## Personal and Political Choices: An American Economist's Perspective

Lecture at Lucy Cavendish College, University of Cambridge, England on her Induction as an Honorary Fellow October 25, 2007

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It is an honor and a privilege to be here today as an honorary fellow of Lucy Cavendish College. I am in very distinguished company!

I want to thank a number of people for being here tonight:

- Members of my family my husband, Len Glassman; my sister-in-law and brother-in-law from Philadelphia; and my nephew and his wife who live in London.
- Old friends from my Cambridge days John Beath, with whom I went to graduate school and then was on the Cambridge faculty before going to St. Andrews; Geoff and Gay Meeks – both economists at Cambridge; and also the Lasks and Bogans who live here in Cambridge.

But most of all, I want to thank Dame Veronica Sutherland and the Lucy Cavendish community. I am thanking them not just for this honor – for which thanks are due indeed – but also for their help in the early days of my career.

I moved to Cambridge in the mid 1970s with my husband and son, when my husband joined the US Air Force as a radiologist at the hospital at Lakenheath. I had been working at the Philadelphia Federal Reserve Bank and writing my dissertation for a Ph.D. in economics at the University of Pennsylvania. When I arrived, one of my classmates at Penn, John Beath, then teaching at Cambridge (and now sitting in the audience) introduced me to two of the men's colleges that needed a supervisor for economics for engineers. While I was pleased to have that opportunity, neither affiliation gave me access to the University library, which I needed to finish my dissertation.

Fortunately for me, one of the other base physicians' wives introduced me to Lucy Cavendish College, which welcomed me as a Senior Member. That membership opened the library doors – literally! I finished my dissertation while I was in England, and returned to the U.S. as a newlyminted Ph. D.

My story illustrates what is so wonderful about Lucy. For those of you who do not know its history, Lucy Cavendish became Britain's first graduate College for women in 1965 after years of effort, and added undergraduates in 1972. It was not until 1974, however – and with quite a struggle – that it became an approved foundation, and later changed its name to Lucy Cavendish College. In this very short time, the college has gained an outstanding reputation for higher education for mature women.

I have not done justice to the history of Lucy, but for those of you who want to learn more, there are several wonderful histories of the College noted on its web site.

What is so important about Lucy Cavendish is its focus on educating women at all stages of their lives. I particularly appreciated Lucy's focus, having received my own undergraduate education at Wellesley College, a women's college in Massachusetts.

In my current role, as Under Secretary of Commerce for Economic Affairs, I oversee two of the major statistical agencies in the U.S. – so I could not resist showing the importance of education to women by providing a few statistics. First, workers with more education – both women and men – earn more than less-educated workers:

- In 2005, U.S. workers with advanced degrees on average earned 46% more than workers with undergraduate degrees, and four times as much as workers without a high school degree.
- In the UK, 25-64 year old workers with tertiary education earned 55% more than those with only upper secondary education and 125% more than those with less than upper-secondary education.
- Also, in the UK, this earnings premium from education was larger for women than men.

Second, workers with more education have lower unemployment rates.

• And, further, the unemployment rates for highly-educated women are sometimes lower than for comparably educated men.

But the benefits of education cover more than simply having a job and earning more. They extend to quality of life, health, and maybe even happiness.

- Research on British university graduates finds that they hold higher-quality jobs, have better health outcomes, are more influential in the community, and contribute more to economic growth and innovation than their counterparts with no university degree. In addition, this research finds that the benefit of a university degree transmits across generations; that is, children with at least one graduate parent have better academic outcomes.
- Research on the U.S. population also finds that more educated people have better
  health outcomes including lower morbidity rates from chronic diseases and better life
  expectancy.

Clearly, more education is beneficial to earnings and quality of life. From my perspective, a basic understanding of economics as part of that education helps get you to a better lifestyle, and a basic understanding of finance helps keep you there, if you use them to ask the right questions.

In my prior position as a Commissioner of the U.S. Securities and Exchange Commission (SEC), which oversees the securities markets, my role was focussed on developing and enforcing

regulations. In that role, I often approached how to vote on a new or changed rule by asking the following questions:

- What are we trying to accomplish?
- Is this the most efficient and effective way to accomplish it?
- Do the benefits outweigh the costs?
- Are there likely to be unintended consequences?
- Are we creating unrealistic expectations?

