

The New Zealand Financial Cycle

Caitlin Davies & Prasanna Gai
University of Auckland

Introduction

The global financial crisis has renewed interest in understanding financial cycles and their implications for the real economy. The resulting international debate has had important consequences for policy design in financial stability policy – for example, policymakers have increasingly sought to implement macroprudential instruments in an effort to ‘fine-tune’ the financial cycle.

New Zealand has been an early adopter of macroprudential policies, but although there has been some discussion of how financial variables can help measure financial stability, there has been no formal attempt to construct a financial cycle for New Zealand and explore its characteristics.

This research documents the New Zealand financial cycle over the fifty-year period 1968–2017. The purpose is to assemble stylised facts about general financial conditions in New Zealand with a view to informing academic and policy debate on financial stability policy.

Study

The financial cycle is constructed by aggregating a group of financial variables into a single financial conditions index using principal components analysis. Then analysis is used to identify cycles in the index and to isolate cycle frequency. Finally, some key features are drawn out of the financial cycle.

The principal components approach captures the extent to which a group of financial variables is correlated with a common underlying factor, which is interpreted here as reflecting the general level of financial activity in the economy. The method assigns a weighting to each variable which explains the highest amount of variation in the common factor. Financial cycles capture trends related to financial systems such as credit aggregates and asset prices. This is distinct from business cycles which measure and reflect trends in GDP growth.

The nine variables used for the index are:

Real Credit	Money/GDP Ratio	Stock Price Index
Credit/GDP Ratio	Credit/Money Ratio	Interest Rate Spread
Real Money	House Price Index	Proportion of Variance

Findings

Specifically, we found that financial cycles in New Zealand are much longer than the typical business cycle, that the extent of synchronisation between the cycles is considerable, and that the relationship between real and financial variables shows signs of change after 1986. While the US and NZ financial cycles are broadly similar on average, the synchronisation between the cycles increases markedly after 1986. These

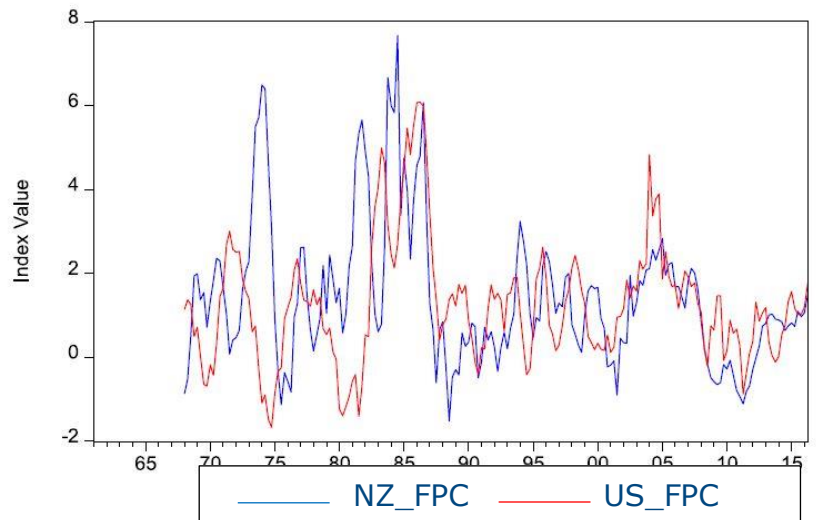
Key Findings:

- The median length of the financial cycle in New Zealand is 8 years
- Its duration has increased substantially (from 4.75 to 9.75 years) following the economic reforms of the mid-eighties
- There appears to be a strong relationship between financial cycle contractions and real economic outcomes, with 83% of financial cycle contractions preceding a recession by a median of 2.5 years
- We also find a strong degree of synchronicity between the New Zealand and US financial cycles

findings seem to confirm the importance of financial factors and spillovers from the global financial cycle reported elsewhere in the literature.

The broad characteristics of the New Zealand financial cycle seem comparable to financial cycles documented for other advanced economies. It has a **median length of around 8 years** and its duration increases after 1986. The overall impression is that the New Zealand financial cycle has become longer and slower over time, as international financial integration has assumed greater significance. The measure of the financial cycle also appears to be broadly consistent with the major economic developments in New Zealand during this period, notably the first oil price shock, the financial crisis of 1984 and the Asian and global financial crises.

The measure of the New Zealand financial cycle appears to be broadly consistent with the main economic developments during the period studied. The financial cycle picks up the wool bust of 1967–69 and exhibits a deep trough in the mid-1970s, coinciding with the aftermath of the first oil price shock. Real house prices fell every quarter from 1975 for the next five-and-a-half years. The financial cycle turns again in late-1984 and exhibits another deep trough in the late 1980s. The turning point is consistent with events – namely a 20% devaluation of the currency in July 1984 and a subsequent downgrading of New Zealand’s AAA credit rating in October 1984. Following the economic reforms of the mid-eighties, the financial cycle in New Zealand appears to have become much more synchronised with a US (or global) financial cycle.



The deeper integration of New Zealand into global capital markets from the late 1980s appears to have resulted in a less volatile financial cycle. The peaks and troughs are noticeably smaller, perhaps reflecting greater international risk-sharing opportunities. The recovery of the financial cycle in the early 1990s is consistent with the housing boom of the time. The subsequent deterioration in financial conditions coincides with the Asian-LTCM crises of 1997–98, which accentuated global risk aversion and impaired the functioning of capital markets for a time. 2003–7 was a period of rapidly rising house prices, strong credit growth and substantial private sector dissaving, fuelled by aggressive and risky lending by financial intermediaries. The global financial crisis of 2007–8 and finance company failures from 2006 would seem to account for the final downswing in the studied measure of the financial cycle.

The deeper integration of New Zealand into global capital markets from the late 1980s appears to have resulted in a less volatile financial cycle. The peaks and troughs are noticeably smaller, perhaps reflecting greater international risk-sharing opportunities. The recovery of the financial cycle in the early 1990s is consistent with the housing boom of the time. The subsequent deterioration in financial conditions coincides with the Asian-LTCM crises of 1997–98, which accentuated global risk aversion and impaired the functioning of capital markets for a time. 2003–7 was a period of rapidly rising house prices, strong credit growth and substantial private sector dissaving, fuelled by aggressive and risky lending by financial intermediaries. The global financial crisis of 2007–8 and finance company failures from 2006 would seem to account for the final downswing in the studied measure of the financial cycle.

Financial stability risks and inflation of the property market have increased substantially following the outbreak of the Covid-19 pandemic. While the Reserve Bank of New Zealand has taken steps to reduce the impact of a potential housing market correction, this research reflects the level of risk that unsustainable house prices and the spike in monetary stimulus injected over the course of the pandemic could pose for a recovery in growth for New Zealand economy.

Key Policy Implications:

- US monetary policy and financial conditions spill over to other countries, including to countries with floating exchange rates such as New Zealand
- **Macprudential policies or capital controls** may therefore play an important role, in concert with floating exchange rates, in helping insulate small open economies from global financial shocks
- **Greater financial integration** may be beneficial – by facilitating better risk sharing opportunities, greater capital market integration may serve to safeguard the economy from the ebb and flow of shifting global risk appetite.

To find out more about this research, please visit: <https://doi.org/10.1080/00779954.2018.1552984>

Contact: Caitlin Davies (caitlin.davies@auckland.ac.nz)

Adapted with assistance from Sarah Hendrica Bickerton and Suzanne Woodward, PPI