The GFC and Australia

Source: *Edey (2021)* The role of the RBA in Australia's crisis response

Additional background: Papers by Henry and Tune from 2021 GFC review

Note on sources

Papers commissioned by David Gruen (now Australian Statistician) in early 2019

Purpose: review by former officials of

- Australia's crisis response
- lessons regarding future crisis readiness

Status of review: non-official, but authors given archival access

<u>Authors</u>: Henry (fiscal), Tune (whole of government), Edey (RBA)

Papers completed: Feb 2020 but launch delayed due to Covid

Launch, with Covid postscripts added: May 2021

General themes

- Crisis impact in Australia was less severe than elsewhere
 - no recession
 - no bank failures
- Combination of good luck and good management
- Luck: trade exposure to China, timing of crisis, nature of banking structure
- Management:
 - monetary
 - fiscal
 - prudential

Nature of the crisis in Australia

- Two sources of banking stress
 - asset quality (asset side of balance sheet)
 - remedy: capital injection
 - liquidity (liabilities side)
 - remedy: liquidity support
- Potential interaction between the two
- In Australia, the main vulnerability was on the liabilities side
 - reason: Australia a large net capital importer
 - contrast with European banks
- Hence, important role for RBA in liquidity support
- In addition, GFC was a major business cycle event, requiring countercyclical monetary and fiscal action

RBA risk assessments in lead up to the crisis

- Wallis reforms (1998)
 - Bank supervision moved from RBA to APRA
 - RBA retains focus on system stability (but not individual institutions)
- RBA financial stability assessments reported to Board twice-yearly
- These assessments published (in modified form) as FSR since 2004
- Assessment in lead up to crisis highlighted:
 - general build-up of global risks (associated with <u>search for yield</u>)
 - structured securities
 - domestic housing market and associated debt
- But, overall tone was fairly positive
- Australian and world forecasts were for strong growth, with inflation seen as the main risk

Contours of the crisis

Relevance of Reinhart-Rogoff analysis: zones of vulnerability Implications for crisis predictability

<u>Vulnerabilities</u>: US subprime, risky securitisation, poor risk management

<u>Trigger</u>: collapse of US housing market

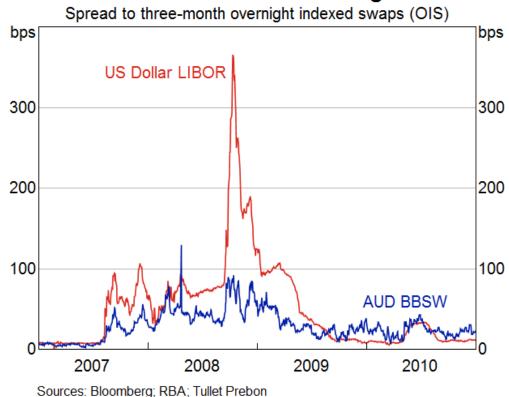
<u>Contagion</u>: Interbank exposures, interconnected markets

Feedback: The 'self reinforcing' cycle (Bernanke et al)

- These things applied to the crisis as a whole
- But <u>also</u> to each successive wave

Risk metric for Australia

Short-term Interbank Lending Rates



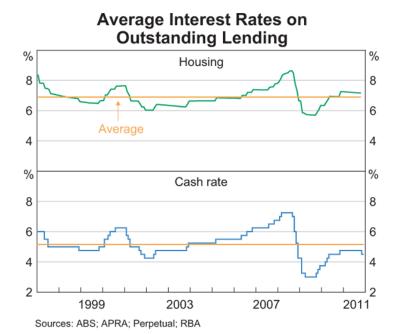
- On this metric, risk perception in Australia less severe than in US
- RBA reports that interbank markets in Australia remained open
- Market stress was correlated with, and caused by, international developments
- As elsewhere, peak stress points were triggered by BNP, Bear and Lehman

Impact on Australian financial system

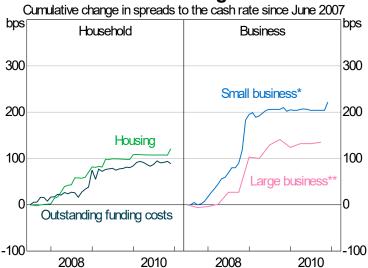
Cost and availability of funding to banks