I believe these same questions are relevant to many of the important decisions in our lives. I also believe that certain basic economic principles are very helpful in finding the answers. That is what I want to focus on this evening.

I know that many non-economists think about economics with fear and trepidation about all of the math and diagrams, but the basic concepts are really pretty straightforward. They boil down to a framework for how to make choices. I want to talk about some of the main concepts and consider how they are used to make decisions in our daily lives and how they may inform our views about bigger picture issues.

Before I talk about the use of economic principles in making decisions, I want to underscore the importance of using accurate information as well. Having seen both how data are collected and also how they are used, I have a strong appreciation for the importance of accurate information in making our personal or policy decisions.

It is interesting to note that, in 1984, Sir Richard Stone, a Cambridge economist, won the Nobel Prize in Economics for his work on developing the first Gross Domestic Product (GDP) accounts. The press release announcing the award stressed the importance of finding "methods for systematic summarizing and aggregating of a reality which, on a micro level, is endlessly complicated."

I believe that the economic principles I am about to discuss can be very helpful in bringing order to otherwise endlessly complicated situations.

I will start with the law of supply and demand. All this says is that people will buy more of a product if it is cheaper, and producers will want to produce more if they get paid more. That seems obvious. The mystery is how the price gets set so that this balance is achieved. Basically, you can think of it as a continuous stream of offers by all market participants until a market price is set. This works in markets for goods and services, such as cars or candy, as well as financial markets, such as for stocks and bonds. You can actually witness this in real time on the floor of the New York Stock Exchange, where buyers and sellers offer the price at which they are willing to trade. When a there is a match, a trade happens.

There is a story, perhaps apocryphal, about the famous Cambridge economist, John Maynard Keynes, who tested the theory of demand right here at the old Cambridge Arts Theatre, which he founded. As the story goes, he wanted to encourage more spending on champagne than on spirits in the Theatre's restaurant, so he instructed that the markup on champagne be lower than

the markup on spirits. The result was that demand for, and profits from, the sale of champagne went up.

You can see the same result, in the opposite direction, in the context of rising gas prices. People change their behavior in order to use less gas, including cutting down on driving time and buying more fuel efficient cars.

Let's look at another concept – opportunity cost. Basically, what that says is that you do not make decisions in a vacuum. If you go down one path, you forgo another. Think about the data that I mentioned on education. If you choose to drop out of school, or not pursue higher education, and instead go directly to work, you start earning a living sooner. However, the opportunity cost is that you likely give up significantly higher earnings (and perhaps a more interesting career) over your lifetime. Or if you buy an expensive car instead of a low priced model, the opportunity cost is that you could have saved the difference or spent it on something else. The decision to be made is whether the cost is worth the benefit to you. For example, the cost of a degree from Lucy Cavendish is not just the direct cost of tuition and living expenses, but also the lost opportunities of other paths you could have taken. The benefit, of course, is the wonderful education, potential earnings, and interesting friends you have made here at Lucy.

Turning to the law of comparative advantage – this one can get confusing and can seem counterintuitive. It generally comes up in the context of foreign trade, but applies to personal choices as well.

Comparative advantage is one of the most difficult economic principles to grasp—and one of the most valuable. Comparative advantage tells me that I might be better off buying something even when I can produce it more efficiently than the person I buy it from. Why? Because I am better off producing the things that I can produce *most* efficiently—and using the proceeds to buy the things I produce relatively less efficiently, even if, in absolute terms, I am the best producer. Let me give you an example.

You might able to do your financial record keeping in just two hours a week. Yet, it might make sense for you to hire somebody who would take three hours to do the same work. Why? Because you have more valuable things to do than keep track of your financial records. Even though you can do it efficiently, you can earn so much more doing other things that you can pay someone else for working the three hours and have something left over. And so I suspect that many of you who have significant financial affairs hire somebody to take care of them for you—even if you are just as smart and capable as that "expert." It is still cheaper—in terms of your time and the income and satisfaction you could earn doing other things—to let a less efficient person do the job.

The really interesting thing is that, ultimately, whether you undertake a particular job, depends on a relative, not absolute, value. It is the value you receive from that job *relative* to the value you would receive from doing something else that matters. Economic decision-making, it turns out, depends very heavily on this relativity, rather than absolute costs and benefits.

