From Productivity to Purpose: Human Flourishing in the Age of Artificial General Intelligence

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The Big Questions of Al

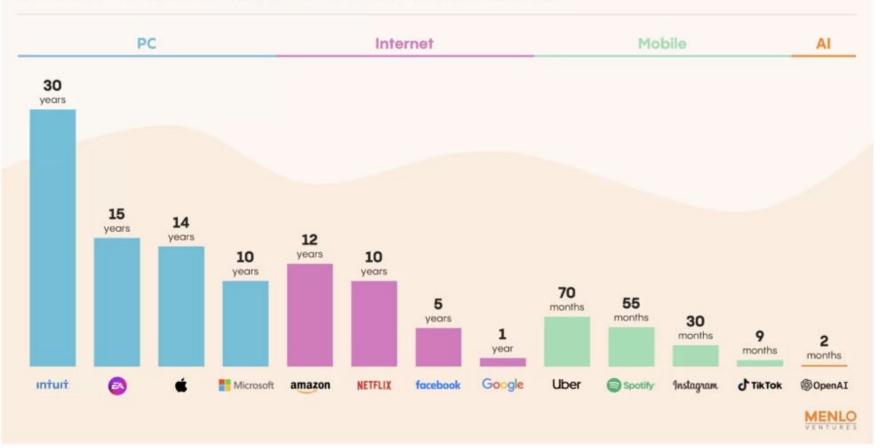
Will it take out jobs?
Will it make us rich?
How will it make us rich if it takes our jobs?
If we get rich but have no jobs will life lose all meaning?

Productivity lags innovation

Major innovations often don't deliver productivity growth until work has been reorganized around them **Adopting AI simpler:** Software is not physical Numbers of years between invention and the boost to productivity "Engels pause" APIs are modular/connective Uses natural language 60 years capital accumulation and **Barriers remain:** wage stagnation to Chip shortage kick off the **Energy bottlenecks** industrial **Solow paradox:** 40 Regulation revolution One "can see the computer age **Factory layouts** everywhere but in the needed to productivity statistics" change to reap 20 benefits A big unknown Steam engine (1769) Electricity (1880) Personal computers (and the ΑI

internet)





The Three Stages of AI and Work







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Human Cost

Can a human do it cheaper?

versus

Technology Cost ←— Can technology do it cheaper?

Augment versus

Substitute

Who does it make more productive?

Who does it replace?

Three Phases in the Evolution of Work

- Short Run: Task-replacement, jobs evolve
 - => A lot of augmenting, people with experience benefit, challenges arise for new entrants to the labor market
- Medium Run: Some jobs disappear, New uses, new work
 - => Occupations become less recognizable with their old version, many people find new occupations, human needs and higher incomes foster the development of entirely new forms of work
- Long-run: Declining importance of human labor in generating income
 - => Falling labor share of income raises important distributional and societal challenges

Will it take our jobs?

Yes

What will matter is the speed and scope with which it happens.

Will it make us rich? Or more importantly, is it good to be rich?



