



Unlike our pay-to-view reports, **RODNEY'S RAVINGS** and the chapters of the **How the Economy Works** booklet are free. You can sign up for them and notification of forthcoming **Property Research** reports on our website – <http://www.sra.co.nz/lists/>.

How the Economy Works

Essential insights for business owners, management and investors

Chapter Three

How economic upturns and downturns unfold

In the first chapter of the **How the Economy Works** booklet that is being delivered in instalments I revealed the trade secrets of the economic forecasters (see <http://sra.co.nz/pdf/TradeSecrets.pdf>). This showed that the economic forecasters are no good at predicting “turning points” (i.e. when economic or industry activity changes from tumbling to rising or vice versa). In the second chapter I demonstrated the pivotal role housing activity plays in most economic upturns and downturns. This means that understanding what drives housing market cycles is at the heart of picking turning points in economic growth (see <http://sra.co.nz/pdf/PivotalHousing.pdf> for the second chapter).

In this, the third chapter I look at how economic upturns and downturns that start in the housing market filter through the economy, impacting on a wide range of occupations and industries. This is the economic multiplier process of textbook economics. The export sector also plays a part in driving economic upturns and downturns, although it is generally of secondary importance to the role that interest rates and net migration play in driving cycles in economic growth. Issues relevant to the export sector will be discussed in a future chapter.

Monthly insights from the unique and superior economic and industry forecasting framework that I have developed over the last 25 years are available in the **Interesting Times** reports. For information on these reports either use the following link to our website - <http://sra.co.nz/interesting.html> - or contact me if you want to discuss whether these reports would be of value to you.

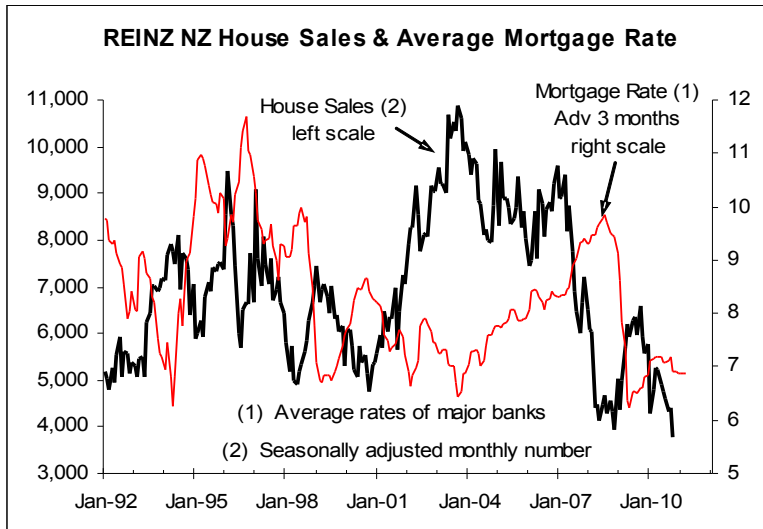


Rodney Dickens
Managing Director and Chief Research Officer
Strategic Risk Analysis Limited
rodney@sra.co.nz
www.sra.co.nz



