

Fixed versus floating rate - Supply and demand effects on household mortgage choice

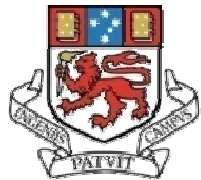
Paul Blacklow

Mardi Dungey

Graeme Wells

School of Economics and Finance

University of Tasmania



UNIVERSITY
OF TASMANIA

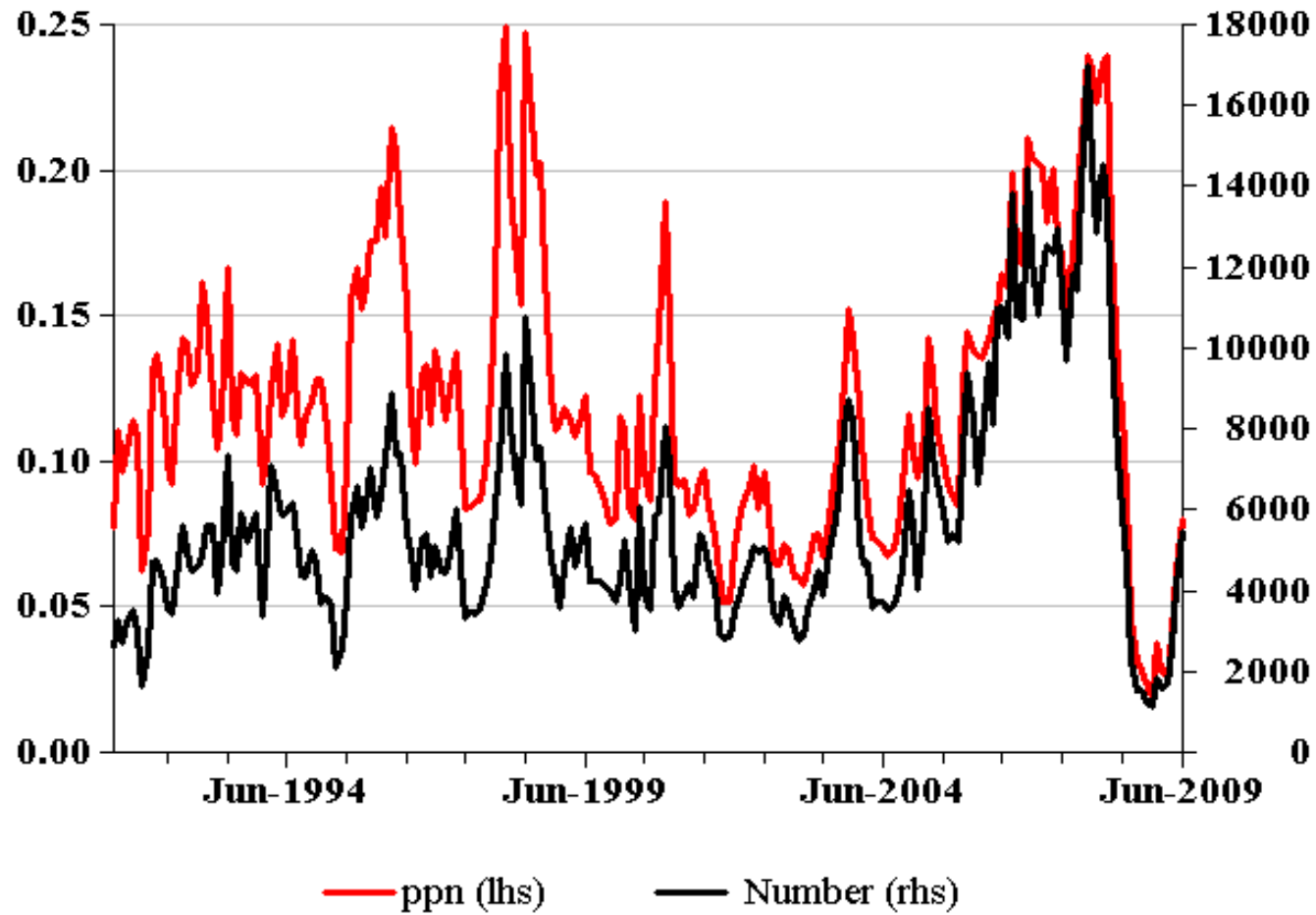
Why Mortgage Choice Matters

- Choice between adjustable and fixed rate mortgages (ARM and FRM) affects the allocation of risk in the economy.
- Is household self-selection of different mortgage contracts efficient?
- Is there a complete suite of mortgages contracts?
- Does the ARM/FRM choice affect the operation of monetary policy?



