

Some comments/observations:

*"Borrower behaviour, mortgage terminations and the price of residential mortgages"*

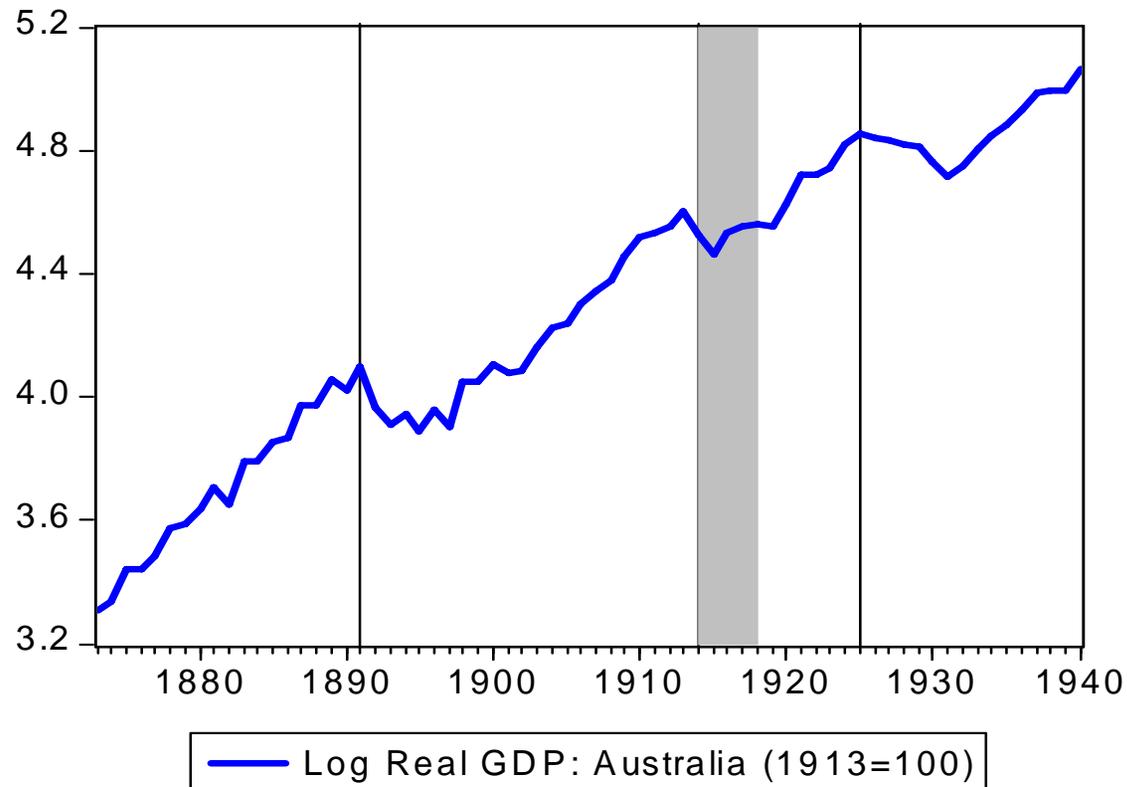
Les Oxley, University of Canterbury

# Roadmap

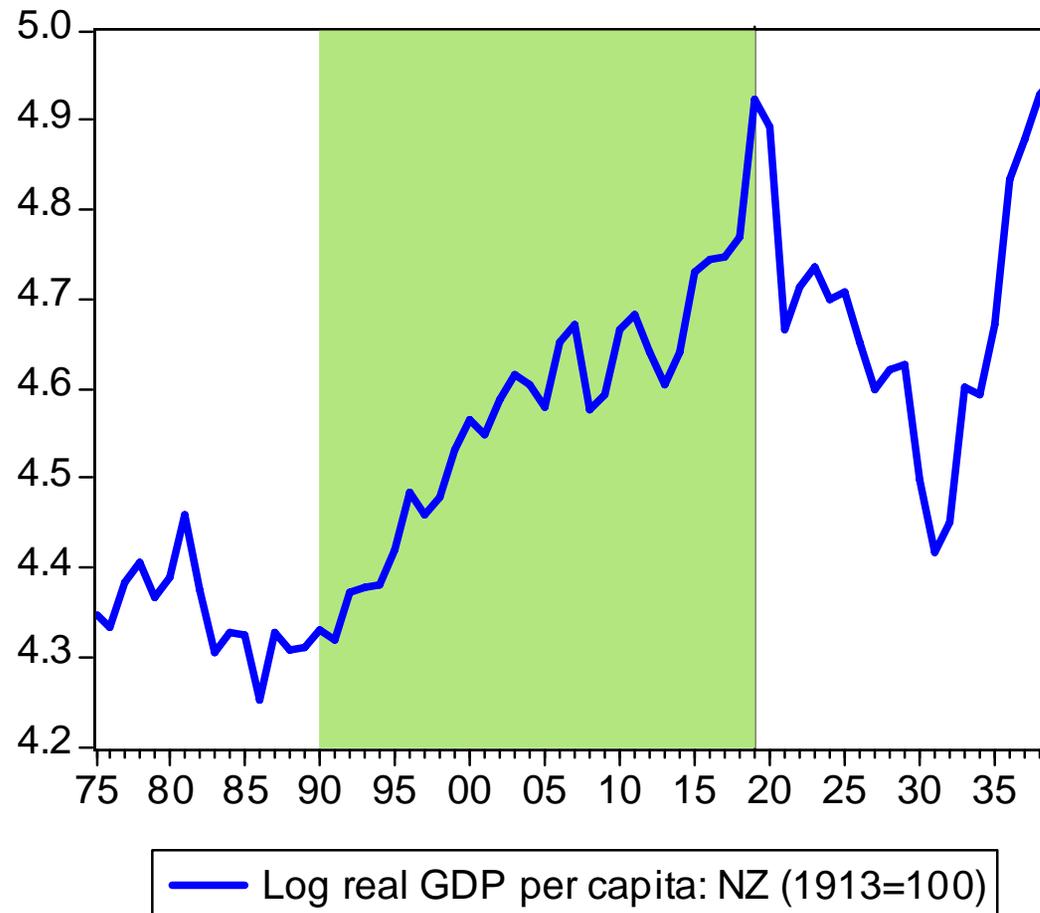
"Bad loans are made in good times." (Greenspan)

- Some history
- Comments on John Quigley's work
- Household Wealth in NZ
- Takeaways

# Australia: 1870-1940



# New Zealand: 1875-1939



# The US: 1920-1990s

- **US: 1920s boom in real estate**
  - Secondary mortgage market established.
  - 1929 crash ended the real-estate boom - many private guarantee companies forced into insolvency as home prices collapsed.
  - Defaults on mortgages because borrowers could not make final balloon payment or to roll over their mortgage due to low market value of their homes.
- **US: National Housing Act of 1934: Congress created the FHA**
  - The FHA's insurance program protected lenders from the risk of default on long-term, fixed-rate mortgages.
- **US: 1938: Congress creates Fannie Mae to refinance FHA-insured mortgages.**

# The US: 1920-1990s

- **US: Serviceman's Readjustment Act of 1944:**
  - Department of Veterans Affairs (VA) authority to guarantee veterans' loans with no down payment or insurance premium requirements.
- **US: 1954, Fannie Mae converted into a mixed-ownership corporation**
- **US: 1968, the Federal National Mortgage Association partitioned into two**
  - Government National Mortgage Association (Ginnie Mae)
  - Federal National Mortgage Association (Fannie Mae).
  - Ginnie Mae remained in the government, and
  - Fannie Mae became privately owned by retiring the government-held stock.
- **US: Early '70s, inflation and interest rates rise.**
  - Many investors drifted away from mortgages.
    - 1970: Ginnie Mae issued its first mortgage-backed security (MBS)
    - 1970: Congress chartered the Federal Home Loan Mortgage Corp (Freddie Mac) to buy conventional mortgages from federally insured financial institutions.
    - 1971: Freddie Mac introduced MBS.

# The US: 1920-1990s

## US: 1980s, economy in recession.

- Ginnie Mae, Fannie Mae and Freddie Mac create programs to handle adjustable-rate mortgages.
- Ginnie Mae **guaranteed securities** are one of the most widely held and traded MBSs.
- Wall Street Journal: Question safety, soundness and financial management of Fannie Mae's and Freddie Mac's
  - Both agencies regarded as risky, fast-growing companies that "look like poorly run hedge funds", "unduly exposed to credit risk with large derivative positions", and that they "use all manner of derivatives" and "are exposed to unquantified counterparty risk on these positions".