Artificial Intelligence Promises Radical Abundance

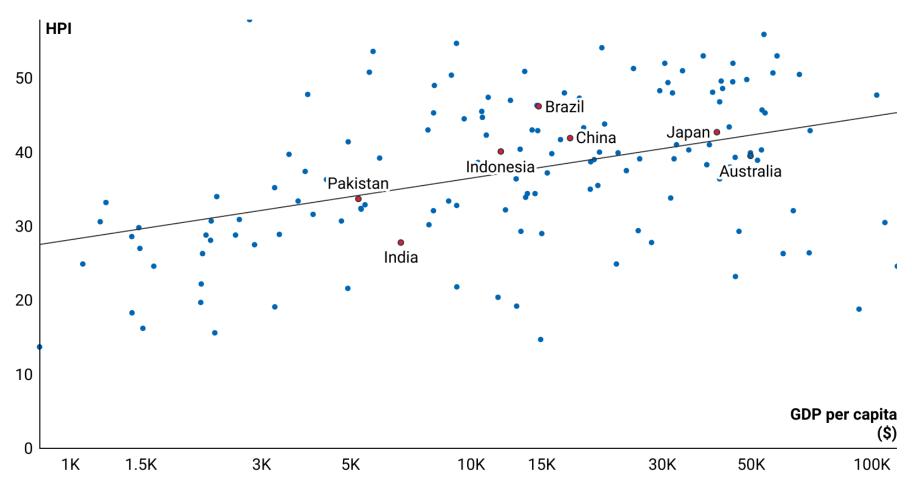
- Unprecedented productivity gains that could allow all of humanity to achieve a standard of living greater than that experienced by those in the wealthiest nations, Amodei, 2024
- radical abundance Hassabis, in Roose and Newton, 2025
- "no scarcity" "everyone can have whatever goods and services they want" Musk, 2023
- Economists tend to be a bit more skeptical about the potential likelihood of such rapid growth (Acemoglu, 2024)
- Most agree that there is the potential for a new era of rapid economic development that both facilitates higher living standards and creates profound changes in labor markets.

Facts about Happiness and Income

- Happiness or overall life satisfaction has risen with the log of income in a consistent way across countries, within people within countries, and over time within countries
- 2. The concept of satiation "enough" income remains popular but unproven
- 3. There are outliers: the United States has seen well-being stagnate and decline, much like life expectancy
- 4. Eudemonic measures of well-being have a less clear relationship with income
- 5. Globally women saw their happiness decline relative to men in the 20th century

Subjective well-being scores are closely correlated with GDP per capita

Correlation = 0.81

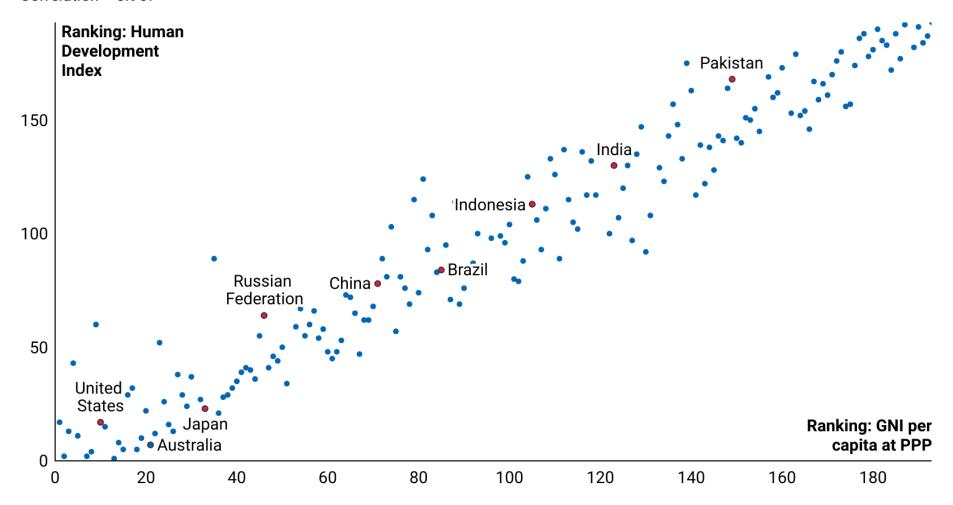


Latest three-year average shown for both variables

Chart: @BetseyStevenson • Source: World Happiness Report and World Development Indicators

"Holistic" measures yield similar cross-national rankings to real GDP per capita

Correlation = 0.967



The Human Development Index (HDI) is a geometric mean of three sub-indices: 1. Health (measured by life expectancy at birth); 2. Education (years of schooling for adults aged 25+, and expected years of schooling for kids entering school); and 3. Gross national income per capita at PPP.

