sum

 Variable | Obs Mean Std. Dev. Min Max

-------------+--------------------------------------------------------

 nim | 719 .0501693 .0242371 -.0500663 .1983077

 ggdp | 719 12.87094 2.499148 9.05065 16.12733

 cr3 | 719 .3819866 .0074576 .3685651 .3942465

-------------+--------------------------------------------------------

 liq | 719 .1231531 .0900482 .0051916 .9397786

 npl | 719 1.423203 6.891922 0 181

 size | 719 16.02517 1.729252 11.41425 20.55603

 car | 719 30.94254 114.8789 0 2529.42

 credit | 719 2.53e+07 6.38e+07 1229 5.58e+08

-------------+--------------------------------------------------------

 id | 719 52.0153 29.78659 1 103

 npl\_winsor | 719 1.086593 1.064018 0 3.87

 car\_winsor | 719 23.47719 13.39793 12.13 63.79

. corr nim l.credit liq npl\_winsor car\_winsor size cr3 ggdp

(obs=616)

 | L.

 | nim credit liq npl\_wi~r car\_wi~r size cr3 ggdp

-------------+------------------------------------------------------------------------

 nim | 1.0000

 credit |

 L1. | -0.0023 1.0000

 liq | -0.1591 0.1034 1.0000

 npl\_winsor | -0.0126 -0.0681 -0.0280 1.0000

 car\_winsor | -0.1700 -0.1437 0.1138 -0.2102 1.0000

 size | -0.0796 0.6489 0.0897 0.0187 -0.3812 1.0000

 cr3 | -0.0187 0.0154 0.0523 0.1449 0.0317 0.0060 1.0000

 ggdp | 0.0719 -0.1132 -0.0879 -0.0752 -0.0131 -0.1480 -0.0313 1.0000

. reg nim l.credit liq npl\_winsor car\_winsor size cr3 ggdp, r

Linear regression Number of obs = 616

 F( 6, 608) = .

 Prob > F = .

 R-squared = 0.0818

 Root MSE = .02363

------------------------------------------------------------------------------

 | Robust

 nim | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

 credit |

 L1. | 5.56e-11 1.33e-11 4.17 0.000 2.94e-11 8.18e-11

 |

 liq | -.0395264 .0132005 -2.99 0.003 -.0654504 -.0136023

 npl\_winsor | -.0011915 .0009726 -1.23 0.221 -.0031016 .0007186

 car\_winsor | -.0004541 .0000667 -6.81 0.000 -.0005851 -.000323

 size | -.0034259 .0006795 -5.04 0.000 -.0047603 -.0020915

 cr3 | .0124607 .159064 0.08 0.938 -.2999209 .3248423

 ggdp | .0003074 .0003463 0.89 0.375 -.0003726 .0009874

 \_cons | .1110259 .0608542 1.82 0.069 -.008484 .2305358

------------------------------------------------------------------------------

. eststo ols

. xtreg nim l.credit liq npl\_winsor car\_winsor size cr3 ggdp, fe r

Fixed-effects (within) regression Number of obs = 616

Group variable: id Number of groups = 103

R-sq: within = 0.0634 Obs per group: min = 5

 between = 0.0064 avg = 6.0

 overall = 0.0096 max = 6

 F(6,102) = .

corr(u\_i, Xb) = -0.4452 Prob > F = .

