

Mortgage Performance Workbook

July 2013 | Prepared by [Eighty20](#) with the support of the [National Housing Finance Corporation](#) and [FinMark Trust](#)



Centre for Affordable
Housing Finance
in Africa



FinMark approached the CPA to obtain access to credit bureau data to assess mortgage performance for mortgages granted to lower income households. A key challenge is identifying FSC and so-called 'affordable market' mortgages



Step 1: Identify affordable areas

- Only mortgages granted in lower income or affordable areas as identified by the Centre for Affordable Housing Finance's al+hdc initiative

Step 2: Include individual borrowers only

- Only those bonds registered by individuals were used (companies and institutions were excluded).
- Traders (defined as those who transact more than once a year) were also excluded

Step 3: Select mortgages granted by the big four retail banks only

- Only mortgages originated by the big four banks were included in the analysis

Step 4: Identify affordable primary Loans

- These are identified using a 20 year bond at prime +2 (prevailing at the time of bond registration) and a maximum affordability threshold of 25% of income using the upper limit of FSC band or the 'affordable' market income threshold for that year

Step 5: Identify affordable secondary Loans

- Link the secondary mortgage to the original primary mortgage
- Exclude the secondary mortgage if the initial primary bond is not 'affordable' (using criteria above). Where the primary bond was registered prior to 2004, the upper limit of the FSC income band is calculated by adjusting the 2008 amount for inflation. Similarly, the upper limit of the 'affordable' income band is calculated by adjusting the 2009 amount for inflation.
- For the secondary mortgage to be affordable, the total outstanding capital of the secondary bond plus remaining capital of the primary bond (assuming no pre-payment) must be affordable using a 20 year bond at Prime +2 (prevailing at the time of the secondary bond registration) and a maximum affordability threshold of 25% of income using upper limit of FSC band the 'affordable' market income threshold for that year

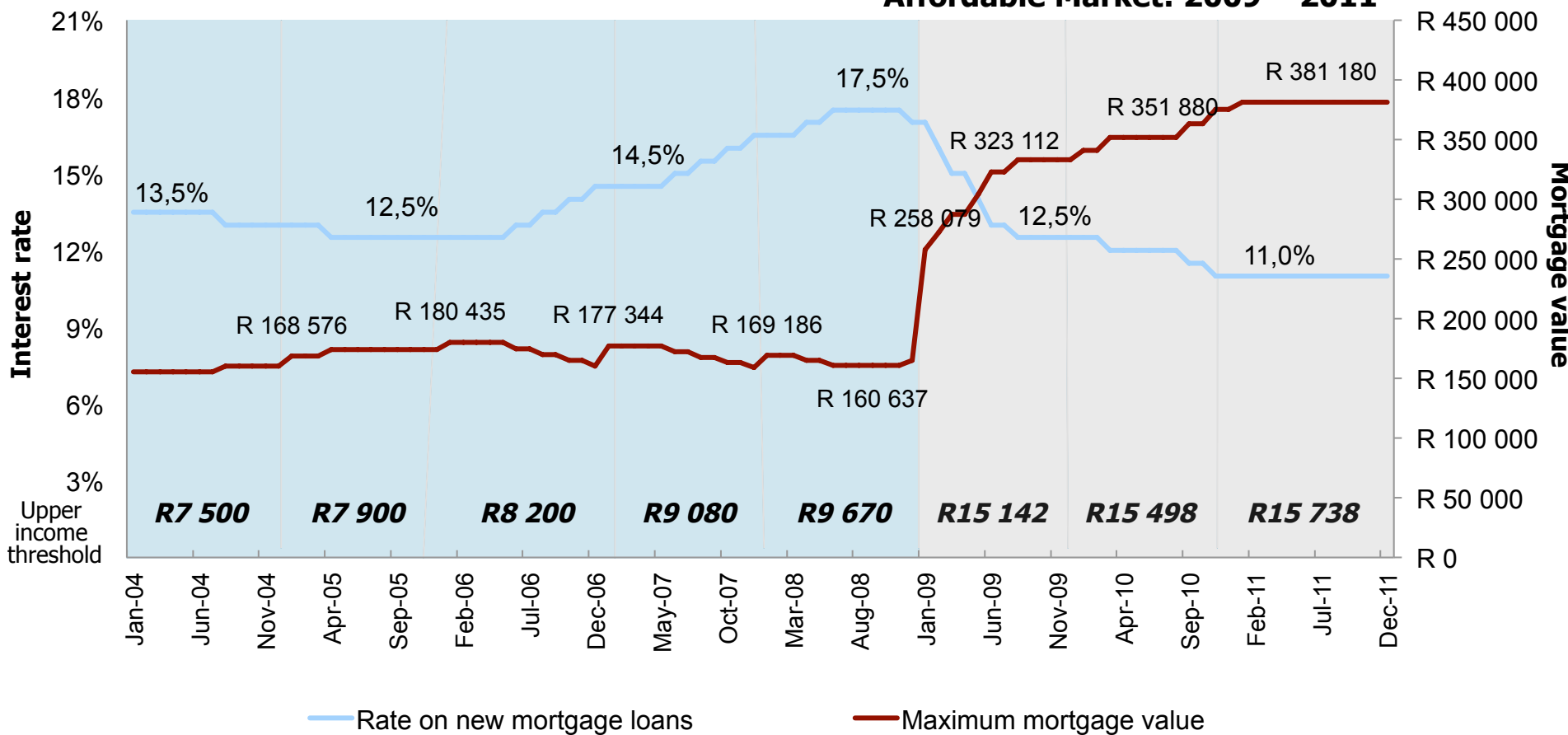
Note: The prime rate, as well as the inflation rate, was obtained from the South African Reserve Bank



Dominant rate on new mortgages 2004 – 2011 Maximum mortgage value

FSC: 2004 - 2008

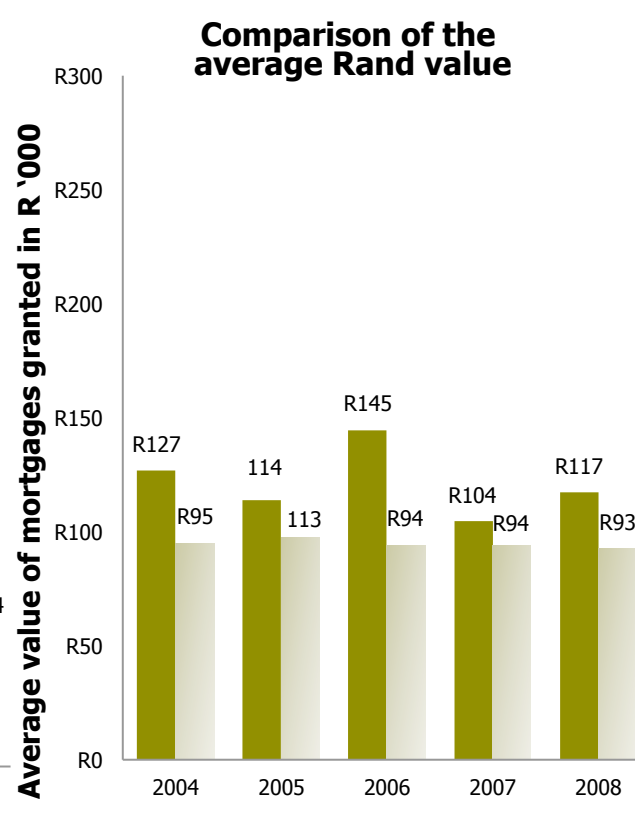
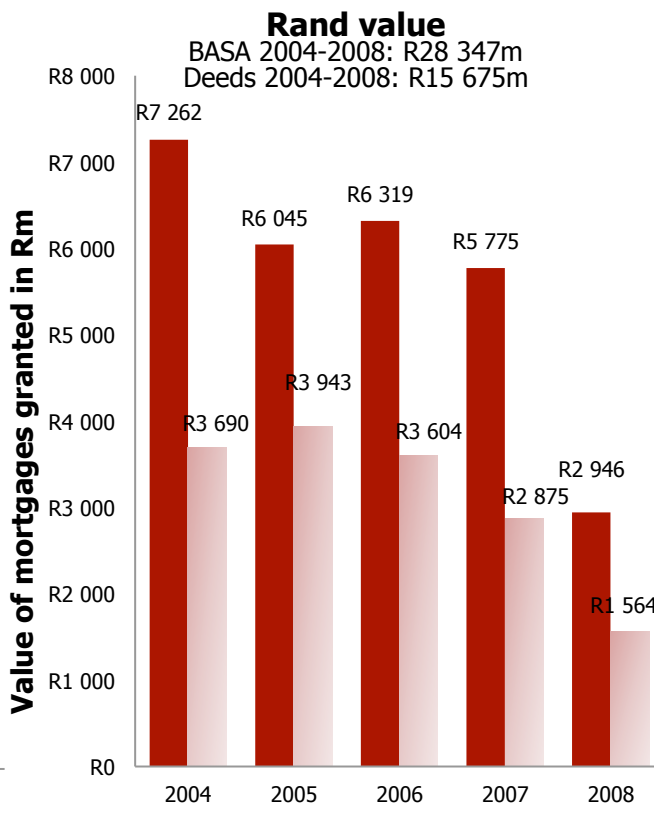
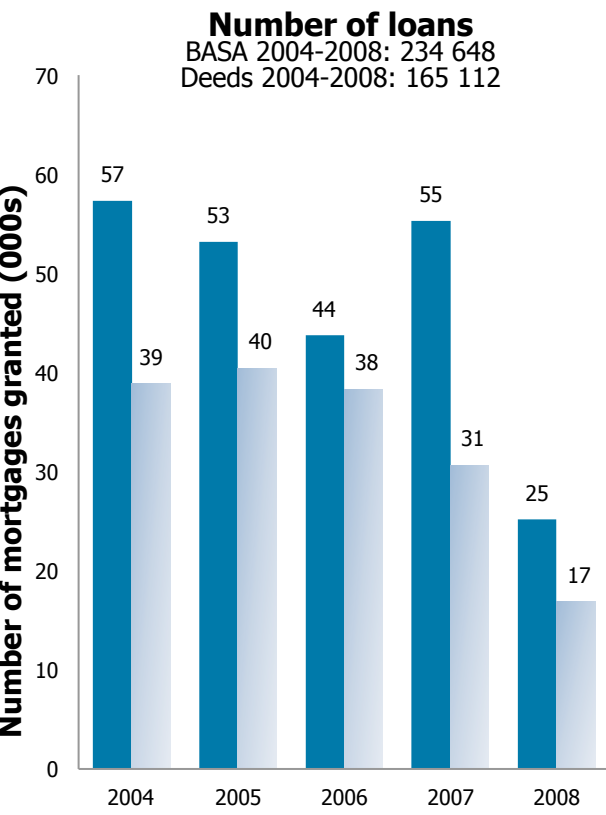
Affordable Market: 2009 – 2011



Note: The maximum mortgage value is determined using a 100%, 20 year mortgage at Prime plus 2% and 25% of household income



Comparison between BASA data and Deeds data (FSC target market: 2004 – 2008)

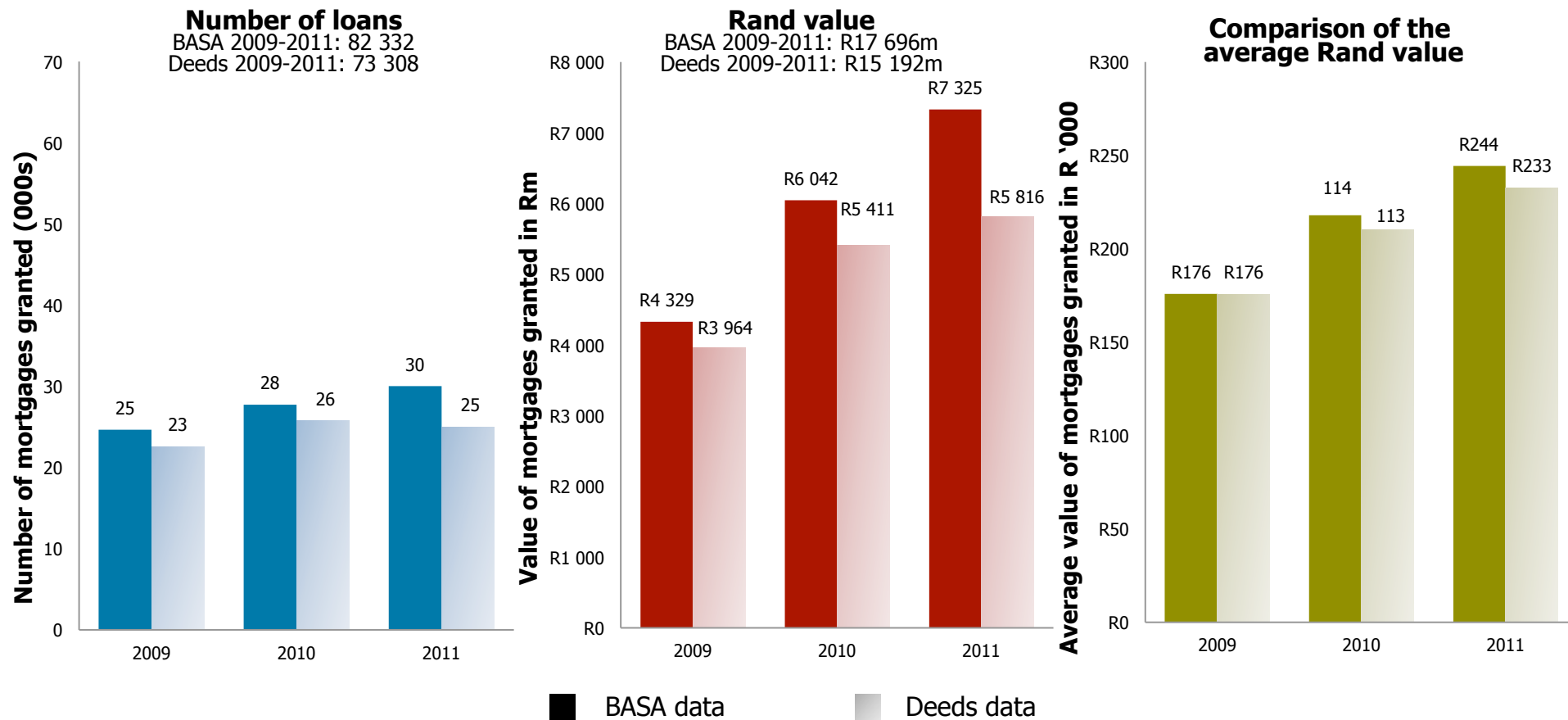


BASA data
 Deeds data

Source: BASA, deeds data sourced from the ALHDC
 Note: The thresholds used to determine affordable market bonds are the FSC thresholds whereas the BASA income cut off is at R10 000pm
 Note: In order to identify affordable market loans an affordability threshold was calculated based on the prime interest +2% rate using a 25% income to instalment ratio



Comparison between BASA data and Deeds data (Expanded threshold: 2009 – 2011)



