RISK AND BUSINESS CYCLES: Reply to Rosser

ABSTRACT: Rosser's thoughtful and careful review of my book on business cycles reflects a different methodological stance than my own. I believe that economic theory and macroeconomics cannot escape using the concept of risk, even though, as Rosser points out, risk is not a simple unidimensional magnitude in many circumstances. I view the rational expectations assumption as a useful way of presenting a theory, rather than as a descriptive account of real-world expectations.

My book *Risk and Business Cycles* attempts to synthesize the best from earlier Austrian-school business-cycle theories and modern macroeconomics. Working within a framework of rational expectations, I attempted to explain how business cycle might arise.

I outlined two central scenarios. First, an increase in monetary volatility will decrease the profitability of investment projects and move the economy to lower-yielding projects, leading to an immediate downturn. Second, gentle inflations will induce more investment in higher-yielding but risky projects. There will be a short-term boom, but in the long run the economy will be riskier and the likelihood of a cycle will go up. Sometimes, however, the new investments will pay off and no downturn will arrive. I examined how each of these scenarios fare against both econometric evidence and the stylized facts.

The two scenarios differ from traditional Austrian-school theory, as

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Tyler Cowen, Department of Economics, George Mason University, Fairfax, VA 22030, email <tcowen@gmu.edu>, is the author, *inter alia*, of *What Price Fame?* (Harvard, 2000).

outlined in the writings of Mises, Hayek, and Rothbard, among others. Such writers focus on inflation *per se*, rather than on monetary volatility. In their account, inflation and artificially low real interest rates fool investors into excessively long-term projects, which then necessarily fail, causing an economic downturn.

I criticize the Austrian account for its overly particular structure and for failing to explain the data. Most plausible expectational errors will lead to scenarios different than the one the Austrians have outlined. And the Austrian theory does not explain a number of well-known stylized facts, such as the comovement of consumption and investment (the Austrian theory predicts that they should move in opposite directions), or the rise in real wages during a boom.

I would like to thank J. Barkley Rosser for his very careful and sympathetic reading of my book in *Critical Review* 13, nos. 3–4. I would like, however, to respond to some of his criticisms and indicate how and why I see things differently. As I read Rosser, he has four criticisms of the book, two methodological and two particular:

1. He believes the assumption of rational expectations is unwarranted.

2. He is unhappy with the standard concept of risk, as used in the book.

3. He is not convinced that interest-rate declines will make the economy riskier.

4. He argues that inflation will not lower real interest rates in a world of rational expectations.

I will consider each of Rosser's criticisms in turn.

Rational Expectations

As my theory is outlined, business cycles arise through changes in the level of economy-wide risk. By using the concept of risk in this fashion, it is possible to explain cycles without invoking systematic expectational errors. Both booms and busts result from increases in risk, which sometimes pay off and sometimes do not. The varying fortunes of dotcom firms are arguably an example of this phenomenon.

Rosser notes correctly that many original pioneers of the rationalexpectations assumption, such as Thomas Sargent, are now moving away from it. He thus wonders why a neo-Austrian theory should make it its starting point. The model in my book does not present the rational-expectations assumption as descriptively true. But it is a useful assumption for the following reason. We wish to know which of the outcomes posited by an economic theory stem from expectational errors and which outcomes stem from other mechanisms. I therefore tried to examine how monetary mechanisms would operate in the absence of expectational errors. Using the rational-expectations assumption ensures that expectational errors would not be doing all the work of the theory.

No doubt a richer and fuller theory would then pile expectational errors on top of these basic mechanisms. But the fact remains that we do not know very much about how these expectational errors operate. Results from experimental economics are suggestive but far from conclusive. For that reason I decided to focus on the non-expectational mechanisms of the theory.

Traditional Austrian theory illustrates the problems with failing to specify rational expectations. The older Austrian theories never explicitly spell out their expectational assumptions, and for this reason these theories are hard to evaluate. My major criticism of these theories is not that investors are always rational (as Barkley suggests), but rather that plausible irrationalities will lead to scenarios different than the Austrians have outlined. I outline this charge in detail in chapter four of the book.

I also argue that many of the costs of inflation can be explained without jettisoning the rational-expectations assumption. Monetary variability remains undesirable, for instance, because it raises the costs of planning and makes the future harder to forecast. We do not need systematic expectational errors to present this idea.

Contrary to some Austrian accounts (though Barkley does not make this mistake), the rational-expectations assumption does not require that individuals are superhuman calculating machines. It rather postulates that human beings make many different kinds of errors, rather than making the same kind of error over and over again (see Cowen 1997, 8–9). We can think of rational expectations as implying that errors are equally likely in all directions. Again, while I do not view this postulate as descriptively true, I think it is a useful starting point for businesscycle theory. Some of today's neoclassical economists are indeed moving away from the rational-expectations assumption, but they still would emphasize its usefulness as a starting point in the initial specification of a theory.