This has a couple of interesting lessons. First of all, there might be somebody—perhaps even somebody in this room—absolutely better at *everything*. But nobody is relatively better at everything, because if you are relatively better at, say, writing a novel, you will be relatively worse at keeping track of your investments. And, in turn, *everybody* has a comparative advantage in something—because even somebody with, say, little education, is relatively better at certain tasks (because they are relatively worse at other tasks).

That is the principle of comparative advantage. It is a surprising idea, and often counterintuitive, and, yet, our standard of living is dependent on it. It tells us that trading between people almost always makes sense, even when they have widely different overall levels of ability or knowledge. And it tells us that everybody, no matter how disadvantaged or challenged, can make a contribution to society because everybody has some comparative advantage.

Turning to another concept, "moral hazard" is a term used by economists to describe a situation in which a person has an incentive to engage in risky behavior because, if something goes wrong, somebody else will pay. For example, if you purchase a new appliance that has a one year warranty against malfunctions, you might treat it with less care than you would without the warranty. After all, if it breaks, the company will repair it or supply you with a new one! This is just one of the ways in which economic incentives influence how people actually behave.

I am sure that many of you have run into strange, complex requirements when you buy insurance. That is because moral hazard has long been known to be a significant problem in the insurance industry, and the industry has developed methods to mitigate it. But moral hazard shows up in many other types of economic behavior, as the appliance example shows. Avoiding moral hazard is about providing appropriate incentives and disincentives to get the desired outcome.

A very interesting example of how this can work is the microlending business of the Grameen bank, for which the bank and Muhammad Yunus, an economist from Bangladesh, shared the Nobel peace prize in 2006. Grameen bank is a microlender, meaning it provides very small loans, no more than a few hundred dollars, to very poor borrowers, especially women, in Bangladesh. The loans are used to buy a cow, a sewing machine, or other relatively small investments that enable the woman to make a living. Instead of requiring collateral, Grameen creates incentives to pay back the loan using peer pressure. A candidate for a loan forms a group with four other people who are not family members. At first, only two members of the group receive a loan. If they pay it back successfully, others in the group are eligible to get loans. According to its website, as of August 2007, Grameen Bank had over 7 million borrowers, 97 percent of which are women.

A basic understanding of the economic principles that I have just described can be very helpful in making good choices regarding one's education, where to work, where to live, and how to live. They can be useful tools in managing budgets and savings plans.

Now I would like to add a few important tenets regarding investments. As SEC Commissioner, I saw first hand, in numerous enforcement actions, the many ways that people can lose their hard-earned savings by not understanding the basic tenets of investing wisely. These are:

- The importance of diversification
- The trade-off between risk and return, and
- If something sounds too good to be true, it likely is.

Starting with diversification – simply put, it means do not put all of your eggs in one basket. And, as you diversify, think about whether the apparent diversification is real – are the baskets really different? One of the best, and saddest, examples of the impact of lack of diversification was what happened to the Enron employees when the firm collapsed. Not only did they lose their paychecks, but also many had their retirement funds in Enron shares, so they lost their savings as well.

Moving on to the relationship between risk and return, it is inverse. That means that the higher the expected return, the lower the likelihood that you will actually get that return. There is a reason that the interest rate on US and UK government bonds is low relative to other investments. It is because they are safer. Investors rightly expect to be paid more to take more risk.

And that brings me to the third tenet – if it sounds too good to be true, it probably is. The most extreme example of this tenet that I have seen comes from one of the SEC enforcement cases that came before me. In an investor scam, the victims were promised a 13,000% return. I am not making that up! That scam raised over \$12 million.

As I mentioned at the outset, the economic and financial principles that I have described can be applied not only to personal decisions, but also to how one thinks about issues of public policy. In the context of the U.S. presidential campaign, various trade negotiations, and global competitiveness, I will point out some key issues that particularly lend themselves to analyses based on some of these principles.

Any discussion of price or quantity limitations invokes the law of supply and demand, because such limitations distort the market and result in imbalances. For example, if a price cap were to be placed on gas prices, there would be less incentive to change behavior; the result would be the type of gas (or petrol) shortages and the long lines we saw in the gas crisis in the U.S. in the 1970s.