FRMs - ppn and no. of owner-occupied dwellings financed

Australia: Monthly data



FRM Proportions First Home Buyers and Others NSW and WA

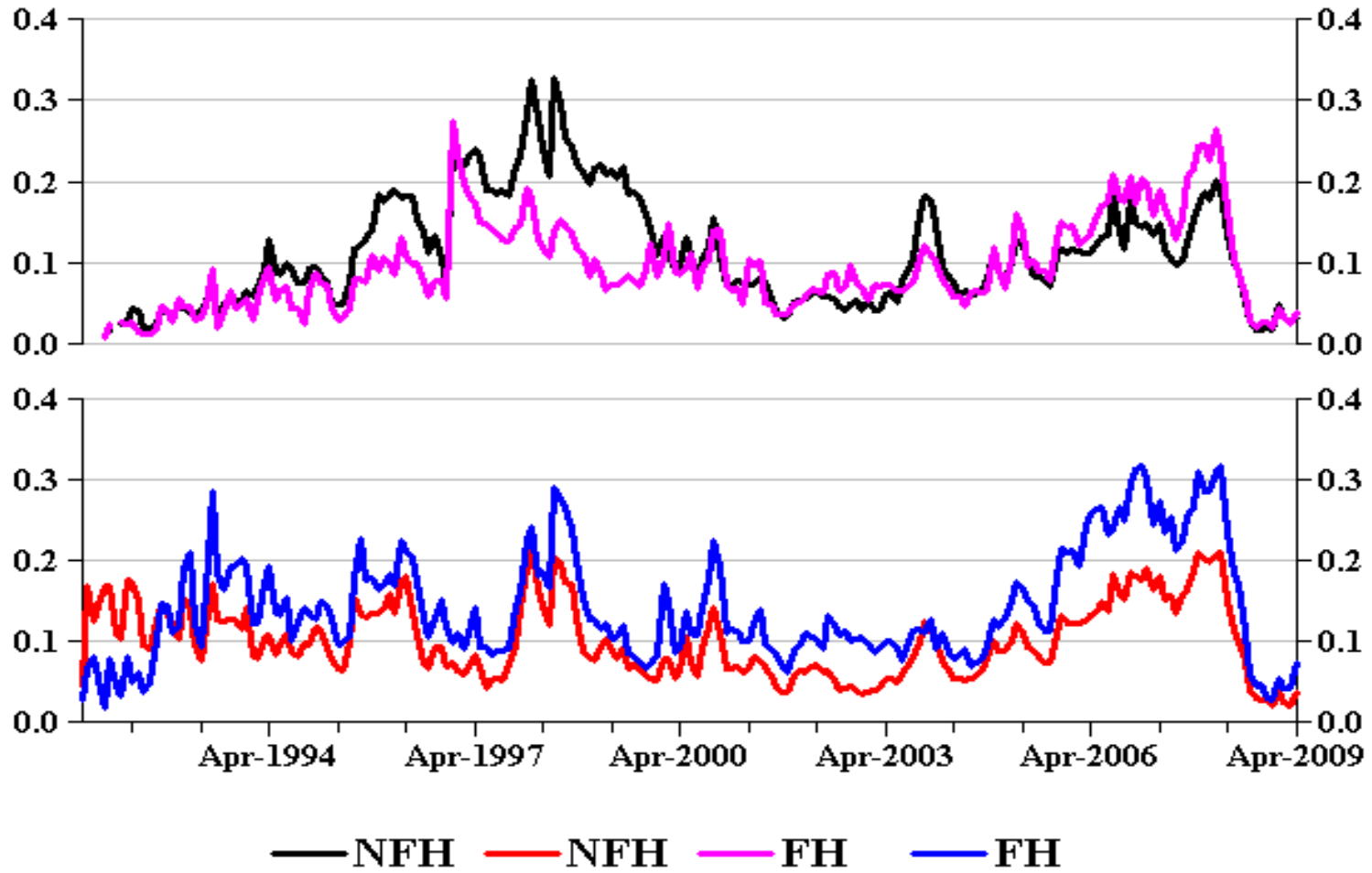
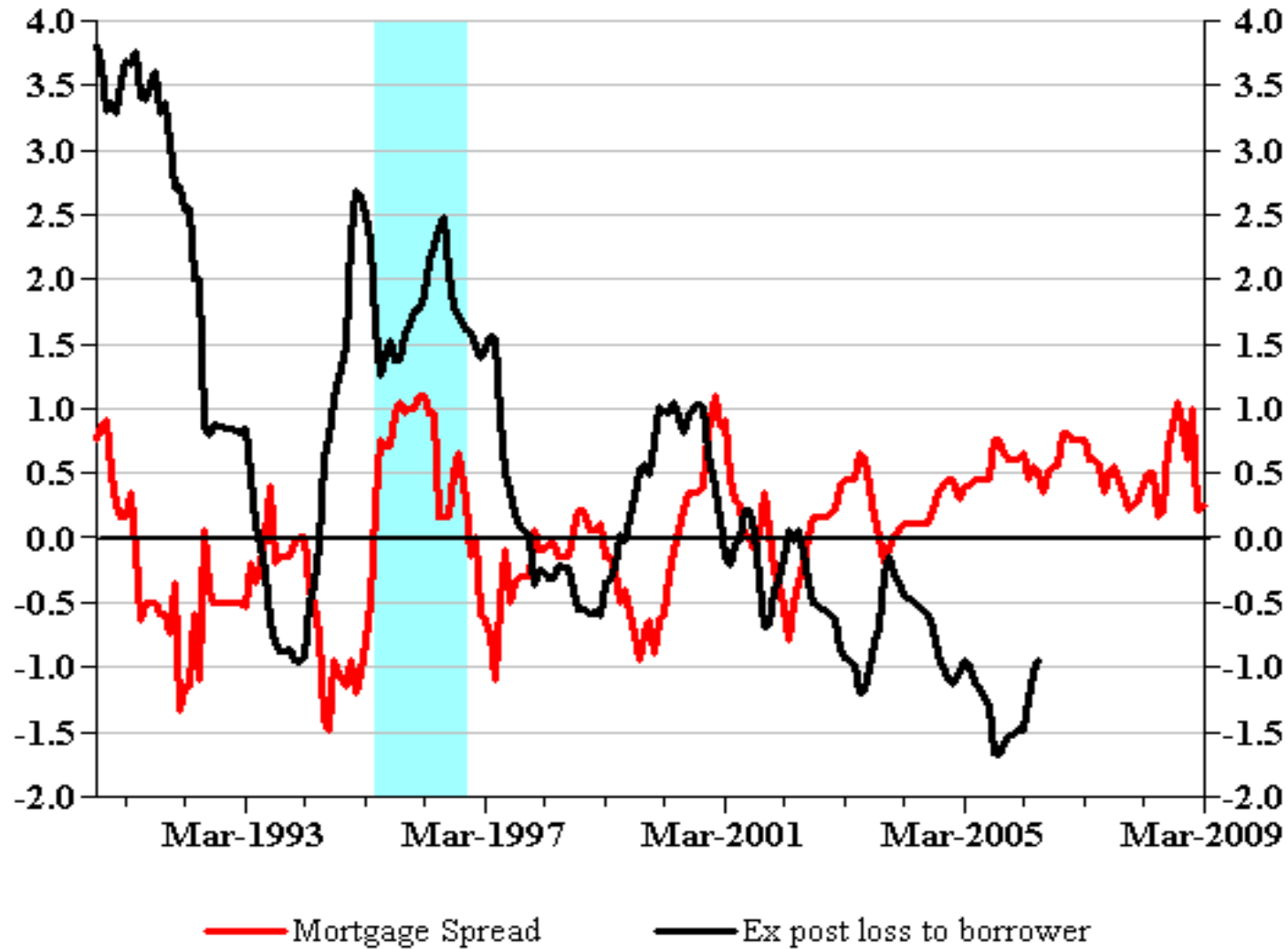