Risk vs. Uncertainty

The argument of my book assumes that some investments are riskier than others. Moving to a larger scale, some macro conglomerates of investment—structures of production, in Austrian terminology—are riskier than others as well. Unless these comparisons have some meaning, it cannot be said that variable inflation makes investments riskier, or that lower real interest rates induce more investment in risky projects.

Rosser (377) notes: "If there is a fundamental criticism that an Old Austrian can make against Cowen, it may be that he has fallen into a widely believed error regarding the nature of risk . . . The Old Austrians and Keynes share, along with Chicago's Frank Knight, a fundamental appreciation for the role of unquantifiable uncertainty."

I grant Rosser's point that we do not have a very good theory of risk. This has been well known in finance for some time. The most common univariate measure of risk is Beta, or the covariance of an asset's return with a broader market portfolio of assets. Some finance theorists have developed arbitrage pricing theory, which involves multivariate measures of risk, with varying success. Barkley, as I read him, seems to think that most economic forms of risk are not quantifiable at all.

We cannot escape believing that the concept of risk means something. Virtually all of us would argue, for instance, that an arbitrary regulatory state makes investment riskier and thus imposes economic costs. A large-scale war makes investment riskier as well. Claims of this kind can be found even in the writings of Mises and other Austrians, although not always using the risk terminology. Nor did Keynes hesitate to talk about lesser and greater risk, despite his clear understanding of what Barkley calls Knightian uncertainty. I am unhappy that we do not have a single fully satisfactory measure of risk, but we should not conclude that claims about risk are meaningless.

Consistent with the above reasoning, I believe that highly variable inflation makes an economy, and particular economic investments, riskier. I also believe that highly ambitious long-term investments are typically riskier than holding T-bills. I use the concept of risk in my work to formalize these intuitions and put them into some kind of workable form. I do not think that real-world risk can in fact always be boiled down to a single dimension. Still, all theories must make simplifying assumptions, and that is one of mine. The standard Austrian theory promulgated by Mises and Hayek also requires that the new investments are riskier (e.g., they have a high probability of a significant downside). They refrain from using the R-word (risk), but this is imprecision; it is not an improvement on the basic concept.

If the Austrian economists wish, we could instead talk about "more" or "less" Knightian uncertainty. For the modern American Austrians, virtually all economic transactions bring unquantifiable Knightian uncertainty rather than "risk," at least outside the gambling casino. But there remains a meaningful difference between the uncertainty of ordering pizza in a new restaurant, and the uncertainty of storming a drug dealer's hideout with machine guns.

Do New Investments Bring More Risk?

Risk and Business Cycles argues that new investments, as induced by real interest rate declines, typically make the economy riskier. Rosser (381–82), in his most particular criticism of my theory, challenges this presumption. He questions whether the new investments will be riskier than the old.

Here Rosser has misunderstood the basic mechanism I posit. My claim is not that the new investments will be riskier than the old ones (which may or may not be true). I claim instead that the new investments are riskier than devoting those resources to immediate consumption would be (see, for instance, Cowen 1997, 18–19). So overall risk increases, even if the 27th investment that is made is less risky than the 26th investment.

Do Monetary Changes Lower Real Interest Rates in a Rational-Expectations World?

Rosser (385) argues that "the claim that expansionary monetary policy will lower the real rate of interest (cf. Butos 1993) sits uneasily with the perfect foresight posited by Cowen's rational-expectations extremism, which would imply no change in real interest rates, as people perfectly anticipate inflation attendant upon monetary expansion. . . ."

In contrast, increases in the supply of loanable funds will lower real rates of interest with or without rational expectations. The effect is one of simple supply and demand. If there are more funds to be lent out, the real interest rate falls to clear the market. I discuss these issues at length on pages 64–74 of my book, also citing a variety of rational-expectations models with real-interest-rate effects.

In closing, I would like to make a final plea that my work does in fact merit the title "New Austrian." I see at least two notions of "Austrian" economics in the marketplace of ideas. The first refers to the "New York School" that grew up around Mises, Rothbard, and Kirzner. The second notion of Austrian economics, more widely used among economists, also would include Friedrich von Wieser, Joseph Schumpeter, some of John Hicks's work, Oskar Morgenstern, some of Fritz Machlup and Gottfried Haberler, and the "neo-Austrian" capital theory writings of Continental economists. This second usage of *Austrian* is more catholic than the first, and is what I intended when I titled my book.

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