To Our New Subscribers

Thank you to our new subscribers and welcome to the third issue of the ARM quarterly newsletter! We hope to make this publication valuable to you with several brief articles that provide unique insights, some ideas about how to address specific problems and introduce potential risks that may not yet be on your radar.

The primary authors are Dave Ingram and Max Rudolph. In this issue we add David Ensor as a guest author. We are active participants in the risk management, actuarial, investment and insurance spaces, and have been for many years.

Subscribers can suggest topics for articles and ask questions of the authors during our follow-up webinars and discussion sessions. Ever cognizant of regulatory requirements, leveraging them to add value to your company in practical ways will be our focus.

Published by Actuarial Risk Management (ARM), the Strategic and Risk Solutions for Executives (SRSE) subscription will consist of two paid tiers. The newsletter is free to all.

A webcast is available at either the company or individual level, as well as a follow-up one-on-one discussion with the newsletter authors that extends the general webcast. More info can be found at the final page of this newsletter.

We hope you find a solution that works for you!

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We hope you will join us on our journey!

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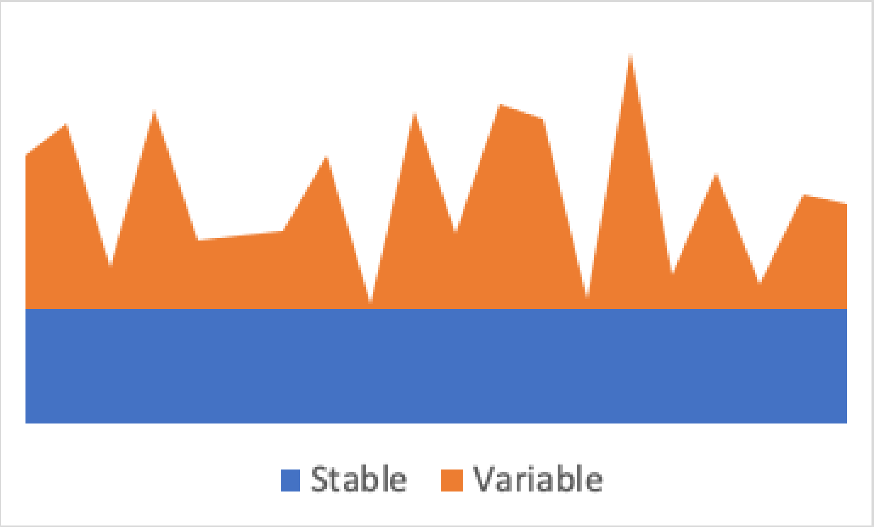
Leverage: the flip side of risk management

It is quite tempting, when interest rates are so very low, to take on debt just because you can. But that might not be the best thing for an organization, especially from a risk/reward perspective.

A common definition of risk management is the deliberate act of systematically avoiding, reducing, transferring or retaining risks. Generally, an organization would add potential risks by adding risky activities, decreasing risk reducing activities, accepting transfers of others' risks and generally retaining more risks.

Leverage, or borrowing, is not usually mentioned in this context however it can have a major impact on the risk profile of an organization that is not usually considered when talking about risk management. Leverage, it turns out, is actually the flip side of risk management.



By adding leverage, an organization potentially reduces the stability of their expected future in return for a single payment thereby decreasing the future expected earnings compared to future expected volatility.

In most cases, a business will borrow with some potential use in mind. It might be to expand the business in some way, like entering a new territory, adding a new product line or buying another business. These trade-offs will often be made because the expected return from the new activity exceeds the all-in cost of the funding.

But sometimes this seemingly simple relationship between funding amount and returns gets foggy. Minsky famously describes three levels of borrowing: Hedge, where the loan principal and

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Leverage (cont'd)

interest can be repaid out of the new activity; Speculative, where the loan interest can be repaid out of the new activity but the principal is only repaid by rolling over the loan and; Ponzi, where returns from the new activity are insufficient to pay all of the interest so that rollover loans must be found to capitalize unpaid interest along with the original principal.

As interest rates are now rising quickly, we need to be careful. As borrowers, we will feel the pressure on the ability to get funding that will provide for our investments at a cost that the investors can support. As lenders, we need to make sure that a lending program does not accidentally slip from Hedge to Speculative or from Speculative to Ponzi.

In addition, each of those activities would have their own risk reward profile. So the businesses that are borrowers trading to obtain a variable stream of funds in return for a fixed stream will likely increase the amount of risk relative to expected income. A business with growth plans that need funding that is in excess of their earnings will find that over an extended time, they are replacing more and more of their stable income with variable income, making the business more and more risky and therefore more fragile.

Looking at the picture below, you might notice that what we have at the far right is the picture of a derivative, most of which have had all of the stable cashflows stripped out and some or all of the variable cashflows (the risk) left behind. Derivatives can usually be replicated by combinations of other securities, one of which is often a loan, which is why derivatives are often called highly leveraged.