Understanding the Healthcare Bubble: How It Was Inflated, and Why It Must Burst

Andrew Foy, M.D.

The U.S. healthcare system is a huge bubble created by misguided government policies that are made possible by the government's ability to borrow money at artificially low interest rates. When either the policies change or the flow of credit stops, the bubble will burst.

Austrian Business Cycle Theory

The one business cycle theory that has stood the test of time was first advanced in 1912 by Ludwig von Mises in his masterwork *The Theory of Money and Credit*.[1] It was elaborated upon by Friedrich Hayek and Murray Rothbard. Hayek's work eventually won him the 1974 Nobel Prize in Economics.[2] The basic outline of the theory is as follows:

- Interest rates have a profound effect on economic decisions.
- Left to the market, interest rates are determined by the supply of credit, which is a mirror of the savings rate and the willingness of investors to take risks in the market.
- Manipulation of interest rates by the central bank destroys this balance.
- This spurs investment and spending on projects and activities that would not have otherwise been undertaken.
- Money tightening prompts an economic downturn as these projects and activities are no longer profitable or cannot be maintained when the supply of credit is contracted.

This theory is strongly supported by data from both the dot.com and housing bubbles, but a full review of this data is too extensive to undertake here. Instead, to highlight the validity of the theory, I will simply quote a 2003 prediction about the housing bubble by the most famous modern-day Austrian economics spokesman, Rep. Ron Paul of Texas, a long-time AAPS member and current presidential candidate:

> Despite the long-term damage to the economy inflicted by the government's interference in the housing market, the government's policy of diverting capital to other uses creates a short-term boom in housing. Like all artificially-created bubbles, the boom in housing prices cannot last forever. When housing prices fall, homeowners will experience difficulty as their equity is wiped out. Furthermore, the holders of the mortgage debt will also have a loss. These losses will be greater than they would have otherwise been had government policy not actively encouraged over-investment in housing.
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> Perhaps the Federal Reserve can stave off the day of reckoning by purchasing GSE [government-sponsored enterprise] debt and pumping liquidity into the housing market, but this cannot hold off the inevitable drop in the housing market forever. In fact, postponing the necessary, but painful market corrections will only deepen the inevitable fall. The more people invested in the market, the greater the effects across the economy when the bubble bursts.[3]

A unique difference exists between the housing bubble and the healthcare bubble. The low interest rate on home loans, in addition to government policy intended to create a "home ownership society," is credited for inflating the housing bubble. In this case, private banks and quasi-private institutions (or the GSEs, Fanny Mae and Freddie Mac) made loans to private home buyers. Mortgage interest rates were low because the Federal Funds Rate for bank borrowing was held low in an attempt to stimulate the economy after the dot.com bubble burst. This caused a misallocation of resources into housing that could not be supported once the Federal Funds Rate was raised and housing and construction activity dried up.

For the healthcare bubble, the concern is not about private banks or quasi-private institutions making low-interest loans to private individuals seeking to invest in or consume healthcare goods and services. Rather, the low-interest loans have been and are continuing to be made available to the U.S. government to support spending on healthcare goods and services through federal programs such as Medicare and Medicaid, which have caused severe distortions in how healthcare is paid for and consumed. However, as with the housing bubble, this has led to a misallocation of resources into healthcare that cannot and will not be supported once federal healthcare spending dries up.

Illustrative Case

As Friedrich Hayek wrote in *The Constitution of Liberty:*

> There is no objective standard for judging how much care and effort are required in a particular case; also, as medicine advances, it becomes more and more clear that there is no limit to the amount that might profitably be spent in order to do all that is objectively possible. Moreover, it is also not true that, in our individual valuation, all that might yet be done to secure health and life has an absolute priority over other needs. As in all other decisions in which we have to deal not with certainties but with probabilities and chances, we constantly take risks and decide on the basis of economic considerations whether a particular precaution is worthwhile, i.e., by balancing the risk against other needs. Even the richest man will normally

not do all that medical knowledge makes possible to preserve his health, perhaps because other concerns compete for his time and energy.

Congestive heart failure is a major health problem and a major cause of death in the elderly. In the U.S. alone, 550,000 new cases are diagnosed a year and only a tiny fraction of these afflict relatively healthy young adults who are candidates for a heart transplant. The overwhelming majority affect older individuals with chronic conditions such as ischemic and hypertensive heart disease. Advanced heart failure, experienced by 250,000 Americans, results from the natural progression of this medically manageable yet ultimately incurable illness.

