



Arbejdsrapport 82: Why economic growth should be a priority for policymakers

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Sustainable economic growth ought to be the most important and central concept for policy debate. Governments should not violate basic human rights, but within that framework growth should be paramount.

We need to keep the bigger picture in mind. The history of economic growth indicates that, with some qualifications, it alleviates misery, improves happiness and opportunity, and it lengthens lives. Wealthier societies have better living standards, better medicines, more fairness, and they offer greater autonomy, greater fulfillment, and more sources of fun. It is no accident that so many immigrants around the world wish to move to the wealthier countries.

It is not just the magnitude of the rate of economic growth, but also its stability. Most of the world's most desirable countries to live attained that status without super-rapid bursts of growth. Denmark, which has a per capita income of over \$50,000, and is commonly ranked as one of the happiest countries in the world, never went through a phase of being an "economic miracle." Nonetheless, Denmark has prospered because of the remarkable steadiness and sustainability of its growth.

From 1890 to 1916, Danish per capita growth averaged about 1.9 percent per year, and if in 1916 you had forecast that this pace would continue for another 100 years, you would have been off by only about \$200 in your per capita income estimate (the recent Covid crash aside). Denmark had positive growth about 84 percent of the time and no extremely deep recessions, according to a study by Harvard economists Lant Pritchett and Lawrence Summers. The United States has had more volatility, but still it has made forward progress in virtually every period of its development, the Civil War aside.¹

How good is growth anyway?

Economists have created the idea of gross domestic product (gdp) to refer to the total value of goods and services produced over some period of time, typically expressed in terms of a year or a quarter. Thus, when we talk about the rate of economic growth we are referring to the rate at which gdp increases.

Gdp is sometimes an unpopular concept, because it is argued in response that not all of human life can be reduced to dollar amounts, or for that matter to marketplace goods and services. That criticism has

¹ See Lant Pritchett and Lawrence H. Summers, "Asiaphoria Meets Regression To the Mean," October 2014, National Bureau of Economic Research Working Paper 20573.

a point, but still the gdp concept is highly useful. Furthermore, the gdp concept can be improved by some not too difficult modifications.

A reformed version of gdp should account for leisure time, what is called “household production” (e.g., cooking dinner instead of spending money at a restaurant), leisure activities such as the pleasure of riding a bicycle through town, and environmental amenities, among other adjustments. Current gdp statistics have somewhat of a bias towards what can be measured easily and relatively precisely, rather than focusing on what contributes to human welfare.

In this context, maximizing a reformed concept of gdp would not mean that everyone should work as much as possible. A fourteen-hour workday might maximize measured gdp in the short run but it would be less propitious over time, given both the value of leisure and the risk of labor burnout.²

As an aside, accounting for these “hidden” forms of gdp probably would favor Denmark relative to most other nations, as Denmark is renowned for its high quality of life. The country is wealthy in standard terms, but also is commonly regarded as a good location for leisure activities and a relatively non-stressful family life. It is also has done a relatively good job protecting its environment and also working to limit carbon emissions.

Maximizing gdp growth does not mean destroying the natural environment. It’s now well understood that environmental problems can lower or destroy economic growth through feedback effects. We therefore should protect the environment – if for no other reason -- to preserve and indeed extend economic growth for the more distant future. We wish to maintain higher economic growth over time, and not just for a single year or for some other shorter period of time.

It is important to realize, however, that the broader, properly understood gdp notion usually moves pretty closely with the narrower, money-based measurement of goods and services. If you consider which societies are in a position to deliver amenities, good family life, and leisure time, it is usually the wealthier societies. In one study, the correlation between gdp and broader understandings of human welfare, across countries, runs as high as 0.98.³

The relationship between wealth and environmental improvements can be tricky, since wealthier, more populous societies do place greater burdens on the environment. Once we move out of highly underdeveloped societies, however, we see that the wealthier citizenries are more interested in investing resources to improve the environment. For instance, pro-environmental practices are far more widespread in Western Europe, Japan, North America, and Australia than in the poorer emerging economies of China and India. The latter two countries are major polluters, but realistically speaking they are not going to return to their earlier extreme poverty. The most realistic chance of getting them

² On the proper calculation of gdp, see Jones and Klenow (2016) and Becker, Philipson, and Soares (2005).