Figure 3 Ex post Losses from holding FRMs



Basic panel model

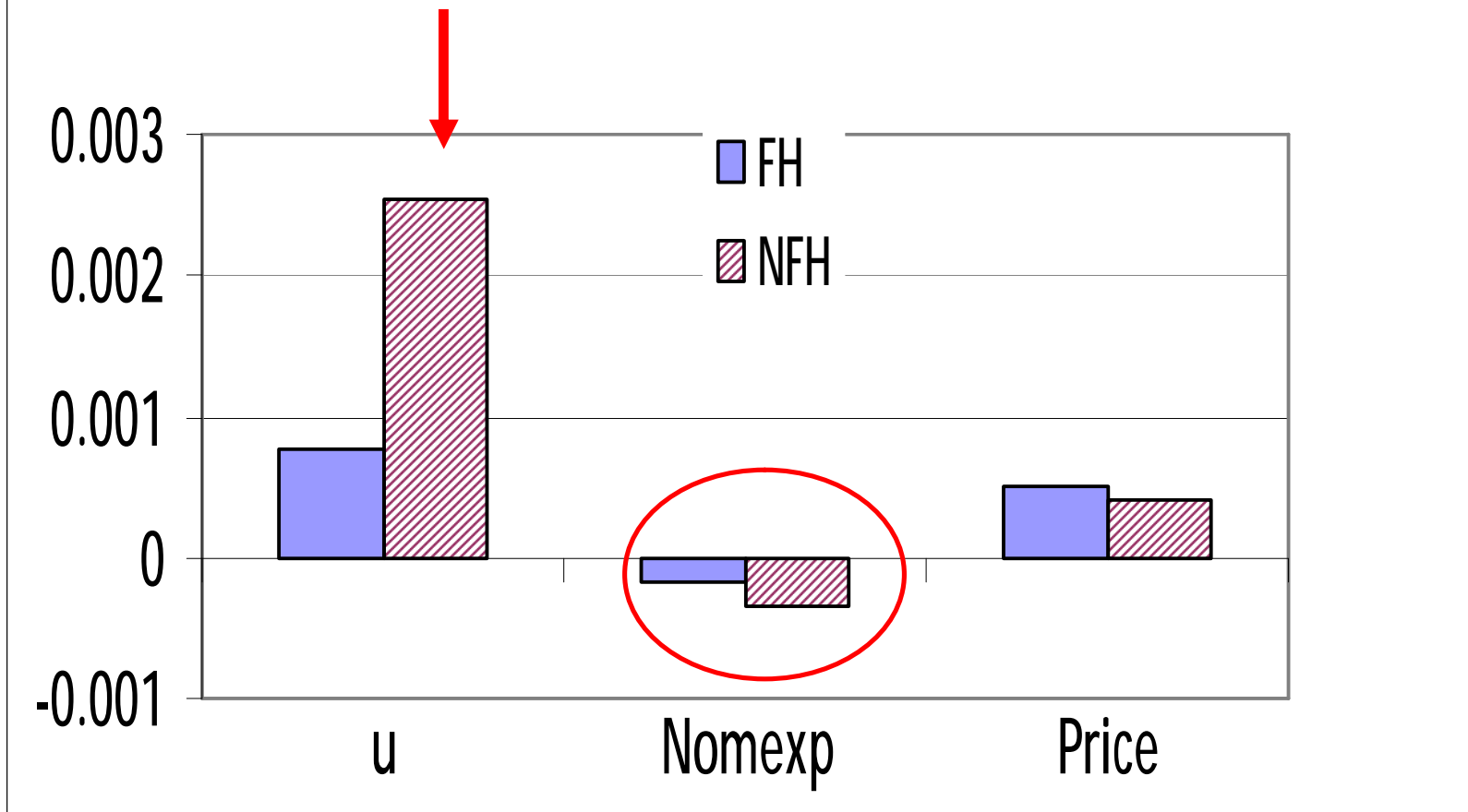
$$FRM_{i,j,t} = a_{i,j} + \dot{\mathbf{a}} \sum_{j=1}^J b_{i,j} x_{i,j,t} + \dot{\mathbf{a}} \sum_{k=1}^K g_k y_{k,t} + e_{i,j,t}$$

Estimated as 2SLS-Koyck distributed lag to deal with autocorrelation in basic model

