a Conversation

With Robert Shiller

Robert Shiller, an economist at Yale University and the author of the surprise bestseller, *Irrational Exuberance* (Princeton University Press, 2000), has just come out with a new book. The theme of *The New Financial Order* (Princeton University Press) is, once again, economic risk and the way people cope with it. But this time around, Shiller heads in a very different direction, offering a series of bold proposals for insuring against risks that, at first glance, seem uninsurable. Herewith, a distillation of our recent conversation.

– Peter Passell

Unfortunately. the insights of finance have been applied in only a limited way. Risk sharing has been used primarily for certain narrow kinds of risks...[with] benefits that accrue mainly to already well-off members of our society.

Finance, however, has substantially neglected the protection of our ordinary riches our careers, our homes, our years of retirement, and our very ability to be creative as professionals.

PETER PASSELL: Since the publication of Irrational Exuberance you have become a bit of a media star - the economist who explains economics to non-economists. Has that required a lot of gear-changing?

ROBERT SHILLER: It was a good thing for me to do. Academia encourages specialization – it's like a team sport, where you're supposed to keep to your position. The system works pretty well. But when you try to talk to the public, your training sometimes gets in the way. Adjusting proved to be great fun - explaining ideas without the help of jargon broadened my understanding of economics.

PP: The new book on risk is quite well-written. Did you get a lot of editing help, or is that the real you?

RS: Well, I did have fine editors at the Princeton University Press and my wife Ginny pointed out when I was getting too technical for a broad audience, and helped me smooth out some rough spots. But, yes, that is the real me.

PP: Irrational Exuberance took a whack at Americans' obsession with the stock market. And at a rather opportune time, since the book came out just as the tech stock bubble burst in March 2000. Care to tell us what's in your own securities portfolio now?

RS: Mostly cash. We just sold our business. I had a student, Alan Weiss, who had the idea of selling the single-family home-price indexes that Karl Case [a professor of economics at Wellesley College] and I had developed. And so we created this company, Case Shiller Weiss in 1991, which Alan developed into a substantial company selling automated home valuation services and risk management products. Last May, we sold it to Fisery, a big financial data services company in Wisconsin. And we got what sometimes seems to me like a lot of money from that. PP: Who says academic economists are dummies at business...

RS: And since we're just now in the process of taking the company apart, we've got the money in Treasury bills.

PP: So this is not an insight into your views on the market?

RS: Well, I don't have much stock in my personal portfolio. On the other hand, I never "shorted" the market, which is something that you might have thought I'd do. But I was never confident enough to predict when the bubble would burst. I always thought the market might still go up.

PP: What really big mistakes do ordinary investors make?

RS: People depart from economists' models of rationality in so many ways that it's hard to know where to start. They tend toward overconfidence. They have lapses of attention. They tend to focus on little risks rather than big risks. They doubt the importance of diversification and hedging. They trust intuition too much. Their self-esteem gets tangled up with the idea that they'll beat the market - that, "my brilliance will be revealed in my investing successes."

Note: all sidebars are quotations from The New Financial Order **PP:** That's a nice segue into my next question. Do you believe that it would be good public policy to let individuals control their own Social Security investments?

RS: Left to their own devices, people are not very reliable in providing for their own old age. So it seems a little funny to have a system that forces them to save for old age – presumably because many won't save for retirement on their own – but then assume they will invest the forced savings responsibly.

TIAA-CREF, the pension fund for college professors, finds that most people follow very simple rules of thumb in deciding on portfolio allocations, and then they just forget about it completely.

I think that we need a Social Security system that takes care of people, because many people will mess up on their own. Of course, the proposals that have been recently aired would only direct a small fraction of Social Security contributions into discretionary personal accounts. And so these little tinkerings are probably not so serious.

PP: But is there any value at all to privatizing portions of Social Security? **RS:** Not from where I stand. One purpose of Social Security is to force people to take care of the old, because many don't provide for old age. But the other thing the system ought to do is help manage risk.

