# Unpublished Appendix:
# Ancillary Results and Robustness Checks on a Probit Model of Irish Mortgage Defaults

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This unpublished appendix provides ancillary empirical results and some simple robustness checks on the probit model of Irish mortgage defaults presented in Connor and Flavin (2014) hereafter referred to as CF. The document is organized in three sections; first we present our robustness tests; second, we include ancillary tables to complement the results reported in CF; and third, we discuss the absence of "cures" (that is, successful workouts) in our sample.

**1. Robustness Tests**

In this section we compare the CF probit-based coefficient estimates with coefficient estimates using logit and using a simple linear-probability ordinary least squares approach. We show estimation details in each case. We plot the residuals from the linear-probability ordinary least squares estimates to check for heteroskedasticity. The data is identical to that in CF, and we follow the variable name conventions from that paper.

Recall that CF uses three subsample categories of mortgages: all loans, home loans, and buy-to-let loans, and five explanatory variables in the main estimation model: application affordability ratio, current affordability ratio, application loan-to-value, current loan-to-value, and log income. We apply three estimation methods: probit, logit and linear-probability ordinary least squares (see Greene (2008, pp. 770-794)).

The linear probability model has a number of shortcomings. This model serves as a useful robustness check rather than as sensible data generating process; we refer the interested reader to Greene (2008, pp 772-773) and references therein. For this model we calculate Eicker-White heteroskedasticity-consistent standard errors and the coefficient t-statistics are based upon these heteroskedasticity-consistent standard errors.

All the models were estimated using RATS and in all cases the nonlinear search routine (for probit and logit) converged quickly, as shown in the results below. See Enders (2003) for technical details on RATS estimation algorithms. The estimation results are shown in the following nine panels (for the three subsamples and three estimation methods). The results are quite uniform across the three subsamples and three estimation techniques. Each of the coefficients has the same sign in every single case of the nine cases: AppNet negative, Net positive, AppLTV negative, LTV positive, LogIncome negative. The probit and logit coefficients estimates are similar in magnitude within each subsample. The linear-probability ordinary least squares estimates are not comparable to probit/logit due to a nonlinear transformation between the models, but they do preserve the signs. Of the fifty-four coefficient estimates (six coefficients including constant time three estimation methods times three subsamples) only three have t-statistics less than 1.96 in magnitude – and these three are all for the same variable and subsample: the AppNet variable in the buy-to-let subsample is insignificant using all three estimation methods.

The maximum number of iterations needed for convergence is five, which is low, and this indicates that the empirical likelihood surface is well-behaved.

## Probit Estimation for All Loans

Binary Probit - Estimation by Newton-Raphson

Convergence in 4 Iterations. Final criterion was 0.0000000 <= 0.0000100

Dependent Variable DEFAULT

Usable Observations 24993

Degrees of Freedom 24987

Skipped/Missing (from 28377) 3384

Log Likelihood -16375.1310

Average Likelihood 0.5193441

Pseudo-R^2 0.0729950

Log Likelihood(Base) -17296.8518

LR Test of Coefficients(5) 1843.4417

Significance Level of LR 0.0000000

| Variable | Coefficient | Std Error | T-Stat | Significance |
|---|---|---|---|---|
| 1. Constant | 1.195719666 | 0.153189147 | 7.80551 | 0.00000000 |
| 2. APPNETS | -0.178311566 | 0.070534686 | -2.52800 | 0.01147149 |
| 3. NETS | 0.338455435 | 0.034542978 | 9.79810 | 0.00000000 |
| 4. APPLTV | -0.946680026 | 0.047507693 | -19.92688 | 0.00000000 |
| 5. LTV | 0.875840399 | 0.026224509 | 33.39778 | 0.00000000 |
| 6. LOGINCOME | -0.217966364 | 0.018730206 | -11.63716 | 0.00000000 |

## Logit Estimation for All Loans

Binary Logit - Estimation by Newton-Raphson

Convergence in 4 Iterations. Final criterion was 0.0000011 <= 0.0000100

Dependent Variable DEFAULT

| | |
|---|---|
| Usable Observations | 24993 |
| Degrees of Freedom | 24987 |
| Skipped/Missing (from 28377) | 3384 |
| Log Likelihood | -16370.3212 |
| Average Likelihood | 0.5194440 |
| Pseudo-R^2 | 0.0733718 |
| Log Likelihood(Base) | -17296.8518 |
| LR Test of Coefficients(5) | 1853.0612 |
| Significance Level of LR | 0.0000000 |

| Variable | Coefficient | Std Error | T-Stat | Significance |
|---|---|---|---|---|
| 1. Constant | 2.028625662 | 0.251509324 | 8.06581 | 0.00000000 |
| 2. APPNETS | -0.297547130 | 0.116727572 | -2.54907 | 0.01080096 |
| 3. NETS | 0.550564290 | 0.057019151 | 9.65578 | 0.00000000 |
| 4. APPLTV | -1.571361416 | 0.079445454 | -19.77912 | 0.00000000 |
| 5. LTV | 1.435511074 | 0.044044920 | 32.59198 | 0.00000000 |
| 6. LOGINCOME | -0.363598531 | 0.030830923 | -11.79331 | 0.00000000 |

## Linear-Probability Ordinary Least Squares Estimation for All Loans

Linear Regression - Estimation by Least Squares

With Heteroscedasticity-Consistent (Eicker-White) Standard Errors

Dependent Variable DEFAULT

| | |
|---|---|
| Usable Observations | 24993 |
| Degrees of Freedom | 24987 |
| Skipped/Missing (from 28377) | 3384 |
| Centered R^2 | 0.0707082 |
| R-Bar^2 | 0.0705223 |
| Uncentered R^2 | 0.5137699 |
| Mean of Dependent Variable | 0.4767734966 |
| Std Error of Dependent Variable | 0.4994702305 |
| Standard Error of Estimate | 0.4815363792 |
| Sum of Squared Residuals | 5793.9177071 |
| Log Likelihood | -17196.3084 |
| Durbin-Watson Statistic | 1.9050 |

| Variable | Coefficient | Std Error | T-Stat | Significance |
|---|---|---|---|---|
| 1. Constant | 0.938424830 | 0.058670494 | 15.99483 | 0.00000000 |
| 2. APPNETS | -0.063680402 | 0.026823316 | -2.37407 | 0.01759326 |
| 3. NETS | 0.123664339 | 0.012356333 | 10.00817 | 0.00000000 |
| 4. APPLTV | -0.349407930 | 0.018079729 | -19.32595 | 0.00000000 |
| 5. LTV | 0.326047629 | 0.009384522 | 34.74313 | 0.00000000 |
| 6. LOGINCOME | -0.080710424 | 0.007175417 | -11.24819 | 0.00000000 |

## Probit Estimation for Home Loans Subsample

Binary Probit - Estimation by Newton-Raphson

Convergence in 4 Iterations. Final criterion was 0.0000000 <= 0.0000100

Dependent Variable DEFAULT

| | |
|---|---|
| Usable Observations | 22368 |
| Degrees of Freedom | 22362 |
| Skipped/Missing (from 28377) | 6009 |
| Log Likelihood | -14709.3273 |
| Average Likelihood | 0.5180902 |
| Pseudo-R^2 | 0.0679331 |
| Log Likelihood(Base) | -15476.4644 |
| LR Test of Coefficients(5) | 1534.2743 |
| Significance Level of LR | 0.0000000 |

| Variable | Coefficient | Std Error | T-Stat | Significance |
|---|---|---|---|---|
| 1. Constant | 1.308572483 | 0.191792830 | 6.82284 | 0.00000000 |
| 2. APPNETS | -0.204264030 | 0.081581881 | -2.50379 | 0.01228704 |
| 3. NETS | 0.246565087 | 0.044733600 | 5.51185 | 0.00000004 |
| 4. APPLTV | -0.978222652 | 0.050592174 | -19.33545 | 0.00000000 |
| 5. LTV | 0.900451776 | 0.028196033 | 31.93541 | 0.00000000 |
| 6. LOGINCOME | -0.226599973 | 0.023488669 | -9.64720 | 0.00000000 |

## Logit Estimation for Home Loans Subsample

Binary Logit - Estimation by Newton-Raphson

Convergence in 4 Iterations. Final criterion was 0.0000006 <= 0.0000100

Dependent Variable DEFAULT

| | |
|---|---|
| Usable Observations | 22368 |
| Degrees of Freedom | 22362 |
| Skipped/Missing (from 28377) | 6009 |
| Log Likelihood | -14705.3348 |
| Average Likelihood | 0.5181827 |
| Pseudo-R^2 | 0.0682832 |
| Log Likelihood(Base) | -15476.4644 |
| LR Test of Coefficients(5) | 1542.2593 |
| Significance Level of LR | 0.0000000 |

| Variable | Coefficient | Std Error | T-Stat | Significance |
|---|---|---|---|---|
| 1. Constant | 2.189339984 | 0.312397438 | 7.00819 | 0.00000000 |
| 2. APPNETS | -0.338278130 | 0.135727206 | -2.49234 | 0.01269051 |
| 3. NETS | 0.397687554 | 0.073469528 | 5.41296 | 0.00000006 |
| 4. APPLTV | -1.627625563 | 0.084803135 | -19.19299 | 0.00000000 |
| 5. LTV | 1.477352561 | 0.047459086 | 31.12897 | 0.00000000 |
| 6. LOGINCOME | -0.374498860 | 0.038337741 | -9.76841 | 0.00000000 |