³ Jones and Klenow (2016).

to be more environmentally aware is to hope they grow wealthier and follow the path of many other rich nations, including of course Denmark.

The data show just how much living standards have gone up. To consider the United States, in 1900 for instance almost half of all U.S. households (0.49) had more than one person per room and almost one-quarter (0.23) over 3.5 persons per sleeping room. Slightly less than one-quarter (0.24) of all U.S. households had running water, eighteen percent had refrigerators, twelve percent had gas or electric light, and today the figures for all of these stand at 99 percent or higher. Back in 1900 only five percent of households had telephones and none of them had radio or TV. The high school graduation rate was only about six percent, and most jobs were physically arduous and they involved high rates of disability and death, and of course very high levels of ongoing stress. In the mid-nineteenth century a typical worker might have put in somewhere between 2800 and 3300 hours a year, but now this is closer to 1400 to 2000 hours a year, and in many European countries the shift toward greater leisure has been more pronounced yet.⁴

Until recently in history, polio, tuberculosis, and typhoid were common ailments, even among the rich. In the United States, earlier Presidents George Washington, James Monroe, Andrew Jackson, Abraham Lincoln, Ulysses S. Grant and James A. Garfield all caught malaria during their lives. Antibiotics and vaccines have existed for only a tiny fraction of human history, and it is no coincidence they exist in the wealthiest time period humanity has seen. There is also a strong and consistent relationship between wealth and rates of infant mortality; small children do best when they are born into the wealthier countries, and that is because wealth supplies the resources to take better care of them.

As recently as the end of the nineteenth century, life expectancy in Western Europe ran about forty years of age, and food took up 50-75 percent of a typical family budget. The typical diet in 18th century France had about the same energy value as in the Rwanda of 1965, and that was the most malnourished nation in the world for that year. One effect of this deprivation is that most people just didn't have that much energy for life.⁵

In earlier times most individuals worked at hard physical labor and anything beyond a minimal amount of education was a luxury. Leisure time has risen with economic growth. For instance, according to economist Robert Fogel, in 1880 about four-fifths of discretionary time was spent working, but today Americans spend about 59 percent of our time doing what we like, and that may rise to 75 percent by 2040. Western Europe has done better yet at procuring more leisure time for its citizens, and it has higher tax rates on labor income, which discourage work. To the extent Western Europe is somewhat poorer than the United States, the higher consumption of leisure is one reason for that difference.

⁴ On these and related figures, see Cowen (2018). On work hours, see Huberman and Minns (2007).

⁵ See Fogel (2004, pp.8, 9, 34, 70), including for the paragraph to follow.

The splendors of the modern world boost human comfort and well-being. Imagine a time traveler from the eighteenth century visiting the life of Mark Zuckerberg or Bill Gates. The time traveler would witness television, automobiles, refrigerators, central heating, antibiotics, plentiful food, flush toilets, cell phones, personal computers and the internet, and affordable air travel, among other remarkable benefits. But the most impressive features of the lives of the super-wealthy are shared by most citizens of wealthy countries today. My smart phone is as good as that of Gates. The movies I see are the same as what Mark Zuckerberg might enjoy, and if his refrigerator is better than mine it is by a very small amount. Mine keeps the food cold too. The very existence of an advanced civilization – the product of cumulative economic growth -- confers immense benefits on ordinary citizens, including their abilities to educate and entertain themselves or to choose one life path over another.⁶

Looking into the more distant future makes the question of the economic growth rate all the more important. For instance, a two percent rate of economic growth, as opposed to a one percent rate, makes only a small difference across the time horizon of a single year. But as time passes, the higher growth rate eventually brings a very large boost to well-being. To make this concrete, redo U.S. history, but assume the country had grown one percentage point less per year, over the time period from 1870 to 1990. In that case, the United States of 1990 would not be richer than the Mexico of 1990.⁷

It is also worth pondering some comparisons with higher rates of economic growth, as we often see in emerging economies. At a growth rate of ten percent per annum, as has been common in China until fairly recently, real per capita income doubles about once every seven years, an astonishing rate of progress. At a much lower growth rate of one percent, such an improvement takes about 69 years.

