

Core principle 2 teaches us that risk requires compensation. But to secure proper compensation, investors must understand and appreciate the risks associated with the assets that they buy. If not, an investor can be exposed unnecessarily and unknowingly to large potential losses.

Example: Risk and Bond Maturity. The present-value arithmetic of Chapter 4 helps us understand the riskiness of bonds with different maturities. If interest rates rise sustainably, the losses on a long-term bond will exceed the losses on a short-term bond. The reason is that the further in the future the promised payment (as on a long-term bond), the more the present value falls when interest rates rise. As a result, long-term bonds are more sensitive to the risk that interest rates will change. Unsurprisingly, buyers of long-term bonds usually insist on an extra reward as compensation for such “interest rate risk” (see Chapter 7 on the yield curve).

The Search for Yield. However, in some circumstances, many investors underestimate the risks of owning particular assets. If the risks materialize, investors can face painful losses. In the case of bonds, investors lacking sufficient regard for risk typically seek higher-yield bonds even if these bonds are riskier (due to longer maturities or higher default probabilities).

What can prompt such underestimation of risk? Experience suggests that some investors extrapolate from recent patterns and pay less attention to the more distant past. For example, if interest rates are currently low and stable, investors may expect this pattern to persist even if in prior years rates tended to be higher and more volatile.

Extrapolation of recent experience also can lead investors to underestimate default risk. For example, defaults by households and businesses are relatively infrequent during economic expansions. Because such booms are long while recessions are short, investors can become accustomed to low levels of default. Again, naively projecting recent experience forward leads to the underestimation of the default risks for which investors should be compensated when buying corporate bonds or securities backed by mortgages or consumer loans.

Investors also may underestimate risk if their professional investment managers take risks that are not evident, or are purposely concealed. For example, some investment managers promise to pay a relatively high nominal rate (defined in Chapter 4 as the real interest rate *plus* expected inflation) on a long-term contract. However, when expected inflation falls, as it did in the United States for nearly two decades after 1982, nominal interest rates fall, too. In these circumstances, the investment manager may for a time try to continue making high nominal interest payments by taking greater risks – a so-called *search for yield*. Yet, until events compel the manager to reduce payments, the investor may think that the manager is unusually skillful, rather than fortunate.

Whatever the cause, a widespread *search for yield* can depress the market compensation for risk temporarily below sustainable levels as investors and investment managers bid up the prices of risky securities. Low nominal rates typically spur this search for yield. Eventually, when the risk materializes (say, interest rates rise or defaults increase), the poor mix of market risk and reward becomes evident as riskier bond prices fall disproportionately. The market shock can trigger large financial losses. The 2007-08 plunge of the corporate and mortgage bond markets exemplifies how markets can re-price risk aggressively when the search for yield has gone too far.