

Non-technical summary for ‘Financial Conditions and Downside Risk to Economic Activity in Australia’

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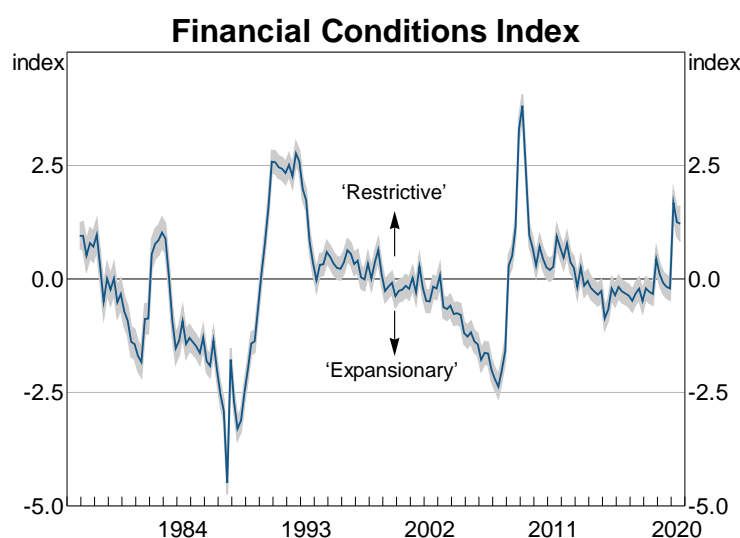
Financial stability risks are hard to measure. But for inflation-targeting central banks with a financial stability mandate, the issue is crucial. For example, when inflation is contained and financial conditions are expansionary, policymakers need to weigh the benefits of easing monetary policy (stronger *near-term* growth) against the potential costs (the possible build-up of financial vulnerabilities that could threaten *future* growth). But there are few tools available to quantify the economic costs of financial instability. This paper attempts to partly rectify this by applying a framework known as ‘growth-at risk’ to the Australian economy.

The growth-at-risk (GaR) framework was first applied to the US economy by researchers from the Federal Reserve Bank of New York. Since then, central banks in a range of other economies have developed similar models. The framework is designed to answer the question: ‘*If there was a financial crisis, how large could the economic losses be?*’ It does this using a technique known as ‘quantile regression’.

Whereas standard regression models are typically used to provide central forecasts – that is, the *average* of the distribution of possible economic outcomes– a quantile regression model produces forecasts of the *entire distribution*. This is appealing because it allows us to explicitly estimate how the lower tail of the distribution (the worst-case scenario) evolves as financial conditions deteriorate. It is not possible to do this using standard regression models, because financial stability risks are highly nonlinear. In a crisis situation, the economic costs are likely to increase by much more than implied by the change in the central forecast alone.

In this study, we make 3 contributions:

1. We apply the GaR framework to Australia for the first time (and in doing so, we advance the methodology used in other papers).
2. We develop a new financial conditions index (FCI) for Australia, which is our measure of financial conditions in the GaR model (see the figure below). But the FCI is also a useful contribution in its own right. It summarises 75 individual indicators of financial conditions over more than 40 years and correlates closely with past financial boom and bust cycles in Australia.



Note: Shaded region represents 95 per cent confidence interval

3. We examine the potential future economic costs of financial instability using a range of macroeconomic indicators. While others have focused solely on risks to GDP growth, we examine alternative indicators – namely, household consumption, business investment, employment and the unemployment rate. We do this because these variables have important links to financial stability in their own right.

Our key finding is that financial conditions provide useful information about downside risks to GDP and employment growth and upside risks to the unemployment rate. That is, when financial conditions are extremely restrictive, the risks of very bad outcomes for these variables increase. However, the FCI is less useful for explaining downside risks to household consumption and business investment.