Robert E. Lucas, macroeconomist and Nobel Laureate in economics, observed: “the consequences for human welfare involved in questions like these are staggering: once one starts to think about [exponential growth], it is hard to think about anything else.”⁸

What about the poor?

The economic growth of the wealthier countries benefits the very poor as well, even though that is sometimes with considerable lags. Not all economic growth trickles down, but as an overall historical average the bottom quintile of an economy shares in growth.⁹ You can see this by comparing the bottom quintile in Western Europe to say India or Mexico or Algeria.

Technological trickle down is easier to observe in the short run. For instance, new medicines and technologies, typically coming from the wealthier countries, bring benefits to the entire world, as is illustrated most conspicuously by the rapid spread of the cell phone and now the smart phone. The

⁶ See also Steven Pinker’s 2018 book *Enlightenment Now: The Case for Reason, Science, Humanism, and Progress*.

⁷ See Cowen (2004).

⁸ See Lucas (1988, p.5).

⁹ See for instance Dollar and Kraay (2000).

same is true for medicines and treatments, even if the trickle-down process is slow and uneven. Most generally, trickle-down occurs through research and innovation. If the leading 21 industrial countries boost their R&D by half a percentage point of gdp, U.S. output will grow by 15 percent. But it does not end there. Output in Canada and Italy will grow by about 25 percent, and on average industrial country output will go up by 17.5 percent. In the less developed countries, economically speaking that is, output will go up by about 10.6 percent on average.¹⁰

Although these historical processes have embodied unfairness and long lags of decades or more, economic growth nonetheless has brought wealth to the poor and elevated their status through the broader swathe of human history. The Greek city-states and the Roman Empire benefited from maritime trade across the Mediterranean; those regions in turn spread growth-enhancing institutions around Europe, Northern Africa, and the Middle East. The commercial revolution of the late Middle Ages and Renaissance reopened many of the trade routes of antiquity and eventually human beings started to climb out of the Malthusian trap of very low per capita incomes at subsistence. The wealth of the West helped enable the export miracles of the East Asian economies. Today most poor countries seek greater access to wealthier Western and Asian markets and they flourish if they can achieve it.

For all the recent increases in inequality within individual nations, global inequality has declined over the last few decades, in large part because of growth in China and India and other emerging economies. This growth in large part has in turn been driven by earlier growth in the West and in East Asia. China for instance engaged in “catch up” growth based on adopting Western technologies and also by exporting to the wealthier nations. China has gone from being a quite poor nation to a “middle income” nation with a sizable middle and upper class. Although it belies a lot of the recent media coverage, which focuses only on “within nation” inequality comparisons, recent world history has been an extraordinarily egalitarian time. Most of all, the last few decades of human history have been a story of how global economic growth helps the poor.

Sometimes extended periods of growth do not bring full or fair benefits for the poor or lower classes, for instance during the early phase of the British Industrial Revolution in the late eighteenth century. Still, even given these transitional troubles, it was better for Britain to push ahead with economic growth, as this eventually drove the greatest boost in living standards the world has seen. To be sure, there probably were better policies at the time which would have distributed the benefits of growth more widely (e.g., fewer wars and Poor Law reform and earlier moves toward free trade). But taking misguided policies as given, it was better that Britain pursued economic growth rather than turning its back on the idea, even though significant real wage gains for the working class often did not arrive until the 1840s.

The truth is that economic growth is the only permanent path out of squalor. Economic growth is how the Western world climbed out of the poverty of the year 1000 A.D. or 5000 B.C., it is how much of

¹⁰ See Helpman (2004, p.84).