In an attempt to improve and ultimately prolong life in patients with advanced heart failure, left ventricular assist devices (LVADs) are now being used as "destination therapy." Pamboukian et al. found that in a cohort of 80 consecutive VAD implants, the observed 1-year survival post-VAD was 60% compared with the estimated 47% survival had these patients not received a VAD using the Seattle Heart Failure Model (SHFM).[4] In an observational study of 86 patients with chronic heart failure who underwent LVAD implantation with the HeartMate II (Thoratec Corp.) Morgan et al. found the prevalence of post-implant gastrointestinal bleeding was 22.1%, with duration of support ranging from 5 to 456 days.[5]

Rogers et al. assessed the cost-effectiveness of the HeartMate II device and found the following results:

> Compared with medically managed patients, continuous-flow LVAD patients had higher 5-year costs ($360,407 versus $62,856), quality-adjusted life years (1.87 versus 0.37), and life years (2.42 versus 0.64). The incremental cost-effectiveness ratio of the continuous-flow device was $198,184 per quality-adjusted life year and $167,208 per life year.[6]

Thoratec credited a U.S. and global sales surge of its HeartMate II pump as a key factor in boosting 2012 first-quarter revenue 27% compared with a year earlier.[7] Thoratec President and CEO Gary Burbach said in a statement, "Our HeartMate II performance was broad-based, with unit growth of 32%.... In the U.S., the product's destination therapy indication continued to drive much of the growth."[7]

The Healthcare Bubble

As Figure 1 demonstrates, healthcare spending began to take off in 1965, when the government began subsidizing healthcare for the poor and elderly through Medicare and Medicaid. It expanded further as legislation, most notably the HMO Act of 1973, and regulatory policy shifted the responsibility of health maintenance from the individual to everyone in his insurance pool. This was accomplished through regulations requiring insurers to cover medical services (e.g. cancer screenings, pharmaceuticals, and a wide range of therapeutic and rehabilitative services) for conditions that were not insurable events but rather part of routine health maintenance. Throughout the expansion, out-of-pocket spending declined dramatically.

America's healthcare system today can best be described as "fascialist," a term coined by economics professor Thomas DiLorenzo, who writes: "Fascialism means an economy is part fascist, part socialist."[9] Fascism is characterized by private enterprise that is comprehensively regulated and regimented by the state, ostensibly "in the public interest" (as arbitrarily defined by the state). A variant of fascism is "crony capitalism." Socialism started out meaning government ownership of the means of production, but it has come to mean egalitarianism promoted by progressive taxation and the institutions of the welfare state. According to DiLorenzo, "The problems of the American healthcare system are caused entirely by the fact that the government subjects the system to massive interventions, some of which are fascist in nature, while others are socialist."

Under the current system, consumers play virtually no role in shaping the pattern of resource use and assignment of resource rewards. The outputs produced, the methods of production employed, and the rewards given to the various owners of productivity are not dictated by healthcare consumers, but rather by government and industry lobbyists—the medical-industrial complex.

Prior to Medicare and Medicaid and the significant regulatory changes that followed, American medicine actually operated under near-capitalist conditions (it was never pure capitalism). I will term this the capitalist period of U.S. healthcare. During this time, individuals paid for the majority of medical goods and services out of their own pockets and used health insurance as a rational tool for mitigating financial risk posed by catastrophic events. Although still a relatively new concept, participation in private insurance plans was growing, and by 1960 nearly 75% of Americans had some form of private health insurance coverage.[10] During this period, rapid advancements were being made in pharmaceuticals, diagnostics, and surgical techniques (e.g. the heart-lung machine, which made coronary artery bypass surgery possible). Furthermore, charitable institutions and hospitals run by religious groups and fraternal organizations such as the Freemasons, whose mission was to take care of the indigent, abounded. Most importantly, the price of medical goods and services remained remarkably stable (see Figure 2).

