
From Lemonade Stands to 2065

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One problem with predicting the future is that it is full of surprises, which by definition are impossible to predict. Another problem is that the forecaster, to the extent that he feels capable of influencing events, is tempted by wishful thinking: to predict what he wishes to happen. Ecologists of the 1960s and 1970s were especially adept at that, predicting mass starvation within a few decades (Sabin 2013).

In this short essay, I focus mainly on the United States, although my tea leaves also reveal something about the rest of the world. I try in turn (1) to build a simple forecast of the standard of living, (2) to explore a neglected megatrend, (3) to look at surprises that might further affect the world before 2065, and (4) to reorganize all these factors around two possible polar worlds. In the process, to separate the normative from the positive, I propose a criterion for distinguishing between good (or better) and bad (or worse) scenarios.

Simple Predictions about Gross Domestic Product

Surprisingly, simple predictions of the standard of living often seem to get it right. In 1930, John Maynard Keynes ([1930] 1963) predicted that the standard of living would multiply by between four and eight times over the following one hundred years. If we measure the standard of living with real gross domestic product (GDP) per capita (which is the most general measure of average income), Keynes was quite on the

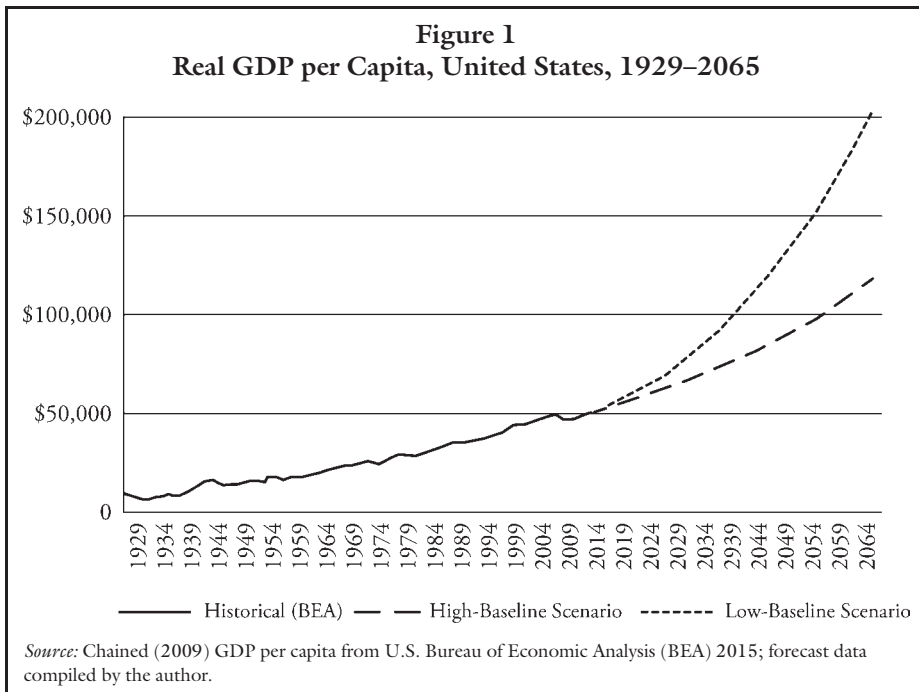
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mark: from 1930 to 2014, the actual increase of real GDP per capita was more than sixfold, and there are still sixteen of his one hundred years to go. This growth occurred despite a world war and the recent Great Recession—showing how resilient a more or less free economy is. Similarly, the predictions of the late futurists Herman Kahn and Anthony Wiener were pretty close to the mark. In 1967, they provided forecasts for real GDP per capita in the year 2000. The actual figure turned out to be close to the midpoint between their most optimistic and most pessimistic predictions, which ranged between a twofold and a fourfold increase.

Figure 1 attempts a similar simple forecasting exercise for the U.S. economy fifty years from now. My high-baseline scenario would have real GDP per capita grow at 2.8 percent per year, which corresponds to the growth rate between 1930 and 1973. My low-baseline scenario would see an annual growth of 1.7 percent, the growth rate experienced since 1973. The lower growth can be thought of as representing what some analysts describe as the new “Great Stagnation.” My low-baseline scenario is close to the forecast made by the U.S. Congressional Budget Office (CBO), which envisions a growth rate of 1.6 percent over the next seventy-five years (2014). This suggests that my low-baseline scenario may be a bit optimistic.