Social Security should be designed to spread risk rather than to concentrate it on individuals. And with individual accounts, some people will undermine the purpose of the system by investing heavily in high risk assets. We have seen that happen already in Hong Kong and Sweden, which allow workers to invest their public pension contributions. A lot of people have lost much of their savings because they put it in a tech fund or the like.

PP: So some people are inclined to take inappropriate risks with their savings. But that puts the cart before the horse: do people save enough? **RS:** No. Americans' personal savings rate has been around 2 percent. It fell as the market boomed – it seems people were very optimistic about the future. People are adjusting their savings upward somewhat now. But the rate is still much too low.

PP: What's an adequate level of savings?

RS: It's no longer uncommon for people to live into their 80s or even 90s. And so the average person may be looking at 30 years of retirement. We also have to remember that when the baby boom generation retires, that there will be relatively few young people to take care of them. And so the boomers ought to take care of themselves by saving as much as possible.

PP: Care to give us a ballpark of what it ought to be?

RS: Something like 10 percent is a good target, and we aren't close to that now.

Democratizing finance means solving the problem of gratuitous economic inequality that is, the inequality that cannot be justified on rational grounds in terms of differences in effort or talent.

Finance can
thus be made to
address a
problem that
has motivated
utopian and
socialist thinkers
for centuries.

Indeed, financial thinking has been more rigorous than most other traditions on how to reduce random income disparities.

Most long-term economic risks that people face are borne by each individual or family alone. Social welfare exists primarily for the very poor, but is limited even for them.

In today's world, we cannot insure against risks to our paychecks over years and decades. We cannot hedge against the economic risk that our neighborhoods will gradually decay. We cannot diversify away the risk that economic and societal changes will make our old age difficult... PP: In Irrational Exuberance you argued that Americans paid too much attention to variations in stock prices. Would you like to see less trading in stocks - maybe with a little help from a tax on stock sales?

RS: That idea, which originally came from my late colleague at Yale, James Tobin, is interesting, but I've never endorsed it. It's just not clear that making stock trading more expensive would help.

The fundamental problem - attitudes toward investing - is a psychological one. And making it more difficult to trade stocks wouldn't change those attitudes. A turnover tax is not a solution to the fundamental problem: people enjoy speculation.

Consider housing. The costs of buying and selling are enormously high – in the neighborhood of 6 percent of the value of the house. But housing markets go through booms and busts just like the stock market, where trading is cheap and easy.

PP: Well, how about discouraging the rapid dissemination of information about stock prices? Would you like to see less emphasis on "marking-to-market" the value of securities portfolios?

RS: Same problem. There are cases where we have speculative bubbles even where there are really no markets. One example is careers. Young people flocked to careers in investment banking and Internet startups on the flimiest evidence that they would succeed.

Speaking of which, I think it would be good idea – indeed, it is one of the ideas in my new book - to create markets to share the risks associated with earning income.

PP: Glad you mentioned the new book. The proposals in the book imply there is a lot of "market failure" out there, in the sense that if efficient insurance markets existed, individuals could insure against many of the economic risks of daily life - and at premiums they would find attractive.

RS: That's right. Once we had such markets, people could make their own choices. It's sort of like when you shop around for an insurance policy. Policies that cover more risks are going to cost more money. But because risk management is generally not very expensive, the prices often look like bargains.

PP: All of the risk management proposals in the book imply that you could increase personal welfare by implementing them. To put it another way, without efficient markets for risk management, the economy operates at less than its potential. Do you have a sense of how much better off, in terms of dollars of income, people would be if we fully exploited this potential?

RS: I published such calculations in a paper with a student. The estimates were modest - just a few percentage points of GDP. But I think if you take a broader view, the number would be much, much larger.

One reason why it's hard to be precise is that when you improve risk management, people's behaviors change in fundamental ways. They're much more likely to take risks if they can control them. And risk-taking behavior is an engine of economic growth. So if people were sheltered from unnecessary risks, we could expect a payoff in faster economic growth.

PP: This is a supply-side argument – that if people could manage risks better, they could act in more daring ways.