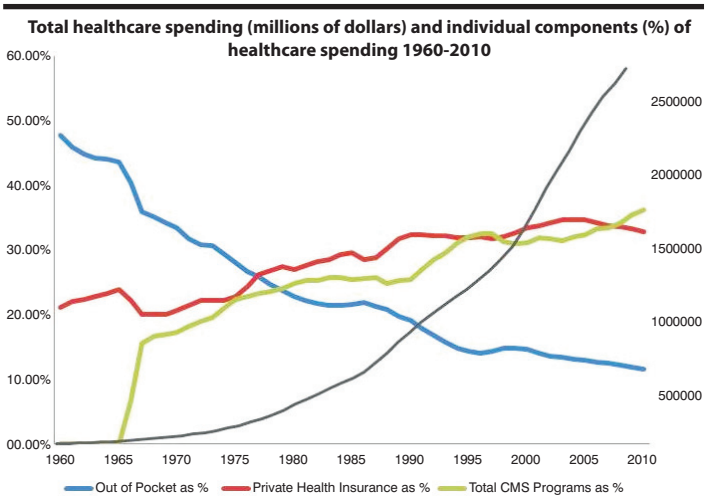

Figure 1. Healthcare spending trends[8]

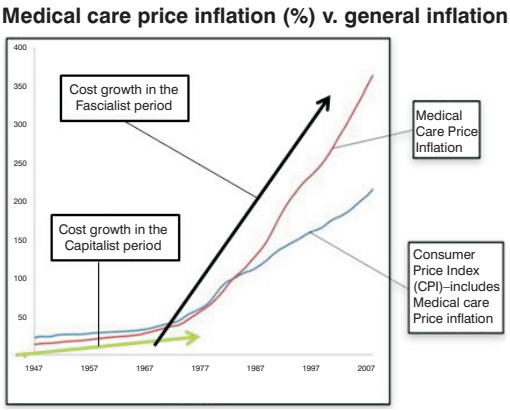

Figure 2. Disproportionate price increases under fascialism[11]

As Figure 2 demonstrates, inflation of the healthcare bubble corresponded with the change from the capitalist to fascialist model of U.S. healthcare, which was facilitated by going off the gold standard (see below). From the period 1990 to 2007 the cost of all items, as measured by the Bureau of Labor Statistics, rose by 159%, while housing rose 163% and medical care rose a staggering 216%.[11] A recent study by the Kaiser Family Foundation found that between 1999 and 2011, health insurance premiums increased 168%, while workers' total earnings increased only 50%.[12] Over that same time period, government spending on healthcare increased 240%, while GDP increased 62%.[13] The Bureau of Labor Statistics (BLS) reported that over the last 50 years, the percentage of workers employed in private-sector healthcare has gone from 3% to over 11%, and employment has continued to grow throughout the current recession.[14] BLS further projects that "healthcare will generate 3.2 million new wage and salary jobs between 2008 and 2018, more than any other industry" and that "the number of wage and salary jobs in pharmaceutical and medicine manufacturing is expected to increase by 6% over the 2008-18 period, compared with 11% projected for all industries combined."[15,16]

The 1% and the 99%

The Occupy Wall Street (OWS) movement that sprang up in 2011 brought to the surface the growing discontent felt by many American citizens. One of OWS's main talking points was that over the last several decades the rich have gotten richer while the poor and middle class have stagnated. This point is underscored by U.C. Berkeley economists Thomas Piketty and Emanuel Saez, whose work has shown that from 1993 to 2008, the "real annual growth in income" of the top 1% has increased by 3.94%, while that of the bottom 99% has increased by only 0.75%.[17] However, there are several shortcomings to Piketty and Saez's method of using income tax data to measure changes in income inequality. The most important problem is that income tax data does not account for changes in household size, transfer payments to low-income people, tax code changes, and untaxed benefits contributed by employers that go toward benefits such as employee health insurance and retirement accounts. Piketty and Saez admit that if adjustments were made for the missing incomes, changing family sizes, and rising benefits, "from 1973 to 2000, the average income of the bottom 99% would have grown by about 50% in real terms instead of stagnating" as their raw data suggest.[18]

Despite the shortcomings of Piketty and Saez's approach, which I have publicly criticized in the medical literature,[19] it is worth considering what truth their findings reveal. To put it simply, while "earnings" of the poor and middle class have indeed increased, their take-home pay has not. Effectively, this can make people feel as though they're spinning their wheels, and it probably underlies the real angst felt by so many Americans during this difficult economic period. Interestingly, it is strongly related to the healthcare bubble. As mentioned above, Piketty and Saez's approach does not account for untaxed benefits contributed by employers to health insurance, but if we examine the increase in premiums we can begin to understand why so many middle-income Americans are not seeing an increase in their take-home pay—a significant and ever-increasing amount is going towards their health insurance. A recent study by the Kaiser Family Foundation found that between 1999 and 2011, health insurance premiums increased 168% with a near-equal increase in contributions from both workers and employers; however, over that same time period, total earnings increased by 50%.[12]

Access to Easy Credit

Access to easy credit is a necessary component of Austrian business cycle theory, and the healthcare bubble is no exception. In this case, it was access to easy credit made available to the government to finance the operations of the welfare state. As Figures 1 and 2 show, the increase in government spending on healthcare is the primary driver of the bubble, and much of this spending has been financed by borrowing. Currently, nearly half of Medicare and all of Medicaid are financed through general revenue. In addition, there is an ever-expanding number of federal government employees who earn generous healthcare benefits that include "Cadillac" private health insurance plans. This has all been made possible despite the fact that the government has been consistently running deficits since going off the gold standard in 1971.