Because of compounding, the end result of either of my two scenarios translates into significant increases in the standard of living: by 2065, real GDP per capita would have been multiplied by a factor of between 2.3 and 4.1, depending on which scenario obtains. To grasp what this means, imagine your real income either doubling or quadrupling.



My two baseline scenarios can be interpreted as reflecting two different paths of regulation. A good argument can be made that economic growth is positively affected by economic freedom (and attendant institutions) and negatively impacted by the opposite of economic freedom, regulation (see Lemieux 2014). Between 1949 and 2005, the Code of Federal Regulations was multiplied sixfold to more than 134,000 pages (Lemieux 2014–15). Charles Murray counted 175,000 pages for 2012 (2015). These pages do not include state and local regulations. One can argue that the rapid growth of regulation after World War II has played a major role in the slowdown of economic growth (Lemieux 2014–15 and references cited therein). My low-baseline scenario can be thought of as incorporating the impact of the regulation explosion, my high-baseline scenario as the growth potential if the postwar regulatory explosion were dowsed. In other words, my high-growth scenario assumes a decrease of regulation, whereas my low-growth scenario assumes some leveling off in the regulatory trend.

Although comparable data are missing, it is certainly true that the regulation explosion started not with the end of World War II but with the New Deal and that it was smoldering for a few decades before that. Only the resilience of markets in an entrepreneurial economy can probably explain the relatively high growth rates that persisted until a few decades ago. Moreover, the damage caused by regulation—its marginal cost—certainly increases with its volume, which would explain why the Great Stagnation did not become visible earlier (Lemieux 2014–15). The Great Stagnation is probably the result of this whole regulatory megatrend.

The Regulatory Megatrend

The impact of the regulatory megatrend is the most important and the most neglected factor in understanding the world we live in. How regulation evolves will play a major role in what the economy and society will look like in fifty years time.

Nearly two centuries ago, Alexis de Tocqueville forecasted this regulatory megatrend and imagined the democratic dystopia of the future. The sovereign power, he thought, would extend its reach “over the whole community” and seek “to fix [men] in perpetual childhood.” “It attends to their security, provides for their needs, facilitates their pleasures, conducts their principal affairs, directs their industry.” It “covers the surface of society with a network of small, complicated, minute, and uniform rules. . . . [I]t does not break wills, but it softens them, bends them. . . . [I]t does not tyrannize, it hinders, it represses, it enervates, it extinguishes, it stupefies, and finally it reduces each nation to being nothing more than a flock of timid and industrious animals, of which the government is the shepherd” ([1840] 2010, 1251–53).

Without claiming to be exhaustive, I suggest that if the regulatory megatrend continues unabated, its results in half a century may be summarized by three metaphors.

The Central-Bank Metaphor. The “small, complicated, minute” regulations forecasted by Tocqueville cannot suffer the straightjacket of uniform rules. They have to

escape the rule of law as the concept used to be known. To regulate or even to monitor everything, discretion and arbitrariness become necessary. Powerful central agencies with wide power and discretion are required. We can call this process the “central-bank model” (Hummel 2011), although several other federal agencies fit the model well. According to this perspective, the politicians of the future will be content to establish and occasionally tweak powerful independent agencies. In practice, the latter will be the real legislator. Continuous electronic democracy, if it were implemented, might interfere with this setup, but it would mainly add more whim and inconsistency.

The Parenting-License Metaphor. Not only narrowly defined economic activities will be hit. In today’s world, permits and licenses are already needed to do many things, including to operate children’s lemonade stands (Kain 2011). Strangely, however, no permit is needed for conceiving and raising children, activities that produce more consequential externalities than selling lemonade, driving a clunker, or operating a massage clinic. If the regulatory megatrend continues, this incongruity will be corrected with the establishment of a parenting license. (This idea has been circulating in academic circles for a few decades; see Lemieux 2015.)

The Travel Metaphor. Continuous surveillance is indispensable to minute regulation. By 2065, all conversations, emails, and physical letters will be scanned and kept in databases, where the authorities can retrieve them, perhaps with special warrants issued by special courts. All encryption software will automatically provide some government agency with a private key (or another sort of “backdoor”). Any nonlocal trip (longer than, say, one hundred miles) will need to be logged on a government website. Of course, drivers’ licenses will have completed their transformation into a national ID card long before 2065; it has already happened for all practical purposes, with only a central database missing.