 (Std. Err. adjusted for 103 clusters in id)

------------------------------------------------------------------------------

 | Robust

 nim | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

 credit |

 L1. | 3.92e-11 2.45e-11 1.60 0.113 -9.40e-12 8.78e-11

 |

 liq | .0096459 .008597 1.12 0.264 -.0074062 .026698

 npl\_winsor | .0004615 .0006164 0.75 0.456 -.0007611 .0016841

 car\_winsor | -.0001 .0000839 -1.19 0.236 -.0002665 .0000664

 size | -.008676 .0024981 -3.47 0.001 -.0136309 -.0037211

 cr3 | -.0812189 .0959479 -0.85 0.399 -.271531 .1090932

 ggdp | -.0000518 .0002993 -0.17 0.863 -.0006455 .0005419

 \_cons | .2209025 .0437915 5.04 0.000 .1340424 .3077627

-------------+----------------------------------------------------------------

 sigma\_u | .02377579

 sigma\_e | .01326364

 rho | .76265343 (fraction of variance due to u\_i)

------------------------------------------------------------------------------

. eststo fe

. xtreg nim l.credit liq npl\_winsor car\_winsor size cr3 ggdp, re r

Random-effects GLS regression Number of obs = 616

Group variable: id Number of groups = 103

R-sq: within = 0.0501 Obs per group: min = 5

 between = 0.0239 avg = 6.0

 overall = 0.0285 max = 6

 Wald chi2(6) = .

corr(u\_i, X) = 0 (assumed) Prob > chi2 = .

 (Std. Err. adjusted for 103 clusters in id)

------------------------------------------------------------------------------

 | Robust

 nim | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

 credit |

 L1. | 5.74e-11 1.68e-11 3.42 0.001 2.46e-11 9.02e-11

 |

 liq | .0041584 .0083172 0.50 0.617 -.012143 .0204599

 npl\_winsor | .0003805 .0006144 0.62 0.536 -.0008237 .0015847

 car\_winsor | -.0001638 .0000818 -2.00 0.045 -.000324 -3.53e-06

 size | -.004572 .0011769 -3.88 0.000 -.0068788 -.0022653

 cr3 | -.0744444 .0944139 -0.79 0.430 -.2594923 .1106035

 ggdp | .0003613 .0002518 1.43 0.151 -.0001322 .0008549

 \_cons | .1486023 .0355904 4.18 0.000 .0788465 .2183581

-------------+----------------------------------------------------------------

 sigma\_u | .01944883

 sigma\_e | .01326364

 rho | .68255112 (fraction of variance due to u\_i)

------------------------------------------------------------------------------

. eststo re

. xtabond2 nim L.nim l.credit liq npl\_winsor car\_winsor size cr3 ggdp, gmm(L.nim, collapse) iv( l.credit liq npl\_winsor car\_winsor si

> ze cr3 ggdp) twostep robust orthogonal small

Favoring space over speed. To switch, type or click on mata: mata set matafavor speed, perm.

Warning: Two-step estimated covariance matrix of moments is singular.

 Using a generalized inverse to calculate optimal weighting matrix for two-step estimation.

 Difference-in-Sargan/Hansen statistics may be negative.

Dynamic panel-data estimation, two-step system GMM

------------------------------------------------------------------------------

Group variable: id Number of obs = 616

Time variable : year Number of groups = 103

Number of instruments = 14 Obs per group: min = 5

F(8, 102) = 480.07 avg = 5.98

Prob > F = 0.000 max = 6

------------------------------------------------------------------------------

 | Corrected

 nim | Coef. Std. Err. t P>|t| [95% Conf. Interval]

-------------+----------------------------------------------------------------

 nim |

 L1. | .4406053 .1140903 3.86 0.000 .2143078 .6669028

 |

 credit |

 L1. | 3.35e-11 1.17e-11 2.87 0.005 1.03e-11 5.68e-11

 |

 liq | -.0101854 .0068681 -1.48 0.141 -.0238082 .0034374

 npl\_winsor | .0002804 .0005798 0.48 0.630 -.0008695 .0014304

 car\_winsor | -.0002313 .0000618 -3.75 0.000 -.0003539 -.0001088

 size | -.0019536 .0007876 -2.48 0.015 -.0035158 -.0003914

 cr3 | -.0924549 .0685065 -1.35 0.180 -.2283372 .0434274

 ggdp | 5.37e-06 .0001293 0.04 0.967 -.0002512 .0002619

 \_cons | .0992038 .0292893 3.39 0.001 .0411087 .157299

------------------------------------------------------------------------------

Instruments for orthogonal deviations equation

 Standard

 FOD.(L.credit liq npl\_winsor car\_winsor size cr3 ggdp)