East Asia became remarkably prosperous, and it is how our living standards will improve in the future. Just as the present appears remarkable from the vantage point of the past, the future, at least provided economic growth continues, will offer comparable advances, including perhaps greater life expectancies, cures for debilitating diseases, and cognitive enhancements. Billions of people will have much better and longer lives. Many features of modern life might someday seem as backward as we now regard the large number of women who died in childbirth for lack of proper care.

I have myself written of “the great stagnation” as a growth slowdown which overtook the Western world, starting in about 1973, when rates of productivity growth began to slow. It is a failure of imagination, however, to believe that human progress has run its course. The more plausible view is that progress is unevenly bunched, we have been in a slow period as of late, various new developments are percolating, and we should do our best to help them along. Whether we like it or not, economic growth and technological progress do not always come in steady doses.

We might wonder whether we would do best by existing at a very modest population and economic level for a very long time, “living in harmony with nature,” so to speak. Think of some of the more extreme segments of some of Europe’s Green parties. But poorer societies from the past have collapsed repeatedly through military weakness, eco-catastrophe, famine, tyranny, and natural disasters, among other factors.

Keep in mind that the wealthier tyrant will conquer or at least disrupt the noble savage. Even if in principle the life of the noble savage were best, no society following this path will, on its own, keep its autonomy in the longer run. Given the previous path of human development, someone will have tanks and nuclear weapons, whether we like it or not. It is important that the more benevolent societies be both richer and more technologically advanced, and again we see the relevance of sustainable economic growth. Even if not all of those wealthier societies invest in having an advanced military, *some* of them will need to do so and to maintain technological leads over potential adversaries.

Furthermore primitive warfare appears to have been at least as frequent, bloody, and arbitrary in its violent effects as modern warfare.¹¹ Earlier societies were neither idyllic nor peaceful. So returning to the past, or attempting to throttle economic growth, does not guarantee either peace or future comfort for our civilization.

Does economic growth make us happier?

Some recent research suggests that wealth boosts happiness and that is true for a great variety of people, including for the relatively wealthy who are already meeting their basic needs. For instance

¹¹ On the brutality of primitive warfare, see Keeley (1996) and LeBlanc (2003).

economists Betsey Stevenson and Justin Wolfers, in the most comprehensive study of the income-happiness link to date, find that the relationship between measured well-being and income is roughly linear-log, which implies income boosts happiness even at higher levels of earnings. The comprehensive study by Nobel Laureate economist Angus Deaton finds similar results, namely that extra income brings extra happiness, even in relatively wealthy settings.¹²

An older body of literature suggests that additional riches do not make citizens in wealthy countries any happier, at least not above a certain level of wealth. The core evidence here is taken from questionnaires that ask people how happy they are. Once a country has a per capita income of roughly \$10,000 a year or more, the aggregate income-happiness link appears weak to many observers. Some commentators argue that the curve flattens out at about half of current American per capita income. These results have, in the eyes of many, cast doubt upon whether economic growth does in fact make people happier.¹³

Despite this evidence, wealth and happiness do seem to co-move in the broad sense, again subject to a properly sophisticated understanding of wealth.

The observation of a nearly flat happiness-wealth relationship reflects more about the nature of language than about happiness. To give an example, if you ask the people of Kenya how happy they are with their health, you get a pretty high rate of reported satisfaction, not so different from the rate in the healthier countries and in fact higher than the reported rate of satisfaction from the United States. The correct conclusion is not that Kenyan hospitals have hidden virtues, or that malaria is absent in Kenya, but rather that Kenyans have recalibrated their use of language to reflect what they can reasonably expect from their daily experiences. In similar fashion, people in less happy situations or less happy societies often attach less ambitious meanings to the claim that they are happy. Evidence based on questionnaires therefore will underrate the happiness of people in wealthier countries and thus underrate the happiness difference between wealthier and poorer countries.¹⁴

In similar fashion, the wealthy develop higher standards for reporting when they are “happy” or “very happy.” If you are a millionaire living next door to a billionaire, you might be less likely to report that you are ecstatically well-off even though your day to day existence is pretty sweet. The failure to issue a totally glowing report does not mean that you spend your entire time envying the billionaire or suffering because of your somewhat lower relative status; you still can lord it over plenty of other people, if you so desire. That means even a constant level of reported happiness implies growing real happiness over time, because the “happy” word is taking on more ambitious meanings as society accumulates more wealth and richer experiences.