The economic multiplier process

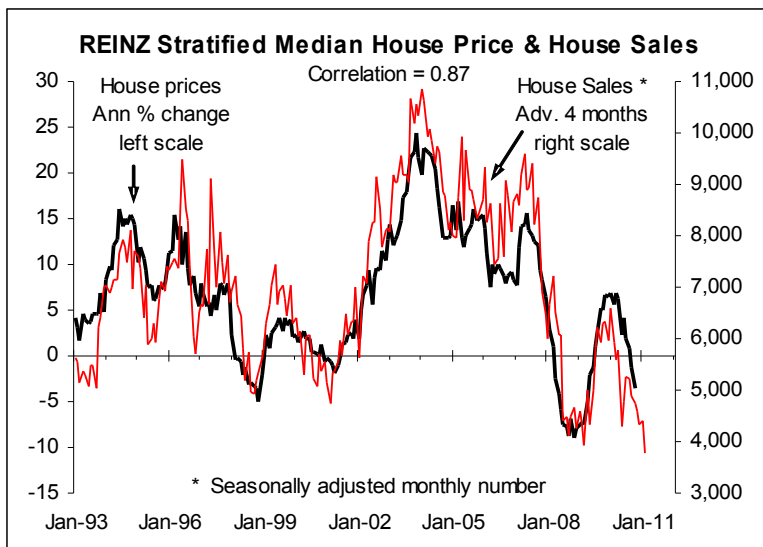
The economic multiplier process is about how a rise or fall in demand or activity in one industry impacts on demand in other industries, which in turn impacts on yet more industries. This multiplier process that follows an initial rise or fall in spending in one industry is best understood in the context of the pivotal role housing upturns and downturns play in economic cycles, which was the topic of Chapter Two.



The chart shows a consistent inverse relationship between the average mortgage interest rate charged by the major banks and the number of house sales reported by REINZ each month. The best fit is with the interest rate line advanced or shifted to the right by three months, which reflects how long it takes on average for changes in interest rates to impact on the number of house sales. Net migration also has a significant impact at times. For example, the massive upturn in the number of house sales between 2001 and 2004 was driven in part by falling interest rates and in part by a major upturn in net migration. In the **Housing Prospects** reports we look at

all the factors that drive housing demand, but for the current purpose it is sufficient to only consider what happens after an upturn or downturn in housing demand is caused by a change in interest rates.

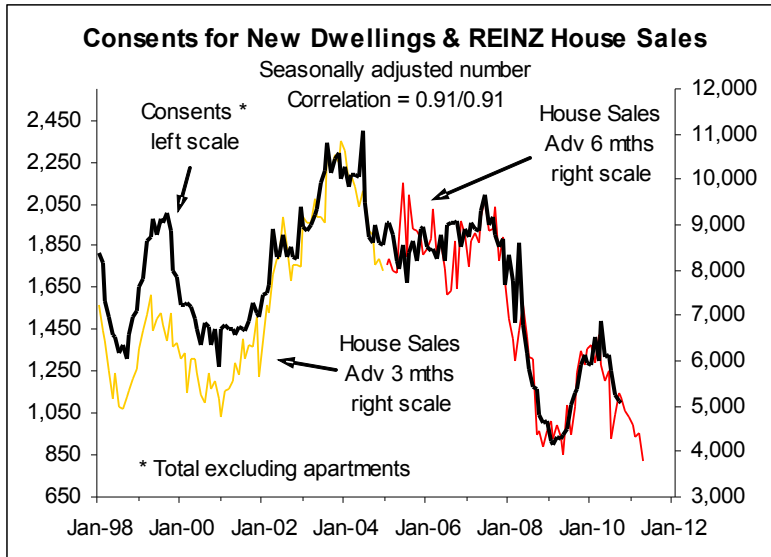
There are significant differences from cycle to cycle but the chart above shows that on average mortgage interest rates fall around 2.5% (250 basis points) when there is a cyclical fall. On average this will result in the number of house sales increasing by around 3,000 per month (i.e. from around 5,000 per month to around 8,000 per month or a 60% increase). This means that a number of professions associated with house sales experience a large increase in incomes (e.g. real estate agents, lawyers doing conveyancing, valuers and furniture removal firms), while in a number of other areas activity levels increase strongly (e.g. mortgage loan processing at banks, property transfer transactions). This increase in incomes will result in increased spending by the beneficiaries (e.g. the real estate agents and lawyers), which is the start of the economic multiplier process. It will also result in more jobs being created in the related industries, some increases in capital spending (e.g. more or upgraded furniture trucks) and will result in some new businesses being set up (e.g. real estate agents setting up new offices and employing services staff). But this is only the tip of the iceberg in terms of the economic multipliers set in motion.