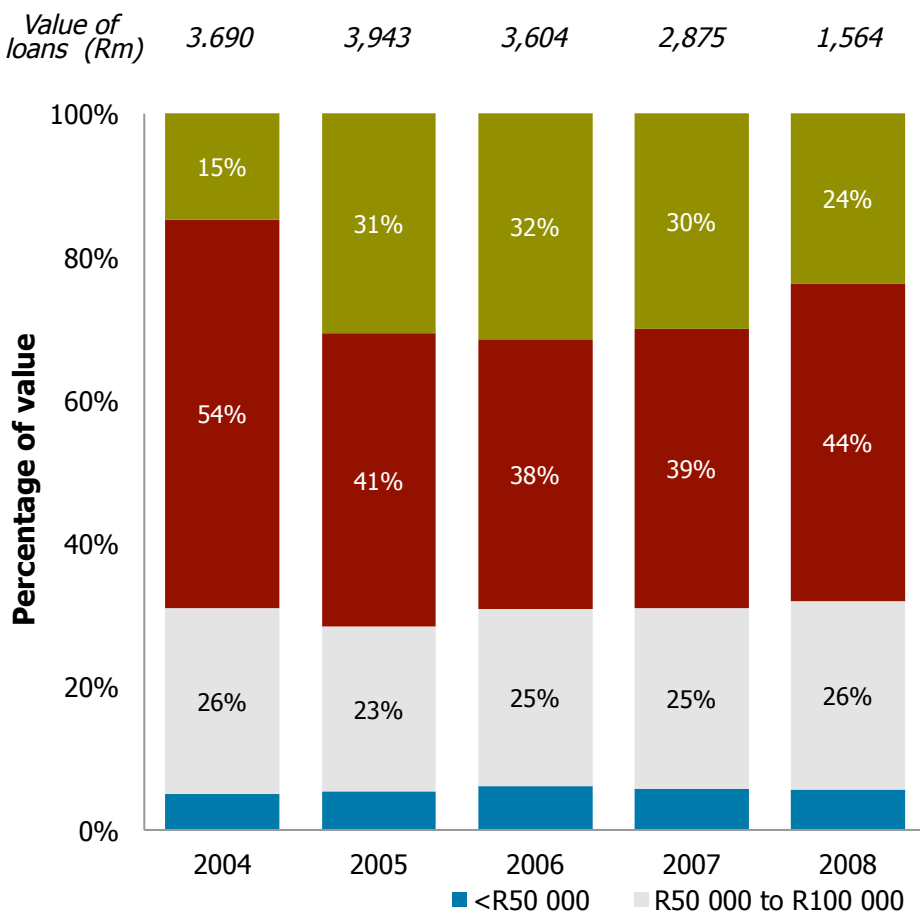
Source: BASA, deeds data sourced from the ALHDC

Note: The thresholds used to determine affordable market bonds are the expanded thresholds whereas the BASA income cut off is at R15 000pm

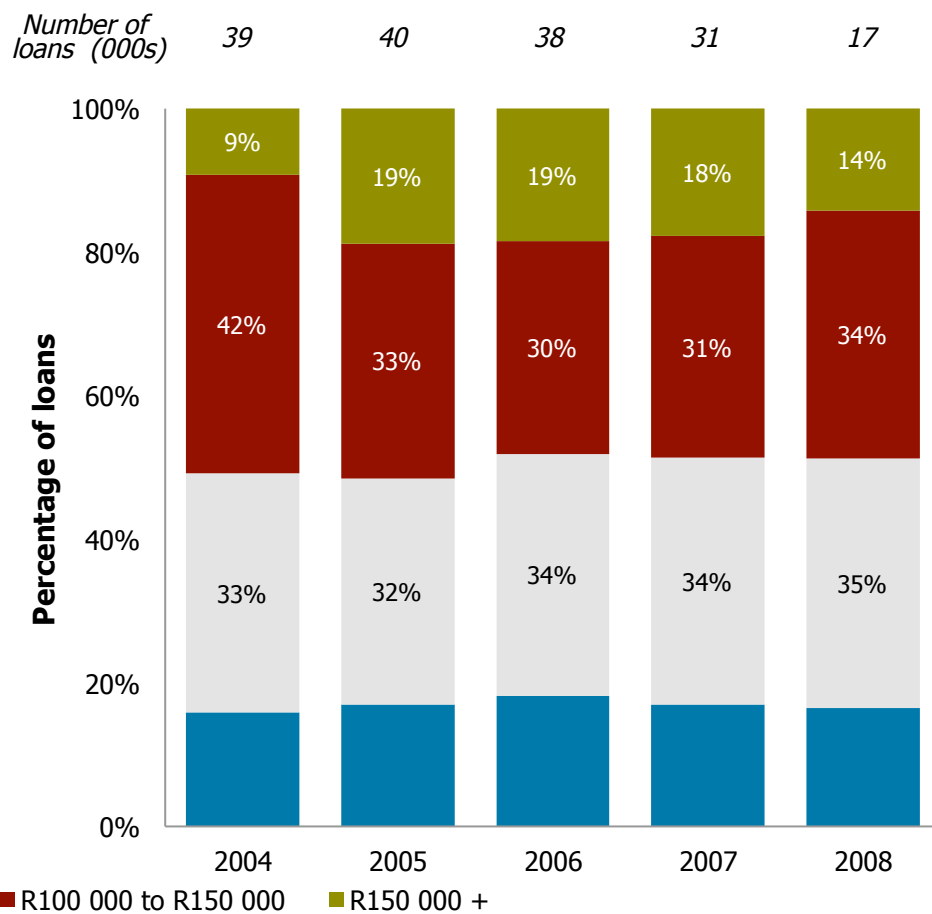
Note: In order to identify affordable market loans an affordability threshold was calculated based on the prime interest +2% rate using a 25% income to instalment ratio



Distribution of loans by Rand value



Distribution of loans by volume



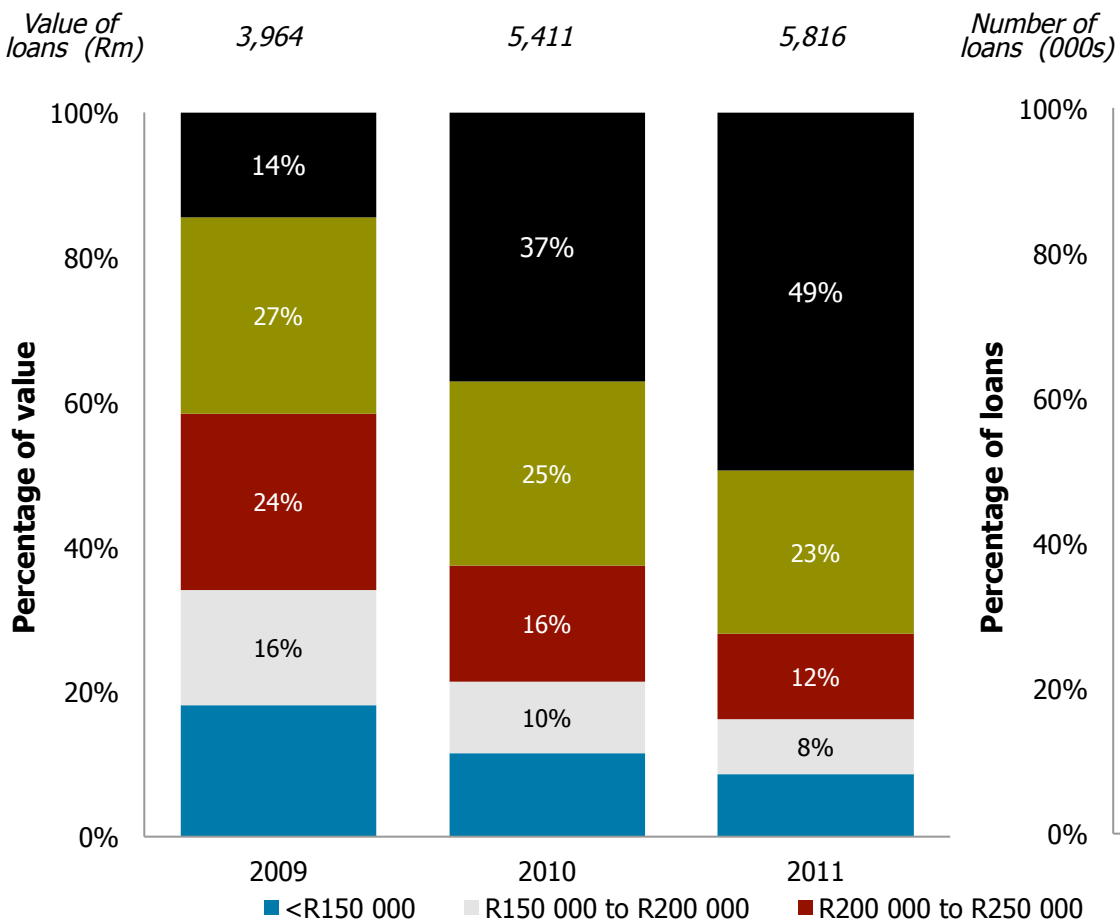
Source: Deeds office data sourced from the ALHDC

Note: In order to identify affordable market loans an affordability threshold was calculated based on the prime interest +2% rate using a 25% income to instalment ratio

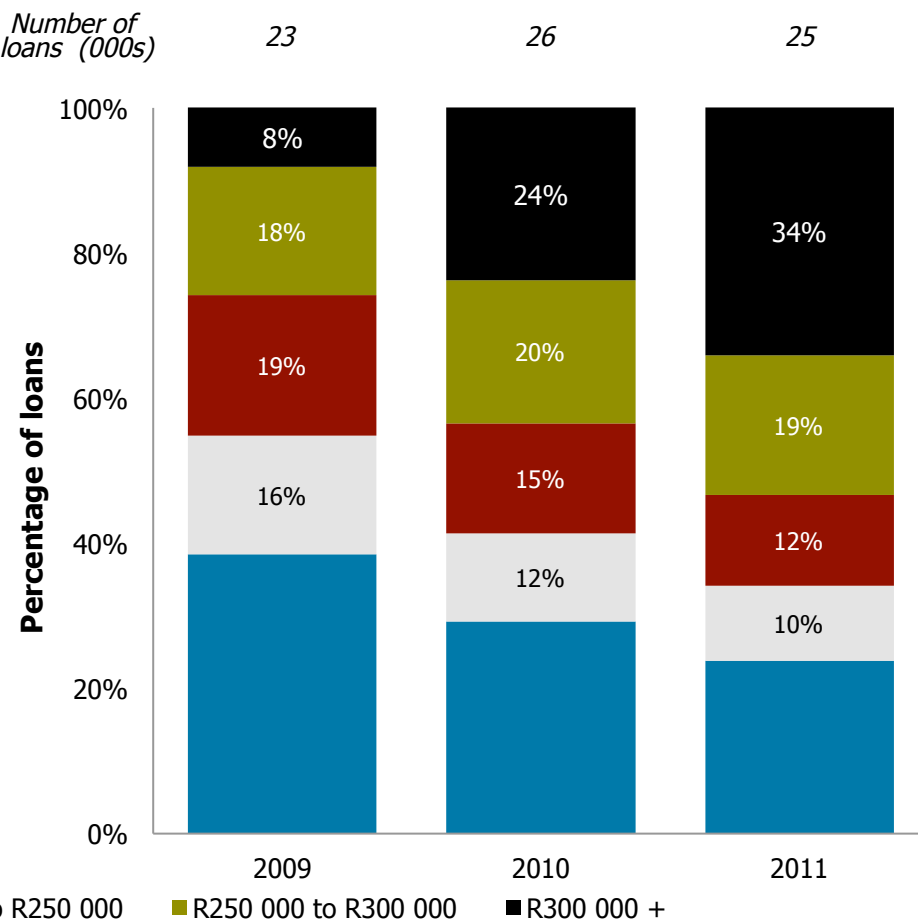
Note: The thresholds used to determine affordable market bonds are the FSC thresholds



Distribution of loans by Rand value



Distribution of loans by volume



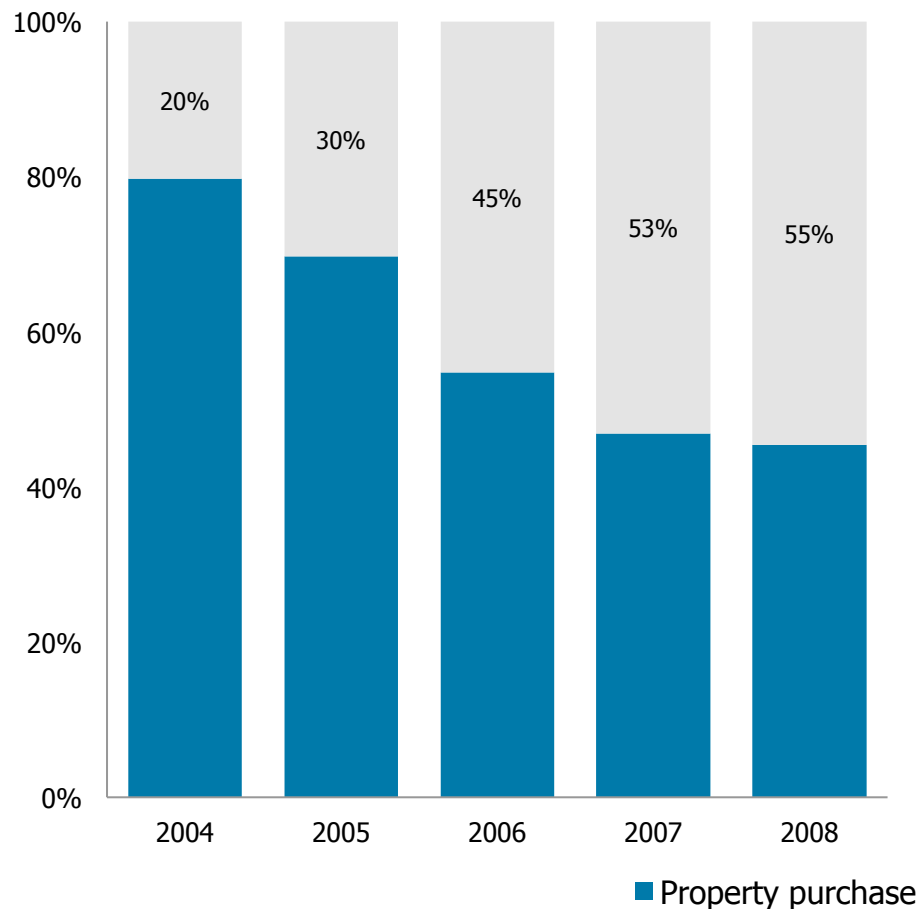
Source: Deeds office data sourced from the ALHDC

Note: In order to identify affordable market loans an affordability threshold was calculated based on the prime interest +2% rate using a 25% income to instalment ratio

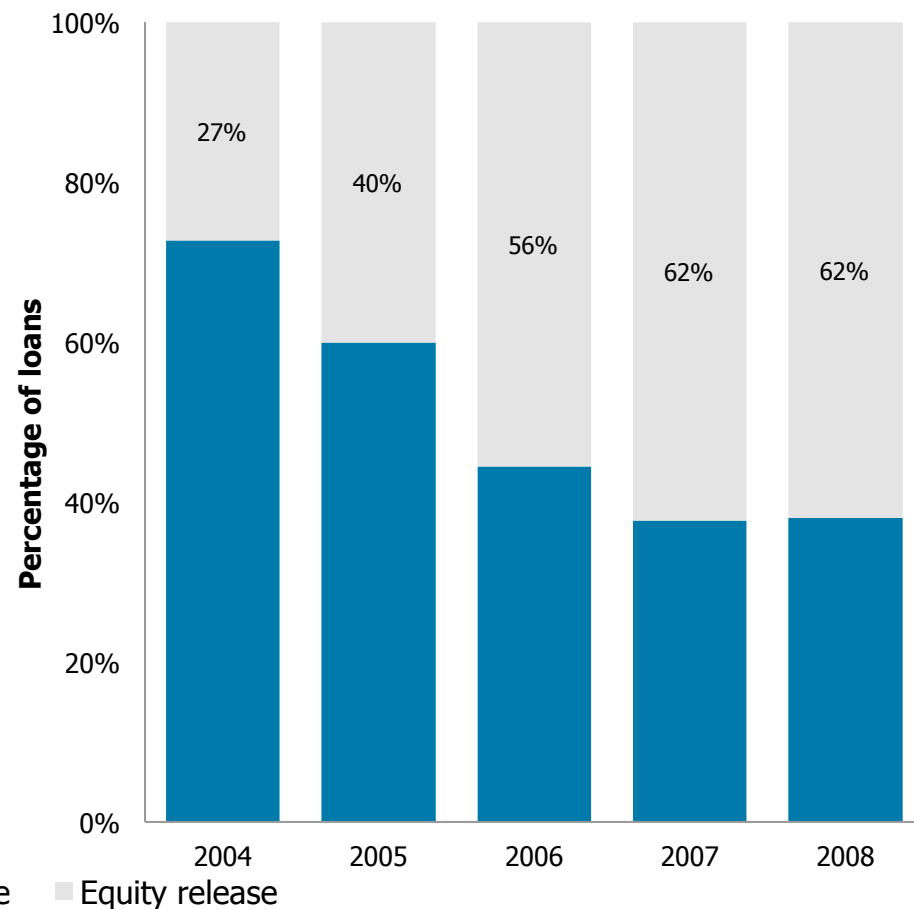
Note: The thresholds used to determine affordable market bonds the Expanded threshold



