundry. For example in the U.S. it is easy to buy a university degree or a noble title on-line. Critics of Hirsch have suggested that this phenomenon undermines the very concept of positional goods. But clearly such status becomes less and less valuable the more it proliferates. Paradoxically perhaps, feudal societies – the antithesis of modern democracies with free markets – also provided status via inherited positions in life (serfs, lords, and the like) as well as guilds that were open only to specific occupations.
system. But in practice public policy could not suppress many if not most positional goods and societal privileges without brutal interventionism akin to China’s horrific Cultural Revolution.

This is not to say that positional goods unambiguously contribute to aggregate welfare. The reverse may be closer to reality. Hirsh argued, for example, that the screening effects of higher education lead people and societies to invest more in irrelevant education than is optimal: even in 1977 it was evident that an expensive four year university education was not necessary for many of the jobs it led to. He also argued that flight to the suburbs in the hope of positional status was futile and wasteful. Most fundamentally, he argued that frantic striving for higher relative income and position led Americans in particular to over-work, and that these efforts were largely futile because by definition only a few would acquire positional goods. One of his darker implications was that such striving militates against generosity and altruism and could tear a society apart.

Thirty years later, Hirsh’s core concept – positional goods - unquestionably remains powerful. But some of his policy conclusions have not been borne out. Although a liberal arts university education may not be necessary to perform most of the jobs undergraduates enter, value in modern economies is added by what Florida (2002) calls the rising “Creative Class”, for which core literacy and flexibility is the key to success. And this new class no longer seeks exclusivity in the suburbs; rather, it finds like company in city centers. Positional status now resides in an inner-city loft.
It is not obvious that the long hours put in by today’s young creative workers are motivated solely by a quest for status, and it is obvious that such creative effort has contributed to the past decade’s sustained productivity growth. And finally, it is not clear that generosity and even altruism are in such secular decline that American society is being torn apart. For example, Americans give substantially more to all forms of charity than do Canadians, their closest cultural counterparts.

That said, positional pursuit remains a challenge for public policy. To the extent that status is acquired by via relative income, such pursuit contributes to widening income inequality that is resented by those left behind. There is also a convincing argument that the struggle for position, more commonly called “status”, is a zero-sum game that merely motivates people to work longer hours than what would maximize their aggregate happiness: my status rises if I work longer hours than others, but not if all others follow suit.

In his concise and comprehensive book *Happiness*, the prominent British economist Richard Layard (2005) even extends this logic to argue that the tax levels optimal to fund democratically-decided provision of public goods and income redistribution is suboptimal to the extent that people pursue higher income simply as an avenue to status. Weak evidence of this is the relatively high levels of happiness that the heavily-taxed Scandinavian countries report in survey studies. As anecdotal evidence that Europeans are not induced to work shorter hours than Americans by higher taxes but rather out of free choice, Layard remarks “In Europe we find it
particularly irritating when Americans lecture Europeans about our shorter working week and our longer holidays. The majority of Europeans are happy with the hours they work, even though their GNP would be higher if they worked longer” (p. 156).

Reference effects
Happiness researchers have accumulated substantial evidence that we evaluate goods, services and experiences by comparing them with past, present or future such goods, services or experiences. Although happiness specialists might object to such generalization as facile, in this short essay I will lump such complex and partially unrelated phenomena as the endowment effect, loss-aversion, derivation of happiness from positional goods and status, accommodation to the status quo, regret, and optimism and pessimism  under the heading “reference effects”.

The endowment effect is that we value what we have, and have had for a long time, at more than its market value. Simply put, we would pay more to keep it than to acquire it. For example, the Canadian city of Vancouver enjoys one of the largest and most scenic public parks in the world. If a developer proposed buying it from the City in order to build skyscrapers, and the City offered home-owners a $2000 per year average reduction in property taxes for 20 years, they would probably reject it. Yet if the park did not exist and the City proposed raising taxes by that amount, they would also reject the idea. Endowment values can in principle be

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10 The seminal empirical study documenting endowment effects is Kahneman et al., 1990.
measured by asking people what they would be willing to pay to keep goods they already have. Willingness to pay to hang on to an “endowment” is often higher than willingness to pay to acquire it de novo.