- Banks faced higher risk spreads when borrowing in wholesale markets
- Risk of outright closure of some funding sources (international)
 - counteracted by RBA liquidity support, government guarantees
- Bank interest rate structure (both deposit and loan) rises <u>relative to</u> the policy rate
- This raised concerns about:
 - effectiveness of monetary policy ('incomplete pass-through')
 - profiteering and competition

Bank interest rates and margins



Variable Lending Rates



- * Indicator rate on residentially-secured term loans
- ** Average rate on credit outstanding; includes bill lending Sources: ABS; APRA; RBA





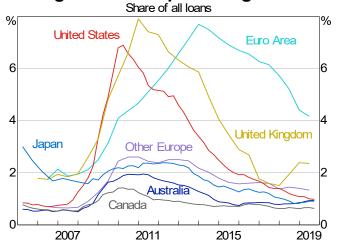
 Data from 2005 are from APRA; data before 2005 are collected from bank reports; data are annual prior to 1998 and semi-annual thereafter Sources: APRA; Banks' financial reports; RBA

Asset quality and profitability deteriorated but less so than in other economies or in early 1990s

Bank Profitability* Institutions operating in Australia Return on shareholders' equity Post-tax and minority interests 20 20 10 Regional banks Major banks Charge for bad and doubtful debts Per cent of average assets 1.5 1.5 Major banks 1.0 1.0 Regional banks 0.5 0.5 1993 1998 2003 1988

* From 2006 data are on an IFRS basis; prior years are on an AGAAP basis; includes St. George and, from 2009, Bankwest Sources: RBA; banks' annual and interim reports

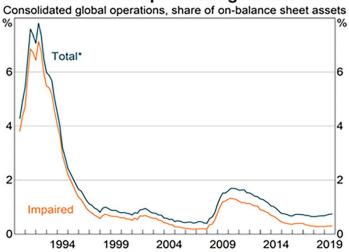
Large Banks' Non-performing Loans*



 Definition of 'non-performing loans' differed across jurisdictions before 2016; number of banks: Australia (4), Canada (6), Euro area (41), Japan (3), Other Europe (10), United Kingdom (4) and United States (19)

Sources: APRA; Banks' Annual and Interim Reports; Bloomberg; FSA; RBA: S&P Global Market Intelligence

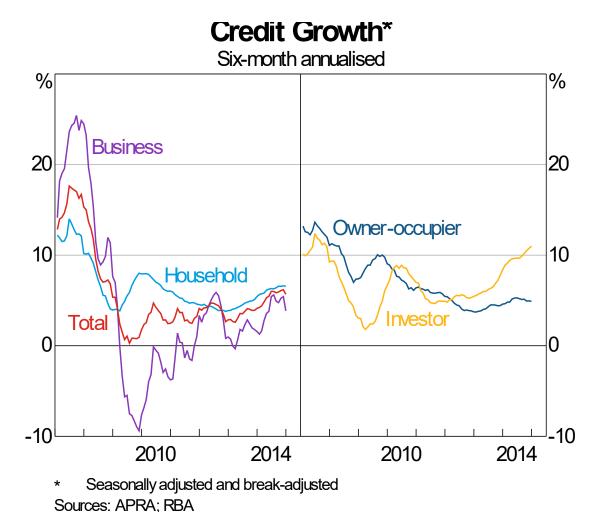
Banks' Non-performing Assets



 Includes assets 90+ days past due that are well secured Source: APRA

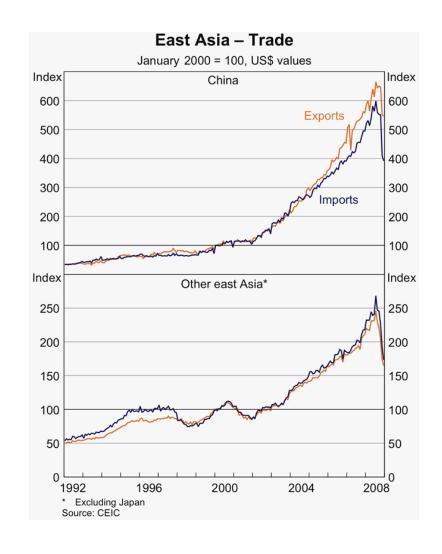
Bank lending to households and businesses ...