## Linear-Probability Ordinary Least Squares Estimation for Home Loans Subsample

Linear Regression - Estimation by Least Squares

With Heteroscedasticity-Consistent (Eicker-White) Standard Errors

Dependent Variable DEFAULT

| | |
|---|---|
| Usable Observations | 22368 |
| Degrees of Freedom | 22362 |
| Skipped/Missing (from 28377) | 6009 |
| Centered R^2 | 0.0661276 |
| R-Bar^2 | 0.0659188 |
| Uncentered R^2 | 0.5097671 |
| Mean of Dependent Variable | 0.4750536481 |
| Std Error of Dependent Variable | 0.4993884549 |
| Standard Error of Estimate | 0.4826483269 |
| Sum of Squared Residuals | 5209.2146491 |
| Log Likelihood | -15441.4670 |
| Durbin-Watson Statistic | 1.9196 |

| Variable | Coefficient | Std Error | T-Stat | Significance |
|---|---|---|---|---|
| 1. Constant | 0.996323531 | 0.071732782 | 13.88938 | 0.00000000 |
| 2. APPNETS | -0.073444145 | 0.031389934 | -2.33974 | 0.01929740 |
| 3. NETS | 0.088995743 | 0.016291463 | 5.46272 | 0.00000005 |
| 4. APPLTV | -0.363894223 | 0.019491210 | -18.66966 | 0.00000000 |
| 5. LTV | 0.337626400 | 0.010234212 | 32.98997 | 0.00000000 |
| 6. LOGINCOME | -0.086025997 | 0.008792175 | -9.78438 | 0.00000000 |

## Probit Estimation for Buy-to-Let Loans Subsample

Binary Probit - Estimation by Newton-Raphson

Convergence in 4 Iterations. Final criterion was 0.0000016 <= 0.0000100

Dependent Variable DEFAULT

| | |
|---|---|
| Usable Observations | 2625 |
| Degrees of Freedom | 2619 |
| Skipped/Missing (from 28377) | 25752 |
| Log Likelihood | -1645.3332 |
| Average Likelihood | 0.5343022 |
| Pseudo-R^2 | 0.1299221 |
| Log Likelihood(Base) | -1819.1256 |
| LR Test of Coefficients(5) | 347.5848 |
| Significance Level of LR | 0.0000000 |

| Variable | Coefficient | Std Error | T-Stat | Significance |
|---|---|---|---|---|
| 1. Constant | 0.897857031 | 0.431583136 | 2.08038 | 0.03749067 |
| 2. APPNETS | -0.054485092 | 0.146683025 | -0.37145 | 0.71030400 |
| 3. NETS | 0.677650230 | 0.076976891 | 8.80329 | 0.00000000 |
| 4. APPLTV | -0.682025821 | 0.149429489 | -4.56420 | 0.00000501 |
| 5. LTV | 0.749668838 | 0.073490300 | 10.20092 | 0.00000000 |
| 6. LOGINCOME | -0.218409769 | 0.048997293 | -4.45759 | 0.00000829 |

## Logit Estimation for Buy-to-Let Loans Subsample

Binary Logit - Estimation by Newton-Raphson

Convergence in 5 Iterations. Final criterion was 0.0000000 <= 0.0000100

Dependent Variable DEFAULT

| | |
|---|---|
| Usable Observations | 2625 |
| Degrees of Freedom | 2619 |
| Skipped/Missing (from 28377) | 25752 |
| Log Likelihood | -1643.3048 |
| Average Likelihood | 0.5347153 |
| Pseudo-R^2 | 0.1314084 |
| Log Likelihood(Base) | -1819.1256 |
| LR Test of Coefficients(5) | 351.6416 |
| Significance Level of LR | 0.0000000 |

| Variable | Coefficient | Std Error | T-Stat | Significance |
|---|---|---|---|---|
| 1. Constant | 1.831993788 | 0.751513100 | 2.43774 | 0.01477939 |
| 2. APPNETS | -0.086471754 | 0.243180497 | -0.35559 | 0.72215009 |
| 3. NETS | 1.115593393 | 0.131803868 | 8.46404 | 0.00000000 |
| 4. APPLTV | -1.124528032 | 0.247846536 | -4.53719 | 0.00000570 |
| 5. LTV | 1.234899192 | 0.122897219 | 10.04823 | 0.00000000 |
| 6. LOGINCOME | -0.401753890 | 0.086007032 | -4.67117 | 0.00000299 |

## Linear-Probability Ordinary Least Squares Estimation for Buy-to-Let Loans Subsample

Linear Regression - Estimation by Least Squares

With Heteroscedasticity-Consistent (Eicker-White) Standard Errors

Dependent Variable DEFAULT

| | |
|---|---|
| Usable Observations | 2625 |
| Degrees of Freedom | 2619 |
| Skipped/Missing (from 28377) | 25752 |
| Centered R^2 | 0.1220452 |
| R-Bar^2 | 0.1203691 |
| Uncentered R^2 | 0.5534973 |
| Mean of Dependent Variable | 0.4914285714 |
| Std Error of Dependent Variable | 0.5000217765 |
| Standard Error of Estimate | 0.4689636333 |
| Sum of Squared Residuals | 575.98852326 |
| Log Likelihood | -1733.9813 |
| Durbin-Watson Statistic | 1.9313 |

| Variable | Coefficient | Std Error | T-Stat | Significance |
|---|---|---|---|---|
| 1. Constant | 0.741288371 | 0.181985364 | 4.07334 | 0.00004634 |
| 2. APPNETS | -0.021689829 | 0.052459785 | -0.41346 | 0.67927233 |
| 3. NETS | 0.242973400 | 0.026289725 | 9.24214 | 0.00000000 |
| 4. APPLTV | -0.239099705 | 0.053247424 | -4.49035 | 0.00000711 |
| 5. LTV | 0.263310913 | 0.024072584 | 10.93821 | 0.00000000 |
| 6. LOGINCOME | -0.068559400 | 0.020681416 | -3.31502 | 0.00091635 |

Next, we examine residual plots for the ordinary least squares model, keeping in mind that heteroskedasticity is a necessary component of this model when the endogenous variable is binary, as in our case. We plot the residuals for each of the three regression-based estimates (all, home, and buy-to-let subsamples) against each of the five explanatory variables. These are shown on the following fifteen graphs (Figures A.1.1 – A.1.15). Since the endogenous variable is binary and the explanatory variables are not, this model always has conditional heteroskedasticity by construction (see Greene (2008, pp. 772-773)) but other than this effect there are no obvious or extreme heteroskedasticity effects detectable.

**Figure A.1.1**

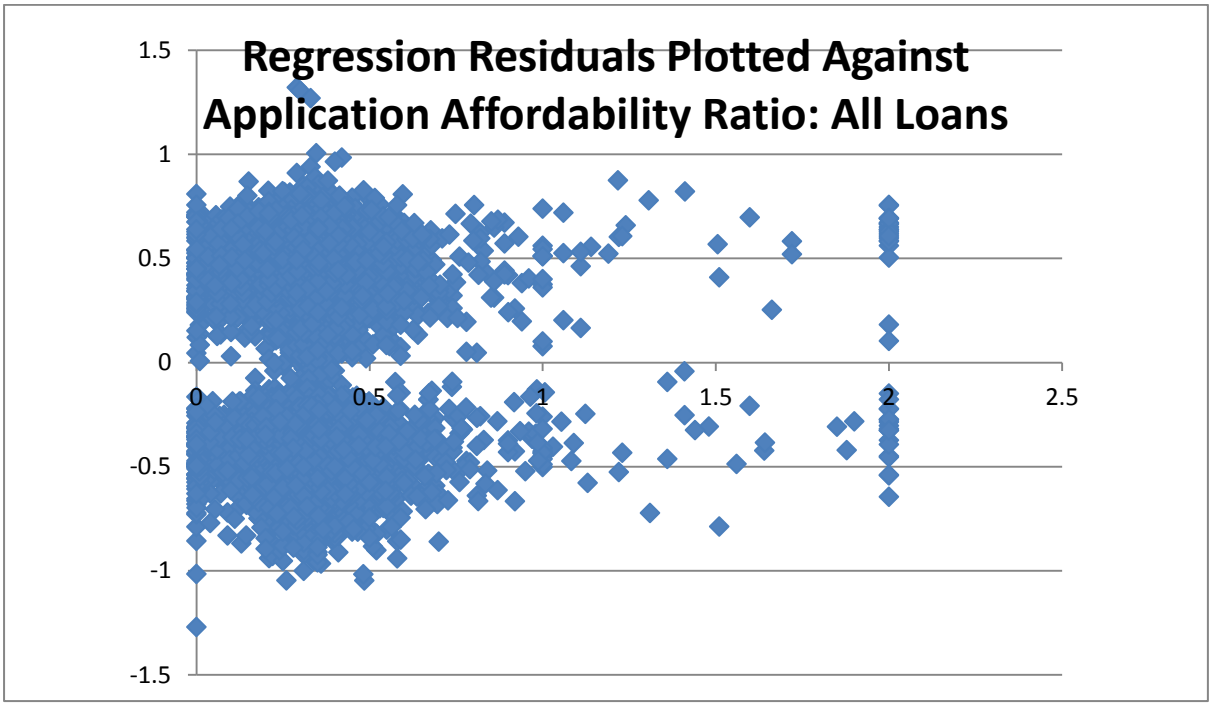

Regression Residuals Plotted Against Application Affordability Ratio: All Loans
1.5
1
0.5
0
-0.5
-1
-1.5
0
0.5
1
1.5
2
2.5