Distribution of loans by Rand value



Distribution of loans by volume

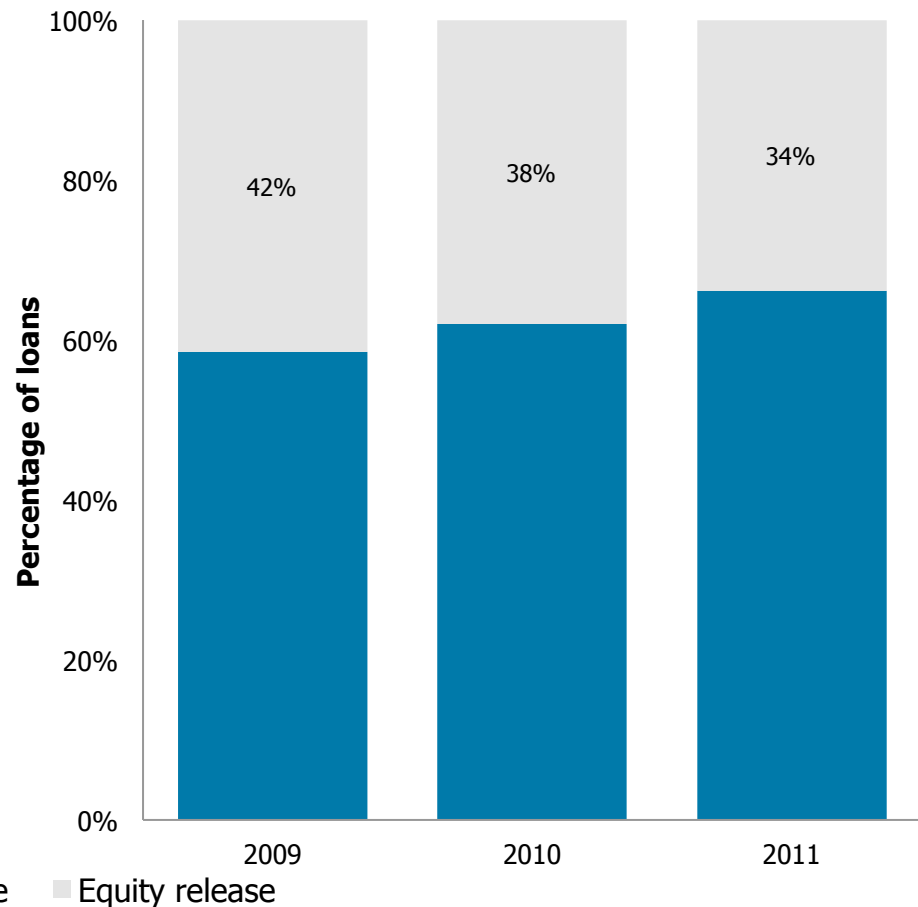
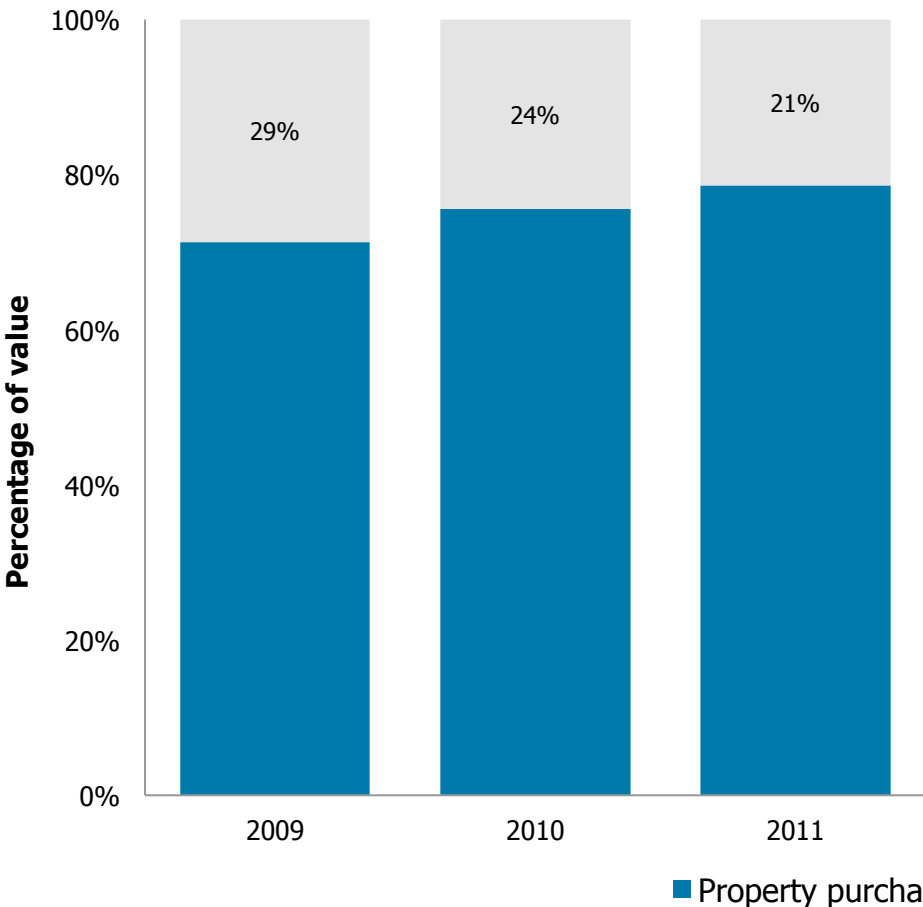


Source: Deeds office data sourced from the ALHDC
 Note: Records where there is no transaction value and where the bond registration is not on the same day as the property registration are regarded as equity release loans
 Note: The thresholds used to determine affordable market bonds are the FSC thresholds



Distribution of loans by Rand value

Distribution of loans by volume



■ Property purchase ■ Equity release

Source: Deeds office data sourced from the ALHDC

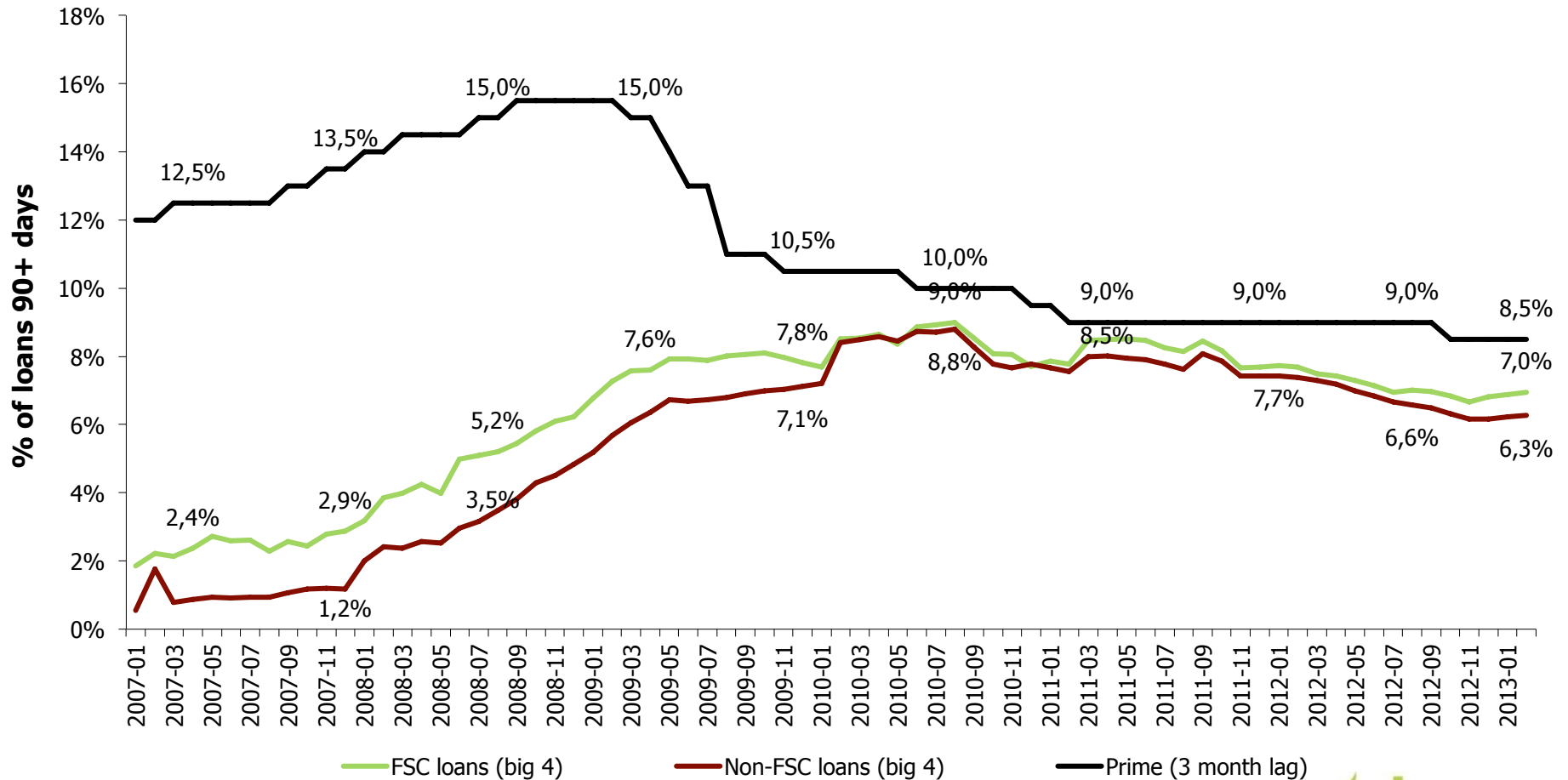
Note: Records where there is no transaction value and where the bond registration is not on the same day as the property registration are regarded as equity release loans

Note: The thresholds used to determine affordable market bonds are the Expanded thresholds



NPL by calendar date

(Loans originated between 2004 and 2008, mortgages from big 4 banks)



FSC loans (big 4)

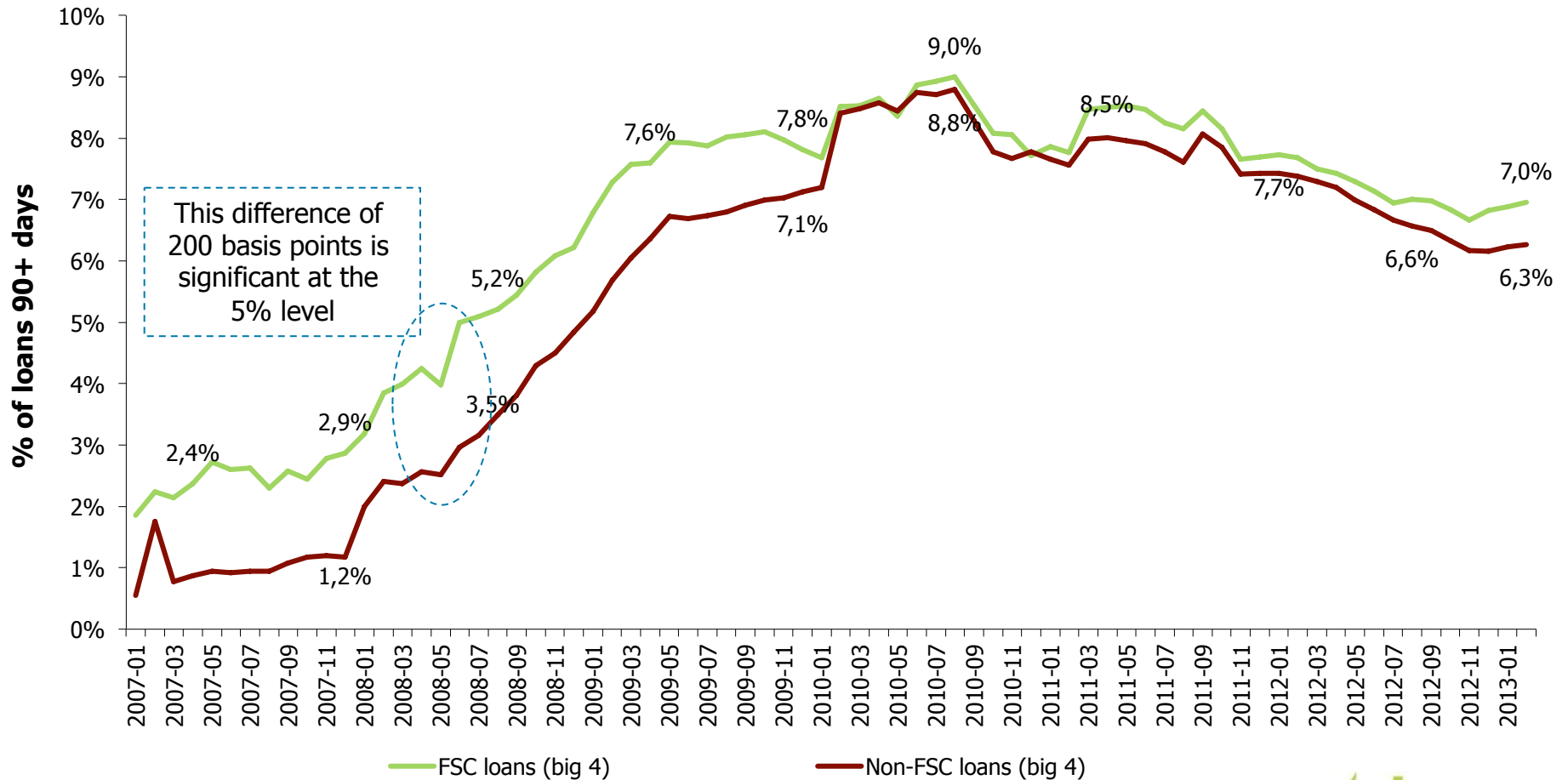
Non-FSC loans (big 4)

Prime (3 month lag)



NPL by calendar date

(Loans originated between 2004 and 2008, mortgages from big 4 banks)