RS: Right. One reason that the advanced-country economies have done so well over the long haul is that we have long had substantial risk management capacity in business. Most of our wealth comes through companies, and corporations have a variety of ways to spread the risk of investment.

If you told people that if they wanted to go into business, they'd have to mortgage their houses and take all the consequences if the enterprise failed, no one would start a business. Ever since stock markets became a dominant institution in advanced countries, economic growth has been very much propelled by risk management.

PP: And ironically, the ability to control risk gives you the ability to take more risks.

RS: Right. If you went back to the early 19th century, before the invention of modern capital markets, could anyone have envisioned how much the economy would change? If every country had decided there would be no financial risk-sharing whatsoever – if there were no bankruptcy laws and people who couldn't pay their debts went to prison – imagine how much less the world economy would have grown.

So if you look forward, imagine a world in which risk management were extended down to the personal level. There's no way to quantify the potential gains – but I'm sure they are large.

PP: Essentially, what you're proposing are a bunch of ways to reduce systemic risk. For example, the risk of choosing the wrong profession or the risk of retiring at a time when those still working aren't prosperous and can't afford the taxes to cover your monthly check. All of these changes, it strikes me, would reduce incentive to care about government economic policy, because insurance markets would insulate individuals from the long-term consequences of bad policy.

RS: You're talking about an incentive problem – what economists call "moral hazard." I think that practical applied finance has discovered a lot about how to deal with moral hazard. One answer is to limit insurance. There always needs to be some consequences for not trying hard. **PP:** Of the proposals in the book, the one that struck me as cleverest is the idea of inequality insurance.

RS: The problem of inequality is alarming and not much discussed.

The stock markets are big and important, but not as big and important as we think. Far more important to the world's economies are wage and salary incomes and other nonfinancial sources of livelihood such as the economic value of housing.

This is where the bulk of our wealth is found.



Achieving massive risk sharing — that is, spreading risk among many individuals until it is negligible to any one person — does not mean the world will live in harmony.

History shows, however, that long-term arrangements for risk sharing have often been useful despite wars and disruptions of government authority.

Indeed, those events themselves are risks that the financial arrangements addressed.

And it looks like the problem is going to get worse. New technology and globalization are not going away; we could see massive unemployment or massive inequality in coming decades.

The idea of inequality insurance is inspired by other sorts of insurance – but also by research in psychology. Any policy to deal with inequality, which evolved over a long period of time, has to involve enduring changes to our system. I want to restructure tax policy as inequality policy, redefining taxation in terms of income distribution rather than tax rates. Instead of legislating rates and brackets, we would target the acceptable level of inequality and automatically adjust rates to meet the target.

PP: So an individual could still get rich in this system?

RS: The progressivity of the tax system would be adjusted automatically to preserve the desired income distribution, the acceptable degree of inequality. Individuals who worked hard or got lucky could still propel themselves to the top of the heap.

Such a system would be fundamentally different than the current one. Once we collectively defined the acceptable limits of inequality, there wouldn't be much left to fight about in terms of tax policy. Such a system, I think, would have a good chance of enduring for many years. Tax rates would change frequently, but the targeted degree of inequality wouldn't.

As a practical matter, what amounts to insurance would allow us to make sure that inequality did not get any worse than it is today. If markets pushed the economy toward greater inequality, tax policy would push back. But politicians wouldn't have the problem of explaining why tax rates changed.

PP: Sort of like the automatic macroeconomic stabilizers envisioned by the early Keynesians?

RS: That's right. Suppose inequality did get much worse. Even without inequality insurance, the government would probably respond to help reduce its impact. But done after the fact, the response would have the look of charity or welfare. And it would be very limited. That's why it would be so much better to announce before the fact that we, as a society, have decided that we're not going to let inequality get worse.

PP: The other idea in the book that really appealed was to structure public pension systems so that generations share the risk associated with unanticipated changes in demography and income.

R5: Yes, I think this is a matter of common sense. To paraphrase Keynes, some of the best financial arrangements are just very sophisticated versions of simple arrangements that we make in everyday life. What I'm thinking of here is the analogy of the family as a risk-sharing device – extending that to the nation.