**Figure A.1.2**

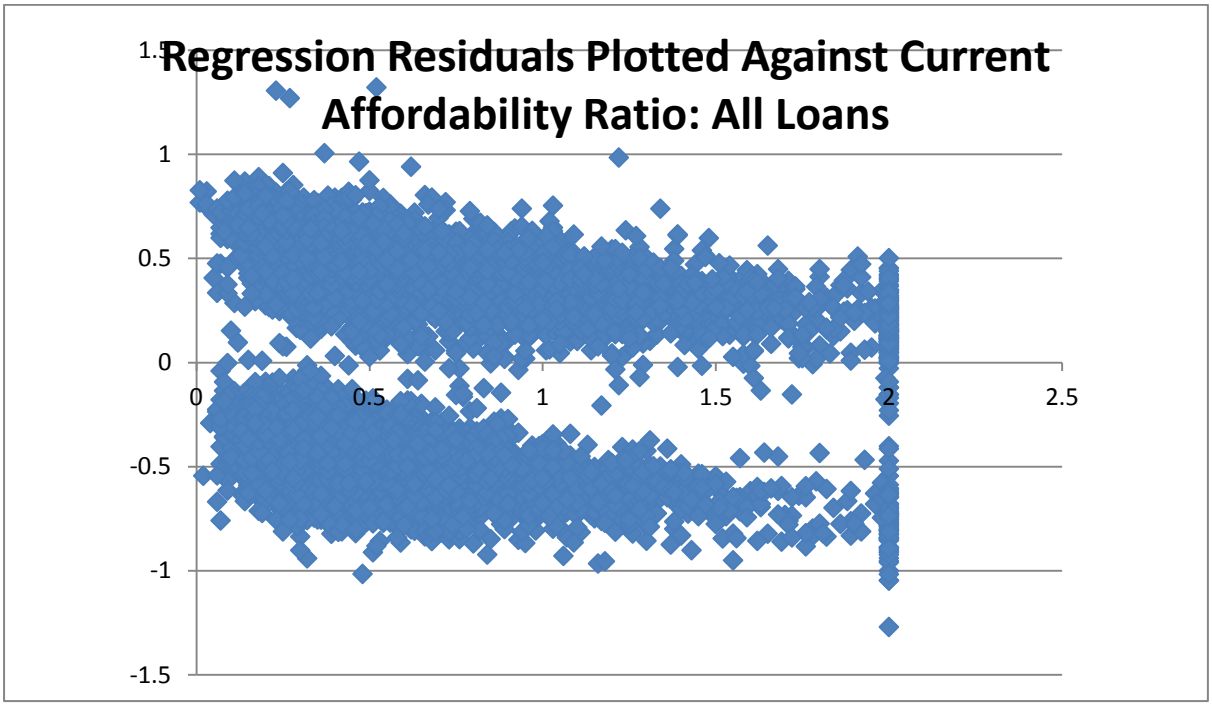

Regression Residuals Plotted Against Current Affordability Ratio: All Loans
1.5
1
0.5
0
-0.5
-1
-1.5
0
0.5
1
1.5
2
2.5

**Figure A.1.3**

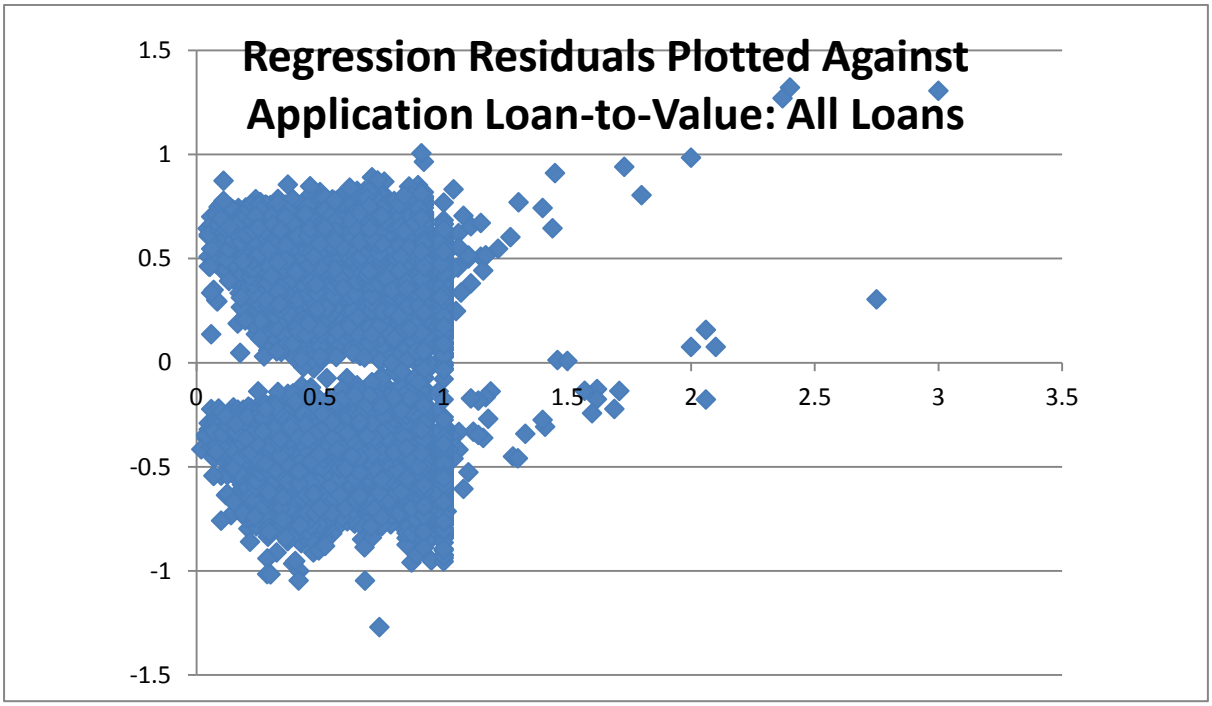

Regression Residuals Plotted Against Application Loan-to-Value: All Loans
1.5
1
0.5
0
-0.5
-1
-1.5
0
0.5
1
1.5
2
2.5
3
3.5

**Figure A.1.4**

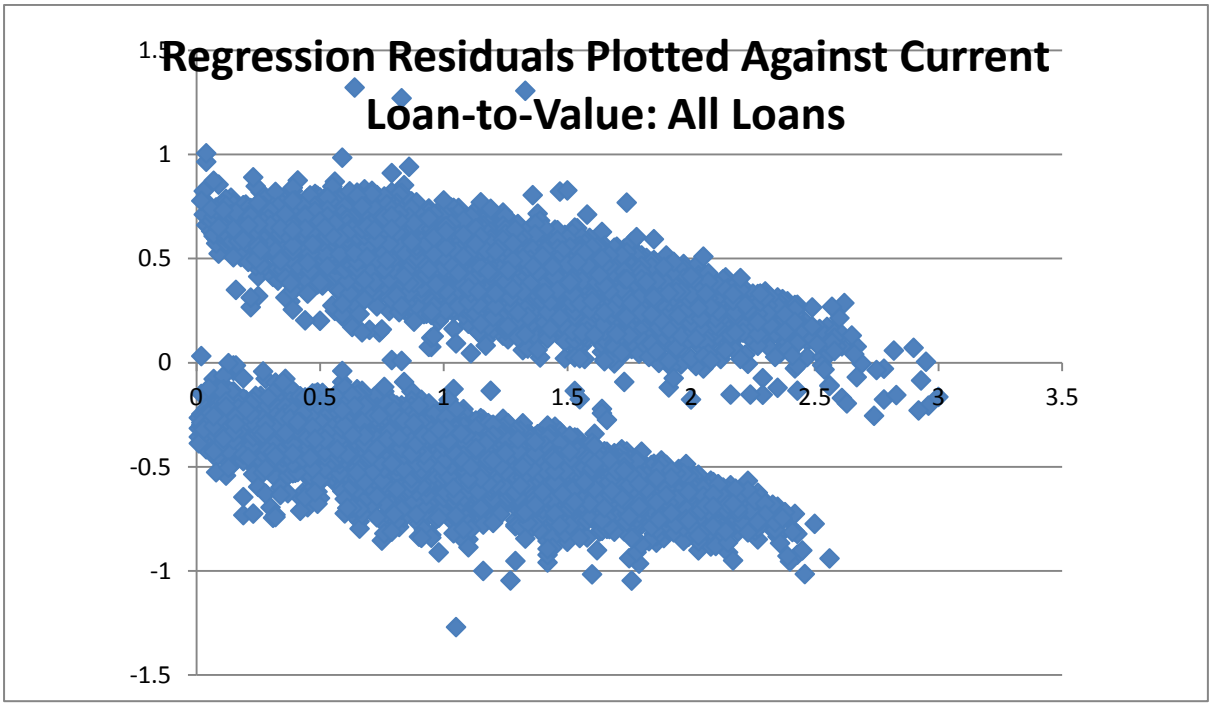

Regression Residuals Plotted Against Current Loan-to-Value: All Loans
1.5
1
0.5
0
-0.5
-1
-1.5
0
0.5
1
1.5
2
2.5
3
3.5