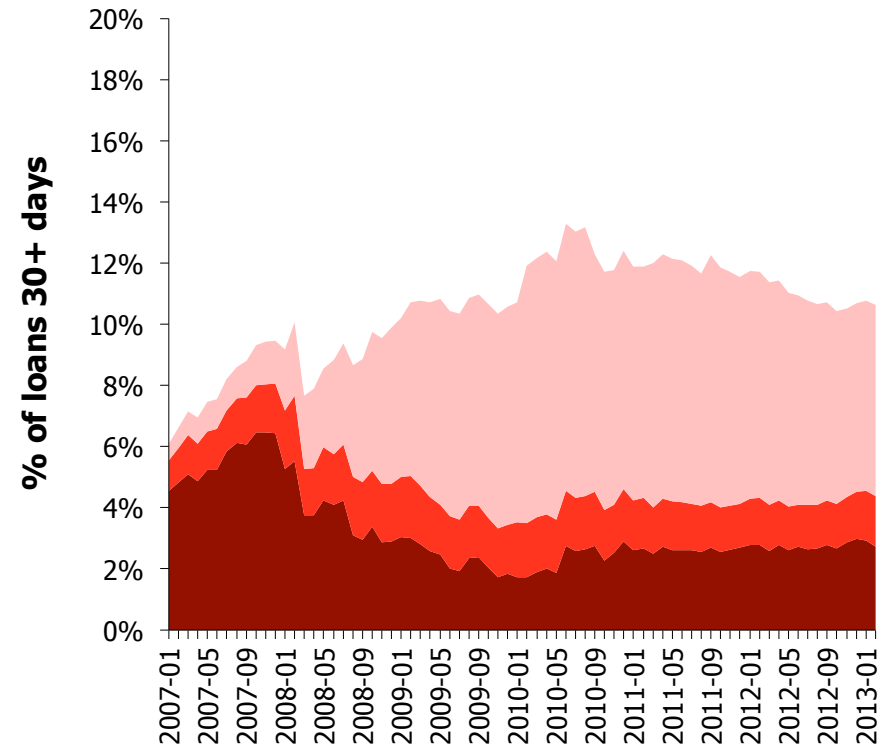
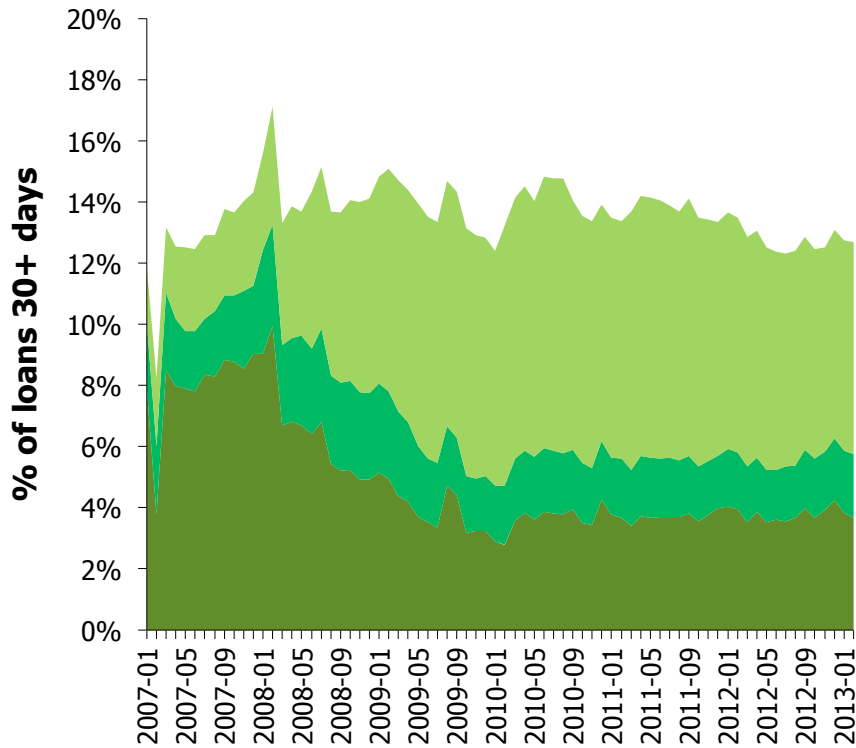


Ageing analysis over time (cumulative)

(Loans originated between 2004 and 2008, mortgages from big 4 banks)

FSC loans

Non-FSC loans

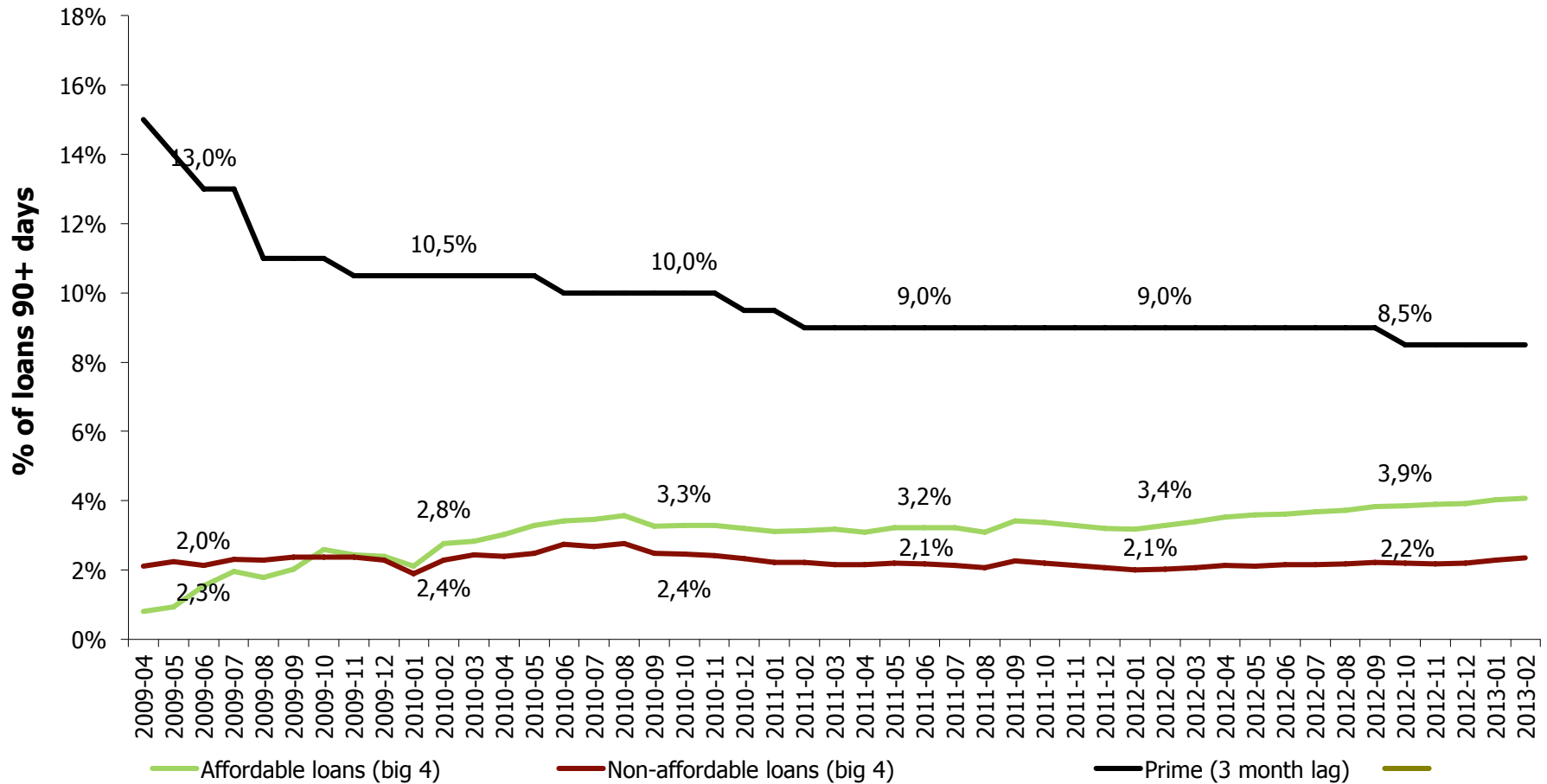


30 – 60 days
 60 – 90 days
 90+ days



NPL by calendar date

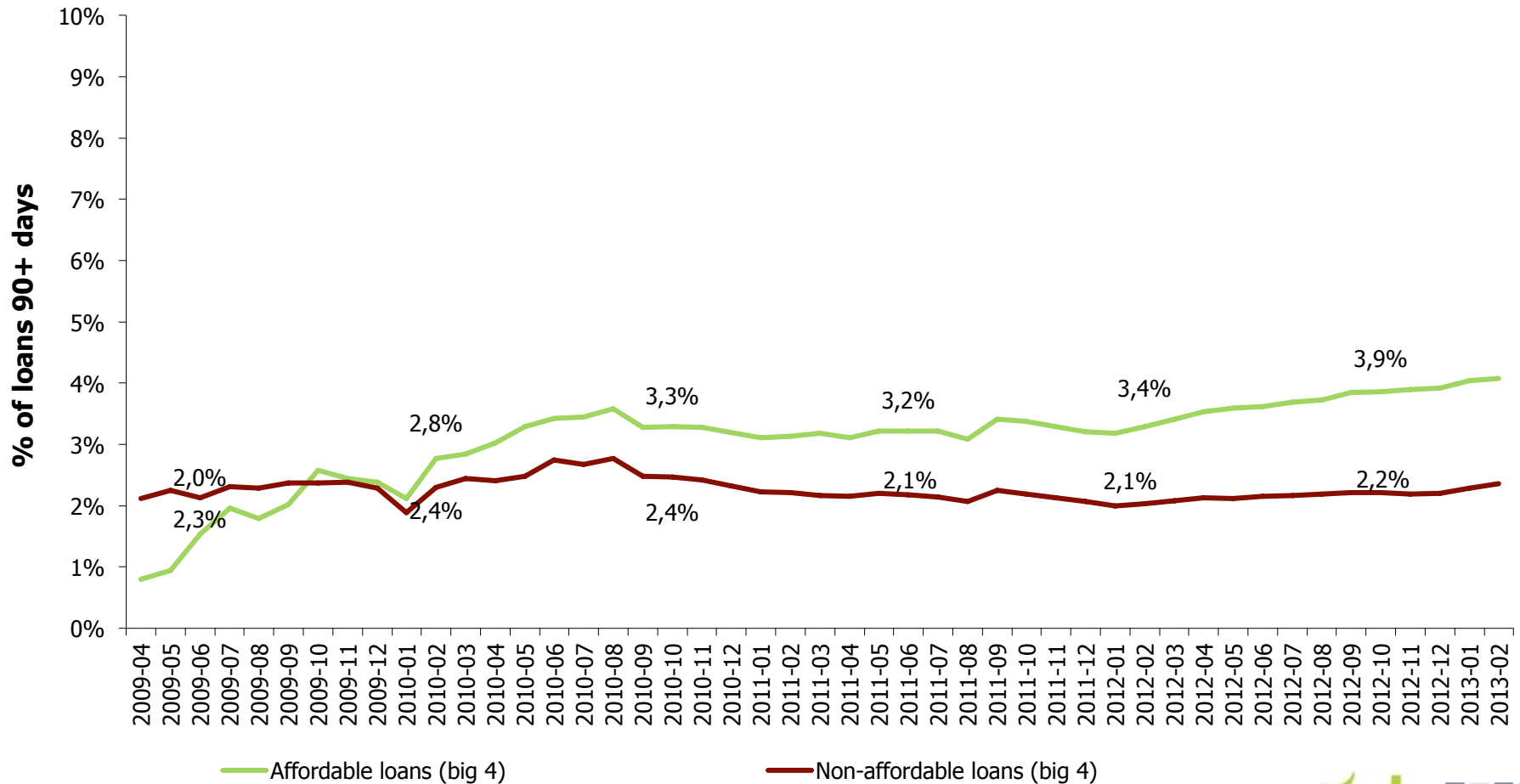
(Loans originated between 2009 and 2011, mortgages from big 4 banks)





NPL by calendar date

(Loans originated between 2009 and 2011, mortgages from big 4 banks)



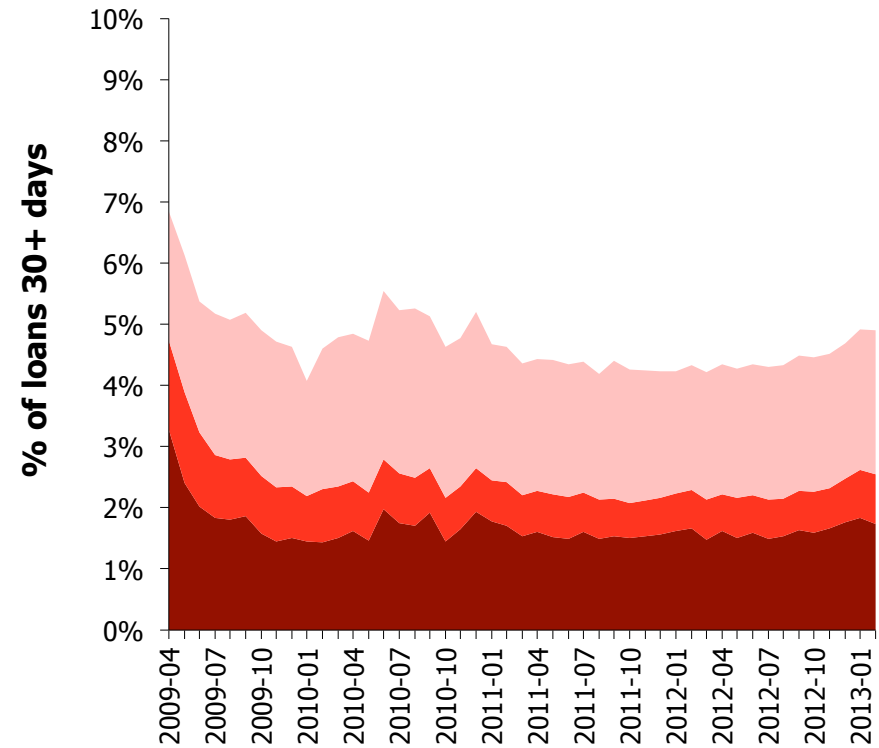
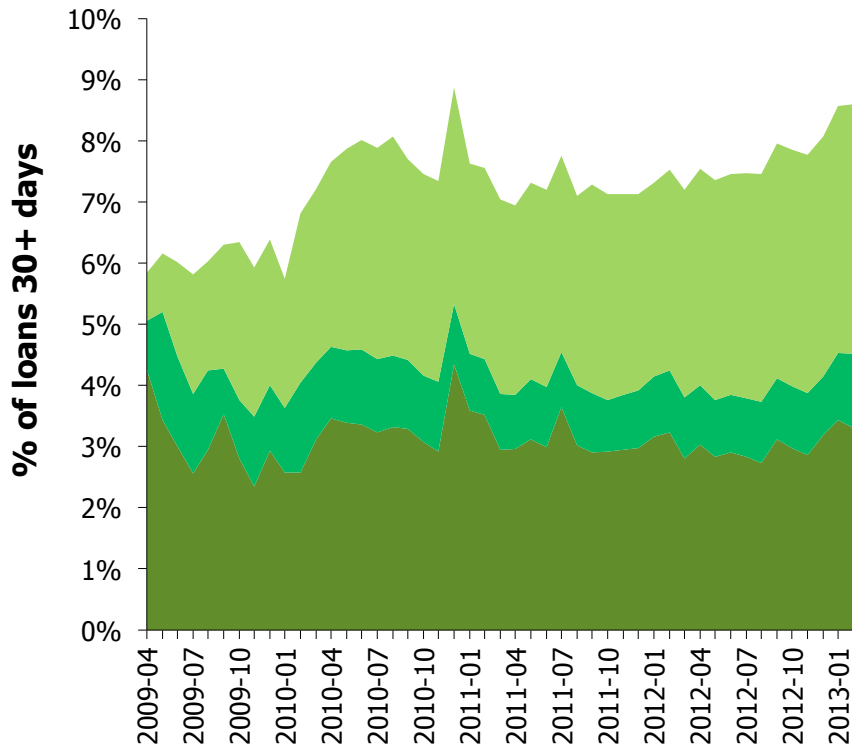


Ageing analysis over time (cumulative)

(Loans originated between 2009 and 2011, mortgages from big 4 banks)

