

EVERYONE IS A MILLIONAIRE

By Richard W. Rahn
August 15, 2018

Do a thought experiment. Think back to the year 1979 if you were born before 1964 or, if not, just think back to the year you turned 16. How many hours did you have to work to buy the goods and services you purchased? There has been considerable discussion about so-called “wage stagnation” in recent years in the U.S. and some other countries, even though after-tax wages now seem to be rising again.

The common measures of inflation, such as the Consumer Price Index, provide a reasonable indicator of the change in price of the same goods over time. With standard commodities, such as wheat, corn, oil, steel and aluminum, the product is essentially identical over long periods. The nominal price usually increases due to changes in the money supply. The real price change reflects both the change in the price level but also the change in productivity. On average, the nominal price of aluminum is now about double what it was 40 years ago, but the average nominal wage is about three times what it was 40 years ago. So where it took the average person about an hour and half of labor to buy a pound of aluminum, it now only takes them about an hour. This means that the real cost of aluminum has declined because of improved manufacturing technology and a real drop in the cost of energy (which is a major component – 40 percent – of the cost of aluminum).

Most manufactured items and agricultural products have had much bigger increases in productivity. The “Human Progress” division of the Cato Institute, directed by Marian Tupy, produced an infographic of how many hours it took to earn enough money at an average wage in 1979 as compared to

the average wage in 2015 to purchase a number of common items. Some examples are in the table below. It shows the reduction in the number of hours from 1979-2015 to produce some common products.

Product	Number of Hours of Labor		Real Cost Reduction
	1979	2015	
26" bicycle	10.5	4.0	62%
24" dish washer	33.0	13.0	61%
Refrigerator	75.0	36.0	52%
Gas grill	14.0	4.0	71%
Microwave oven	61.0	3.0	95%
Four-slice toaster	4.5	0.7	84%
19" TV	70.0	4.3	94%

Source: Human Progress

These products may have the same name and function today of those made decades ago, but most things have vastly improved in quality and safety. A 19-inch TV used to be a screen with a fat back that contained a cathode ray tube producing a greatly inferior picture compared with today's flat screens. And quality and reliability is vastly superior at one-tenth of the real cost.

In the 1980s, I was a member of a U.S. government panel that was trying to improve the measures of inflation. One of the problems we were dealing with was to measure and value improvements in products. For instance, we knew the price of a standard 1954 Ford and the price of the standard 1984 Ford; but over the years, many quality, device and safety improvements had been made so they were not the same product and merely looking at the price change was of limited use. That problem was easy compared to the increasingly rapid rate of change in virtually all products now.

The Ford Model T was produced from 1908 to 1928 and set the record for the number produced (15 million) until it was dethroned by the VW Beetle a few years ago (which is also no longer in production). Trying to compare the Model T with a new Ford to obtain a measure of productivity gain and price inflation is a fool's quest because they are not even close to being the same product. The Model T in terms of performance and utility has much more in common with a high-end golf cart than a modern automobile. The Model T Runabout had open sides like a golf cart, was slow with a limited range, and had about the same payload that a modern high-end golf cart has. In terms of the

average wage in 1920 and now, the golf cart (according to my crude, back of the envelope calculations) takes about a third as many work hours to purchase than the Model T.

The traditional “market basket” approach, whereby changes in prices of a standard set of products is measured to determine inflation and real incomes, is less and less useful in a high-tech, rapidly changing environment. The problem is compounded as the typical person spends an ever declining percentage of his or her income on physical manufactured products and more on services. Many physical products are becoming less and less standardized as new technologies allow for much greater customization – each product being specifically tailored to the wants, needs, and desires of each customer. If every product is different, it becomes almost impossible to compare changes in real costs over time.

The problem with services is even worse. Was a haircut in 1918 the same as in 2018? Well, basically yes, and we can measure the price change. But how about a newspaper? Physical newspapers have only slowly evolved, but now most people get their news from some electronic source – and increasingly those who “provide the news” tailor their product so each customer receives only the news (and even opinions) which are of interest to them – as determined by an algorithm.

Medical services that are provided today have little resemblance to those provided a couple of decades ago. Imaging technology and the ability to measure human chemistry and electrical activity are growing at an exponential rate. Body parts are now routinely replaced by both physical devices and biological constructs. They may cost a considerable amount of money, but they also enable people to live longer, more productive, and happier lives.