**Figure A.1.5**

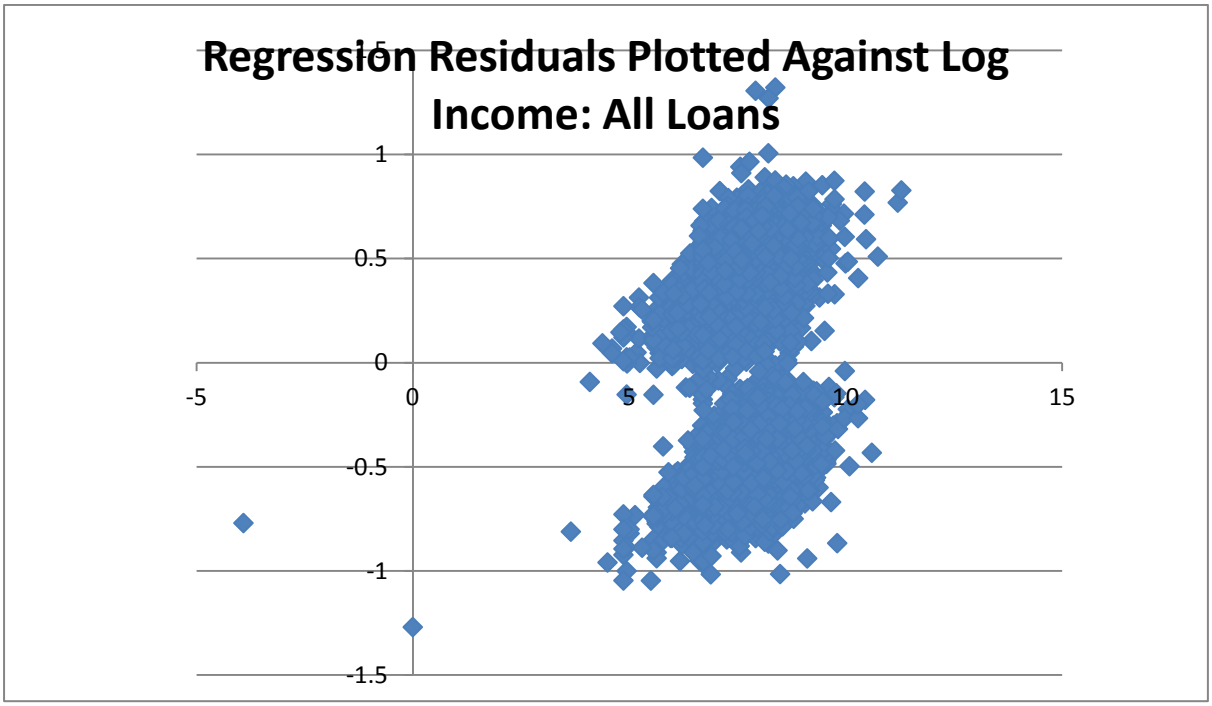

Regression Residuals Plotted Against Log Income: All Loans
1
0.5
0
-0.5
-1
-1.5
-5
0
5
10
15

**Figure A.1.6**

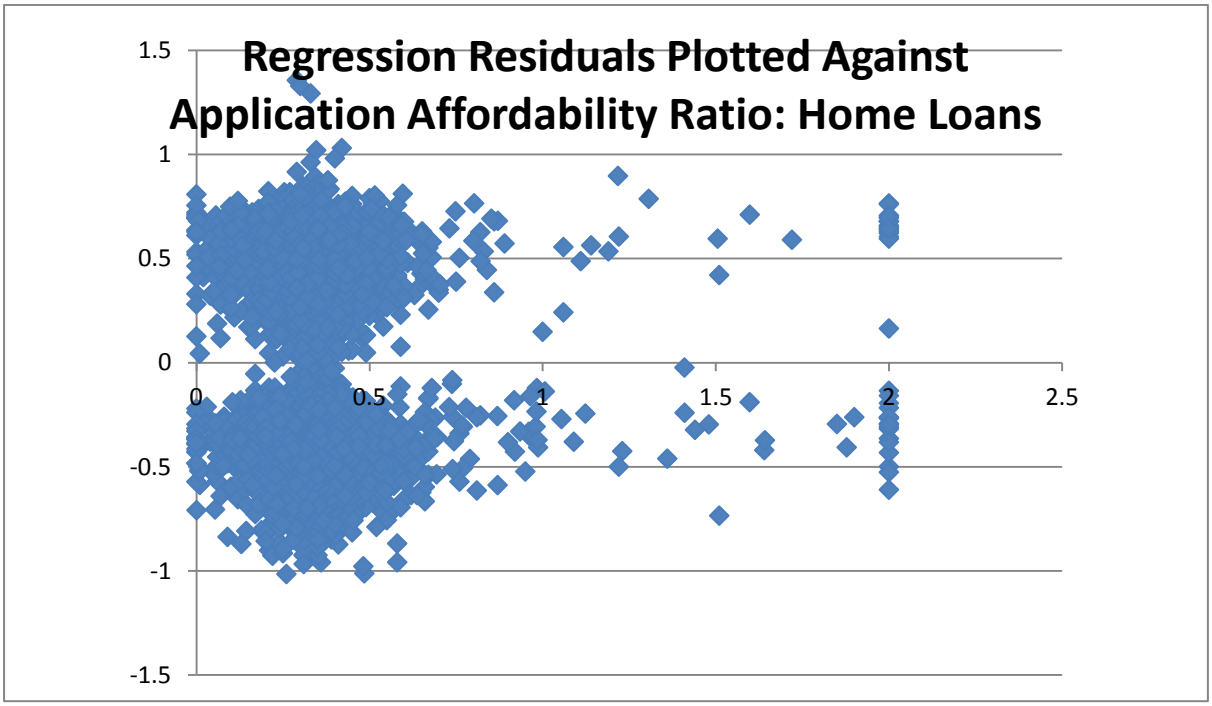

Regression Residuals Plotted Against Application Affordability Ratio: Home Loans
1.5
1
0.5
0
-0.5
-1
-1.5
0
0.5
1
1.5
2
2.5

**Figure A.1.7**

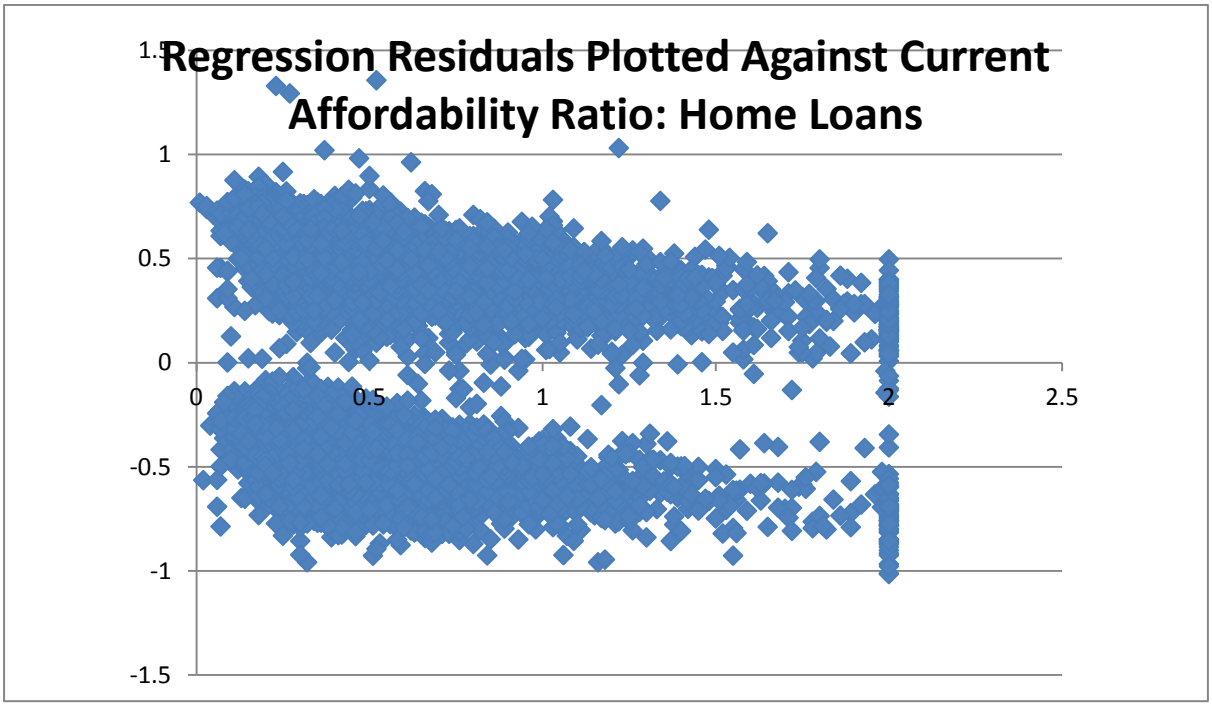

Regression Residuals Plotted Against Current Affordability Ratio: Home Loans
1.5
1
0.5
0
-0.5
-1
-1.5
0
0.5
1
1.5
2
2.5