Affordable Market loans

Non- Affordable Market loans

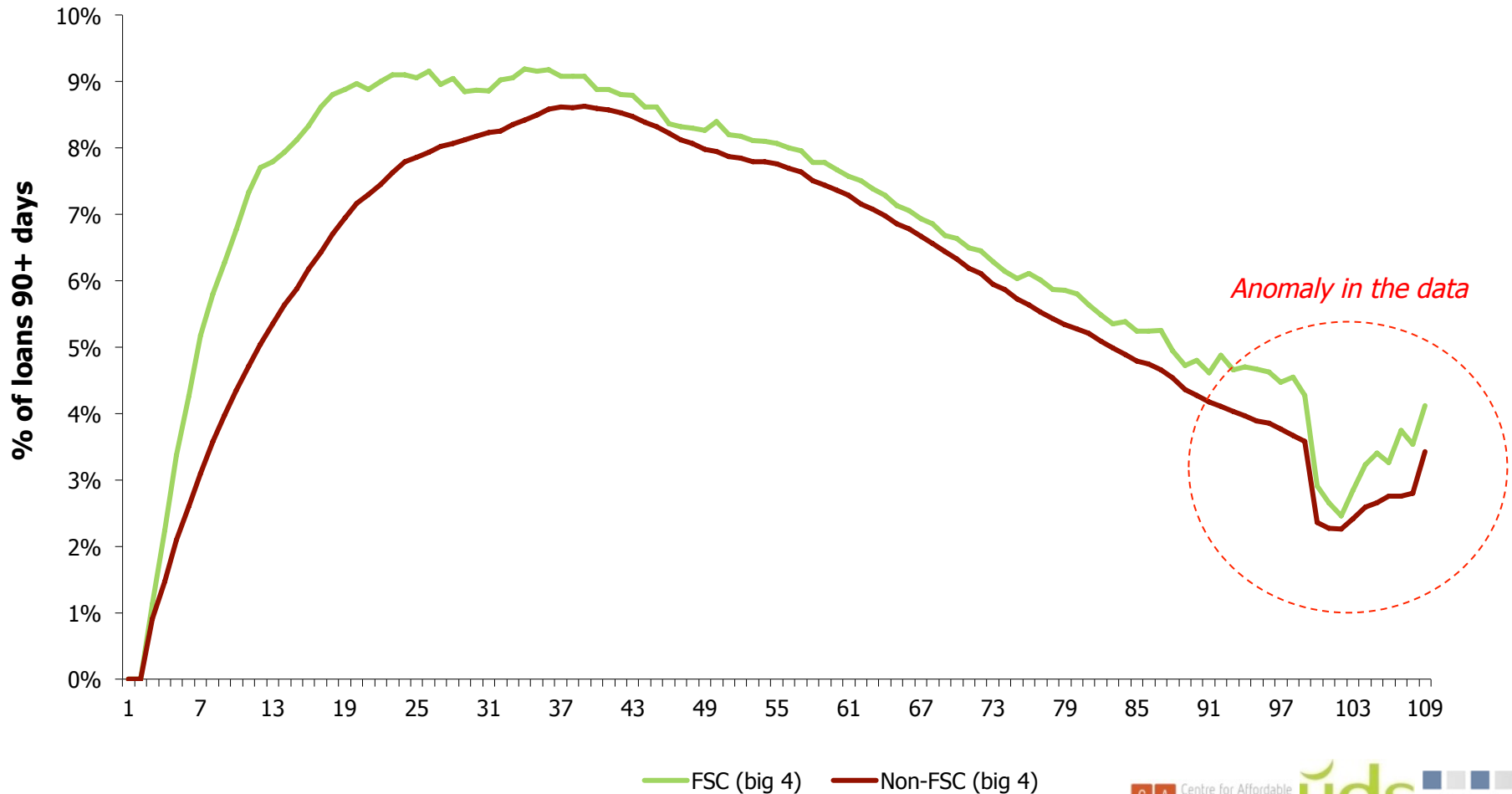


30 – 60 days
 60 – 90 days
 90+ days



NPL by months since inception

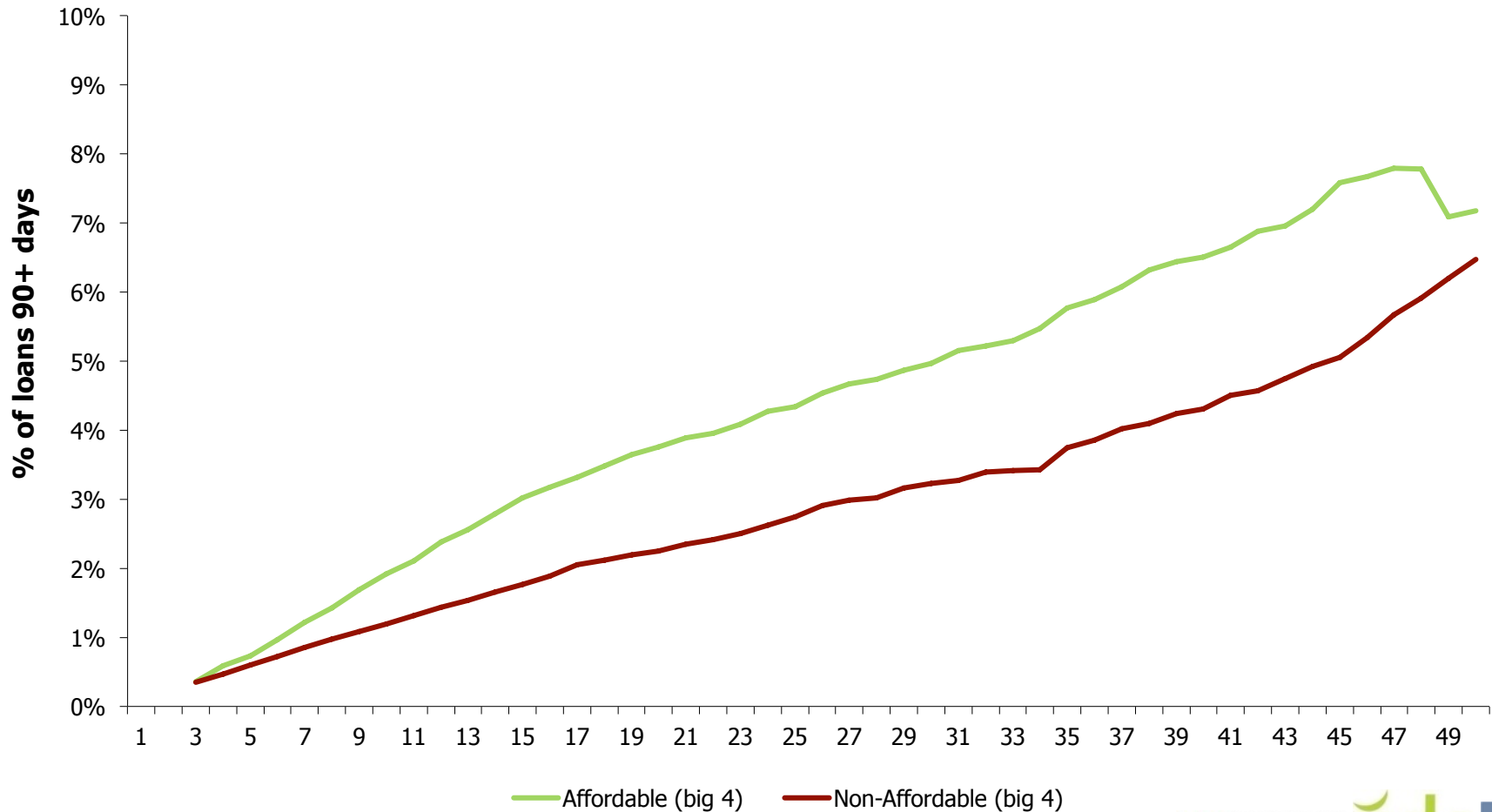
(Loans originated between 2004 and 2008, mortgages from the big 4 banks)





NPL by months since inception

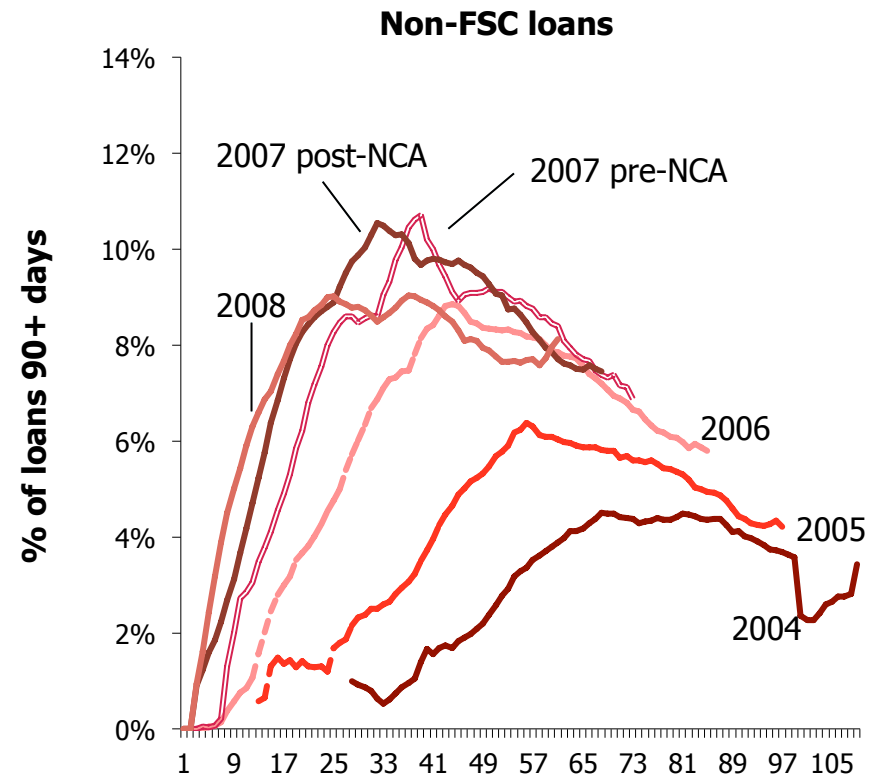
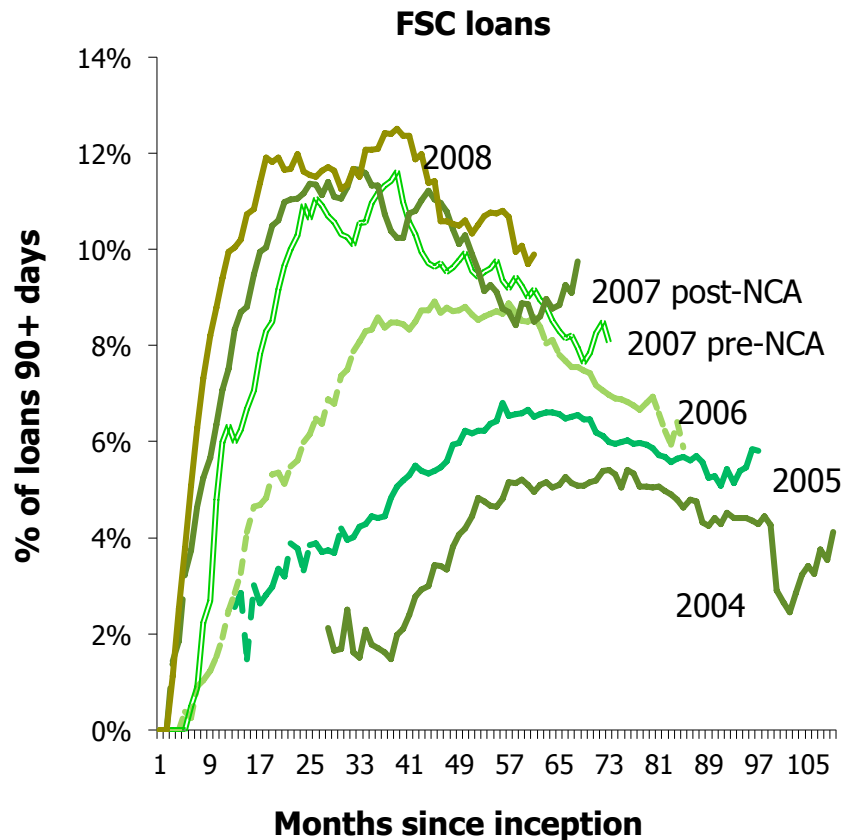
(Loans originated between 2009 and 2011, mortgages from the big 4 banks)





Vintage analysis: NPL by months since inception

(Loans originated between 2004 and 2008, mortgages from big 4 banks)



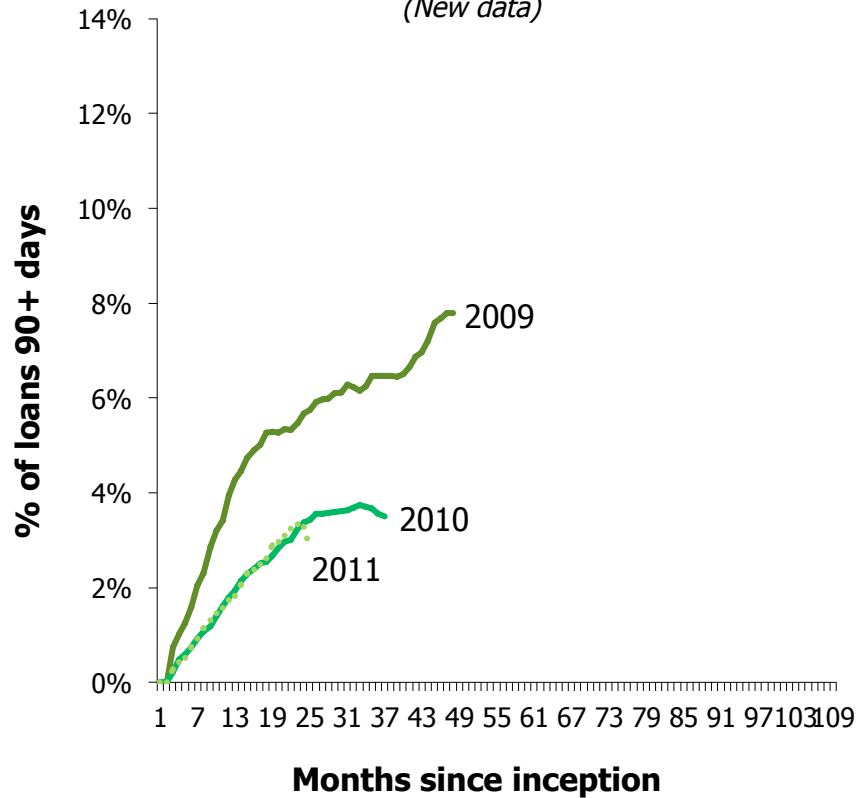
— 2004 - - - 2005 - - - 2006 — 2007 pre-NCA
 — 2007 post-NCA — 2008