That the continuation of the regulatory megatrend will still produce a 1.7 percent annual real growth (as in my low-baseline scenario) may again seem overly optimistic, but one must not forget how resilient markets are, even when constrained. Asia provides some examples, although sustaining high-growth rates is easier at lower stages of development. We can expect technological progress to exert an upward pressure on GDP, canceling part of the negative impact of regulation.

GDP tells only part of the story. Although there exists a close correlation between income and welfare (Lemieux 2014), individuals’ goal is the latter, not the former, and the two variables can sometimes move in different directions. For example, the fast growth of GDP during World War II did not equate with an increase in welfare (at least in the short run or for the dead coerced conscripts). If we want to evaluate our economic future and not “simply” forecast it, we should ultimately be interested in individual welfare.

Measuring welfare, even only conceptually, opens a huge Pandora’s box. I propose to sidestep the problem by assuming that individual liberty, properly defined, is an important part of any individual’s welfare not only because it exerts a direct influence on GDP but also because it is by itself an argument in most if not all

individuals' utility functions—an idea that the Western political tradition owes to the eighteenth century. So we should also be interested in the state of individual liberty fifty years from now. I will thus use liberty as my main normative criterion.

Regulation generally constrains liberty. The only exception would be when it is required to produce public goods and protect liberty itself. The Tocquevillian regulation that has developed in the past several decades is quite certainly not of that sort, and only a small number of the 4,500 federal statutes on the books in 2007 (Murray 2015) protect everybody's liberty. It follows that my high-baseline scenario, which implies some (and probably much) deregulation, means a higher level of individual liberty than today and that my low-baseline scenario, which incorporates a great deal of regulation, must result in a lower level of individual liberty. Anybody who agrees that liberty is a normative criterion thus has another reason to prefer the high-baseline scenario to the low-baseline scenario.

Global Surprises

Surprises—that is, significant unexpected events—will also influence the state of America and the world in fifty years' time. What these surprises will be, nobody knows, but we can try to peek under the hood of the future. On the basis of the evaluation criteria suggested earlier, these surprises will be either good or bad depending primarily on their effect on individual liberty (and secondarily on incomes).

Surprises can be either physical/biological or social/economic/political. The former include severe pandemics, perhaps with antibiotic resistance, massive volcanic eruptions, collisions with large asteroids, crippling solar geomagnetic storms, and so on (National Intelligence Council 2012). The disruptive potential of such events is large: they could push America below my low-baseline scenario and lead governments in all countries to dramatically restrict liberties. However, the probability of these catastrophes is low.

Man-made surprises can be good or bad. It may be inspiring to look at half a dozen such surprises that over the past fifty years have had global significance. Which surprises would an observer in the mid-1960s have been less likely to forecast? Six candidates (in no particular order) are (1) China's economic take-off and rapid growth, at least under the form it has taken; (2) the Internet; (3) the terrorist attacks of September 11, 2001, and the return of religious wars (brought about by Islam); (4) widespread government surveillance in the United States; (5) the disintegration of the Soviet Union; and (6) the questioning of free speech in the West (including free-speech codes and "triggerism" in American universities as well as hate-speech laws in other countries).

These events were difficult to forecast either because they clashed head on with what appeared to be major trends or generalized beliefs at the time (numbers 3 to 6) or because they pushed existing trends far beyond their imagined paths (numbers 1 and 2). Kahn and Wiener (1967) gave a glimpse at the possibility of numbers 1, 2, and 4, but even in these cases the future developed in its own sneaky way.

Similar black swans for the next fifty years, on both the good and the bad sides, might figure in the following list:

Free trade or autarky. **Good surprise:** One major country declares unilateral free trade, leading to a general drop in protectionism. **Bad surprise:** Protectionism and autarky spread worldwide, perhaps as a response to some other catastrophe.

Leisure society or new Luddism. **Good surprise:** Something close to machine intelligence is achieved, leading to the leisure society that theorists have been predicting for decades (Keynes [1930] 1963; Kahn and Wiener 1967). Or there might be another, more realistic sort of major technological advance. **Bad surprise:** Luddite revolts spread, perhaps after a technological accident.

Resistance or nuclear war. **Good surprise:** Some new technology dramatically increases individuals' capacity to resist tyranny. **Bad surprise:** A nuclear war causes devastating damage and deaths.

Liberty restored in the United States or tyranny established. **Good surprise:** A vast movement rebuilds American liberty, perhaps as Charles Murray (2015) advocates. **Bad surprise:** A world government is instituted, possibly in the aftermath of nuclear war. Alternatively, a dictatorship is established in the United States or in other major countries of the West.