Before 1971, the dollar was tied to a certain amount of gold. Although private citizens, including Americans, could not redeem their dollars for gold, foreign central banks could. This meant that the U.S. could not over-inflate its currency because if inflation got out of control, foreign central banks would cash in their dollars for gold, and the naked emperor would be revealed.

Unfortunately, the growth of military and welfare spending that commenced in the 1960s made it impossible for the government to finance its operations through tax revenue alone (which is historically about 18-20% of GDP regardless of the exact tax rates), and it had to resort to borrowing. However, money is by definition a scarce resource. There is only so much of it available at any one time for lending, and the lender will only part with it if he can expect a return. Therefore, the interest rate for borrowing and lending money is subject to the same laws of supply and demand

as everything else in the market. All else being equal, if the government borrows, it will drive up interest rates. Many businesses that depend on lines of credit to finance their operations would be negatively impacted, and the public would be outraged. Therefore, government needs a mechanism to make borrowing easy. It needs inflation, and the only way the U.S. government could make inflation possible in the 1970s was to close the gold window. Dr. Ron Paul states:

> [T]he gold standard is not compatible with a government that continually incurs deficits and lives beyond its means…. Because gold is honest money, it is disliked by dishonest men. Politicians, prevented from buying votes with their own money, have learned how to buy votes with the people's money. They promise to vote for all sorts of programs, if elected, and they expect to pay for those programs through deficits and through the creation of money out of thin air, not higher taxes. Under a gold standard, such irresponsibility would immediately result in high interest rates (as the government borrowed money) and subsequent unemployment. But through the magic of the Federal Reserve, these effects can be postponed for a while, allowing the politicians sufficient time to blame everyone else for the economic problems they have caused.[20]

Figure 3 demonstrates that the federal government began running consistent budget deficits in the 1970s. While in the 1970s changes in the federal funds rate roughly tracked with deficits, by the early 1980s interest rates had totally uncoupled from federal debt. An increase in the monetary base, as signified by M2 and M3 on the figure, made this uncoupling possible. This has driven economic activity into areas that would not have otherwise seen such investment had it not been for monetary expansion.

This monetary expansion, made possible by going off the gold standard, has allowed for unrestrained government growth, and it has expanded its activity most in the area of healthcare. As proof, the government spends 1,890% more now than in 1970 ***but spends 5,400% more on healthcare.***[21]

Federal Deficit versus the Federal Funds Rate, M2, and M3

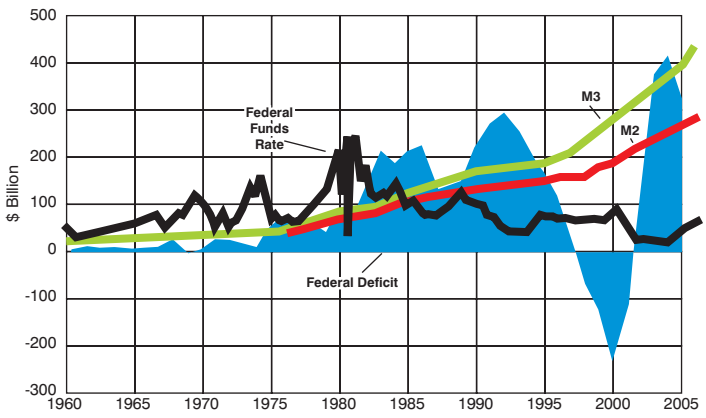

Figure 3. The federal deficit and inflation[21, 22]

Why the Bubble Must Burst

The healthcare bubble cannot possibly be maintained without this continuing line of credit to the federal government. When either government policy changes to reflect this reality, or government cannot raise enough revenue to meet its full commitments to all federal healthcare programs, then healthcare revenue will decline and profits will dry up.