**Figure A.1.8**

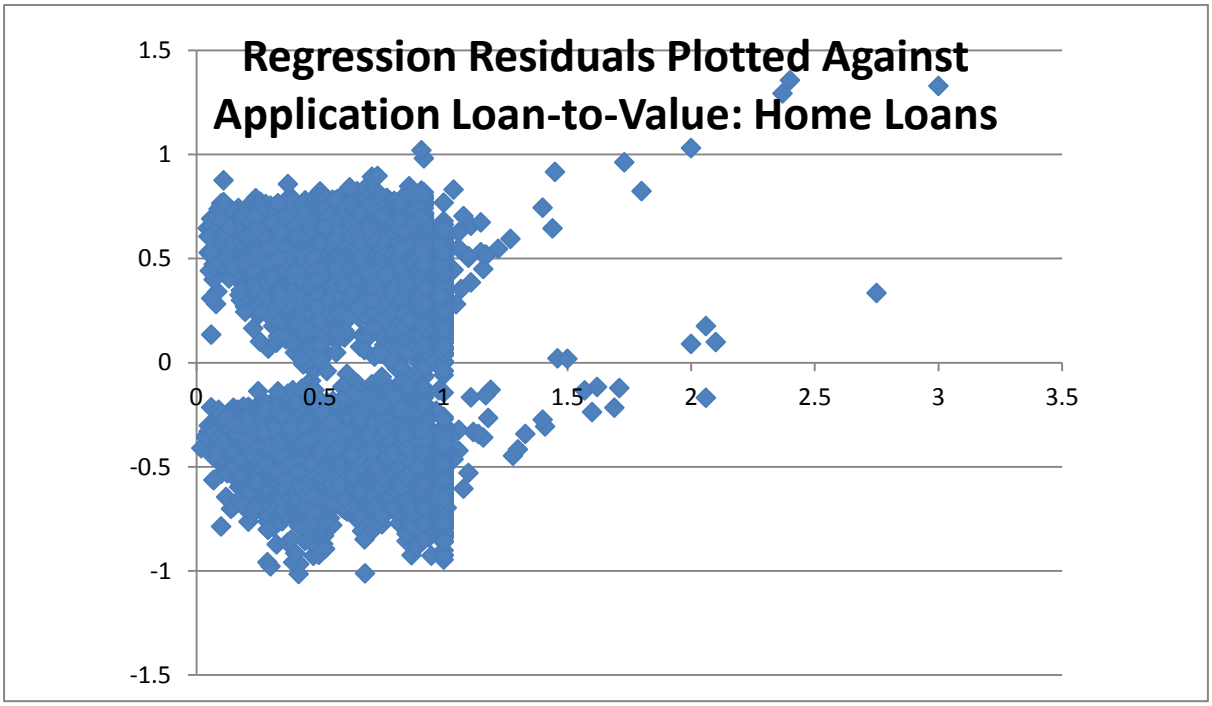

Regression Residuals Plotted Against Application Loan-to-Value: Home Loans
1.5
1
0.5
0
-0.5
-1
-1.5
0
0.5
1
1.5
2
2.5
3
3.5

**Figure A.1.9**

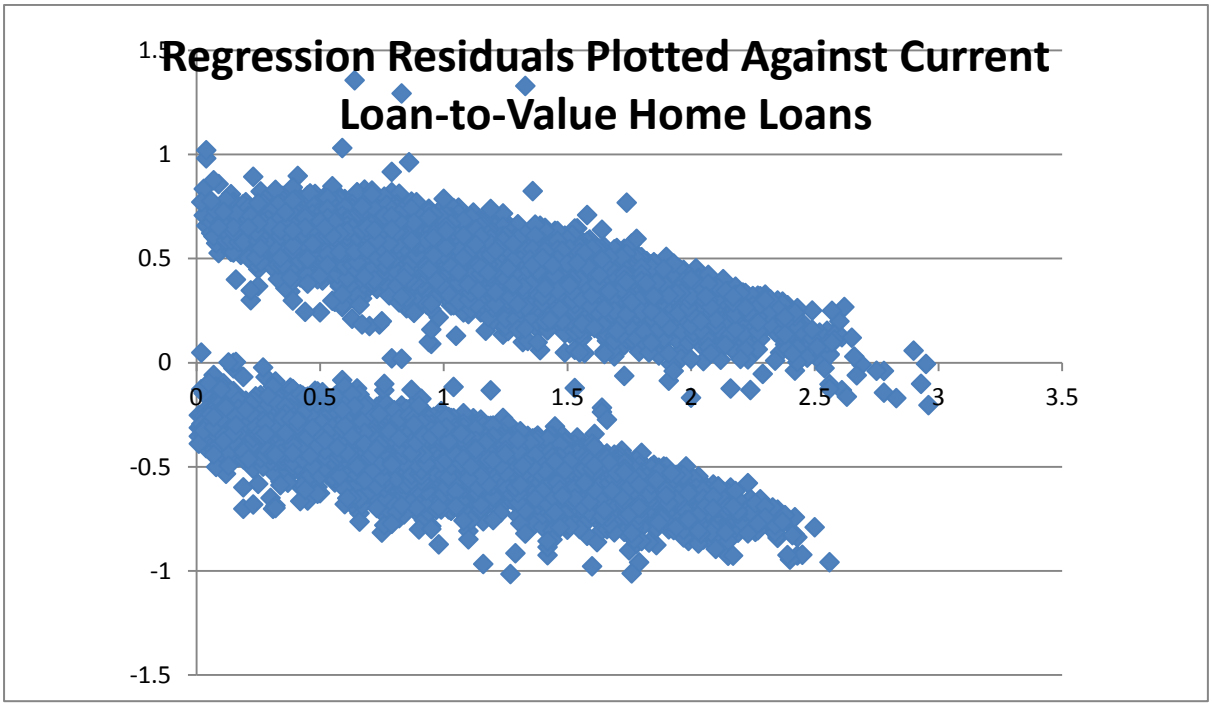

Regression Residuals Plotted Against Current Loan-to-Value Home Loans
1.5
1
0.5
0
-0.5
-1
-1.5
0
0.5
1
1.5
2
2.5
3
3.5

**Figure A.1.10**

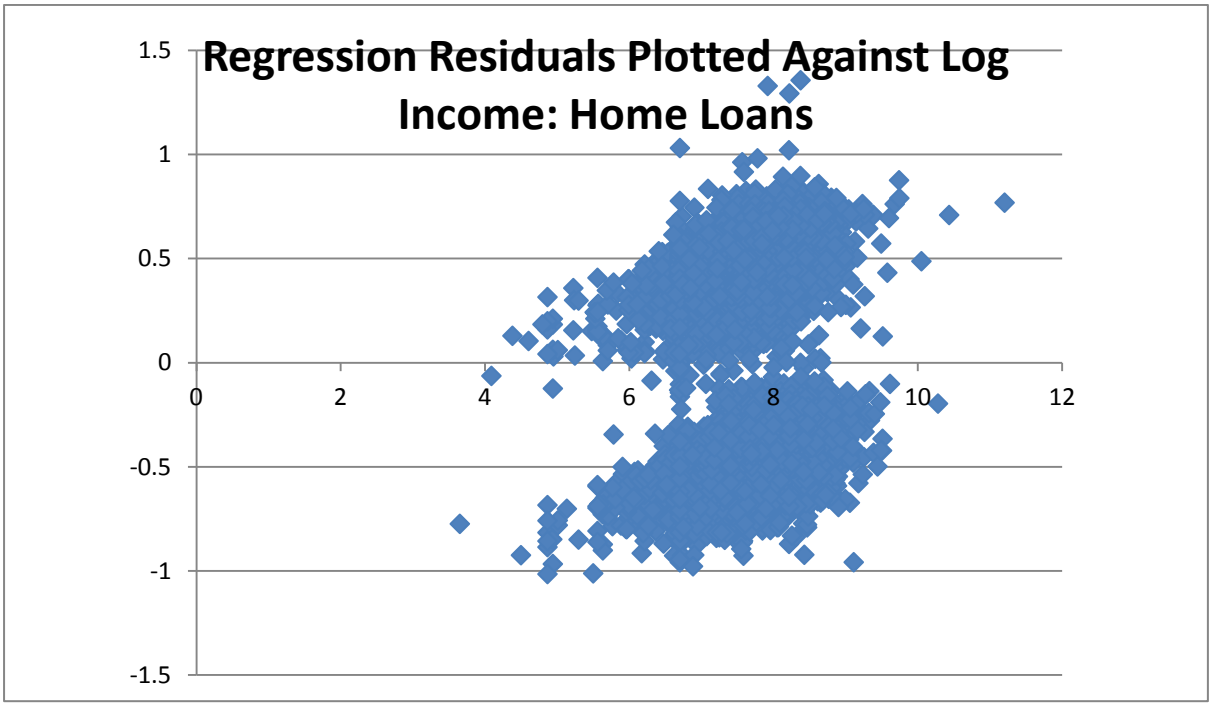

Regression Residuals Plotted Against Log Income: Home Loans
1.5
1
0.5
0
-0.5
-1
-1.5
0
2
4
6
8
10
12

**Figure A.1.11**

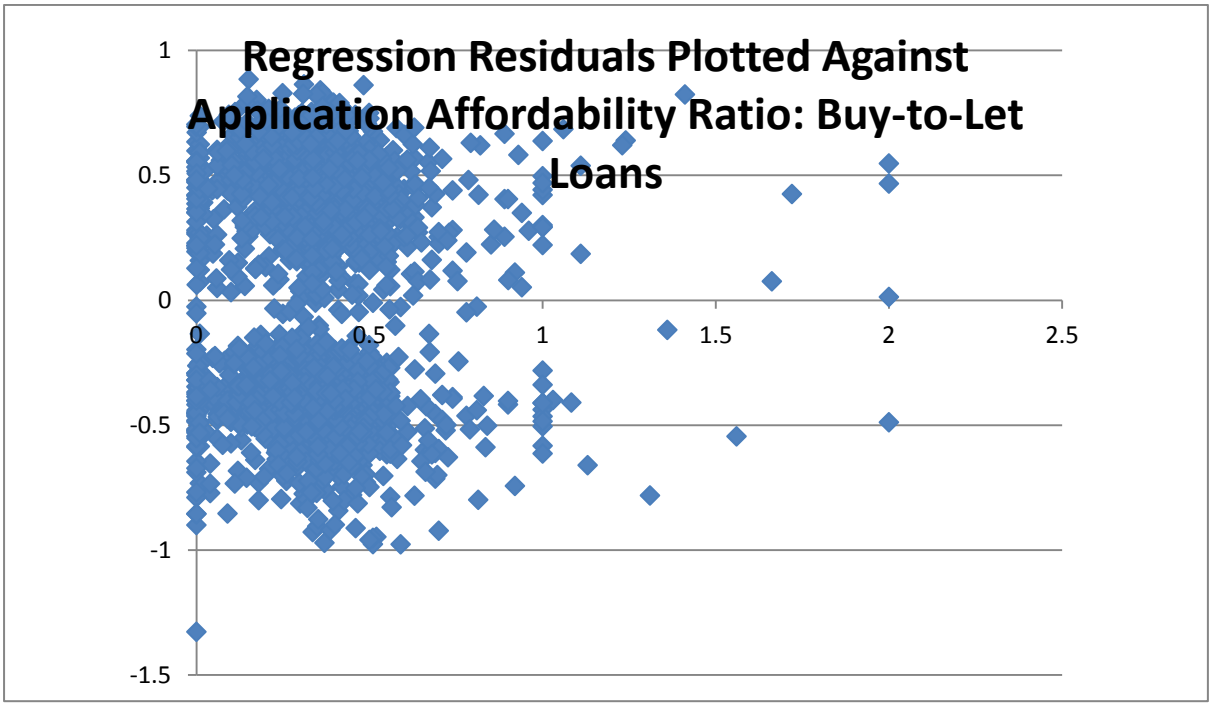

Regression Residuals Plotted Against Application Affordability Ratio: Buy-to-Let Loans
1
0.5
0
-0.5
-1
-1.5
0
0.5
1
1.5
2
2.5