Families traditionally share risk, in the sense that different generations living together more or less pool their income. In a traditional society, the working adults support the children and the elderly. If the number of dependents changes relative to the number of breadwinners, the whole family adjusts its living standard. If grandma and grandpa happen to be rich, they help other members of the family – not the other way around.

That's just common sense, but it's also risk management. By contrast, under the current Social Security system, the pensions of the elderly are fixed, and those still working bear the risk.

PP: So under your proposal, pension benefits would change with dependency ratio - the average number of dependents supported per worker - as well as the average productivity of those still working. In good times, everyone would get an extra piece of the pie. In bad times, scarcity would be shared.

RS: Right.

PP: You also propose that whole economies agree to share risks. In effect, countries would pool risks, with those doing unexpectedly well in terms of economic growth making payments (or concessions of loans) to those doing unexpectedly badly. It would formalize what we do now - providing aid after natural disasters, helping to rebuild economies destroyed in war.

RS: The accident of where you are born matters so much in terms of living standards - much too much. And the idea of aiding the losers after the fact – say, by forgiving the debts of less-developed countries – does not work very well, because it seems like charity.

There's no need to do it that way. Take the case of loans to poor countries hit hard by AIDS, drought, etc. We could make debt forgiveness, where the borrower did unexpectedly badly in terms of economic growth, a part of the loan agreement. And so it would become a risksharing agreement.

Individuals could make income-sharing agreements for themselves; it doesn't have to be done by governments. But I think there is a place for governments here, since the impact of changing fortunes for countries lasts so long, and the most useful risk-sharing agreements would be very long-term contracts.

PP: Wouldn't such agreements reduce the pressure on governments to sustain pro-growth economic policies?

RS: That's the "moral hazard" issue again. I think you could deal with this by limiting the portion of income fluctuation that could be insured.

PP: Thanks, Bob. My guess is, you've raised more questions here than you've answered. But that's why folks should buy the book. \mathbf{M}

The theory of finance underwent a fundamental transformation starting around 1990 with the development of behavioral finance, the application of principles of psychology and insights from other social sciences to finance.

Behavioral finance corrects a major error in most mathematical finance: the neglect of the human element.

BY ROBERT HAVEMAN AND BARBARA WOLFE

When we published an excerpt from Alison Wolf's contro-

versial book, Does Education Matter?, in the 4th Quarter 2002 issue of the Review, we invited readers to talk back. This comment is a serendipitous result. — Peter Passell

Alison Wolf argued that high estimated returns to higher education were based on a statistical misunderstanding - and that society's resources would therefore be far more usefully spent in, say, providing better education at the primary and secondary levels. David Card challenged her interpretation of the evidence, arguing that the most sophisticated statistical studies properly isolated the impact of education on earnings. We think Card was on target, but failed to take the argument far enough.

Wolf's main concern with estimated returns on education stems from the difficulty of accounting for unmeasured factors that affect both earnings and schooling. If certain factors - ability, drive and family background come to mind - are not adequately controlled, the estimates will be overstated. For example, many teenagers work while they are still in school. If this work experience is omitted from consideration in estimating the

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effects of schooling, the returns from schooling will be exaggerated.

That said, Wolf almost surely overstates the impact of such statistical bias. We are persuaded by the "meta-analysis" of Princeton University's Orley Ashenfelter and his colleagues Colm Harmon and Hessel Oosterbeek, whose study of earlier studies concluded that investments in higher education in the United States yielded 6 to 8 percent market returns for recipients. This compares favorably with returns on most other investments.

But the total gain from education is only partially reflected in estimates of labor market returns because they do not include the nonmarket benefits of schooling. Consider, for example, the benefits to children of having better-educated parents. Moreover, the entire society may gain from what economists refer to as the public-good aspects of schooling the gains that all citizens experience because they live in a better-educated society. We believe these effects are large, perhaps as large as the market effects of education on which the traditional economic studies focused.

Take the hypothetical example of a young woman at, say, age 16, the earliest age at which children are allowed to leave school in most developed countries. She already possesses some skills. She uses this human capital to