Loss aversion is closely related to the endowment effect, and, as reported by Layard (2005), is also well-documented: people’s perceived happiness is decreased twice as much by the prospect of losing $100 as it is increased by prospect of gaining $100.¹¹ Likewise, derivation of happiness from positional goods and status can be thought of as a reference effect because it comes from comparing current goods and activities with reference to those of others. Accommodation to the status quo derives from comparison with the past: it suggests, for example, that we rapidly grow used to an increases in income: Layard (2005) cites studies that show 40% loss within a year of the extra happiness that comes from a raise in pay. Regret also comes from reference to the past. Optimism and pessimism derive from comparing the present to the expected future: behavioral economists point out what psychologists have long since known: that people’s happiness is heavily conditioned not by what they have but by what they expect to have.

Many highly unorthodox public policy implications follow from these various reference effects. I have already mentioned Layard’s advocacy of higher tax rates: in his book he suggests much more such government intervention, very little of which is subscribed to by conventional economists, let alone libertarians. For

¹¹ This much-cited result is largely due to experiments by Daniel Kahneman. As his sometime-co-author Jack Knetsch has pointed out to me, it is subject to considerable variance with circumstances.
example, happiness research can be construed to argue for public policies that break bad habits like smoking, policies that many would decry as “paternalistic”. It can be construed to argue for policies that discourage commuting and working long hours, and against many public projects like freeways that purport to increase welfare by increasing efficiency but that also disrupt the status quo. In an international context, it weighs in against our “missionary” instincts in foreign aid, and even, perhaps, our instincts to “export democracy”.

Goods in kind

Whereas economists have long since well-worked-out theoretically that public goods typically provided by governments in kind - for example, health care, education, pollution-reduction and physical infrastructure - contribute more to aggregate welfare than the sum of their contributions to individual happiness, due to positive externalities, it is quite controversial to argue that private goods “paternalistically” provided in lieu of unconstrained income – for example, food stamps, welfare housing, child care or government-managed pensions – are welfare-improving. Similar controversy surrounds regulation of health and safety, banking and finance, hours of work, wages, and corporate governance.

Today’s happiness researchers claim that in certain contexts people systematically make welfare-reducing choices that reduce their happiness: not the welfare of society as a whole via negative externalities, as conventionally argued, but rather

12 An intuitive understanding of this is what led the late and celebrated urbanologist, Jane Jacobs in the 1960s to oppose the attempt by New York’s infrastructure czar Robert Moses to drive a freeway through the heart of her beloved Greenwich Village.
happiness of the individuals who make the choices. If these claims are pervasive and robust, they constitute a strong argument for paternalistic public policy. For example, Robert Frank’s thesis in *Luxury Fever* (1999) harks back to John Kenneth Galbraith’s *The Affluent Society* (1958), which argued, essentially, that on the margin of extant government spending in the U.S., people would in fact be happier if they paid higher taxes and delegated more of their spending to the public sector. One of Frank’s secondary claims is that working shorter hours and commuting less would increase happiness more than the consequent lower income would reduce it. More generally, Frank and his ilk claim that experiences often bring more enduring happiness than do commodities that command the same price. Even Adam Smith wrote “How many people ruin themselves by laying out money on trinkets of frivolous utility?”

These claims undermine *de gustibus non est disputatum*: the often-implicit assumption that our declared tastes are indisputable, in other words that they are our ‘true’ preferences in the sense that they always maximize our happiness. They also undermine our usual assumption in economic theory that tastes are wholly innate and immutable, rather than acquired in good part from family, schools, custom and cultural context. For example, most economists condemned automobile seat belt laws as paternalistic when they were introduced a generation ago, but now,

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13 See Thaler and Sunstein (2003), who argue (p. 175) that “... the anti-paternalistic fervor expressed by many economists is based on [the] false assumption that people always (usually?) make choices that are in their best interest. This claim is either tautological, and therefore uninteresting, or testable. We claim that it is testable and false – indeed obviously false.”

14 I am grateful to William Baumol for pointing out that *de gustibus non est disputatum* is not synonymous with “revealed preference”: it implies that our tastes are not to be argued with, not that our tastes are ‘revealed’ by our choices.
as a result of education and habit, most people use them voluntarily. Questioning
the immutability of tastes has potentially profound implications for public policy
that could lead us down a so-called “slippery slope” of government intervention. But
the disturbing evidence from ‘happiness research’ is not only that tastes are
malleable, but also that changing them can sometimes make people happier.