Some states (nearly) wither away, or the United States crashes. **Good surprise:** Nonstate organizations develop to the point where the usefulness of the state is questioned in the United States and elsewhere in the world. Perhaps some states are replaced by minimum states. **Bad surprise:** A severe economic crash occurs in the United States, perhaps following defaults on public debt and hyperinflation (Lemieux 2013). Or political polarization leads to a new civil war and the dissolution of the union. (In case of disintegration, some parts of the former country may reestablish liberty and thrive, which would be a good surprise from the point of view of most individuals living there.)

Two Alternative Polar Worlds

By construction, good surprises will increase individual liberty; bad ones will decrease it. The impact on GDP should be in the same direction. My high-baseline and low-baseline scenarios would be amplified. Nobody knows if we can expect more good or bad surprises. But we may be in a position to reformulate our two simple scenarios into something more complete. In this section, I try to combine in two polar worlds the different strands of thought I have pursued: the two simple GDP scenarios, the regulatory megatrend, and the possible surprises that can mitigate or exaggerate these developments. The two polar worlds that might exist in year 2065 are very different.

If we assume the continuation of the regulatory megatrend and a larger probability of bad surprises, the prognosis is not good. Our grandchildren will be lucky to get the low-baseline scenario for economic growth and will live in a much less free world. This bad polar world may look very much like the caring tyranny of

Aldous Huxley's novel *Brave New World* (1932) or George Lucas's film *THX-1138* (1971). A more cruel tyranny à la George Orwell's *Nineteen Eighty-Four* (1949) is less probable but might develop after a major catastrophe. The developing police abuse in the United States gives us some insider hints. The only hope in the bad polar world would be that there remain some spaces, physical or virtual, where some individual liberty survives. This hope would be reduced by the creation of a world government.

At this point, the parallelism I proposed between liberty and welfare may completely break down. Most people may well enjoy their golden chains. Except perhaps for the elderly, they will never have experienced anything else. James Buchanan (2005) called "parentalism" the desire of people to be taken care of by the state, like children by their parents, and he forecasted that this phenomenon would continue to fuel socialism in the twenty-first century. The parentalist society is very close to the Huxley-Lucas version of my bad polar world.

My crystal ball has a murky area that I have not explored, in part because it does not fit with Tocqueville's egalitarian forecasts. But it ties in well with the class vision of *Brave New World*. In this version of the bad polar world, incomes earned in 2065 will be grossly unequal, extending a phenomenon that seems to be currently emerging. On one side, the lucky, educated, and "law abiding" will be rich and comfortable and obtain permits easily. The earth will belong to them. On the other side, a minority of unlucky, poorly educated, and unpopular individuals will be excluded from many ordinary rights and opportunities. They will be the wretched of the golden earth. Although the state will conspicuously assist these new proletarians, its laws and regulations will be the main cause of their degradation. A prefiguration of this world can be seen in the number of convicted felons (9 percent of American adults, according to estimates by Sarah Shannon and her colleagues [n.d]), who are often guilty of mere regulatory crimes, can never become "law abiding" again, and find themselves irremediably blocked from many ways to earn a living. We don't know who will be the hated minorities of the future.

The alternative world, the good polar world, assumes that regulation is drastically reduced and that mostly good surprises happen and mankind is spared the most devastating ones. If new technologies can fuel government surveillance and control, they can also undermine regulation (the taxi industry provides a current example). In the good polar world of 2065, we expect a rate of growth at least equal to that of my high-baseline scenario and perhaps much higher. Compounding would again work its magic: for example, if real GDP per capita were to grow at 4 percent per year, it will be multiplied by seven from 2014 to 2065. The average American will then earn an income that makes him rich enough to qualify as a member of today's richest 1 or 2 percent. More important, our grandchildren will be living in a free society.

The future will tell if my good polar world is just wishful thinking.

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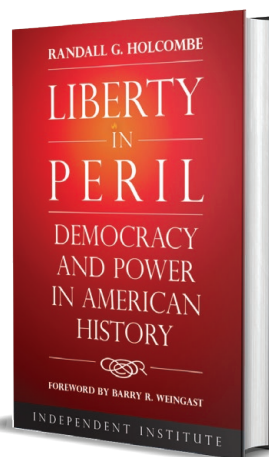
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