And we saw a dramatic illustration of the impact and importance of the law of supply and demand when the formerly centrally planned economies adopted the market system. Under the old system, prices were set arbitrarily. Much was demanded and little was supplied, leading to an entire culture of queuing to obtain goods and services. The adoption of the market system by these countries ultimately sparked economic growth as higher demand led to higher prices and that, in turn, led to more production. The result—no more lines in Poland, East Germany, or the former Soviet Union countries. And Chinese development—simply letting the law of supply and demand work—has proven to be the most effective anti-poverty measure anywhere.

As I mentioned earlier, comparative advantage is commonly applied to discussions of trade policy. For the UK, whose economic history was built on trade, this is an important concept.

For the U.S., it is a basic principle underlying our 14 existing and 4 pending Free Trade Agreements, as well as all of our other trade negotiations. Expanding trade, in particular our exports, has been a significant component of growth of our GDP for the last several years.

Moral hazard considerations often apply to policies regarding social safety nets. The key is to provide the right incentives and disincentives in these policies. For example, an overly inclusive or generous health insurance system will provide incentives to overuse the system and push up costs. On the other hand, a system that is too limited will not provide sufficient preventive care and will limit quality and access. A balance is needed. This is a key issue that has been, and will continue to be, debated in the U.S.

A recent example on a national scale of the "If it sounds too good to be true, it likely is," phenomena is the subprime mortgage loan market. The particular loans that created the most problems were those that had low "teaser" interest rates for the first two years, after which rates adjusted up several percentage points for the next 28 years. Borrowers who could afford the payments for the first two years, but not the higher payments after adjustment, were caught in a bind when they could not refinance at affordable rates. As a result, foreclosures are up significantly. There were other factors that compounded the problems, but certainly borrowers not understanding the true cost of the loans was an important factor.

There are many areas in which the importance of diversification comes into play. Perhaps the most general is the importance of free markets with minimal regulation. Open markets provide maximum scope for the type of innovation and diversity that make economic growth robust. Over the past seven years the American economy has suffered from a number of shocks including corporate accounting scandals, the terrorist attacks, two wars, a growing trade deficit and, most recently, a declining housing market. Yet, despite recurring weaknesses in one sector or another, other sectors have always managed to pick up the slack. This could only happen in a diversified economy that has the freedom to adapt to rapidly changing economic conditions.

A more concrete example is our approach to alternative energy sources. We know that a shift away from fossil fuels is desirable for a number of reasons. To accomplish this shift, the United States is investing in a number of new technologies, including solar, wind, and thermoelectric. Within each of these, progress is being made on more than one front. It is not clear which combination of sources will emerge as the right one or, even for a specific source such as solar power, which specific technology will harness the most energy for the least cost. But by pursuing a wide portfolio of research projects, we can be fairly sure that progress in energy efficiency will continue.

Devising rational policies to deal with the challenges posed by global warming is a particularly difficult task. There is much disagreement about its timing, its economic impact, our ability to adapt to it, the costs of mitigating it, and the efficacy of efforts to mitigate it. Two things are certain: Any solution will come with opportunity costs – consumption foregone today in favor of preserving future economic growth; and there is no uniquely best solution. Instead, one could imagine choosing a diverse portfolio of policies, each with their own risk and return, that, at least from our vantage point today, would yield a higher return (in terms of higher future growth) and lower risk (in terms of uncertainty of outcomes) than would any single policy.

To conclude, I am not saying that economics or economists have all of the answers to personal and policy issues. However, using economic principles helps provide a framework for making decisions. Other factors, such as culture, religion, and social views, affect the ultimate choices we make.

Let me give you one last example. My husband and I were in Budapest just after Communism fell. Our guide was a young woman whose husband was an economist at a bank that had been privatized, and she was very proud of the fact that they owned shares of the bank. Over tea one afternoon, we were talking about some differences between employment policies in the U.S. and Hungary. One policy, for maternity leave, was much more liberal in Hungary. Companies were required to provide paid maternity leave for a year or two, as I recall. She thought that was great—until I pointed out that, as a shareholder, she was paying for that policy. As she took in that concept, the policy did not seem quite as attractive any more.

Clearly, where you sit determines where you stand and what choices you make. Nevertheless, knowledge and application of economic and financial principles helps you make the best choices for you.

Thank you so much for the opportunity to speak to you this evening.