**Figure A.1.12**

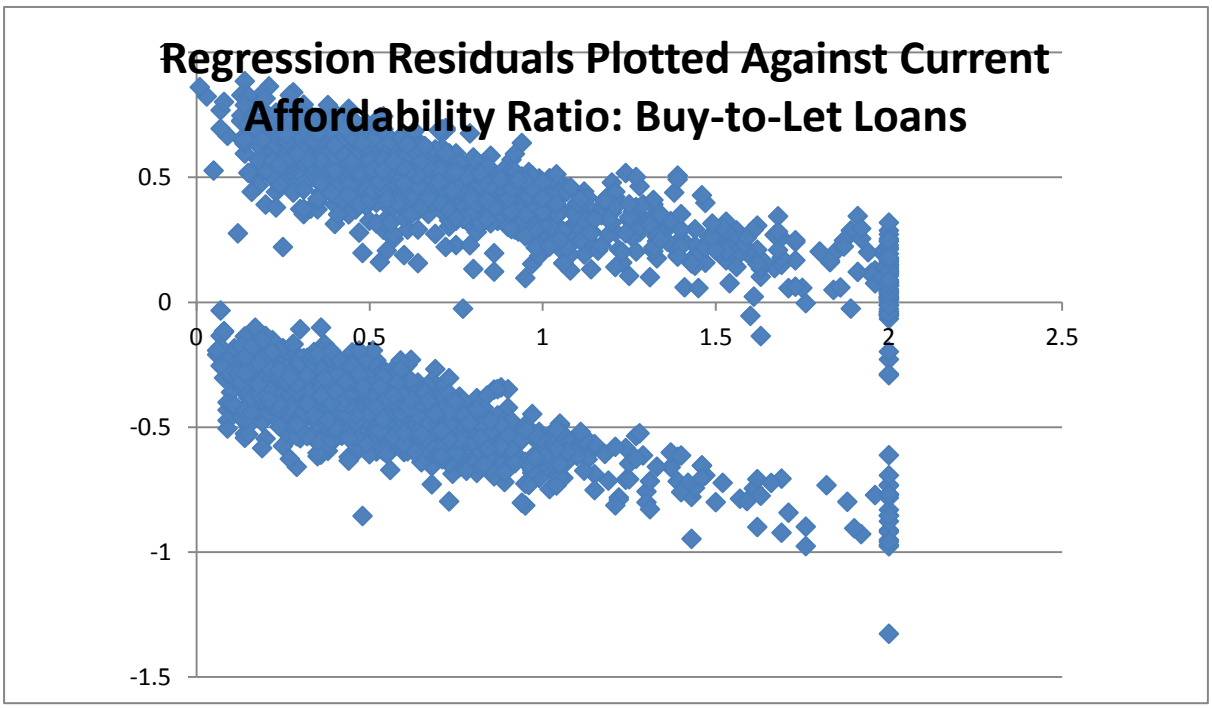

Regression Residuals Plotted Against Current Affordability Ratio: Buy-to-Let Loans
0.5
0
-0.5
-1
-1.5
0
0.5
1
1.5
2
2.5

**Figure A.1.13**

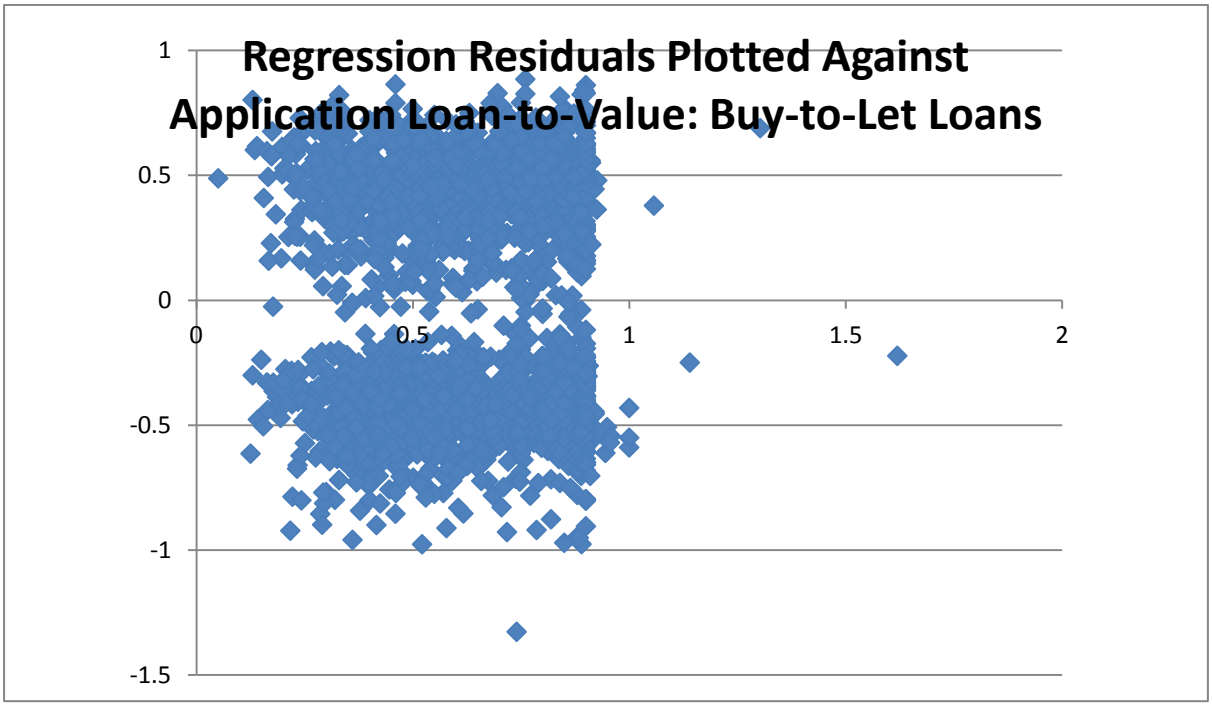

Regression Residuals Plotted Against Application Loan-to-Value: Buy-to-Let Loans
1
0.5
0
-0.5
-1
-1.5
0
0.5
1
1.5
2