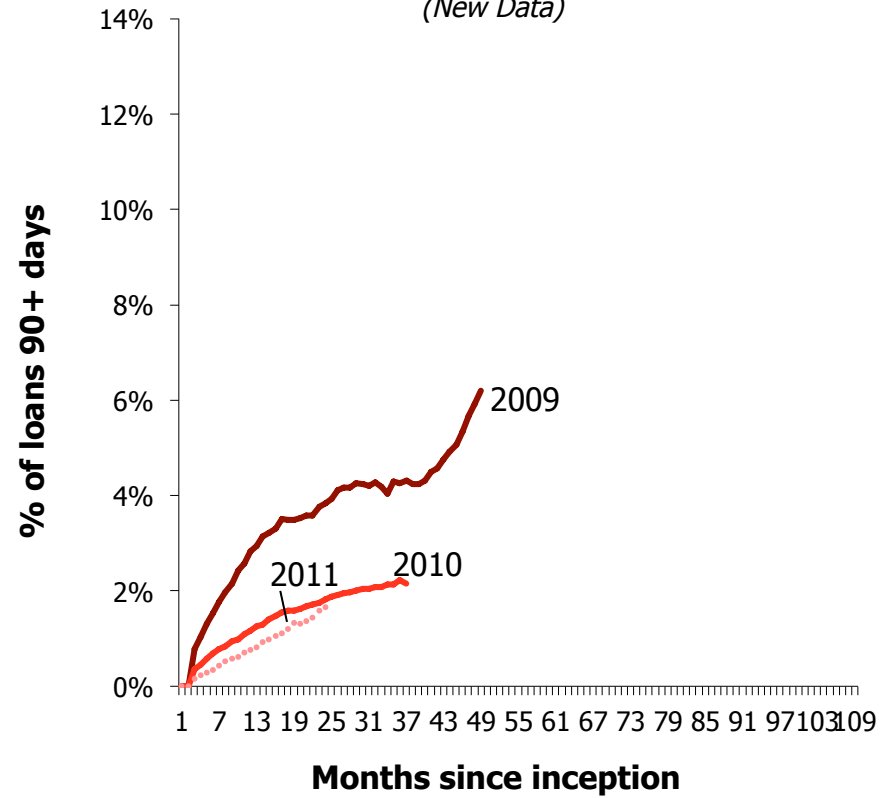
Vintage analysis: NPL by months since inception

(Loans originated between 2009 and 2011, mortgages from big 4 banks)

Affordable Market loans
(New data)



Non-Affordable Market loans
(New Data)



2009
 2010
 2011

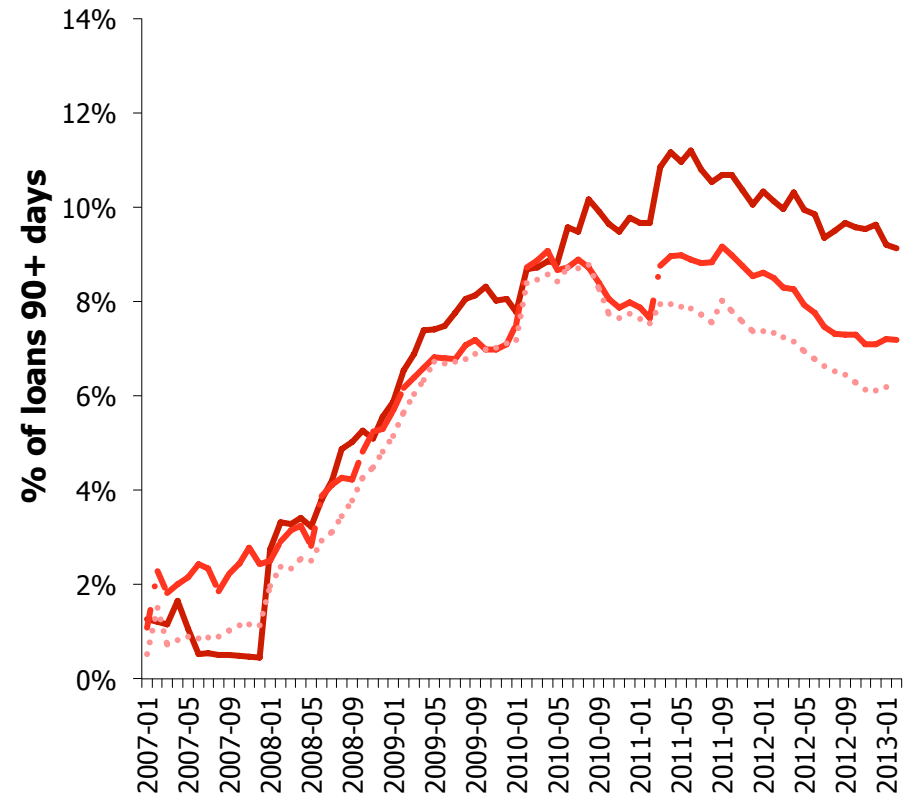
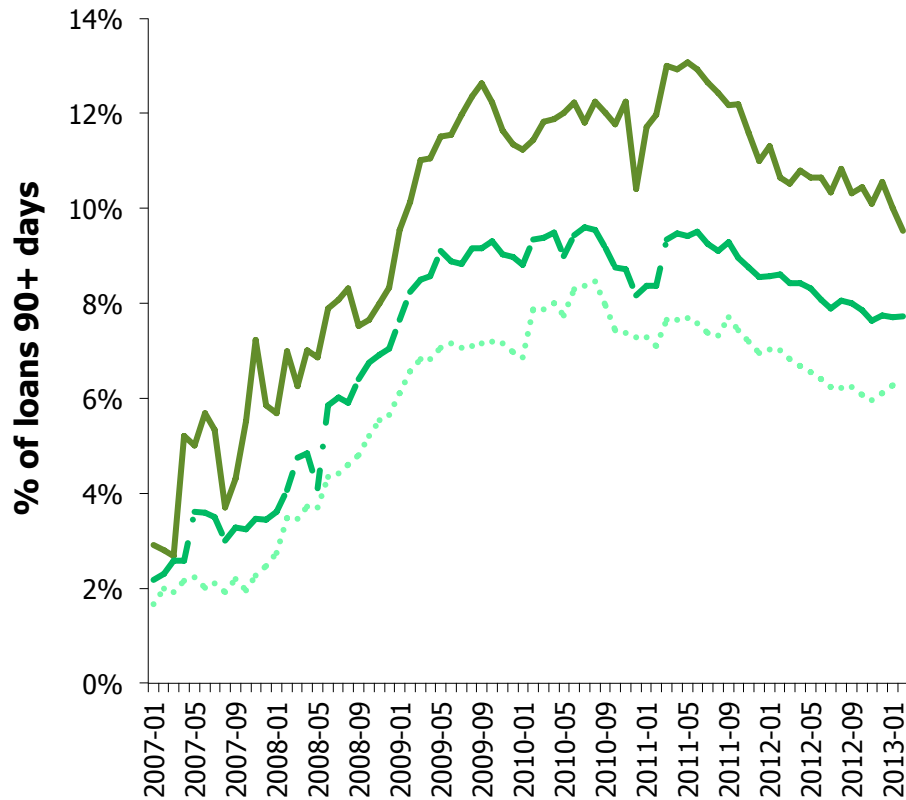


NPLs by opening balance

(Loans originated between 2004 and 2008, mortgages from big 4 banks)

FSC loans

Non-FSC loans



R0 - R50,000
 R50,000 - R100,000
 R100,00+

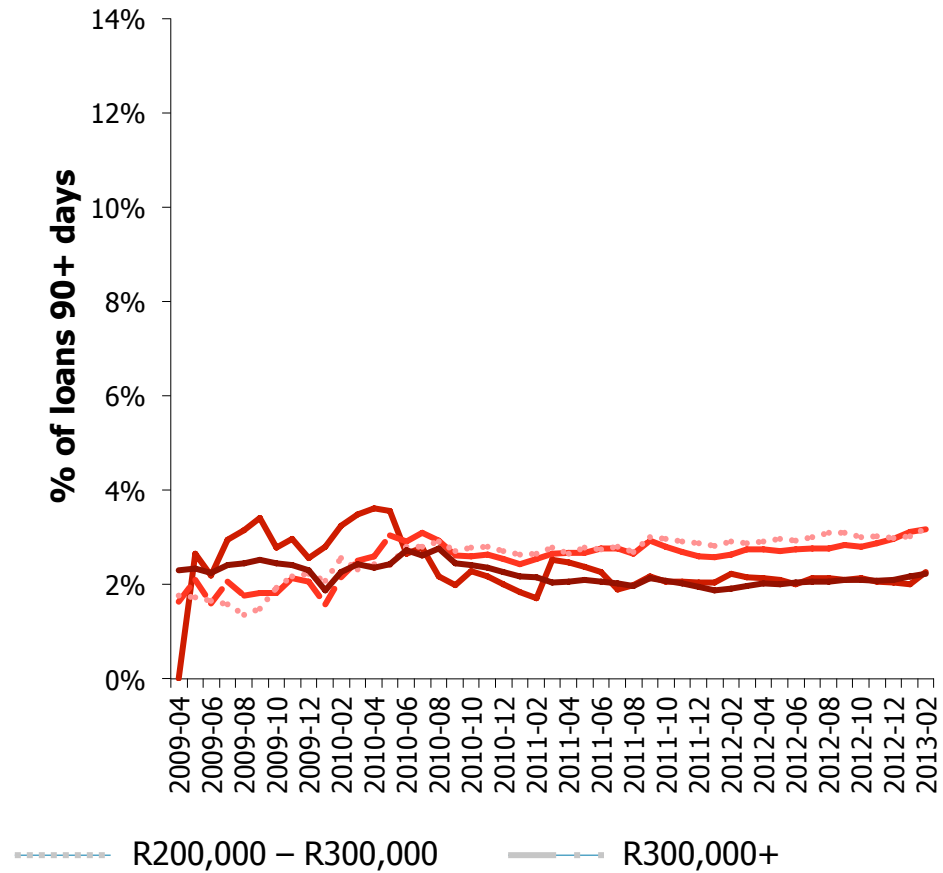
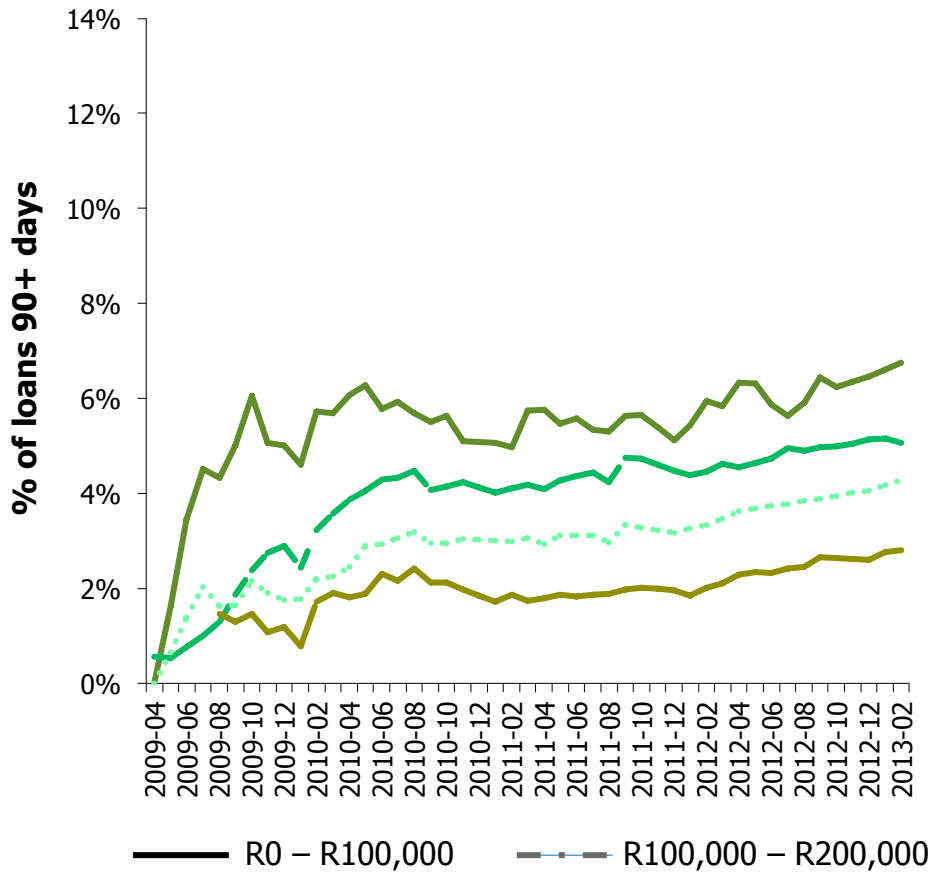


NPLs by opening balance

(Loans originated between 2009 and 2011, mortgages from big 4 banks)