# The US: 1920-1990s

- **Japan and Asia:**
  - Japanese economy shifted from a government credit economy to a private debt economy and the economy moribund
  - A government credit economy is different from a private debt economy in its sustainability
  - Japanese private debt bubble subsequently infected all Asian economies.
- **What's' the point of all this?**
- **Minsky:**
- **"Big Government"**
  - "Creates floor to declining demand"
- **"Big Bank"**
  - "Creates floor to declining asset prices"
- **Private sector institutional responses**
  - "Create new financial instruments to maintain booms"

# John Quigley's paper/work

- Really interesting work!
- Particularly like work on differential effects of stock market and housing market wealth on consumption
  - John finds that increases in housing wealth have > effect on consumption compared to stock market wealth
  - This is important in NZ context (later)
- Importance of borrower heterogeneity (yes)
  - "We need to know a lot more about the differences among borrowers"

# Household Wealth in NZ

## Household Wealth in New Zealand



Grant Scobie  
John Gibson  
Trinh Le

Institute of Policy Studies

- How much wealth do New Zealanders have?
- In what forms do they hold that wealth?
- What about human capital as a form of wealth?
- Does ethnicity, income or occupation matter?
- Their research based upon unique 2002 *Household Savings Survey*
- *Book published 2005*

# Household Wealth in NZ

- Results:
  - Results based upon **NET** wealth
  - Net wealth for young negative (not surprising)
  - Self employed higher wealth
  - No gender or marital/partner effects
  - Migrants lower wealth
  - Inheritance effects positive and significant
  - Education effects (positive)
  - Farmers. Highest net wealth
  - **Property wealth important**
    - Those who bought young, higher net wealth
    - **Those with higher share of property in portfolio, wealthier**

# Household Wealth in NZ

- Results:
  - Once controlling for age (Maori on average 10 years younger than Pakeha) , **ethnicity not significant**
  - Student Loans
    - 6% less likely to have a mortgage
  - Human capital should be added to net wealth calculations
    - Calculate present value of lifetime earnings
  - **BUT:** “Two otherwise identical individuals may have different net worth simply because one chose to invest in a different mix of assets”
    - Unobservable preferences will matter
    - Good fortune will matter

# Takeaways

- “We need to know a lot more about the differences among borrowers”
  - Especially their wealth compositions due to potential for differential effects on current and future consumption
  - “Changes in house prices have a larger and more important impact on consumption than do changes in stock market prices (in US)”
  - Likely to be more pronounced in NZ??
- “Economic behavior of relatively unsophisticated borrowers is key to cash flows and valuation of mortgage investments”

## Appendix: Hyman Minsky

- He divides financial structures -- of firms, households, or countries -- into 3 classes:
  - hedge,
  - speculative, and
  - Ponzi.
- A **hedged structure** is one that can meet interest payments and pay-off principal out of current income
- A **speculative unit** can meet its interest obligations, but finds it impossible to pay off the principal when it comes due -- it needs to roll it over, that is, pay off the old debt with the proceeds of a new one
- A **Ponzi unit** is one that can't meet any of its obligations, interest or principal, without selling off other assets

# Appendix: Hyman Minsky

- Long periods of prosperity lead to
  - (1) overconfidence
  - (2) excessive short-run financing by banks of long-run projects
  - (3) I booms interacting with stock market booms (4) indebtedness and illiquidity
- New instruments are introduced to keep boom going
- Demand for credit  $\uparrow \rightarrow i \uparrow\uparrow \rightarrow I \downarrow \rightarrow$  Cash flow $\downarrow$ , sales $\downarrow$ ,  $Y \downarrow$ ,  $U \uparrow$  businesses attempt to refinance debt and liquidate assets and some fail  $\rightarrow$  crisis unless Central Bank intervenes
- Large deflation shocks  $\rightarrow$  financial crisis and bankruptcy  $\rightarrow$  normally stable equilibrium system going into deep recession where disequilibrium forces are strong.
- When governments and central banks bail-out the over-extended, they "validate threatened financial structures," and 'validate leverage' in the next up cycle