

**CAPS FOR SALE:
THE ECONOMIC SIDE OF THE STORY***

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Congratulations to the economics graduating class of 2008 and to your families and friends. Today I want to follow the lead of our university president John Hennessy who recently said "each year at Commencement we encourage graduating students to think about the skills they have acquired and the impact they can have in the world." For us, for me and the graduates at least, this means talking about economics. I want to do this with a story, a children's story, a book called *Caps for Sale: A Tale of a Peddler, Some Monkeys and Their Monkey Business*. Why a children's story? Well many families have come together for this great occasion. Welcome! And Happy Fathers Day! I bet many fathers, as well as mothers, grandfathers, grandmothers and even older sisters and brothers can remember reading children's books to these graduates. It seems like such a short time ago. I know that before too long you graduates will be reading books to your children. I even see a few little girls and boys in the audience who might like to listen to a children's story right now. We economics-lovers see economics everywhere, not only in the *Wall Street Journal* or on our Bloomberg screens, but in everyday life, even in children's books.

So let's get started with the story.

*Quotes or paraphrases from Esphyr Slobodkina's original book, *Caps for Sale*, 1940, Addison-Wesley, are indented in italics.

Once there was a peddler who sold caps. But he was not like an ordinary peddler carrying his wares on his back. He carried them on the top of his head...He walked up and down the streets, holding himself very straight so as not to upset his caps. As he went along he called, 'Caps! Caps for sale! Fifty cents a cap!'

Let's stop right here; there is so much economics already on the first two pages I can't stand it. We have a firm (the peddler), with output (the caps), selling in a market (people in the street), and a price (50 cents). Now from our economic skills we can actually model this: The price of caps is at the intersection of the supply and demand curves for caps. Simple enough, but looking between the lines we see much more; we see the benefit of this economic activity to society. The people on the street are benefiting from the caps they buy and the peddler is benefiting from the caps he sells. The consumers' benefit (which we call consumer surplus in economics) is the difference between the amount they would be willing to pay for the cap and the 50 cents. If Tim is willing to pay 3 dollars for the cap, then he would gain 2 dollars and 50 cents after paying the peddler 50 cents. Of course the peddler is benefiting too; he is getting producer surplus, like profits. If you add the consumer and producer surplus for all the people in the market you get a measure of how much peddlers are contributing to society. And it is the highest possible contribution, in the sense that, under certain circumstances, a competitive market economy maximizes the sum of consumer and producer surplus. You can't do any better. To paraphrase Adam Smith, "It is not from the benevolence of the peddlers, that we can expect our caps, but from their regard to their own interest." This is the most famous idea in economics.

Now before I go on with the story there is another economic lesson here. Fifty cents a cap seems so cheap, doesn't it? But *Caps for Sale* was first published in 1940. Because of inflation (especially in the 1970s) the purchasing power of the dollar has shrunk sharply since 1940: a dollar today is the equivalent of only 6 cents in 1940. In other words, the 50 cent cap would be an 8 dollar cap today. "Caps for sale! 8 dollars a cap." Our economic skills also explain inflation. It is due to poor monetary policy, producing too much money or holding interest rates too low. We had good monetary policy for the past 25 years, but there are serious risks that inflation is on its way back, which is obvious to everyone who shops.

Let me go on with the story.

One morning [the peddler] couldn't sell any caps. He walked up and down the street calling "Caps! Caps for sale. Fifty cents a cap." But nobody wanted any caps.... He began to feel very hungry, but he had no money for lunch. "I think I'll go for a walk in the country," said he. And he walked out of town, slowly, so as not to upset his caps...He walked for a long time until he came to a tree. And he sat down very slowly, under the tree and leaned back little by little against the tree trunk so as not to disturb the caps on his head...[and] he went to sleep.

Ok we have to stop again, because this is a very big deal in economics: no one wants to buy the peddler's caps, markets are frozen up, other firms probably can't sell either. Yes, it's a recession. Recessions are still one of the most difficult and controversial parts of economics. In fact, sometimes economists don't even know when we are in one, like right now. One thing we know is that recessions have become a lot

less frequent and severe in the past 25 years. Economists call this the Great Moderation. Since 1982 we have been in recession only 6 percent of the time. In the previous quarter century it was nearly 20 percent of the time.

One thing you might notice is that there is no government intervention in this story. Nobody got tax rebate checks. The Fed did not slash interest rates to help the financial sector. So the peddler just decided to take a rest. Wait it out. Do something else for a while. Whether government can or should do something to intervene in a recession is still a big question in economics. But one reason why the past 25 years have been so good is that there has been less discretionary intervention; the Fed for example has had a steadier hand. Because of the heavy interventions this year, some are saying the Great Moderation is coming to an end. In my view this is a risk, but unlikely if policy makers get back on track.

