



# MACROECONOMICS

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## Monitoring Leverage

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*Chapter in Risk Topography (University of Chicago, 2014)*

Regulators, central banks and researchers traditionally have focused on interest rates, not leverage. This is akin to controlling car safely by regulating gasoline prices without monitoring how fast people drive. Risk rises when everyone starts driving faster, and a crisis may start when someone gets scared and starts hitting the breaks on a crowded highway where speeding drivers keep little distance.

Systemic crises tend to erupt when highly leveraged financial institutions are forced to deleverage, sending the economy into recession; leverage is a central element of systemic risk. While traditionally the interest rate has been regarded as the single key feature of a loan, we argue that leverage is in fact a more important measure of systemic risk. We discuss how leverage can be monitored for assets, institutions, and individuals, and highlight the benefits of monitoring leverage. Our main conclusions are:

- At the asset level, leverage can be monitored by recording margin requirements or loan-to-value ratios. This provides a model-free measure that can be directly observed.
- Monitoring leverage provides information about how risk builds up during booms as leverage rises, and how crises start when leverage on new loans sharply declines.
- Leverage data is a crucial input for crisis management and lending facilities, and for ascertaining the state of the indebted economy after a leverage crisis.
- The leverage on new loans is a more timely measure of systemic risk than the average leverage.

Topic: Other Research

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