

## Online Appendix

to

### BANKING INSTABILITY AND DEPOSIT INSURANCE: THE ROLE OF MORAL HAZARD

**HAROLD NGALAWA\***

*University of KwaZulu-Natal*

**FULBERT TCHANA TCHANA**

*The World Bank*

**NICOLA VIEGI**

*University of Pretoria*

Submitted March 2013; accepted February 2016

This appendix presents tables of additional estimation results and robustness checks. Table A1 is a pairwise correlation matrix of all variables used in the study. We also report how our measured insolvency, narrowly and broadly defined, compares with major bank insolvencies identified by Caprio and Klingebiel (1997) in selected countries (see Table A2). While the paper presents estimation results of broad measures of banking instability (*bbrun* and *binsolv*), we also carried out estimations using narrow measures of banking instability (*nbrun* and *ninsolv*) and the results are similar. These are presented in Tables A3.1 to A3.6. We also present full results of “banking instability and deposit insurance coverage,” “banking instability and deposit insurance legal environment,” and “banking instability and the administration of deposit insurance” in Tables A4.1 to A4.3. Furthermore, we carried out robustness checks using dummy variables based on the Caprio et al. classification of systemic financial crises driven by bank runs and insolvency. Specifically, we used as a dependent variable the systemic banking crisis variable developed by Luc Laeven and Fabian Valencia (2012)<sup>1</sup> (see Tables A5.1 to A5.4). An additional robustness check involved a wide search of feasible instruments for deposit insurance and deposit insurance coverage. Unfortunately the search of a good instrument was largely unsuccessful as it is difficult to find a homogeneous exogenous institutional determinant of deposit insurance and insurance coverage. We experimented with difference measures of institutional quality, from the World Bank Worldwide Governance Indicators, and updated 2012 World Bank measures of political institutions discussed in Thorsten Beck, George Clarke, Alberto Groff, Philip Keefer, and Patrick Walsh (2001) – “New tools in comparative political economy: The Database of Political Institutions.” The reasoning is that deposit insurance and its coverage are related to the sensitivity of political institutions to savers’ need of protection against a financial crisis. In Table A6, we report the instrumental variable regression where the variable is our measure of the generosity of deposit insurance, *guarantee*. In the three models we report the instruments for the extent of the deposit insurance coverage that are related to the nature of political relationship in the countries. The variable *maj* measures the extent of the majority of the ruling party; the variable *checks* indicates the presence of check and balances in the political system; and the variable *polariz* indicates the level of polarization in the political system. Finally, Table A7 presents the baseline model, which is re-estimated with lagged valued of deposit insurance to control for endogeneity as a robustness check.

---

\* Harold Ngalawa (corresponding author): School of Accounting, Economics & Finance, University of KwaZulu-Natal, South Africa. Fulbert Tchana Tchana: The World Bank. Nicola Viegi: Department of Economics, University of Pretoria, South Africa.

<sup>1</sup> Laeven, Luc and Valencia, Fabiàn, Systemic Banking Crises Database: An Update (June 2012). IMF Working Paper No. 12/163.