Affordable Market loans

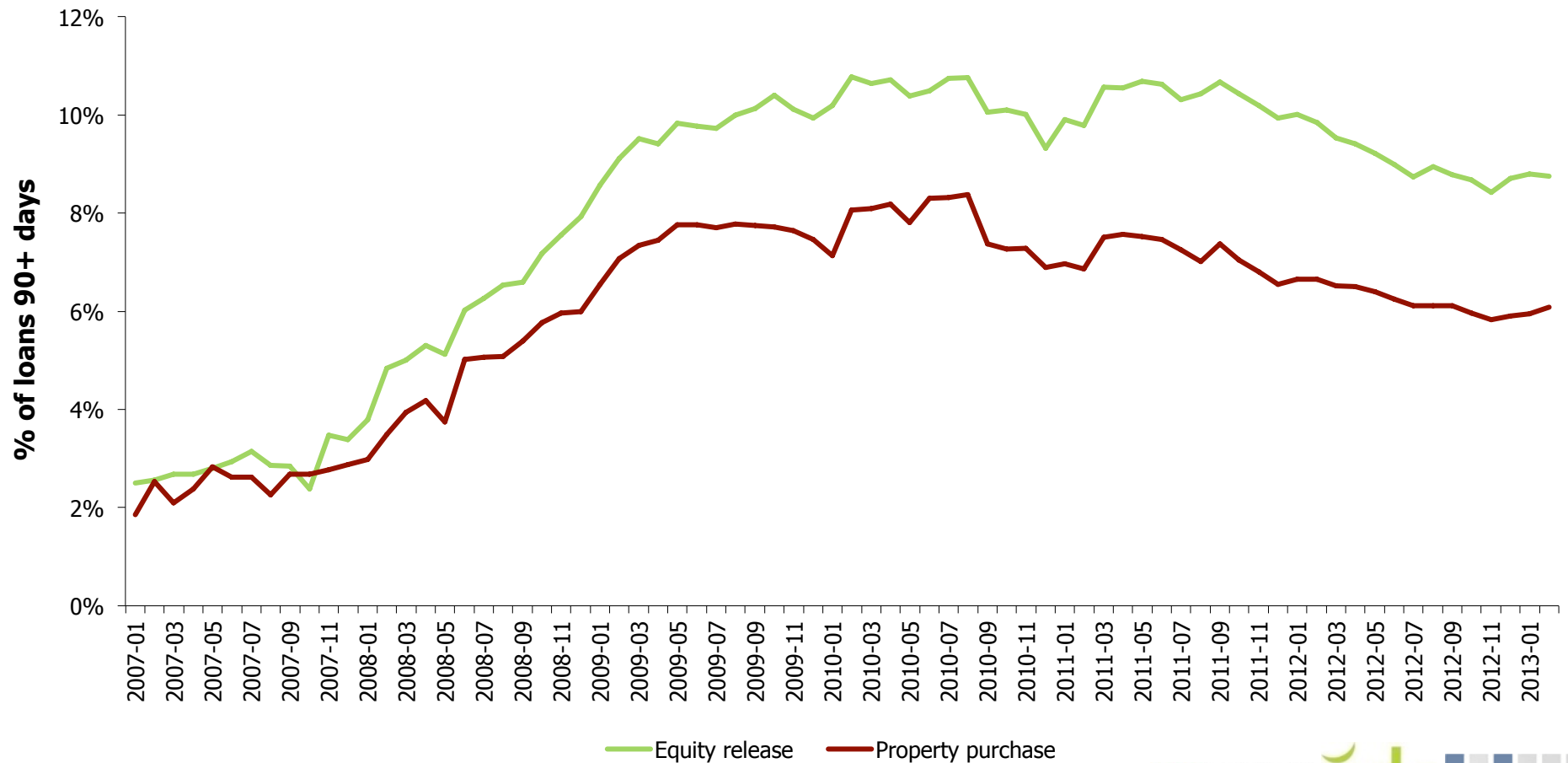
Non-Affordable Market loans





NPL by equity release/property purchase

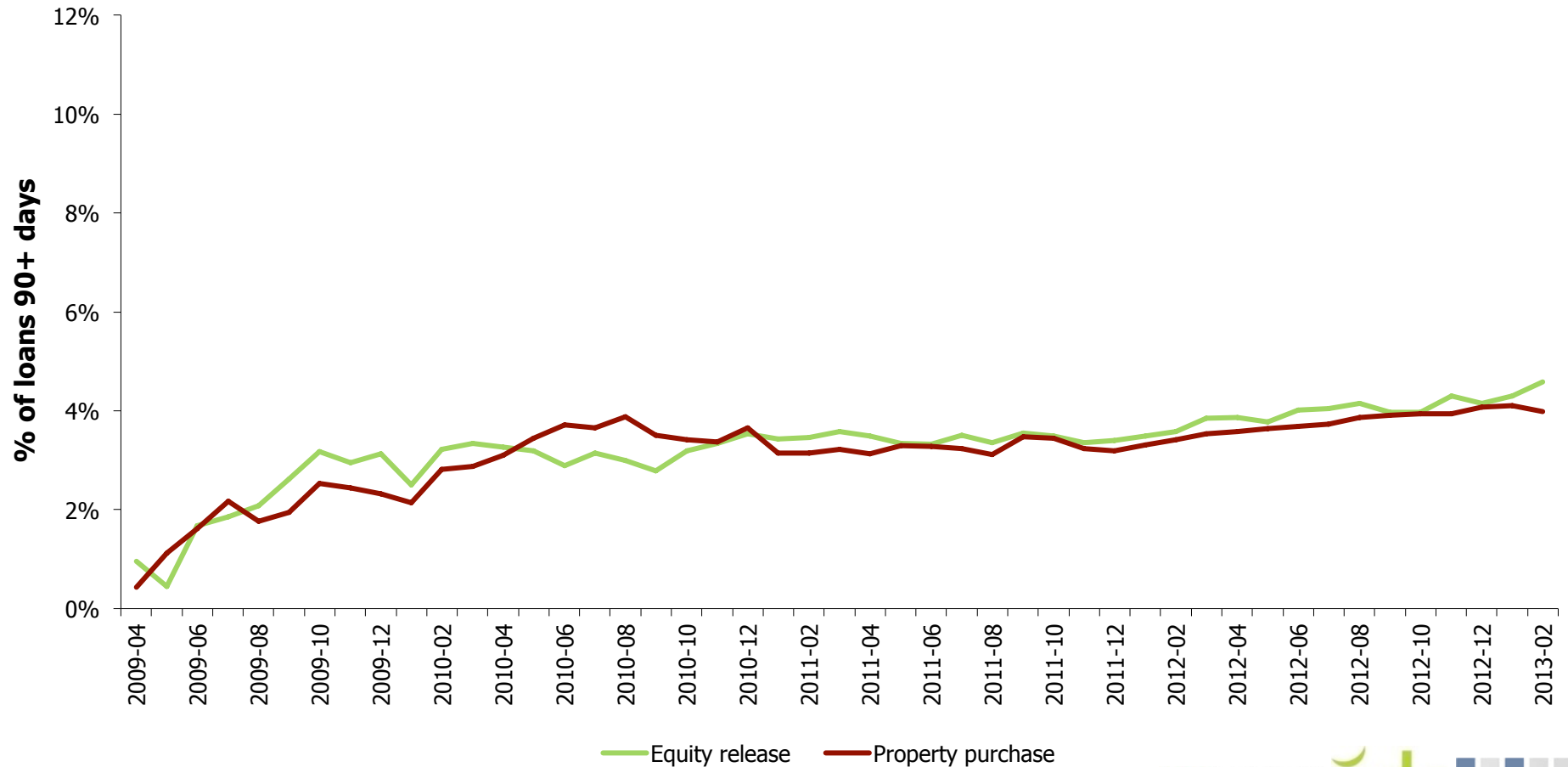
(Loans originated between 2004 and 2008, mortgages from big 4 banks, FSC loans)





NPL by equity release/property purchase

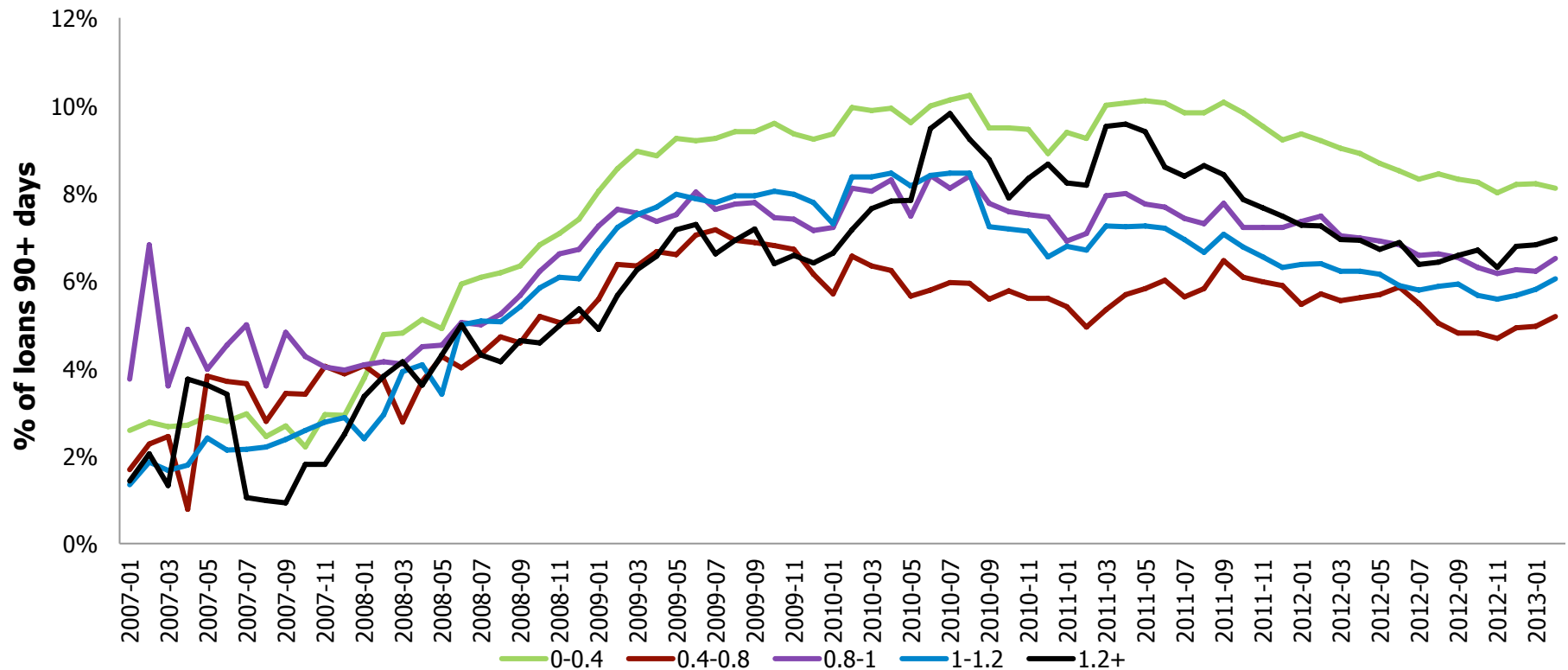
(Loans originated between 2009 and 2011, mortgages from big 4 banks, Affordable Market loans)





NPL by loan to value

(Loans originated between 2004 and 2008, mortgages from big 4 banks, mortgages related to a purchase only, FSC loans)



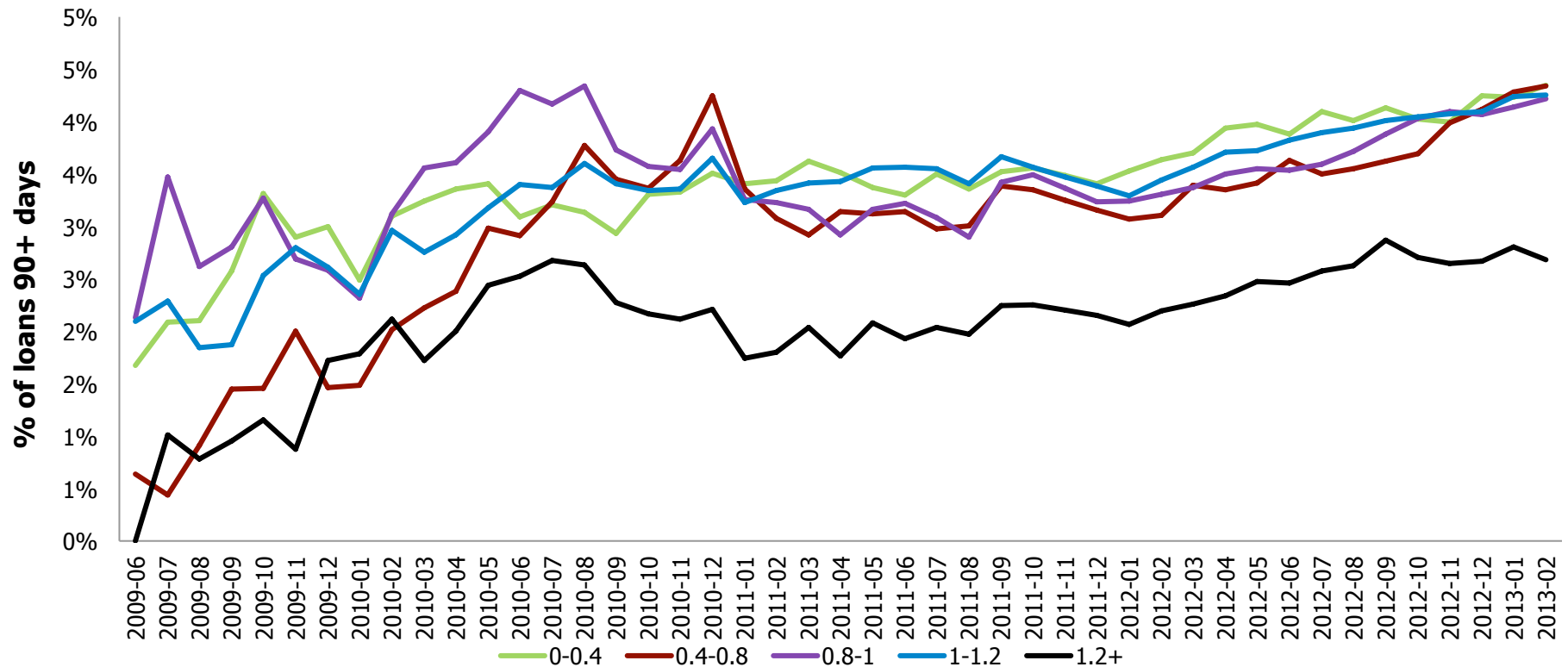
Note: The loan to value is calculated for loans where there is an associated property purchase, the price is greater than R55,000 and the LTV is less than 1.5

This analysis only takes into account the months where the number of loans is at least 50 in all LTV groups



NPL by loan to value

(Loans originated between 2009 and 2011, mortgages from big 4 banks, mortgages related to a purchase only, Affordable Market loans)



Note: The loan to value is calculated for loans where there is an associated property purchase, the price is greater than R55,000 and the LTV is less than 1.5

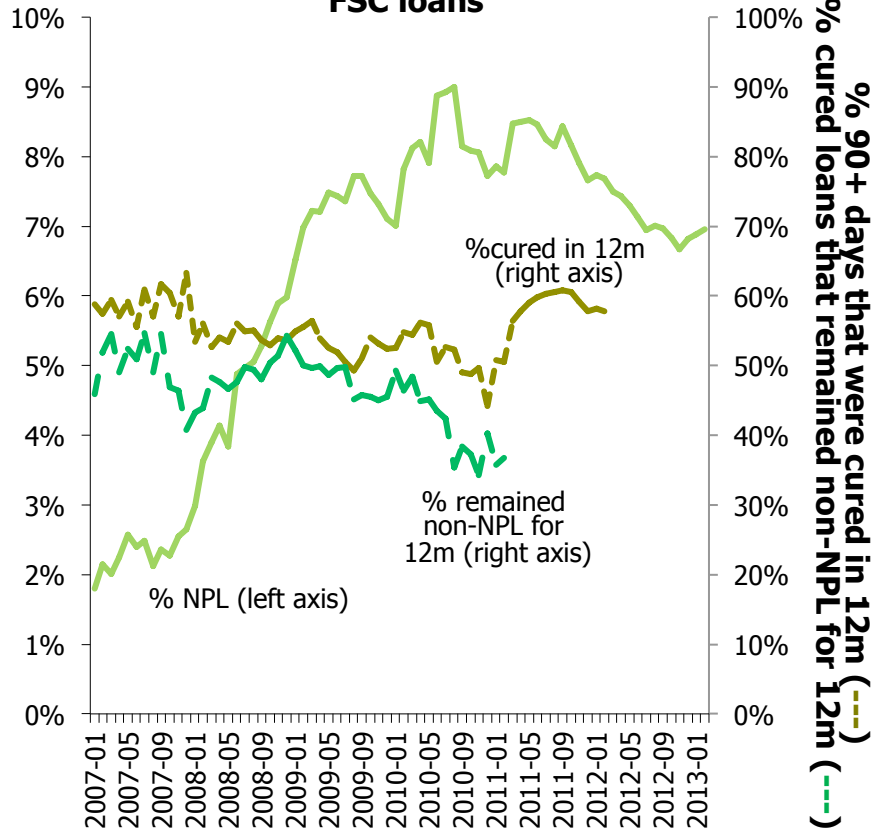
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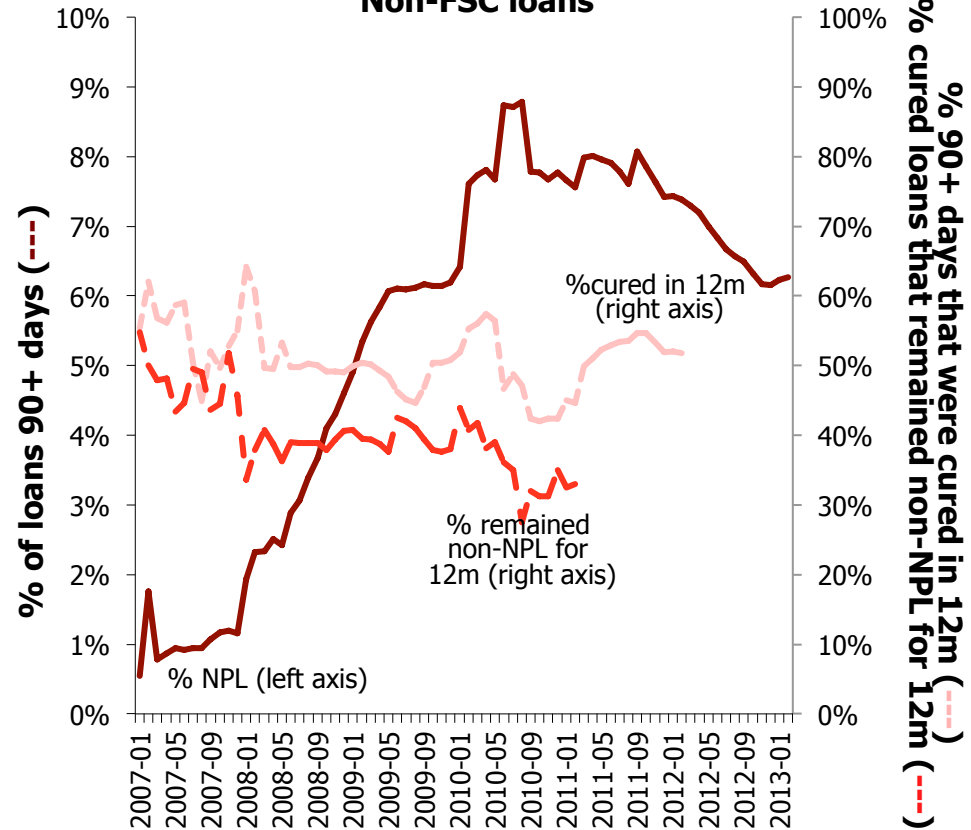
Cure rates