Chart: @BetseyStevenson • Source: UNDP Human Development Reports

Will it make us rich? Probably

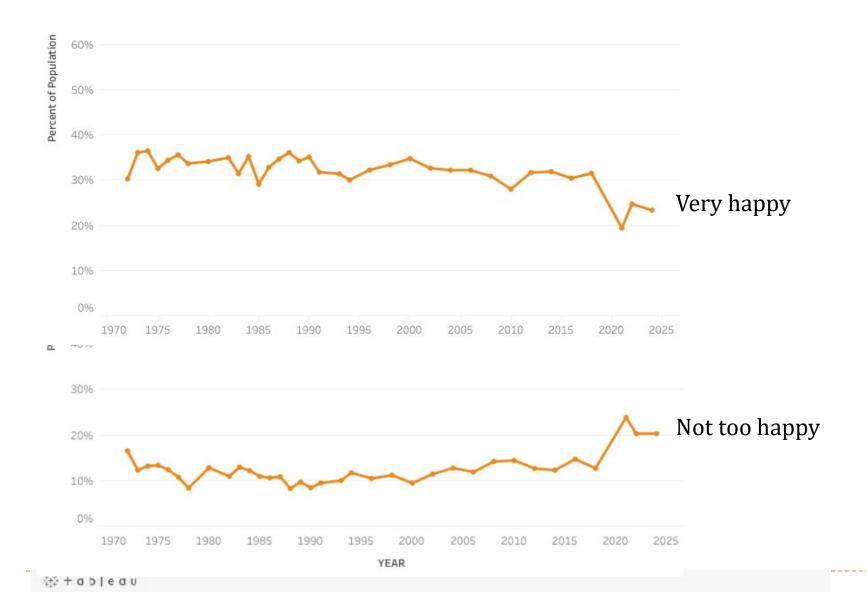
Is it good to be rich?

Yes, from a hedonic, happiness perspective But money isn't the only thing that matters for happiness How will it make us rich if it takes our jobs?

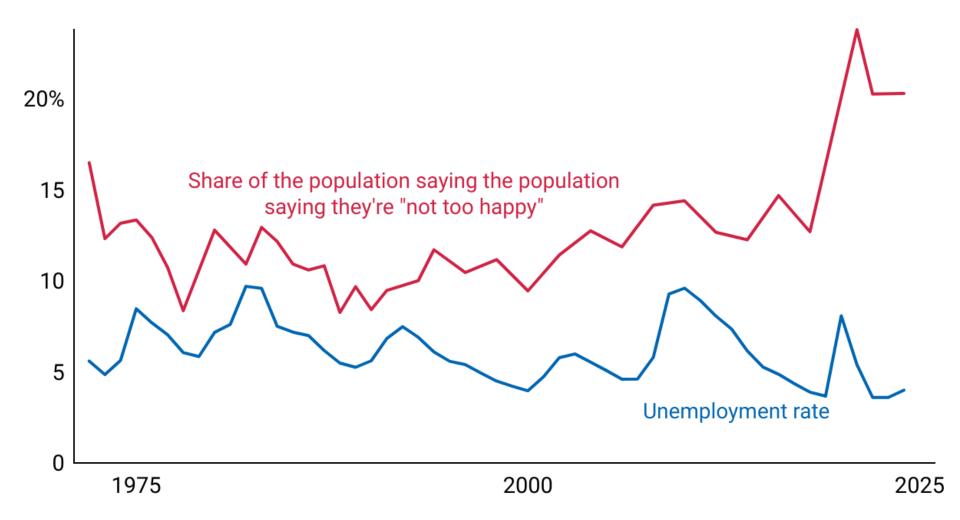
Good question, and that matters for well-being

The question of whether AI improves the world cannot be divorced from the question of distribution

US Happiness: Happiness is declining, unhappiness is rising



Unhappiness rises with unemployment



Data from: Bureau of Labor Statistics and General Social Survey • Chart: ©StevensonWolfers

