

Rising Health Expenditures - More Life vs. More Goods

"Youth would be an ideal state if it came a little later in life." - Herbert Henry Asquith

Are we, as a nation, spending too much on health care? In the United States a rising share of our total resources are being devoted to health care. In 1960, the share of U.S. GDP spent on health care costs was 5%, but by 2002, it had climbed to more than 14% (see figure 1 below) and appears to be heading higher.

Why is this happening? It certainly can't be explained by changes to U.S. government policy or features of U.S. health insurance, because the trend is global. A pattern of rising share of health spending holds true for most industrialized nations (see figure 2 below). This means that there must be some common factors at work.

According to economic research from the Federal Reserve Bank of San Francisco, the aging of populations, the rising cost of insurance, the disconnect between the patient-doctor-payor relationship, and increasing cost of lawsuits do not explain the increase. While waste and fraud might explain some of this increase, there are clearly other forces driving the increased spending.

Recent, economic research indicates that health care's rising share of the economy may reflect the natural course of economic growth. In other words, as a nation gets richer, one of the most valuable and productive opportunities for spending is to purchase better health and longer lives.

Health care extends life. Over the 20th century, U.S. life expectancy at birth increased from about 50 years in 1900 to about 77 years by 2000. Exactly how much of this increase is due to increased health spending is unclear, but the large gains in life expectancy clearly represent one of the major accomplishments of the 20th century.

"Be careful about reading health books. You may die of a misprint." - Mark Twain

Figure 1
Rising health expenditures in the U.S. ...

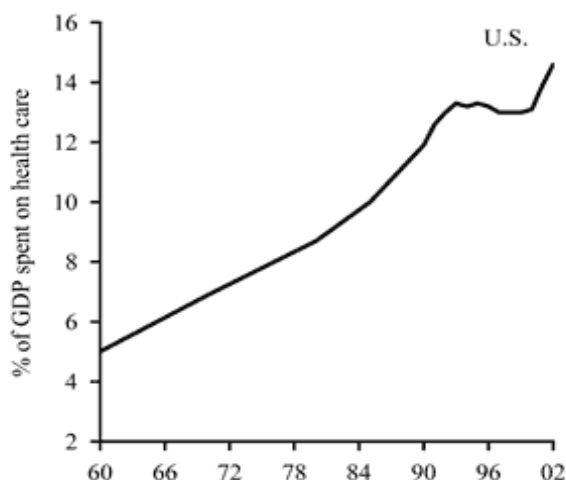
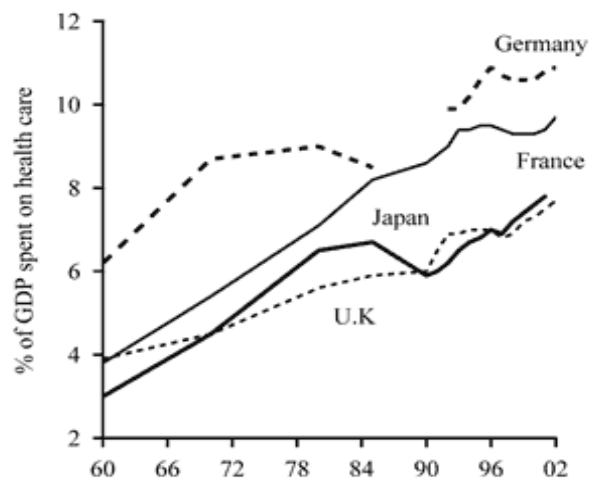


Figure 2
... and in other industrialized countries



Important Disclosure: This copyrighted commentary is published for informational purposes only, and should not be considered a recommendation to purchase or sell any particular security. Madison Financial Advisors does not intend for the information contained in this commentary to be investment advice, and the information presented in here should not be relied upon to make an investment decision. Madison Financial Advisors makes no representation that the information is accurate, complete or current, or that it reflects the current opinion or all information known to Madison Financial Advisors.

"Life can only be understood backwards; but it must be lived forwards" - Soren Kierkegaard

Heart Attacks: Let's consider a specific example to understand the changes in medical spending and life expectancy. Between 1984 and 1998, average medical spending to treat a single heart attack case rose from about \$12,100 to \$21,700. The additional cost primarily represented the more extensive use of surgical intervention rather than the discovery of an entirely new form of treatment. In 1984, only 10% of heart attack patients were treated surgically, while in 1998 more than half were. One of the benefits of this more expensive treatment appears in increased life expectancy. In 1984, life expectancy of a heart attack victim was 4 years and 11 months. By 1998, life expectancy had risen to 6 years. At a cost of less than \$10,000, this additional year of life seems like a bargain.

Over the last century, the consumption of goods other than health care in the U.S. increased from about \$4,000 per person in 1900 to about \$20,000 per person in 2000. The research shows that people value increases in life expectancy as highly as the gains in all other forms of consumption. This begins to explain why health care spending has grown so rapidly: because it is valuable.

Economic models can examine the choices that people have. In one model people are given a choice between spending more on things they can consume or spending to add additional months of life. The model predicts that as people's incomes rise (as they have in the U.S. and other industrialized nations) spending on health care rises faster than consumption. The Law of Diminishing Returns is at work. According to this principle, the first \$10,000 of consumption is incredibly valuable, the next \$10,000 less valuable, and so on. The additional utility one gets by increasing consumption falls as consumption rises.

On the other hand, adding additional months of life doesn't have the same diminishing returns that increasing consumption encounters. As we get richer and richer, which is more valuable: a third car, yet another television, more clothing - or an extra year of life? One of the most valuable uses of our income is to increase the quality and quantity of our remaining lives. Therefore, the model predicts that while both consumption and health spending should rise as income increases, health spending should rise by more.

By using the model to simulate the future, the economists determined possible paths for the health care share of GDP over the next 50 years. The simulations suggest that, while the U.S. spends about 15% of its GDP on health today, the share might rise to 25% or 35% of GDP by 2050. For investors, the implications of this rise are interesting, because the results imply that health care spending will grow at a rate that's 35% to 60% faster than overall economic growth. At Madison, we are taking this into account when we construct and manage our clients' portfolios.

The potential economic gains from further medical innovation and the more widespread application of existing medical techniques remain large. Economists calculate that eliminating deaths from either cancer or heart disease would produce gains in life expectancy worth \$47 trillion dollars, approximately five times the GDP of the entire United States. Even a modest reduction in the mortality rate from cancer by 1% would have an economic value of \$500 billion. By comparison, the U.S. invests approximately \$35 billion each year in medical research.

This analysis, of course, does not begin to address the looming funding issues of Medicare and Medicaid. New thinking will be needed to determine the best ways to finance a rising health care share of the economy.

"If I had to live my life again, I'd make the same mistakes, only sooner." - Tallulah Bankhead

Copyright Madison Financial Advisors, 2005

Madison Financial Advisors

Cincinnati - Washington, DC - Tel: (888) 943-4198 - www.madisonadvisors.com