(Loans originated between 2004 and 2008, mortgages from big 4 banks)

FSC loans



Non-FSC loans



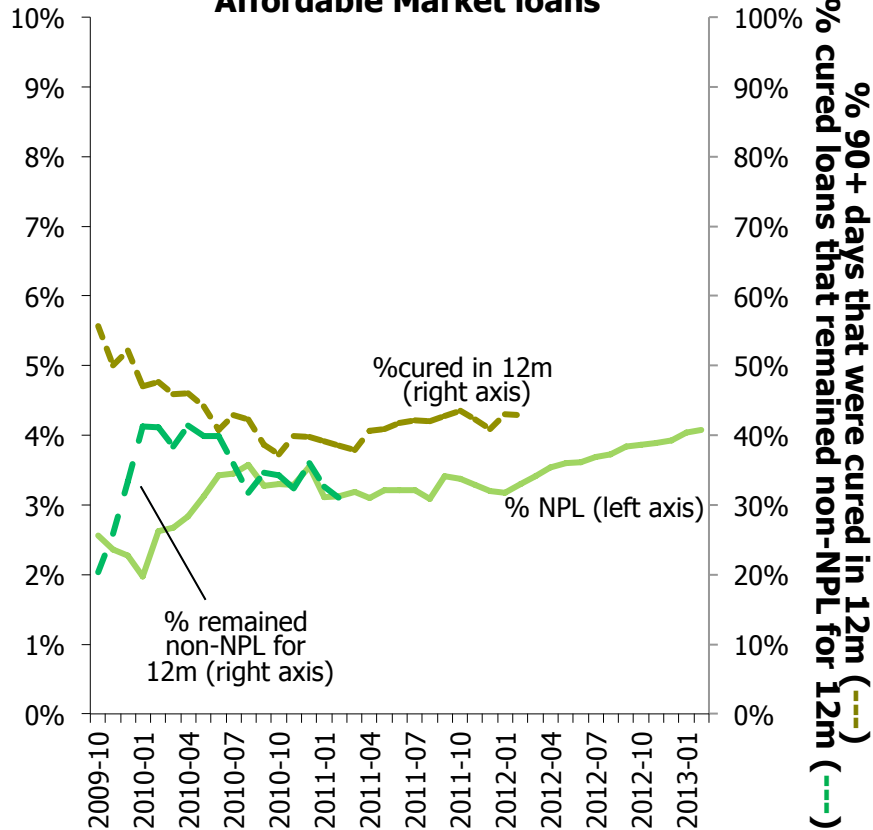
— % NPL (left axis) - - - %cured in 12m (right axis) - - - % remained non-NPL for 12 months (right axis)



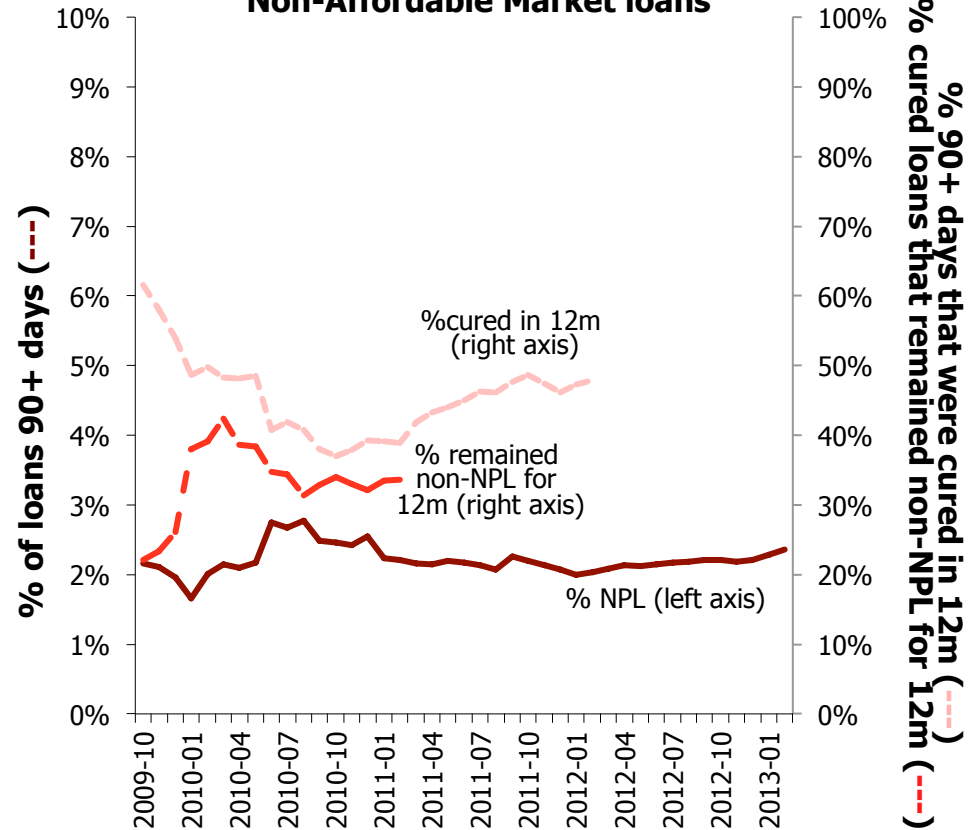
Cure rates

(Loans originated between 2009 and 2011, mortgages from big 4 banks)

Affordable Market loans



Non-Affordable Market loans

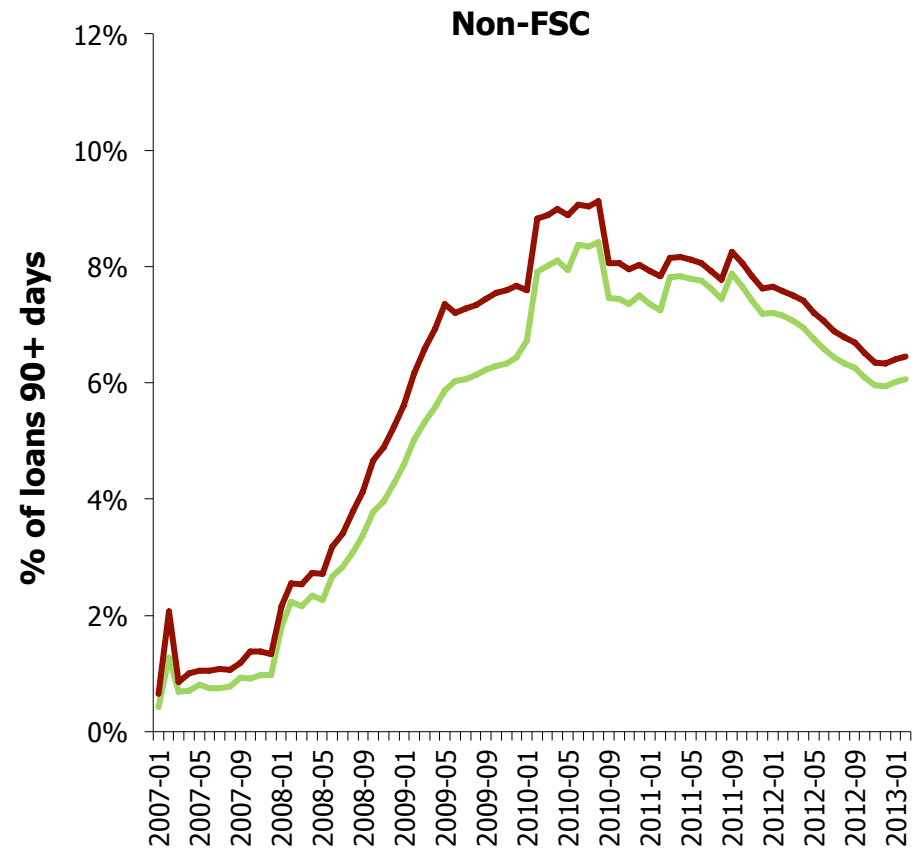
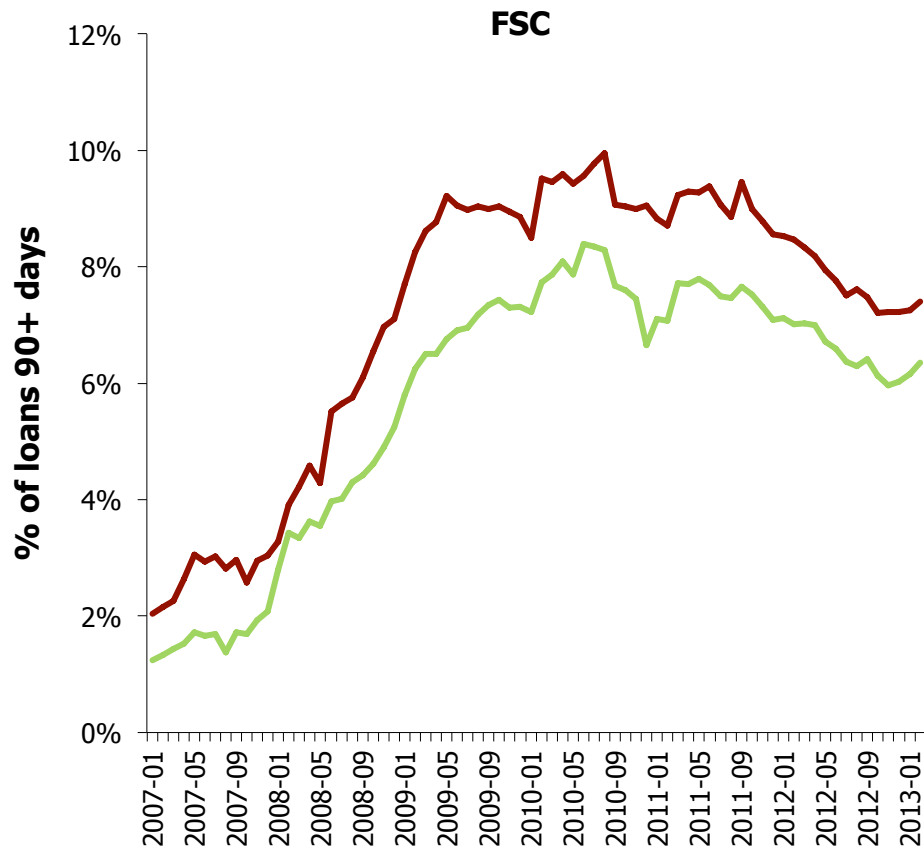


— % NPL (left axis) - - - %cured in 12m (right axis) - - - % remained non-NPL for 12 months (right axis)



NPL by gender

(Loans originated between 2004 and 2008, mortgages from big 4 banks)



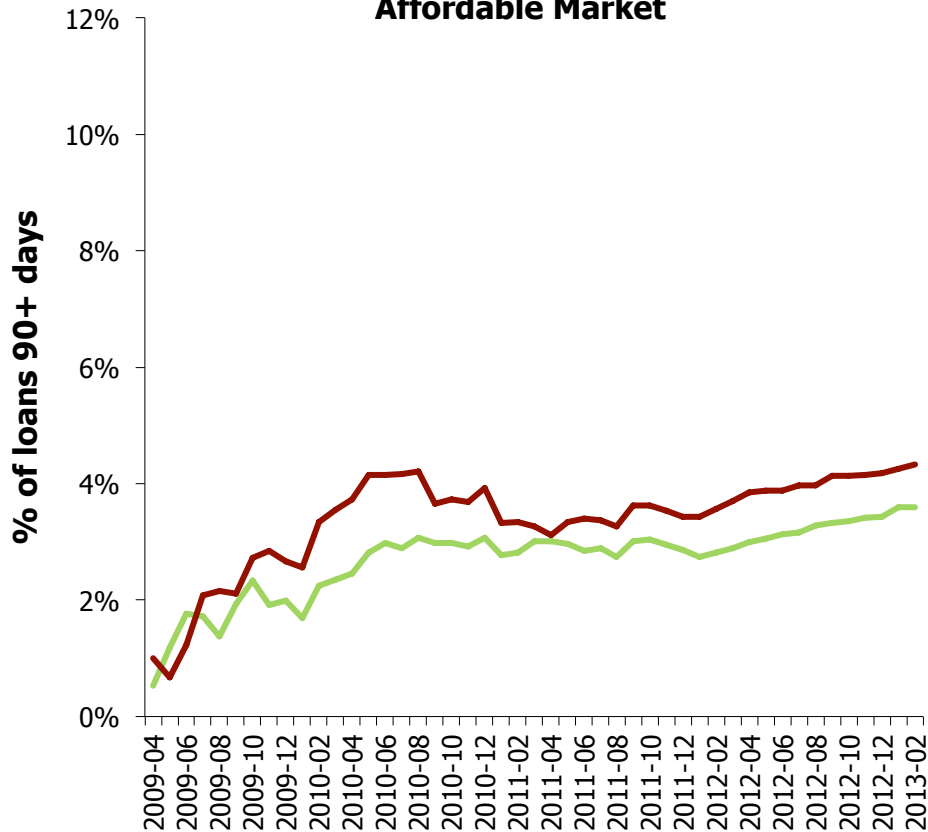
— Female — Male



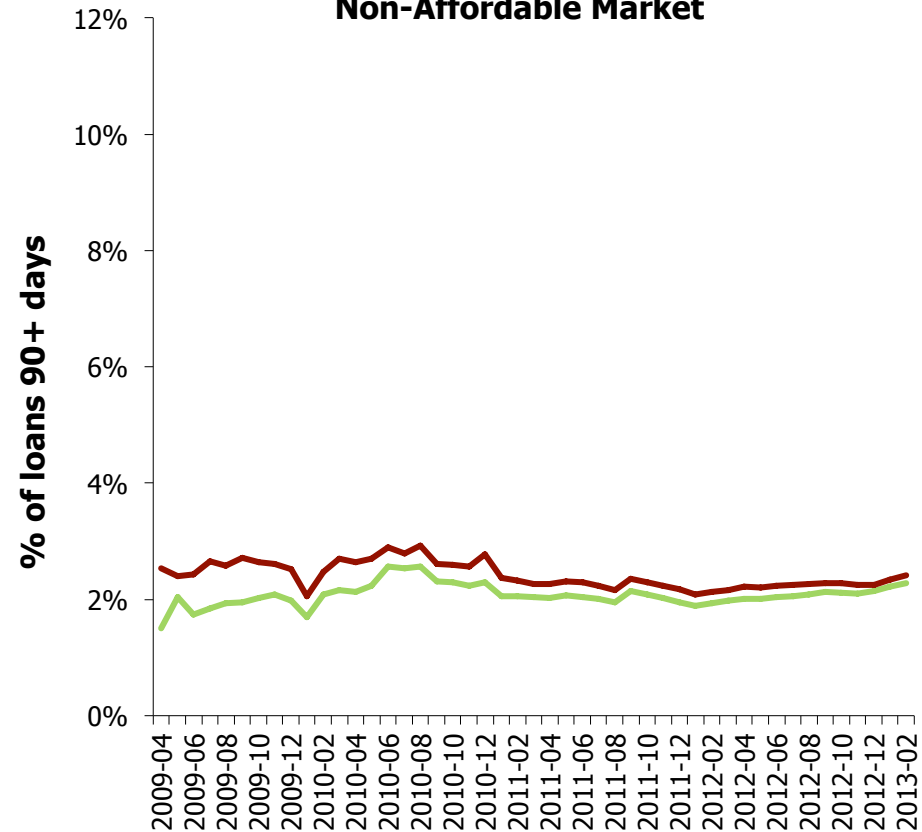
NPL by gender

(Loans originated between 2009 and 2011, mortgages from big 4 banks)

Affordable Market



Non-Affordable Market



— Female — Male