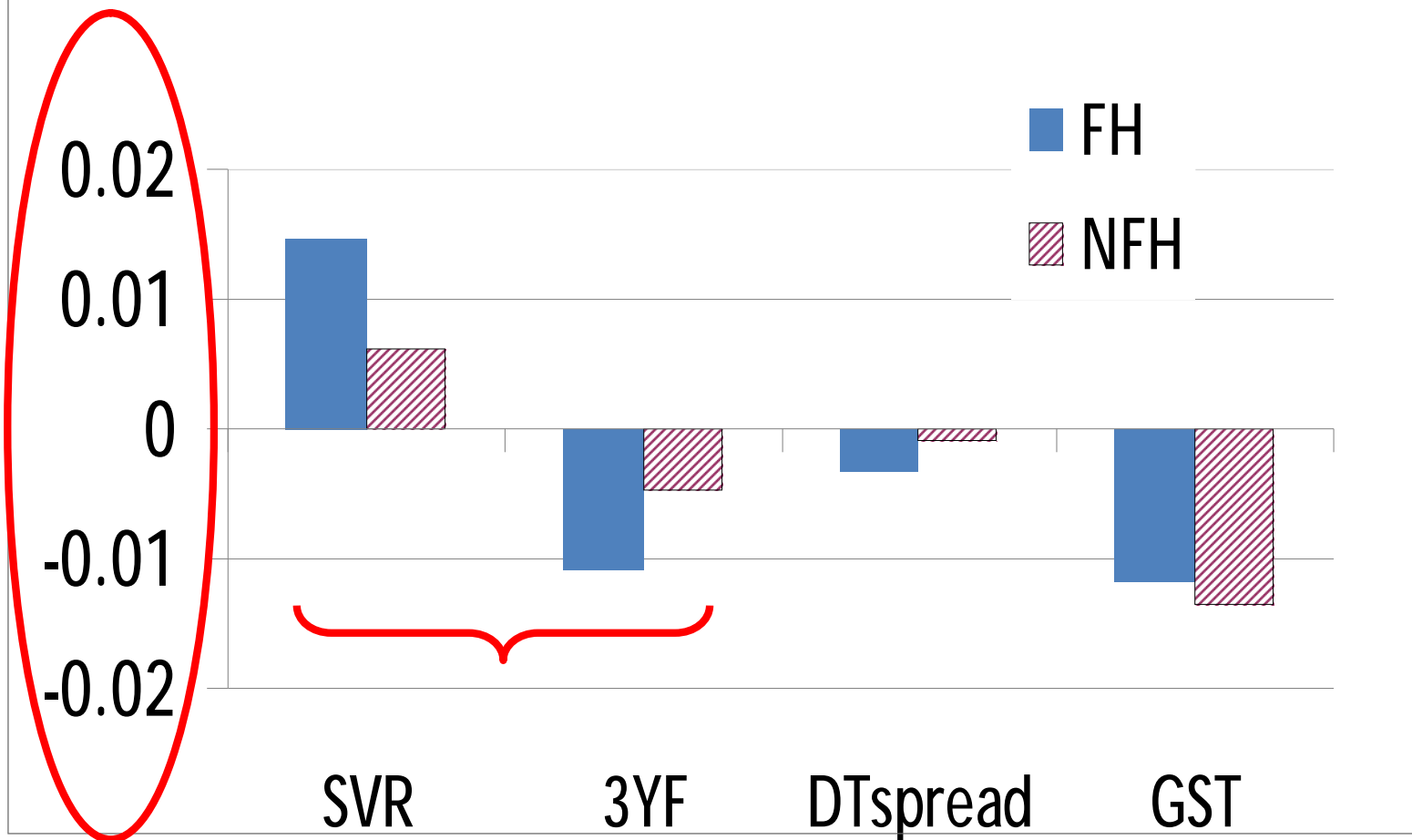
$$FRM_{i,j,t} = (1 - l) a_{i,j} + \dot{\mathbf{a}} \sum_{j=1}^J b_{i,j}^l x_{i,j,t} + \dot{\mathbf{a}} \sum_{k=1}^K g_k^l y_{k,t} + l FRM_{i,j,t-1} + e_{i,j,t} - l e_{i,j,t-1}$$



Estimates of risk proxies



Estimates of interest-rate variables



Time-series estimation: where to from here?

- Interest-rate effects are correctly signed and economically significant
- Not clear whether proposed risk proxies are informative enough at the level of State disaggregation to be useful
- Need to move to a loan-level dataset to better account for borrower heterogeneity



Loan-level database

- Individual confidentialised application records for major bank from January 2003 to January 2009, split into **bank** and **non-bank** originated loans (~700,000 records in the bank originated Jan 06 -09 data)
- Data spans range of macroeconomic conditions
- Borrower characteristics include details of income, assets, job history, demographics, family structure, in addition to characteristics of mortgage
- Preliminary analysis (see paper) indicate that it is representative of national data



Research Agenda

- Do households make efficient choices, given their observed risk characteristics?
- Do bank and non-bank originators attract different clienteles? Are there any differences in subsequent loan performance?
- How does the stance of monetary policy affect mortgage choice?
- Can prepayment probabilities be predicted from household characteristics and ARM/FRM choice? What about defaults?
- Why do Australian and New Zealand households make such different ARM/FRM choices?