Table A1: Pairwise correlation coefficients between variables

|            | binsolv | Bbrun  | infltn | gdppc  | Incomgrp | m2fxres | Rir     | Gdpgr  | Crgdp  | xrdepr | Creditgr | Dinsur | guarantee | fxcoverd | intbank | interven | Leglcancel | leglmgr | admin  | coinsur | funding | rskadj | membership | sourcefnd |
|------------|---------|--------|--------|--------|----------|---------|---------|--------|--------|--------|----------|--------|-----------|----------|---------|----------|------------|---------|--------|---------|---------|--------|------------|-----------|
| binsolv    | 1       |        |        |        |          |         |         |        |        |        |          |        |           |          |         |          |            |         |        |         |         |        |            |           |
| bbrun      | 0.349   | 1      |        |        |          |         |         |        |        |        |          |        |           |          |         |          |            |         |        |         |         |        |            |           |
| infltn     | 0.028   | 0.031  | 1      |        |          |         |         |        |        |        |          |        |           |          |         |          |            |         |        |         |         |        |            |           |
| gdppc      | -0.011  | -0.064 | -0.038 | 1      |          |         |         |        |        |        |          |        |           |          |         |          |            |         |        |         |         |        |            |           |
| incomgrp   | -0.004  | -0.070 | -0.054 | 0.781  | 1        |         |         |        |        |        |          |        |           |          |         |          |            |         |        |         |         |        |            |           |
| m2fxres    | -0.034  | 0.019  | 0.004  | -0.031 | -0.047   | 1       |         |        |        |        |          |        |           |          |         |          |            |         |        |         |         |        |            |           |
| rir        | -0.045  | -0.043 | 0.158  | 0.027  | 0.046    | -0.028  | 1       |        |        |        |          |        |           |          |         |          |            |         |        |         |         |        |            |           |
| gdpgr      | -0.110  | -0.142 | -0.088 | -0.033 | 0.005    | -0.037  | -0.0322 | 1      |        |        |          |        |           |          |         |          |            |         |        |         |         |        |            |           |
| crgdp      | 0.035   | -0.029 | -0.032 | 0.709  | 0.647    | -0.023  | 0.0473  | -0.013 | 1      |        |          |        |           |          |         |          |            |         |        |         |         |        |            |           |
| xrdepr     | -0.084  | -0.112 | -0.297 | 0.190  | 0.176    | -0.008  | -0.0244 | 0.153  | 0.208  | 1      |          |        |           |          |         |          |            |         |        |         |         |        |            |           |
| creditgr   | -0.140  | -0.077 | 0.039  | 0.012  | 0.019    | 0.011   | 0.0379  | 0.154  | 0.069  | 0.054  | 1        |        |           |          |         |          |            |         |        |         |         |        |            |           |
| dinsur     | 0.015   | -0.038 | -0.029 | 0.457  | 0.375    | -0.031  | 0.0172  | -0.008 | 0.351  | 0.078  | -0.014   | 1      |           |          |         |          |            |         |        |         |         |        |            |           |
| guarantee  | 0.065   | 0.010  | -0.083 | 0.207  | 0.199    | 0.035   | -0.0182 | -0.02  | 0.156  | 0.123  | -0.056   | 0.871  | 1         |          |         |          |            |         |        |         |         |        |            |           |
| fxcoverd   | 0.027   | -0.080 | 0.063  | -0.107 | 0.075    | -0.411  | -0.0149 | -0.019 | -0.235 | -0.120 | 0.007    | 0.183  | 0.237     | 1        |         |          |            |         |        |         |         |        |            |           |
| intbank    | 0.046   | 0.038  | -0.031 | -0.269 | -0.305   | 0.107   | -0.0444 | 0.005  | -0.137 | -0.025 | -0.036   | 0.071  | -0.016    | -0.062   | 1       |          |            |         |        |         |         |        |            |           |
| intervene  | 0.051   | -0.040 | -0.042 | -0.043 | 0.030    | 0.096   | 0.0209  | -0.071 | -0.059 | 0.061  | -0.015   | 0.041  | -0.123    | -0.025   | 0.402   | 1        |            |         |        |         |         |        |            |           |
| leglcancel | 0.095   | 0.011  | -0.071 | 0.035  | -0.050   | -0.013  | -0.0449 | 0.047  | -0.082 | 0.116  | 0.041    | 0.025  | -0.078    | -0.109   | 0.107   | 0.426    | 1          |         |        |         |         |        |            |           |
| leglmgr    | -0.078  | 0.013  | 0.102  | -0.257 | -0.141   | -0.171  | -0.0003 | -0.072 | -0.284 | -0.212 | -0.066   | 0.024  | 0.214     | 0.136    | 0.287   | 0.158    | -0.201     | 1       |        |         |         |        |            |           |
| admin      | 0.018   | 0.023  | 0.038  | 0.323  | 0.304    | -0.009  | 0.0418  | -0.168 | 0.214  | 0.048  | -0.070   | 0.069  | 0.144     | 0.072    | -0.175  | -0.070   | 0.112      | -0.093  | 1      |         |         |        |            |           |
| coinsure   | 0.005   | -0.034 | -0.036 | 0.235  | 0.277    | -0.024  | 0.0035  | 0.026  | 0.255  | 0.136  | 0.003    | 0.280  | 0.169     | 0.257    | -0.212  | -0.086   | -0.149     | 0.107   | -0.062 | 1       |         |        |            |           |
| funding    | -0.118  | 0.042  | 0.048  | -0.145 | -0.211   | 0.194   | -0.0261 | -0.002 | -0.203 | -0.118 | 0.025    | -0.042 | 0.044     | -0.273   | 0.106   | -0.033   | 0.110      | 0.109   | 0.028  | -0.246  | 1       |        |            |           |
| rskadj     | 0.030   | 0.004  | -0.005 | -0.027 | 0.136    | -0.181  | -0.0068 | -0.068 | -0.126 | -0.091 | -0.027   | 0.044  | 0.156     | 0.281    | -0.190  | 0.026    | -0.032     | 0.076   | 0.339  | -0.204  | -0.031  | 1      |            |           |
| membership | 0.019   | -0.012 | -0.213 | 0.021  | 0.079    | -0.005  | -0.044  | 0.034  | -0.025 | 0.207  | 0.002    | -0.057 | -0.217    | 0.156    | 0.158   | 0.117    | -0.146     | 0.198   | -0.246 | 0.170   | -0.147  | 0.157  | 1          |           |
| sourcefnd  | 0.091   | -0.010 | -0.095 | -0.377 | -0.334   | 0.131   | -0.0851 | 0.128  | -0.211 | -0.024 | 0.005    | 0.201  | 0.225     | 0.0378   | 0.228   | 0.208    | 0.037      | 0.030   | -0.227 | -0.144  | -0.076  | 0.144  | 0.145      | 1         |