*Cultural differences*

A major caveat to all claims about a-rational economic behavior is that it varies
greatly from culture to culture. For example, among rich, developed countries, the
U.S. is in many respects an outlier. Robert Kagan (2003) famously asserted that “on
major strategic and international questions today, Americans are from Mars, and
Europeans are from Venus”.

Two dimensions along which Americans seem to differ dramatically from
Europeans and even Canadians is their demand for income inequality, and their
supply of productivity in response to it. Americans seem to have a taste for more
inequality than do other cultures. Also, I hypothesize, on the supply side Americans
respond more gradually than Europeans via increased productivity to increases
from low equality to moderate equality, and begin to reduce their productivity at
lower levels of equality.

These propositions can be formalized in a simple framework outlined in the
Appendix. In terms of propositions “P1, P2 and P3”, U.S. happiness, H, peaks on the
P1 curve at a lower ratio of median to average income, m/M, partly because Americans perceive greater opportunity for upward mobility (the “American Dream”). On the P2 curve, U.S. H peaks at a higher M because for a given income distribution, m/M, Americans are more tolerant of a high absolute gap between m and M. And the American P3 curve has a lower slope and peaks earlier: that is, rising m/M acts to increase M more slowly and starts to decrease it at a lower level of m/M.

**Research implications**

The evidence and arguments that I have mentioned in this brief and incomplete survey will not sit well with most economists. However the evidence is mounting and cannot be ignored. Much more analysis and research is needed, particularly by mainstream economists who are predisposed toward the sanctity of individual revealed preferences and their realization by means of free markets. In particular, we should:

1. Rigorously research the contributions of positional goods and “status” both to individual happiness and to aggregate welfare.
2. Consider reference and endowment effects when recommending efficiency-increasing public policies.
3. Rethink our bias against re-distribution via goods in kind.
4. Research tradeoffs of both tastes and incentives between relative and absolute incomes, recognizing that they may differ between cultures.\(^\text{15}\)

\(^{15}\) A framework for analyzing these tradeoffs is suggested in the Appendix.
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In the six years since George W. Bush took office, the forces of economic populism in the US have been gradually rising largely because of the stagnating incomes of America’s middle classes. After adjusting for inflation, the median American household is earning less than it was in 2000. According to a recent poll, three-quarters of Americans say they are either worse off or no better off than they were six years ago.

Is globalisation a leading cause of rising inequality in high-income countries? The outcome of the debate on this question may determine whether the US will remain open to trade. If policymakers do not craft an imaginative response, protection against imports may be the outcome, regardless of its (non-existent) merits.

Ben Bernanke, chairman of the US Federal Reserve, laid out the issues in a thought-provoking speech last week.* He embedded his analysis in three principles: “That economic opportunity should be as widely distributed and as equal as possible; that economic outcomes need not be equal but should be linked to the contributions each person makes to the economy; and that people should receive some insurance against the most adverse economic outcomes, especially those arising from events largely outside the person’s control.”

The HDI measures average achievements in a country along three basic dimensions of human development:

- Longevity, as measured by life expectancy at birth.
- Knowledge, as measured by the adult literacy rate (with two-thirds weight) and the combined primary, secondary, and tertiary gross enrolment ratio (with one-third weight).
- Standard of living, as measured by gross domestic product (GDP) per capita at purchasing power parity (PPP) in USD.
APPENDIX

Does income-inequality increase or decrease happiness? A research framework

H: The sum of individuals’ happiness
M: Their mean income
m: Their median income

Consider three propositions.

First, two on the demand side:

P1: H increases, then decreases, as m/M approaches 1.
P2: Given m/M, H is also convex in M. For higher m/M, the curves shift up, and max H moves north east: people are happier as m/M rises, but are prepared to accept an increasing absolute gap between m and M in return for higher M and thus m.

And one on the supply side:

P3: M is convex in m/M.

In words, increasing income equality at first increases average income (via increased labor productivity), then decreases it. This relationship must be plugged into P2 to determine H-maximizing m/M.