**Figure A.1.14**

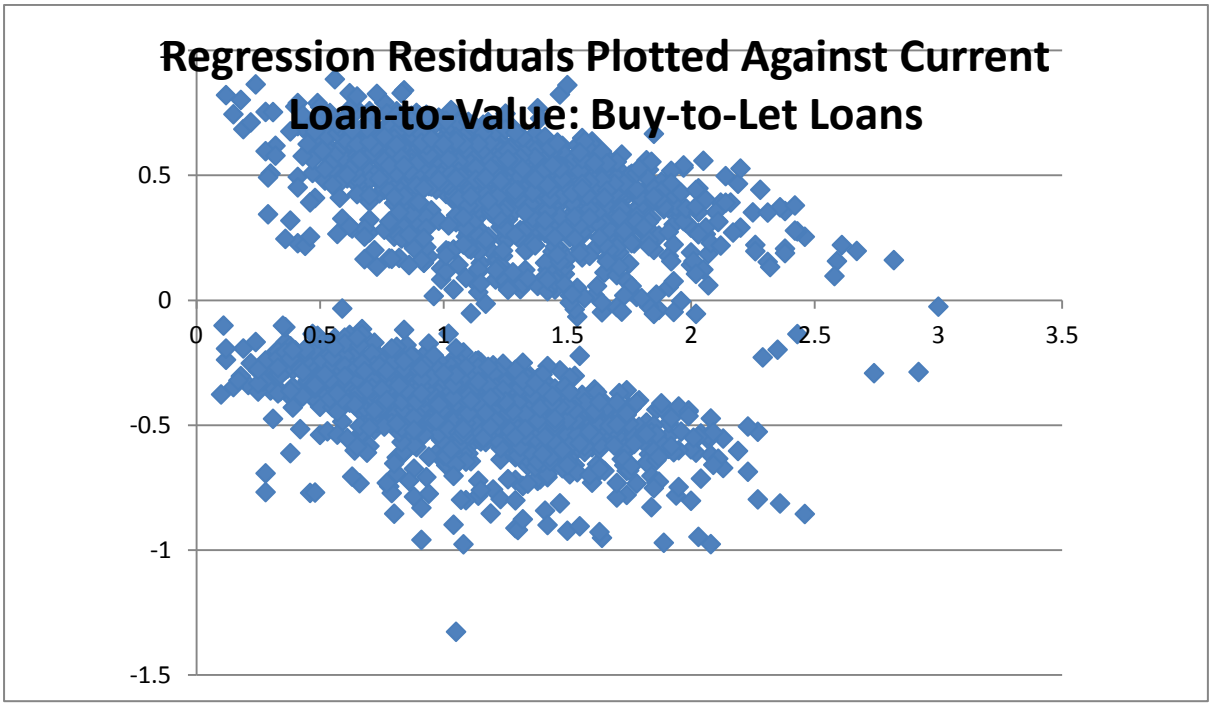
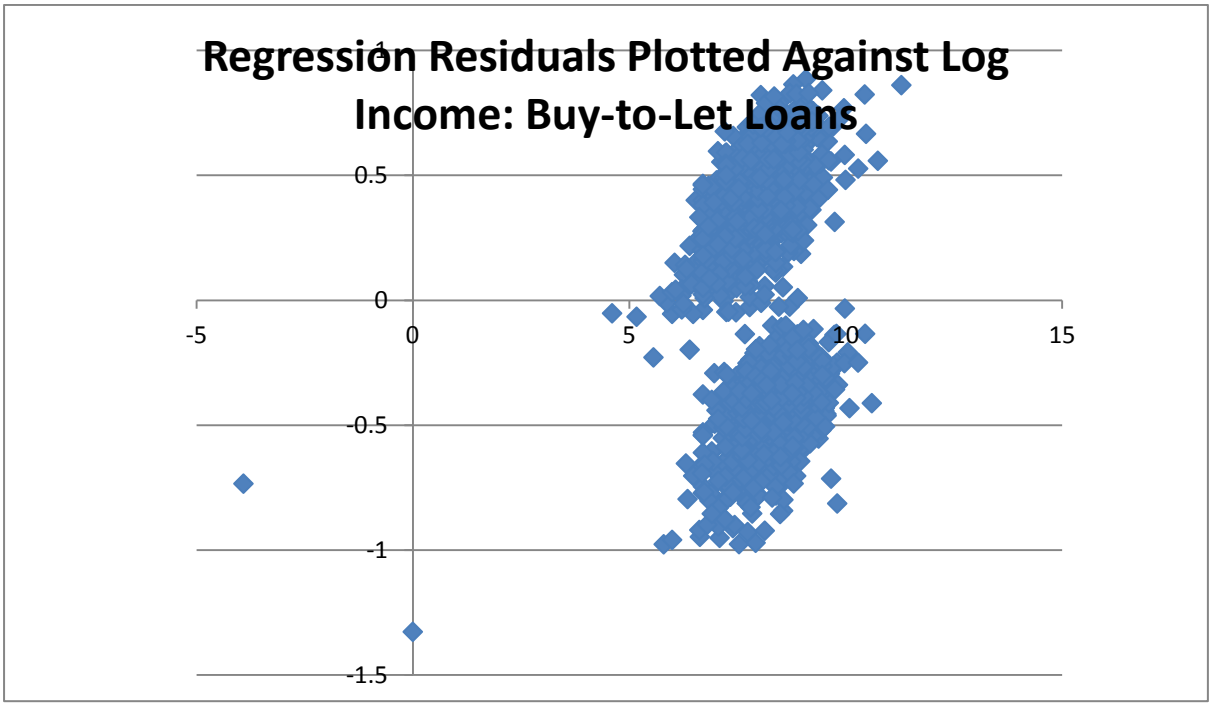

Regression Residuals Plotted Against Current Loan-to-Value: Buy-to-Let Loans
0.5
0
-0.5
-1
-1.5
0
0.5
1
1.5
2
2.5
3
3.5

**Figure A.1.15**


Regression Residuals Plotted Against Log Income: Buy-to-Let Loans
0.5
0
-0.5
-1
-1.5
-5
0
5
10
15

**2. Ancillary Tables**

This section presents some extra tables which are mentioned in the paper but not of sufficient importance to include in the main paper.

## Table A.2.1: Default rates for loans doubly-sorted by loan-to-value, payment-to-income and net income: Home loans

### A.2.1.a: Default rates for loans sorted by loan-to-value and affordability

| | Low Payment-to-Income | Moderate Payment-to-Income | High Payment-to-Income |
|---|---|---|---|
| Low LTV | 43.70% | 39.44% | 45.77% |
| Moderate LTV | 42.70% | 44.57% | 56.97% |
| High LTV | 48.40% | 56.84% | 70.69% |

### A.2.1.b: Default rates for loans sorted by loan-to-value and net income

| | High Income | Moderate Income | Low Income |
|---|---|---|---|
| Low LTV | 32.70% | 40.11% | 48.63% |
| Moderate LTV | 38.67% | 46.83% | 55.69% |
| High LTV | 51.08% | 59.41% | 67.97% |

### A.2.1.c: Default rates for loans sorted by affordability and net income

| | High Income | Moderate Income | Low Income |
|---|---|---|---|
| Low Payment-to-Income | 39.37% | 43.08% | 45.69% |
| Moderate Payment-to-Income | 45.28% | 47.43% | 59.59% |
| High Payment-to-Income | 58.59% | 48.32% | 59.66% |

## Table A.2.2: Default rates for loans doubly-sorted by loan-to-value, payment-to-income and net income: Buy-to-let loans

### A.2.2.a: Default rates for loans sorted by loan-to-value and affordability

| | Low Payment-to-Income | Moderate Payment-to-Income | High Payment-to-Income |
|---|---|---|---|
| Low LTV | 33.78% | 31.21% | 47.89% |
| Moderate LTV | 27.95% | 37.50% | 58.35% |
| High LTV | 39.10% | 51.53% | 70.04% |

### A.2.2.b: Default rates for loans sorted by loan-to-value and net income

| | High Income | Moderate Income | Low Income |
|---|---|---|---|
| Low LTV | 27.49% | 43.90% | 57.14% |
| Moderate LTV | 40.29% | 53.44% | 69.85% |
| High LTV | 52.15% | 64.78% | 85.00% |

### A.2.2.c: Default rates for loans sorted by affordability and net income

| | High Income | Moderate Income | Low Income |
|---|---|---|---|
| Low Payment-to-Income | 31.44% | 38.29% | 53.08% |
| Moderate Payment-to-Income | 36.07% | 43.94% | 62.06% |
| High Payment-to-Income | 50.00% | 51.85% | 73.86% |

## Table A.2.3: Partially-linear Index Probit Model of Default with Four Explanatory Variables

| | Full Sample | | Home Loans | | Buy-to-Let Loans | |
|---|---|---|---|---|---|---|
| Variable | Estimated Coefficient with Standard Probit | Estimated Coefficient with Partially Linear Index Probit | Estimated Coefficient with Standard Probit | Estimated Coefficient with Partially Linear Index Probit | Estimated Coefficient with Standard Probit | Estimated Coefficient with Partially Linear Index Probit |
| App LTV | -0.394 | -0.471 | -0.383 | -0.466 | -0.425 | -0.434 |
| Affordability | 0.227 | 0.227 | 0.093 | 0.086 | 0.491 | 0.497 |
| LTV | 0.452 | Nonparametric | 0.458 | Nonparametric | 0.483 | Nonparametric |
| Log Income | -0.237 | -0.241 | -0.275 | -0.283 | -0.210 | -0.217 |
| Constant | 1.484 | N/A | 1.825 | N/A | 1.089 | N/A |

**3. Successful Workouts and Cures**

In many jurisdictions, a "cure" rate analysis is critically important. However, this type of analysis is not very relevant / informative in the Irish case over our sample time period. During our sample period, the Irish system of mortgage workout was in near paralysis rather than having any dynamic process of cure or repossession following default. For example, in our sample, computing a cure as a loan that was in default on SFS date and performing at the sample end (August 2013) would leave us with an extremely small sample. Figure A.3.1 shows the proportion of loans in default on SFS date that resulted in cures. Figure A.3.2 shows the cumulative number of cures post-SFS date. The number of cures achieved from the early SFS submissions is extremely small; the number increases rapidly, but still leaves us with only 504 cures. Furthermore, caution must be exercised in interpreting these workouts as true "cures" because some of them might be single payments or a small number of payments during the negotiation process followed by a quick relapse into the 'default' category. Though they satisfy our definition of a cure at the sample end, we have no evidence (for or against) that these loans continued to perform.

We do not have any information on repossessions for our sample of loans, though we know from informal discussions with the data providers that it is very low. In the table below we rely on data from the Central Bank of Ireland to depict the trend in repossessions across all Irish mortgage providers, including but not restricted to our data provider. Figure A.3.3 shows the number of repossessions as a proportion of all residential mortgages that are in default (accumulated arrears greater than 90 days worth of payments). The repossession rate is very low, always less than 1.5% and actually declines over time, i.e. the number of mortgages in default grows more quickly than the number of repossessions, so that the rate falls rather than increases over time. For these reasons, we do not undertake "cure" analysis in the paper.