... a retreat from risk



The evolving economic outlook: GDP

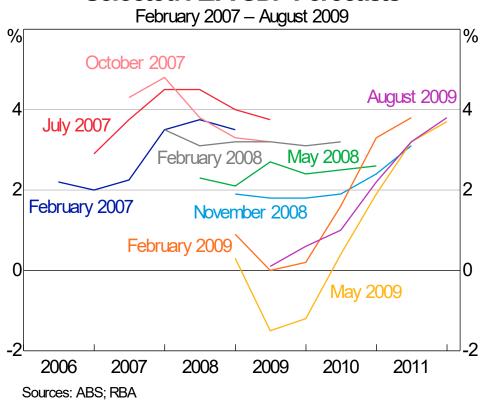
- For most of 2007, forecasts were being revised <u>upwards</u>
- BNP to Lehman: moderate downward revisions
- Immediate post Lehman: significant downgrade (but no recession) reflecting <u>expected</u> financial impacts
- late 2008/early 2009: RBA forecasts deep recession, in response to first signs of international impact (see right, from Feb 2009 SMP)



The evolving forecasts

- Feb 2009: IMF forecasts 4 per cent contraction in world GDP
- This turns out to be broadly correct
- RBA forecasts recession in Australia similar to early 1990s
- In the event, this outcome was avoided

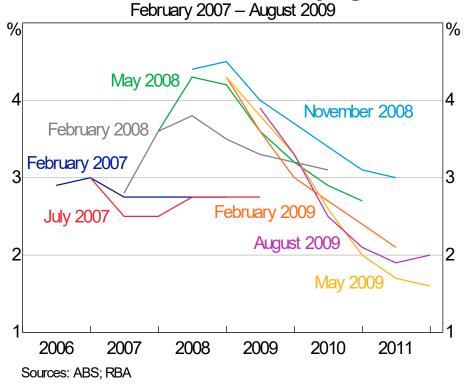
Selected RBA GDP Forecasts



Evolution of the inflation forecasts

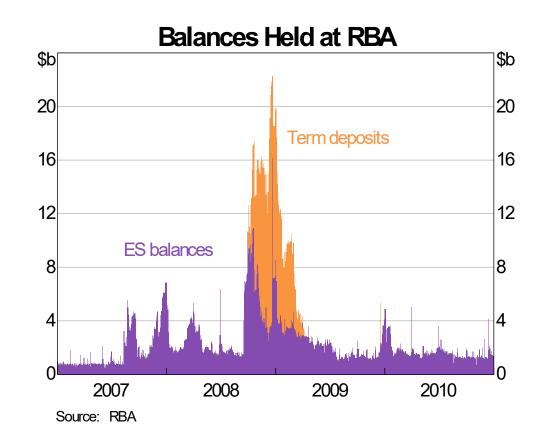
- Early 2007 to late 2008: Upward revisions, inflation above target
- This was mainly a response to higher actual inflation outcomes
- Post Lehman: downward revisions
- Mainly a response to <u>expected</u> economic developments
- This assessment broadly validated by subsequent data

Selected Forecasts of Underlying Inflation



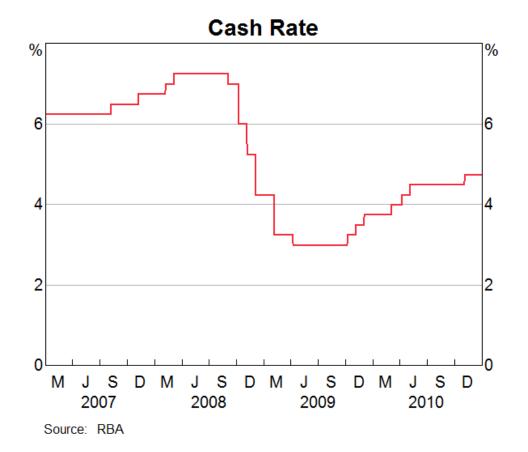
RBA liquidity support during the crisis

- RBA determines the available quantity of bank reserves (ES balances and deposits) through its market operations
- These are conducted via repurchase agreements with banks ('repos')
- In a crisis, demand for reserves rises
- RBA accommodates the demand with additional supply
- Collateral pool expanded to ensure it could not be exhausted