¹² See for instance Stevenson and Wolfers (2008, 2013), Sacks, Stevenson, and Wolfers (2010), and Deaton (2007).

¹³ On the flattening of the curve, see for instance (e.g., Helliwell 2002, p.28). On the United States, see (Frey and Stutzer 2002, pp.76-77).

¹⁴ See Deaton (2007).

Or to put it another way: it is better to envy your neighbor's car than to envy his horse and buggy. Envyng his supersonic transport or Mars launch would be better yet.

Furthermore, within a country wealthier people report unambiguously higher levels of happiness, on average, than do poorer people.¹⁵ For all the talk about how some happiness studies present a revisionist view of material wealth, this result has not been challenged and it pretty decisively demonstrates that, at least on average, wealth brings more happiness. To some extent, the greater reported happiness of the wealthy may reflect a zero-sum relative status effect, namely that the wealthier people feel better but their possessions make the poor feel worse off. Nonetheless it is unlikely that the entire gains from wealth, or even most of the gains, dissipate in zero-sum status games. Wealthier lives are easier and happier in absolute terms in numerous ways, as discussed above.

On top of all of those considerations, happiness isn't a single, simple variable to be measured unambiguously. Some persons may seek temporary stimulations, others may want to feel fulfilled at the end of their lives, and others may seek to maximize the quality of their typical day. Some will seek happiness through the process of out-competing their peers for status, while others will look inward for contemplative delights. Most likely we seek some mix of these ends but with varying emphases and weights. Wealthier societies offer greater opportunities and freedoms to pursue preferred concepts of happiness, even if this privilege does not always show up in the measurement of a single, aggregate number. A wealthier economy will offer greater options for structuring choices of work vs. friends, thrills vs. long-term satisfaction, enjoying children vs. a life of theater and travel, and so on.

A wealthier economy also gives us more "fleeting" happiness experiences. An individual will admit to being happier if he has recently found a dime, or if his soccer team won a big game. These sources of happiness will likely be more frequent and more consistent in the wealthier society. A diverse commercial economy offers more sources of temporary stimulations and more short-term turns of good fortune. This means more new gadgets, more fun videos, and more serendipitous encounters with fun and interesting new people. That sounds a bit superficial and indeed it is, but it is yet another reason why economic growth will boost happiness in its more complex and plural forms.¹⁶

At most, the happiness literature shows that many particular changes in individual conditions are irrelevant for our well-being, due to habituation and expectation effects. This conclusion would not, however, eliminate the major benefits of economic growth. Even if many "small" changes in income are nearly irrelevant for happiness, sufficiently large changes in life circumstances still may boost or harm our welfare.

To give examples of how large changes matter, most life catastrophes create significant misery. Very sick individuals have less autonomy, experience more pain, and face the stress of dealing with their

¹⁵ See for instance Diener (1984), among many other sources.

¹⁶ See Schwartz and Strack (1999) on some of these dilemmas, and Levinson (2013) offers some interesting observations on the role that "projection" (assuming excess permanence of current events) may play in these evaluations.

condition. The death of a child or close family member truly damages happiness for most individuals and those effects can persist for many years. Torture, extreme stress, rape and severe physical pain also produce depression, trauma, and persisting unhappiness. Individuals who have been through wars, revolutions, and collapses of civil order very often experience recurring flashbacks, nightmares, irritability, depression, alcoholism, troubled relationships, and inability to concentrate. However psychologically troubled our modern, wealthy societies may seem, poverty usually makes these problems worse.¹⁷

So to the extent that a poorer society brings an ongoing worsening of conditions for many individuals, the associated human suffering will be greater and this does indeed represent a true loss of human well-being. Once again, ongoing and sustainable economic growth brings significant benefits.