 GMM-type (missing=0, separate instruments for each period unless collapsed)

 L(1/6).L.nim collapsed

Instruments for levels equation

 Standard

 L.credit liq npl\_winsor car\_winsor size cr3 ggdp

 \_cons

 GMM-type (missing=0, separate instruments for each period unless collapsed)

 D.L.nim collapsed

------------------------------------------------------------------------------

Arellano-Bond test for AR(1) in first differences: z = -2.49 Pr > z = 0.013

Arellano-Bond test for AR(2) in first differences: z = -1.53 Pr > z = 0.126

------------------------------------------------------------------------------

Sargan test of overid. restrictions: chi2(5) = 13.98 Prob > chi2 = 0.016

 (Not robust, but not weakened by many instruments.)

Hansen test of overid. restrictions: chi2(5) = 6.34 Prob > chi2 = 0.275

 (Robust, but weakened by many instruments.)

Difference-in-Hansen tests of exogeneity of instrument subsets:

 GMM instruments for levels

 Hansen test excluding group: chi2(4) = 5.58 Prob > chi2 = 0.233

 Difference (null H = exogenous): chi2(1) = 0.76 Prob > chi2 = 0.384

. eststo gmm

. esttab gmm ols re

------------------------------------------------------------

 (1) (2) (3)

 nim nim nim

------------------------------------------------------------

L.nim 0.441\*\*\*

 (3.86)

L.credit 3.35e-11\*\* 5.56e-11\*\*\* 5.74e-11\*\*\*

 (2.87) (4.17) (3.42)

liq -0.0102 -0.0395\*\* 0.00416

 (-1.48) (-2.99) (0.50)

npl\_winsor 0.000280 -0.00119 0.000380

 (0.48) (-1.23) (0.62)

car\_winsor -0.000231\*\*\* -0.000454\*\*\* -0.000164\*

 (-3.75) (-6.81) (-2.00)

size -0.00195\* -0.00343\*\*\* -0.00457\*\*\*

 (-2.48) (-5.04) (-3.88)

cr3 -0.0925 0.0125 -0.0744

 (-1.35) (0.08) (-0.79)

ggdp 0.00000537 0.000307 0.000361

 (0.04) (0.89) (1.43)

\_cons 0.0992\*\* 0.111 0.149\*\*\*

 (3.39) (1.82) (4.18)

------------------------------------------------------------

N 616 616 616

------------------------------------------------------------

t statistics in parentheses

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

. esttab gmm ols re, compress

-------------------------------------------------

 (1) (2) (3)

 nim nim nim

-------------------------------------------------

L.nim 0.441\*\*\*

 (3.86)

L.credit 3.35e-11\*\* 5.56e-11\*\*\* 5.74e-11\*\*\*

 (2.87) (4.17) (3.42)

liq -0.0102 -0.0395\*\* 0.00416

 (-1.48) (-2.99) (0.50)

npl\_winsor 0.000280 -0.00119 0.000380

 (0.48) (-1.23) (0.62)

car\_winsor -0.000231\*\*\* -0.000454\*\*\* -0.000164\*

 (-3.75) (-6.81) (-2.00)

size -0.00195\* -0.00343\*\*\* -0.00457\*\*\*

 (-2.48) (-5.04) (-3.88)

cr3 -0.0925 0.0125 -0.0744

 (-1.35) (0.08) (-0.79)

ggdp 0.00000537 0.000307 0.000361

 (0.04) (0.89) (1.43)

\_cons 0.0992\*\* 0.111 0.149\*\*\*

 (3.39) (1.82) (4.18)

-------------------------------------------------

N 616 616 616

-------------------------------------------------

t statistics in parentheses

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

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end of do-file

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