If demand for existing houses surges or tumbles, as reflected by a sharp cyclical increase or fall in the number of house sales reported by REINZ, it will drive house prices up or down. The adjacent chart uses the number of sales (right scale) advanced or shifted to the right by four months to predict the near-term outlook for annual inflation in the national average house price. On average it takes four months for a change in the number of sales to impact on annual house price inflation. As an aside, the fall in the number of house sales over the last four months points to further downside in house price inflation.



There are roughly 1.75m dwellings in New Zealand with an average value of around \$350,000. If the national average house price increases by 12% during the average housing upturn it means an increase in housing wealth of around \$73.5b. Only a small percent of this increase in wealth results in increased consumer spending, but it only takes a tiny portion of the increase in wealth to be spent for it to have a meaningful impact. To put this in context, on an annual basis total retail spending is around \$67b, so if only 1% of the increase in housing wealth gets spent it will be the equivalent of more than a 1% increase in total retail spending.



The economic multiplier process starts in earnest when the increase in existing house sales is followed by a surge in the number of new dwellings being built. The adjacent chart uses the number of house sales reported by REINZ each month (red line, right hand scale) as a leading indicator of the number of consents approved to build new dwellings (black line, left hand scale). Since the consenting process changed in 2004-05 the upturns and downturns in the number of consents for new dwellings lag changes in the number of REINZ house/dwelling sales by six months on average. This is shown in the chart by the house sales line

being advanced or shifted to the right by six months. This is one of the leading indicator charts we use in the monthly **Building Barometer** reports that provide the best available predictions for residential building activity (see www.sra.co.nz for information and these and the **Housing Prospects** reports).

If the number of house sales reported by REINZ increases by around 3,000 per month it will normally be followed, around six months later, by the number of consents for new dwellings increasing by around 550 per month (i.e. between 40% and 60% depending on what level the upturn started from). An upturn in residential building of this magnitude winds up the economic multipliers big-time because a large number of occupations and industries are impacted by the level of residential building. This includes: builders, plumbers, gas fitters, earth movers, electricians, roofers, appliance installers, painters, a wide range of manufacturers and retailers (e.g. concrete, timber, wall linings, windows, roofing, guttering, kitchens, appliances, garage doors, glass, aluminium, paints, wallpaper, hot water cylinders, light fittings, curtains/blinds, carpet, furniture, cabinet makers and gas/electric fires), a wide range of services industries (architects, transport, councils, valuers, real estate agents, banks, landscapers and quantity surveys) and a number of primary industries (e.g. forestry, mining and quarrying).

When there is a large cyclical upturn in the number of new houses being built (or a large cyclical fall) it has a major impact on incomes in a wide range of occupations and industries, which fuels increased consumer spending. It also boosts employment levels in these industries and flows through to increased capital spending (e.g. new or upgraded building material retail outlets, upgrading or expanding production capacity in the related manufacturing industries and more retail shops being built). These increases in incomes, employment and capital spending in turn fuel sales for yet more industries, which in turn filters stimulus from the initial increase in housing activity fuelled by the interest rate cuts on to yet more and more other firms, occupations and industries. The increases in incomes and spending in turn boost PAYE, GST and corporate tax for the government and governments being governments this is soon followed by increased government spending in a wide range of areas.

The economic forecasters are normally blind to this economic multiplier process for two reasons:

1. As discussed in Chapter Two, they have a poor track record at predicting upturns and downturns in housing market activity, so they miss the boat right from the start.
2. I have observed a repeated tendency for the economic forecasters to argue that increases in consumer spending will not occur until the official measures of employment and incomes start to