Extra wealth also serves as a cushion against very bad events, if only against later declines in wealth, and of course this became evident during recent pandemic times. It is also one major reason why families save when they have sufficient income. At the national level, fifteen or twenty years ago, it was common to hear the claim that once a nation reaches the level of material wealth found in Greece, happiness more or less flat-lines, and indeed this was more or less where the flat-lining point seemed to be. Yet since the Greek economic crisis starting in 2011, few people deploy the Greek example to make points about the flat-lining of the happiness-income relationship. The country lost almost a quarter of its economic output over the crisis, unemployment has run over twenty percent, there have been riots in the streets, a neo-Nazi party was elected to the legislature, and at times basic medicines were unavailable. Some additional cushions of wealth, prior to the crisis, would have helped the country a good deal and perhaps would have prevented the troubles altogether, by easing debt repayment.

The bottom line is this: the more rapidly growing economy will, at some point, bring much higher levels of human well-being on a consistent basis.

Even if you do not regard material wealth as central to human well-being, economic growth brings many other values, including for instance much greater access to the arts and education. Economic growth also gives individuals greater autonomy and minimizes the chance that their destiny will be determined by the time and place they were born. It remains true that many individuals are born poor or born into families that do not much respect formal education, or they are born far away from cities.

¹⁷ On the link between catastrophes and unhappiness, see Dyregrov (1990), Lehman et.al. (1987), Weiss (1987), Frederick and Loewenstein (1999), Lehman, Wortman, and Williams (1987), Archer (2001), and Wortman et.al. (1992). Some commentators have doubted whether even extreme catastrophes make people less well-off. For instance, the arrival of a severe disability of physical handicap may cause individuals to alter their expectations for what their lives will be like. Some of even all of the initial level of happiness may be reattained by lowering one's aspirations, and for that reason the loss in happiness may be blunted. Nonetheless, victims of catastrophes still report lower levels of happiness than do comparable healthy individuals, and many of these victims enduring years of significant suffering. See Brickman, Coates, and Janoff-Bulman (1978), Bulman and Wortman (1977), Kessler, Price, and Wortman (1985), and Wortman and Silver (1987).

Still, ask yourself: has there ever been a time when so many individuals had such a good chance of becoming top, world-class scientists? Today's individuals are more able to shape their futures, more able to choose their friends, more able to communicate with the outside world (if only because of the internet), and more able to weave together diverse cultural strands when building out their personal narratives. Benjamin M. Friedman, in his brilliant [The Moral Consequences of Economic Growth](#), shows just how many of the virtues of the modern world depend on higher and indeed growing levels of wealth.¹⁸

Concluding remarks, and looking toward the future

I wish to elevate two questions in importance, namely:

1. What can we do to boost the rate of economic growth?
2. What can we do to make our civilization more stable?

Politics should be about finding the best means to achieve these ends, rather than disputes about the importance of these ends, again within a framework of respecting basic human rights.

We so often take economic growth and prosperity for granted. But if we look back to the 19th century, among other eras, we can see that some countries, such as China and India, didn't keep up. Instead their economies actually [shrank](#) for sustained periods of time. They had some bad luck, pursued bad policies, and they also suffered under external rulers who were not sufficiently interested in investing in local public goods. Whatever the details may be, societies go backwards in economic terms all the time, once we look at the broader swathe of world history. Most of us in the West are spoiled by having lived through an especially prosperous and stable time. Yet we should not assume that those favorable conditions will continue for the future, as we will have to work very hard to maintain them.

If you are asked what we should be fighting for, higher economic growth and more stable economic growth should be at the very top of that list.

¹⁸ See Friedman (2006). On the connection between the arts and economic growth, see Cowen (1998). For a recent defense of gdp maximization, see Oulton (2012). For a recent philosophic defense of the importance of economic growth based on pluralistic considerations, see Moller (2011).

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