Hedonism versus Eudaimonism

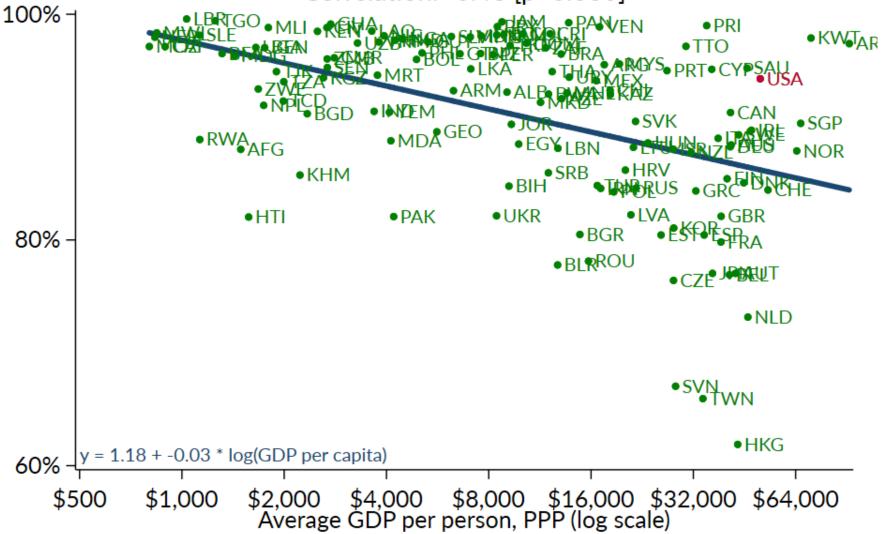
- Psychologists describe two distinct concepts of well-being that they describe a revolving around distinct philosophies
- Hedonism is the idea that well-being consists of pleasure or happiness
- Eudaimonsim is the idea that well-being is the actualization of human potentials (meaning, purpose, learning, feeling proud, bored, productive)
- Most assessments of economic development and well-being have primarily focused on measures of well-being associated with hedonism (OECD better life index moves beyond hedonism toward more concrete measures of health, safety, etc)

Ikigai (purpose) isn't clearly related to GDP per capita

- At least not across countries at a point in time
- □ Is it related to income in the cross section?
 - Recent Japanese government studies finds yes, but much less than life satisfaction
- Employment isn't statistically significantly related to Ikigai in Japanese survey data
- □ Frequent participation in volunteer activities and community events correlate with higher "Ikigai" scores

"Ikigai" appears to relate to emotional and relational dimensions of well-being.

Do you feel your life has an important purpose or meaning Correlation: -0.46 [p=0.000]



Gallup World Poll, 2006-2011, n=248039 in 129 countries

Is the Equity-Efficiency Trade-Off Dead?

- For any given level of average income, a more equal distribution means higher average well-being.
- Equity-efficiency trade-off is that those who chose work over leisure reaped material rewards. Too much redistribution blunts the incentives and can make society poorer overall. What happens to those incentives if human labor becomes only weakly connected or even completely disconnected from the returns to a more prosperous life?
- Will we face the same kind of trade-off between enlarging the pie and giving people equal slices or will the structure of the trade-off itself be transformed?
- Centuries of thinking about what motivates economic activity may itself be undone by the revolution in artificial intelligence.

What Questions Need Answers

How can ordinary people seek a better life?

■How will resources be distributed?

Where will people get meaning and purpose?

What Policy is Needed Now

- Reshape the conversation about whether we will lose jobs into one that focuses on managing the *speed* and *process* of job transformation.
- Recognize the important role that humans have historically played, and will continue to play, in generating the data on which artificial intelligence relies.
- □ Shore up the bonds of reciprocity and trust within society, so that people experience AI-enabled prosperity not as something done *to* them by distant systems, but as a shared project that affirms their place in the social contract.

Summary

- Income is good! It improves happiness and welfare but there are diminishing returns
- Income doesn't have to make us happier, there are other things that matter for well-being
- Meaning and purpose do not rely on jobs. Many people with jobs have no ikigai and many people with loads of ikigai have no job.
- In every scenario jobs will be unrecognizable in a century, the difference between labor augmenting and labor replacing is about people's ability to shift away from declining opportunities and find new ones
- How people react to the post-AGI world will depend on the choices made along the way