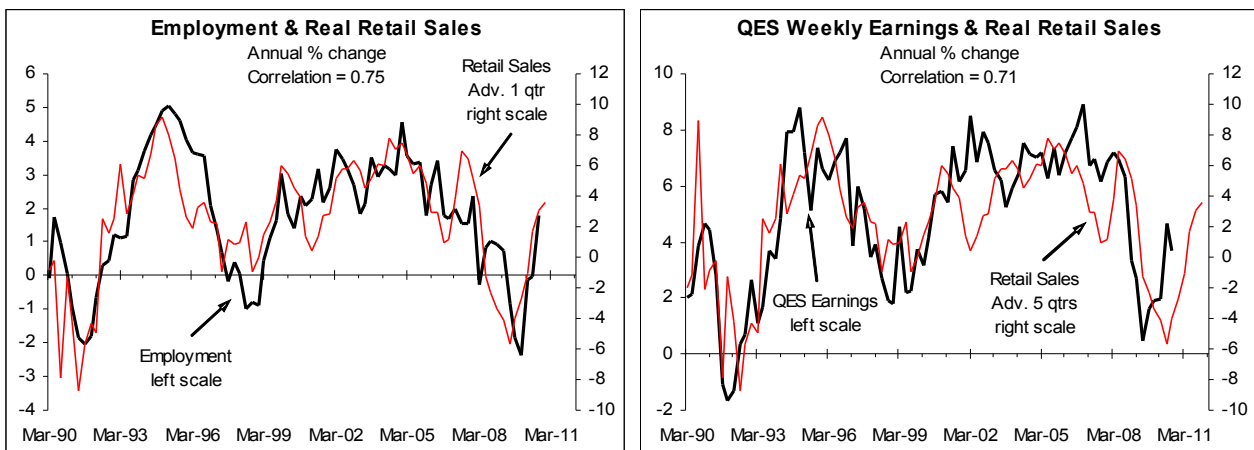
While Strategic Risk Analysis Limited will use all reasonable endeavours in producing reports to ensure the information is as accurate as practicable, Strategic Risk Analysis Limited, its employees and shareholders shall not be liable (whether in contract, tort (including negligence), equity or any other basis) for any loss or damage sustained by any person relying on such work whatever the cause of such loss or damage.



improve. This shows a misunderstanding of how economic upturns and downturns unfold. Much of the initial increase in incomes and jobs is experienced in industries that aren't properly surveyed in some of the official measures of employment and incomes.

The charts below show that by focusing on employment growth and growth in the official measures of income the economic forecasters regularly miss the boat in predicting economic upturns. The left chart shows the relationship between annual growth in the official measure of employment and annual growth in the volume of retail spending. The best fit is with annual growth in retail spending advanced or shifted to the right by one quarter, reflecting the fact that upturns and downturns in retail spending lead rather than lag upturns and downturns in the official measure of employment growth. The right chart shows that the best fit between annual growth in the volume of retail spending and annual growth in one of the best available official measures of income growth is with retail sales leading by five quarters (i.e. on average upturns and downturns in the official measure of income growth lag upturns and downturns in retail spending by five quarters).

The apparently strange relationships in the charts below are possible because the official measures of employment and incomes don't pick up much of the early action set in play by upturns and downturns in housing market activity (e.g. the 60% increase in incomes for real estate agents and lawyers doing conveyancing, the 12% increase in housing wealth, job creation in small firms impacted by residential building). This is why it is critical that businesses that are impacted by economic cycles understand the economic multiplier process described in this chapter rather than wait for the economic forecasters to warn them than an economic upturn or downturn is around the corner.



The example used in this chapter focused on a normal cyclical upturn in housing market activity and how it filters through to the economy, resulted in increase sales for a wide range of occupations, firms and industries, and increased employment and capital spending. It will also result in increased transport activity and increased imports. However, the economic multiplier process works similarly although not identically in both directions. If a normal cyclical increase in interest rates occurs there will be a large cyclical fall in the number of house sales, a more modest fall in house prices than the sizeable increase during housing upturns and a large fall in residential building activity. These will set in play powerful negative economic multipliers effects that will take a year and even more in some areas to filter around the economy.