Given that the average person spends considerably less labor time than in previous times to buy the products they perceive they need even when their real wage (inflation adjusted) has not increased – the question remains as to where they spend the extra money. Note that the relative price of products changes so people tend to substitute the ones that have become relatively less expensive for the ones that have become relatively more expensive.

For example, the smartphone did not exist two decades ago but now most people have them. The smartphone allows a person to access a huge number of apps, often for free, or at little cost.

Going back to our mind experiment – what would have been the cost of each of those apps you now use if you had purchased them as standalone products in 1979? For example, how much would it have cost to buy a camera with all the features found in a standard modern smartphone (realizing that the most expensive cameras in the world back then had nowhere near the resolution of the new smartphone cameras?) Add up the costs of all those things that you now buy or acquire for almost free – goods and services that you could not afford in some past time period or were not available at any price – that number is the true measure of the change in your real income.

Because of Google, your smartphone has virtually all of the world's information in it. The best library in the world (the Library of Congress) with the largest collection of material is now available at virtually no charge to anyone. How much is that worth? Smart students who are diligent and have a basic command of English and mathematics can now get themselves a world-class education for free because many of the leading universities have put their courses online – along with all the necessary material for free. How much is that worth?

Online maps and directions save people countless hours in trying to get from point A to point B. How much is that worth? Everyone now has access to the latest medical developments.

How many lives has that saved? And how much is that worth? The examples are endless, but the point is everyone has free access to stuff that would have cost them millions of dollars even 20 years ago.

What are we trying to measure and why? For many reasons, it is useful to know at what rate living standards are improving, and it is vital to know at what rate the purchasing power of government currencies, like the U.S. dollar, is being eroded.

As explained above, merely looking at the real reduction in cost of producing and acquiring goods and services today in comparison with some earlier time period only provides limited and incomplete information about individual well-being. Perhaps the best that can be done to answer the question of how much living standards have increased from a previous time period is to look at the consumption pattern of a typical person with an average income and then try to determine the cost of what those purchases would have been in the previous period in inflation-adjusted dollars.

As also explained above, there are many problems in determining how much inflation (erosion of the purchasing power of the dollar) there has been from any previous time period. U.S. dollars (USD) serve as the global measuring stick as to the value of production and consumption, and wealth. For instance, most of the world's major commodities, such as oil, are stated in U.S. dollars. Global economic statistics are reported by the leading international organizations in U.S. dollars.

A meter, a liter, a gram, and the speed of light are all constants (except in the world of quantum physics) and thus are useful for measuring and comparing, even over very long time periods. In contrast, the dollar and all other government fiat currencies are not constants – they are ever-changing rulers, which also change at variable rates. Over the last half century, the value of the dollar has changed between an estimated plus 0.4 percent to minus 13.5 percent per annum.

When the world was on the gold standard, there was not the persistent inflation, and, in fact, there tended to be a small, but variable, amount of deflation per year – because the increase in gold supply did not keep up with the increase in world output. Many argue that the world should go back to the gold standard – but an agreement among the world's major economic powers would be needed to bring it about.

The great distinguished economist, F.A. Hayek, in his 1976 book “Denationalization of Money” argued for non-government money – perhaps use a commodity basket as a backing. My own research into the area over the last few decades has led me to conclude that using aluminum as a backing to a global currency is the best solution (see Rahn, “The Future of Money: How Cryptocurrencies with Real Backing will Become the Ultimate Disruptive Technology” Cayman Financial Review, October 2017). Whether gold, aluminum, or a commodity basket, etc., the evidence is that the private sector can create a better money (a less variable measuring stick) than the USD, or any other government fiat currency. A more stable stick, can give us a tool to obtain improved measures of inflation, but as noted above, it in itself cannot solve the problem of how to measure the changes in national and individual economic well-being.

There is no limit to technological progress – and thus there is no limit to mankind's ability to reduce the real cost of virtually all goods and services, and create new ones to make life better and more enjoyable. Several decades ago there was a TV program “The Millionaire.” Each week the representative of a very rich man would give some ordinary person a million dollars – and the rest of

the story would be how it changed his or her life for good or bad. As they say, a million dollars is not what it used to be because of inflation. But in reality it is much more – because a million dollars today can buy you what could have barely been imagined a half century ago. In terms of times past, most people are de-facto millionaires today; and within the next half century, most people will be enjoying things that only billionaires can today.

<https://www.caymanfinancialreview.com/2018/08/15/everyone-is-a-millionaire/>