**Figure A.3.1**

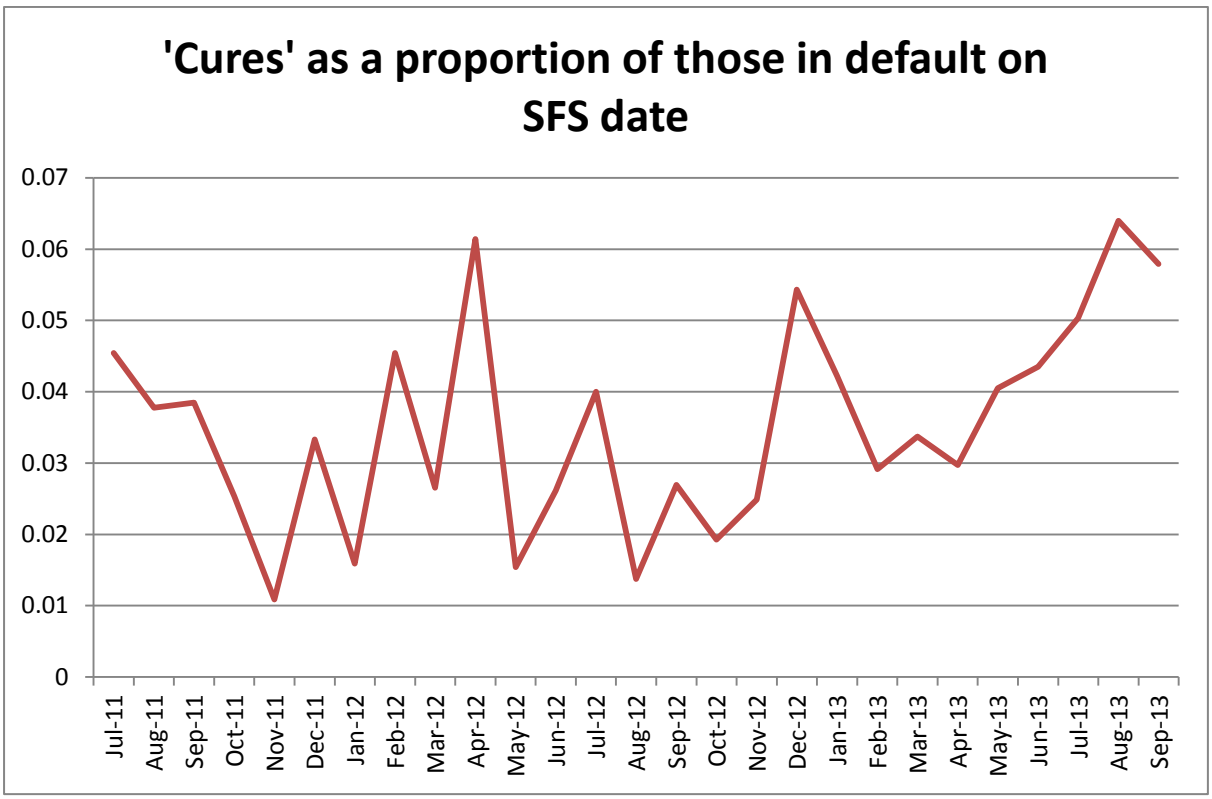

'Cures' as a proportion of those in default on SFS date
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
Jul-11
Aug-11
Sep-11
Oct-11
Nov-11
Dec-11
Jan-12
Feb-12
Mar-12
Apr-12
May-12
Jun-12
Jul-12
Aug-12
Sep-12
Oct-12
Nov-12
Dec-12
Jan-13
Feb-13
Mar-13
Apr-13
May-13
Jun-13
Jul-13
Aug-13
Sep-13

**Figure A.3.2**

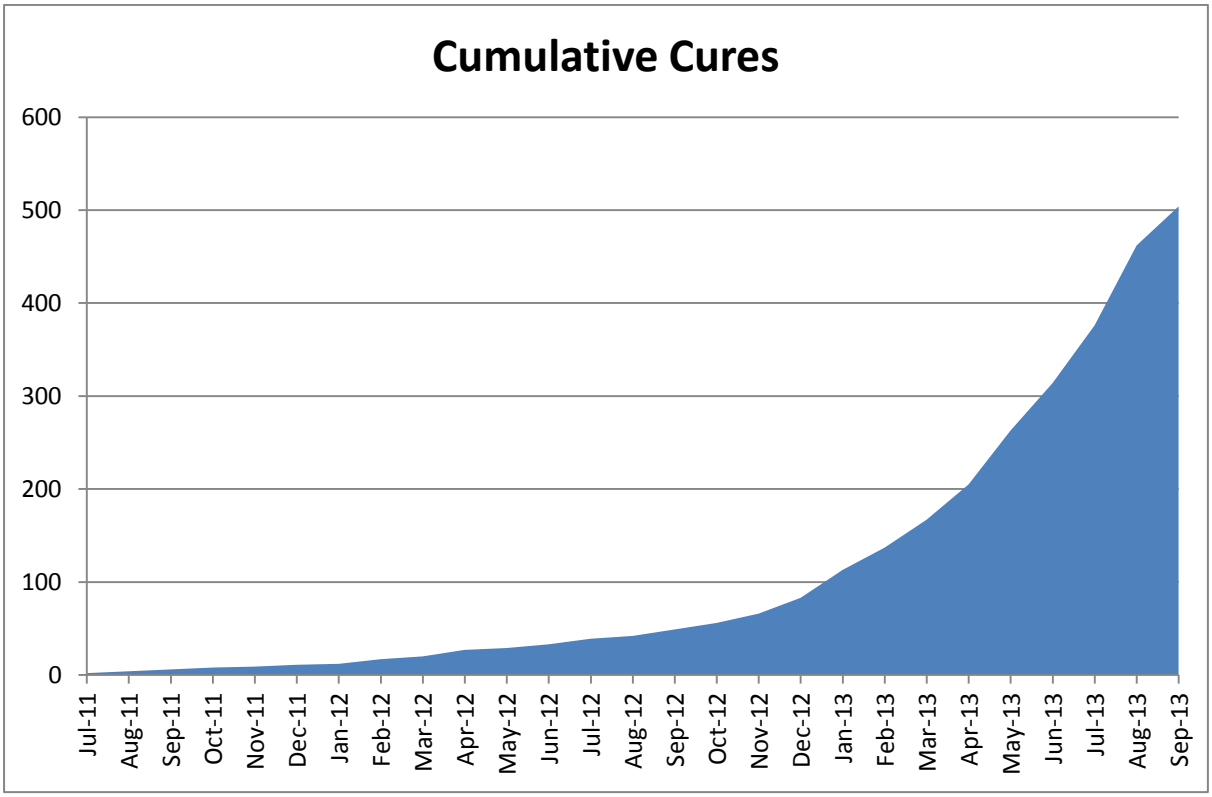
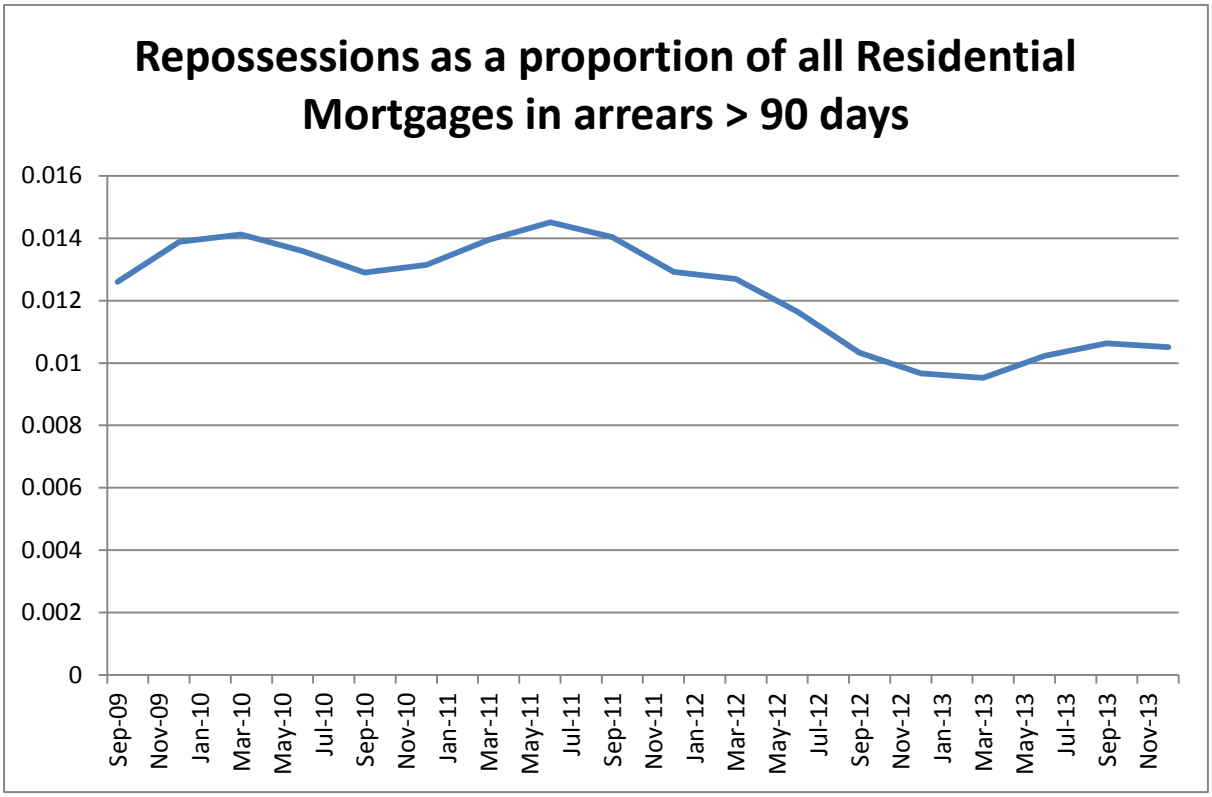

Cumulative Cures
600
500
400
300
200
100
0
Jul-11
Aug-11
Sep-11
Oct-11
Nov-11
Dec-11
Jan-12
Feb-12
Mar-12
Apr-12
May-12
Jun-12
Jul-12
Aug-12
Sep-12
Oct-12
Nov-12
Dec-12
Jan-13
Feb-13
Mar-13
Apr-13
May-13
Jun-13
Jul-13
Aug-13
Sep-13

**Figure A.3.3**


Repossessions as a proportion of all Residential Mortgages in arrears > 90 days
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
Sep-09
Nov-09
Jan-10
Mar-10
May-10
Jul-10
Sep-10
Nov-10
Jan-11
Mar-11
May-11
Jul-11
Sep-11
Nov-11
Jan-12
Mar-12
May-12
Jul-12
Sep-12
Nov-12
Jan-13
Mar-13
May-13
Jul-13
Sep-13
Nov-13

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