But let's get back to the story.

When [the peddler] woke up he was refreshed and rested. But before standing up he felt with his hand to make sure his caps were in the right place. But they were gone. Stolen. He looked to the right of him. No caps. He looked to the left of him. No caps. He looked up into the tree... And what do you think he saw? On every branch sat a monkey. On every monkey was...a cap. He did not know what to do.

Finally he spoke to them, shaking his finger, saying: "You monkeys, you! You give me back my caps. But the monkeys simply shook their fingers back at him and said "Tsz. Tsz. Tsz."

This made the peddler angry, so he spoke to them again, shaking two hands at them: “You monkeys, you! You give me back those caps”

But the monkeys simply shook two hands at the peddler and said “Tsz. Tsz. Tsz.”

By this time the peddler was very angry, so he spoke to them again, stamping his feet: “You monkeys, you! You give me back those caps”

But the monkeys simply stamped their feet and said “Tsz. Tsz. Tsz.”

At last he became so angry he pulled off his own cap and threw it on the ground. And you know what the monkeys did? They took off their caps and threw them on the ground

So now all the peddler had to do was pick up the caps and he was back in business. And so he did, and slowly, slowly, he walked back into town calling “Caps! Caps for sale. Fifty cents a cap.”

Now what does this have to do with economics? As you can see the peddler solved his business problem. He got his inventory back. But was it luck or entrepreneurial skills, business acumen? Did he learn that the monkeys were mimicking him and realize that if he simply acted angry and threw down his cap they would throw down their caps? Or was he really angry. The story makes it sound like luck, but our penetrating skepticism—an essential trait for an economist—reveals an identification problem. How might we identify and test which it is? Here is where the latest ideas in economics come into play: we can set up an experiment. We could find subjects—maybe student subjects—to be monkeys; and the peddler of course. The monkeys could act randomly, not mimicking, and we could see what the peddler will do. Professor Muriel Niederle, one of a new generation of tenured faculty at Stanford, is the expert in this new area of

experimental economics, and she is doing really serious experiments, for example seeing if there are differences between genders in such competitive environments.

I have reached the end of the children's story, but there are still more economics lessons that I'd like to squeeze out of *Caps for Sale*. The book was written and illustrated by Esphyr Slobodkina in 1940. Esphyr was born in Russia in 1908 so she would be 100 years old. Her family fled Russia during the Russian revolution, first to China, and then to the United States when she was 19. The book was an economic success. Two million copies were sold, and it was translated into a dozen languages. A lot of producer and consumer surplus. A lot of happy children.

Esphyr's journey to America across the Pacific Ocean also teaches us some economic lessons. It is clear to me that she benefited from the greater economic freedom she found here. And people are still looking for that economic freedom. I have greatly enjoyed working with three Stanford undergraduate economics majors who happen to have been born in Russia. Leonid Pekelis wrote an honors thesis with me and plans to go on to get a Ph.D. in economics after getting a masters degree in statistics; he is one of our graduates here today. Irina Issakova is also graduating this year; her honors thesis is on the housing market in Russia. Igor Popov, who just finished his Junior year, wrote a wonderful term paper this spring on the recent financial crisis; he will graduate next year.

It is not only from Russia, of course, but from all over the world. Like everywhere else Stanford has gone global. And, of course, people also move around the United States seeking a better life. Herbert Hoover came here from Iowa. My wife Allyn, who graduated from Stanford in economics in 1972, came from Utah. She is here in the audience, the one wearing the "I love economists" cap.

But the world is a different economic place now. In addition to welcoming people from abroad to enjoy our economic freedom, America has successfully been exporting economic freedom abroad. I am proud of that. I am proud that I went to Beijing in the 1980s to teach the kind of market economics we were teaching at Stanford to students who wanted to learn about economic freedom. I am grateful I had the opportunity to lead the international division of the United States Treasury which has long had the objective of promoting economic freedom. Economic growth in China and other poor countries has been extraordinary since they adopted economic freedom. Hundreds of millions of people have escaped poverty without escaping their country. Much of Latin America and Africa are now following suit, and the change is nearly as impressive. Growth in Africa is now four times faster than it was a just a decade ago.

I think it is important for America to remain a beacon of economic freedom and not resort to protectionism or isolationism. Here I think we can do well to remember Stanford's motto: "*Die Luft der Freiheit Weht*" or "Let the winds of freedom blow." But let me be more precise. Let me ask you to remember only phrase from this talk. Call it the Economics Department's version of Stanford's motto: "Let the winds of *economic* freedom blow."