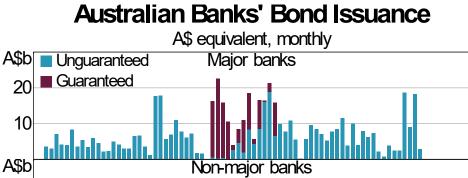
Interest rate decisions

- Phase 1 (pre Bear): domestic inflation concerns predominate
- Phase 2 (Bear to Lehman): a period of uncertainty
- Phase 3 (post Lehman): emergency rate cuts
- Feb 2009 meeting: 100bp cut, same day as fiscal package announced
- Last rate cut: 25 bp May 2009



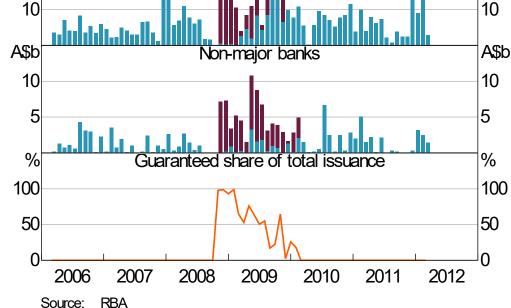
Immediate aftermath: the RBA and 'funding pessimism'

- Australian banks are normally large borrowers in international wholesale markets
- These markets dried up during the peak crisis period
- Government guarantees were put in place in many economies as an emergency measure to counteract this
- Cascading effect across countries



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Design of the guarantee arrangements in Australia

- Large deposits covered under Financial Claims Scheme (initially, up to \$1m per customer per bank)
- Wholesale funding covered, subject to a risk-based fee
- Administered by RBA
- Pricing designed to make the scheme redundant when market conditions normalised (consistent with Bagehot)
- In late 2008/early 2009, virtually all wholesale borrowing by Australian banks used the guarantee
- Scheme closed to new issuance in early 2010

The funding pessimism debate

- Widely held view that that Australian banks were vulnerable to closure of offshore funding access (eg, rating agency assessments, IMF reports)
- Two aspects:
 - currency of denomination
 - availability
- RBA argued that these concerns were greatly overstated, for two reasons
- <u>Effective</u> currency of denomination is AUD
- In the event of reduced access, market forces would bring other funding sources into play
- RBA presented detailed modelling to this effect to CFR
- This debate has now largely faded

Global legacy of the GFC (up to c.2019 - 2020)

- High debt
- Ultra low interest rates
- Explanations for low interest rates:
 - demographic/structural influences on R-star
 - debt overhang
- Policy mix monetary fiscal prudential
- Chronic undershooting of inflation target
- CB framework reviews on how to respond to all this
- Question: has monetary policy run out of firepower?
 - continued debate on the Bernanke menu of policy options at ZLB

Covid postscript (2021)

- Policy makers <u>did</u> find the firepower to fight the Covid-induced downturn, through a combination of **fiscal expansion + QE**
- Some headline-grabbing distractions:
 - 'Modern Monetary Theory (MMT)'
 - Helicopter money
 - 'Financing the government' (note the RBA position on this: QE and fiscal are independent and separable actions)
- Matters of continued debate:
 - role (if any) for monetary/fiscal coordination
 - governance and calibration
 - inflationary risk from Covid-related actions
 - implications of increased fiscal debt overhang

Post-postscript (2023)

- Inflation takes off surprisingly quickly
- Reasons:
 - supply constraints (Covid as a supply shock)
 - Ukraine effect on energy markets
 - Demand stimulus by governments and CB may (with hindsight) have been overdone
- Debate has shifted to inflation control
- The re-calibration problem
- 2023 RBA Review recommends changes in governance and <u>culture</u>, but no major changes in the <u>inflation target</u>