In 2010, 47.5 million people were covered by Medicare, which paid a total of $516 billion in benefits. According to the Medicare Trustee's Report, "HI [Part A] expenditures have exceeded income annually since 2008 and are projected to continue doing so through the short-range period until the fund becomes exhausted in 2024…5 years earlier than was shown in last year's report."[23] They go on to state, "The HI trust fund has not met the Trustees' formal test of short-range financial adequacy since 2003."[23] In regard to Part B,

> [Costs] have been increasing rapidly, having averaged 6.9% annual growth over the last 5 years, and are likely to continue doing so. Under current law, an average annual growth rate of 4.7 percent is projected for the next 5 years. This rate is unrealistically constrained due to a physician fee reduction of over 29 percent that would occur in 2012 under current law. If Congress overrides this reduction, as they have for 2003 through 2011, the Part B growth rate would instead average 7.5 percent. For Part D, the average annual increase in expenditures is estimated to be 9.7 percent through 2020. The U.S. economy is projected to grow significantly more slowly than Part D and the probable growth rate for Part B.[23]

Transfers from the general revenue fund represent an important source of Medicare financing, especially for Parts B and D (also known as the SMI trust fund). According to the Trustees, "The difference between Medicare's total outlays and its dedicated financing sources is estimated to reach 45 percent of outlays in fiscal year 2011," which triggered a statutory "Medicare funding warning."[23] Furthermore, in 2011, the federal government spent $350 billion on Medicaid from the general fund.

Altogether, the federal government is projected to spend $1.1 trillion on healthcare in fiscal year 2012, which will account for 17% of all government spending.[21] The projected deficit for fiscal year 2012 is $1.3 trillion, and the gross federal debt (the debt owed by the U.S. federal government), a staggering ***$16.4 trillion or 109% of GDP!***[21, 24] Given these historic conditions, there is simply no way the federal government can indefinitely prolong the trend in healthcare spending. According to John Embry, chief investment strategist for Sprott Asset Management,

> One of the few reasons that this remarkable debt edifice is still standing is the Fed's zero interest rate policy…in conjunction with massive Fed monetization of Treasury debt [which] has kept the interest rates on government debt ridiculously low, and thus the charade has been allowed to continue…. [I]f the interest rates on US government debt truly reflected both the real level of

inflation in this country and the rising risk of some form of default, rates would already be sky-high and the US would resemble a massive Greece.[25]

There is no circumstance under which this degree of government spending can be financed, and when it's not, the slack won't be taken up by individuals. In 2008, the U.S. Department of Health and Human Services (HHS) estimated that national health expenditures per individual were $7,845—more than $31,000 for a family of four.[19] At the same time, the Census Bureau claimed that the average household size was 2.63 and thus, the average household share of national health expenditure was $20,632.[26] The census estimated that almost one-fifth of U.S. households earn less income than their share of national health expenditure.[8]

As the above figures make clear, U.S. citizens as a whole cannot afford what the U.S. spends on healthcare. Therefore, when government spending on healthcare declines (as it must) overall healthcare spending will decrease dramatically, healthcare prices will drop, revenue will decline, and profits for the healthcare industry and related industries will dry up—the healthcare bubble will burst. This could be brought about in several ways, such as a failure to raise the debt ceiling, as Dr. Gilbert G. Berdine has pointed out;[26] a failure by the government to raise capital at historically low interest rates, as John Embry suggested;[25] or government policies that actually reduce healthcare spending such as using the Independent Payment Advisory Board (IPAB) to restrict which patients are eligible for certain medical care; or simply having CMS reduce allowed fees.

The Future of Medicine

No one can know what the market will look like after the healthcare bubble bursts. In my opinion, practicing physicians would do well to focus on giving patients what they value because for too long the medical-industrial complex has been focused on giving people what *it* values at the expense of the public. The money the government borrowed (or that had been shifted from the young and relatively healthy in politicized private insurance pools) to pay for pharmaceuticals, diagnostic testing, surgical procedures, and a wide range of therapeutic services spawned the tremendous growth in healthcare and related industries. But unfortunately, something that cannot continue must come to an end, and the healthcare bubble is no exception. When this occurs, what will be left?

Medicine is an ages-old profession. It existed long before the healthcare bubble was inflated, and it will continue on long after the bubble bursts. Therefore, discovering the real market for healthcare goods and services after this occurs will be an important task for current and future generations of physicians.

Andrew Foy, M.D., is a cardiology fellow at Penn State Hershey Medical Center. Contact: Andrew.Foy@gmail.com.

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