

CHANGES IN NZ'S BUSINESS INSOLVENCY RATES AFTER THE GFC



An Executive Summary of Motu Working Paper 19-15

Viv B Hall and C John McDermott

Motu Economic and Public Policy Research

viv.hall@vuw.ac.nz, john.mcdermott@motu.org.nz

SUMMARY HAIKU

Businesses do fail.
Things get worse in recessions
as costs rise sharply.

INTRODUCTION

There are many firm-specific reasons for a business to fail. However, the rate of failures is also related to overall macroeconomic conditions.

In this paper we examine how New Zealand's macroeconomic environment is associated with business insolvencies. We use the Global Financial Crisis (GFC) in order to measure the rate of corporate and total personal insolvencies. We are also interested in whether any changes occurred uniformly over the country.

DATA

Our data for business insolvencies span July 2003 to November 2018. We focus primarily on the Insolvency and Trustee Service (ITS) Corporate Insolvency statistics, published for New Zealand as a whole and for the Auckland, Hamilton, Wellington and Christchurch regions. When looking at the relationship between business insolvencies and economic data, we also use the growth rate of employment.

We also use the Total Personal Insolvency Statistics for New Zealand as a benchmark. This is because a high proportion of New Zealand's businesses are small and medium enterprises, many of which have business loans secured as collateral over personal assets (such as residential housing).

We use a Poisson model to analyse the trends of corporate insolvencies and then Poisson and negative binomial regression models to assess how insolvencies were associated with key macroeconomic activity variables.

CHANGES IN THE RATE OF INSOLVENCIES

A sharp increase in the numbers of both corporate and personal insolvencies took place in 2008. After a brief lull in the number of corporate insolvencies, a further increase took place in 2012 before returning to a more 'normal' level a couple of years later. In contrast, personal bankruptcies stayed high after the initial surge before slowly returning to more normal levels over a 5-year period.

There was a distinct increase in insolvencies in Auckland following the GFC but increases occurred later in Waikato and Wellington. Canterbury had a short sharp increase around the time of the GFC but a lower rate of insolvencies in subsequent years.

There was a considerable break in the trend for insolvencies with a considerable dip followed by a sharp rise in January 2008 in New Zealand. This was some months before the fall of Lehman Brothers on 15 September 2008, and some months after the U.S. credit crunch began in July 2007. The somewhat earlier breakpoint of September 2007 for personal insolvencies is consistent with the July 2007 date.

Looking at the regions, Auckland has a similar breakpoint to the whole of New Zealand (February 2008). However, in Waikato, Wellington and Canterbury we find little evidence of a single break. The model suggests that the period late in the sample was generally favourable for businesses in Wellington and Canterbury with fewer insolvencies taking place.



There is also evidence of a significant uptick in trend for personal insolvencies in New Zealand, corporate insolvencies in New Zealand and corporate insolvencies in Auckland between 2012 and 2014. The rate of insolvencies then declines significantly, suggesting a return to a normal rate of insolvencies five or so years after the GFC.

EXAMINING THE RELATIONSHIPS BETWEEN BUSINESS INSOLVENCIES AND ECONOMIC ACTIVITY

Macroeconomic factors explain between 50 and 80 percent of the increase in insolvencies across New Zealand and in three of our regions. However, they cannot explain the variation in insolvencies in Canterbury.

We find sharply rising input costs relative to output prices are the most important macroeconomic factor influencing corporate insolvencies. These are, however, immaterial in determining personal insolvencies. There were sharp increases in relative costs at the time of the GFC and elevated costs around 2011 to 2013. Both are periods with a higher rate of insolvency.

The significant macroeconomic factors driving personal insolvencies are employment growth and house price inflation. Both these factors are important determinants for consumption spending by the household sector which is likely to play a large role in small business profitability. Employment conditions are also critical in a household's ability and willingness to repay debt obligations and thus an important determinant of personal insolvencies.

Neither CPI inflation nor business credit growth is significant in explaining New Zealand or regional insolvencies. This is not surprising, given low and stable inflation throughout our sample period. Our findings imply insolvencies cannot be attributed to either a lack of or an excessive accumulation of credit.

CONCLUSION

The rate of corporate insolvencies in New Zealand and in Auckland started rising in January/February 2008, fitting in with the business cycle peak in the last quarter of 2007 and the subsequent five-quarter recession. There is a further significant increase for total personal insolvencies in New Zealand, corporate insolvencies for New Zealand, and corporate insolvencies in Auckland between 2012 and 2014. The subsequent decline in the rate of insolvencies is consistent with return to a more normal rate following the GFC.

Sharply rising relative costs are the most important macroeconomic factor influencing corporate insolvencies in New Zealand, Auckland, Waikato and Wellington, but were immaterial in determining New Zealand's total personal insolvencies. Employment growth and house price inflation together significantly explain the total personal insolvencies. Previous insolvencies are a lesser factor that nevertheless significantly affect both corporate and total personal insolvencies. Neither CPI inflation nor business credit growth is significant in explaining New Zealand or regional insolvencies.

Overall, our results are consistent with the way an expansion phase of the business cycle has a normal rate of insolvencies, while there is a sharp increase in insolvencies around the onset of a relatively severe recession. One might also interpret the findings as insolvencies being largely a firm-specific event during expansions but a macroeconomic event in recessions.

READ THE FULL VERSION OF THE WORKING PAPER AT

[HTTP://MOTU.NZ](http://motu.nz) OR CALL US ON 04 939 4250

Motu is the top-ranked economics organisation in New Zealand. It is in the top ten global economic think tanks, according to the Research Papers in Economics (RePEc) website, which ranks all economists and economic research organisations in the world based on the quantity and quality of their research publications. It also ranks in the top ten climate think tanks in the world according to the International Center for Climate Governance.