**Table A2: Measured bank insolvency versus major bank insolvencies identified by Caprio and Klingebiel (1997) in selected countries**

|      | Mexico |    |    | Bolivia |    |    | Brazil |    |    | Chile |    |    | Central African Republic |    |    | Ghana |    |    | Kenya |    |    | Togo |    |    |
|------|--------|----|----|---------|----|----|--------|----|----|-------|----|----|--------------------------|----|----|-------|----|----|-------|----|----|------|----|----|
|      | ni     | bi | ck | ni      | bi | ck | ni     | bi | ck | ni    | Bi | ck | ni                       | bi | ck | ni    | bi | ck | ni    | bi | ck | ni   | bi | ck |
| 1980 |        |    |    |         |    |    |        |    |    |       |    |    |                          |    |    | X     | X  |    |       |    |    |      |    |    |
| 1981 |        |    | X  |         |    |    |        |    |    |       |    | X  |                          |    | X  |       |    |    |       |    |    |      |    |    |
| 1982 |        | X  | X  |         |    |    |        |    |    |       | X  | X  |                          | X  | X  | X     | X  | X  |       |    |    |      |    |    |
| 1983 |        |    |    |         |    |    |        |    |    |       |    | X  | X                        | X  | X  |       | X  | X  |       |    |    |      |    |    |
| 1984 |        |    |    | X       | X  |    |        |    |    |       |    |    |                          |    | X  |       |    | X  |       |    |    |      |    |    |
| 1985 |        |    |    |         |    |    |        |    |    |       |    |    |                          | X  | X  |       |    | X  |       |    | X  |      |    |    |
| 1986 |        | X  |    | X       | X  | X  |        |    |    |       |    |    |                          |    | X  |       |    | X  |       |    | X  |      | X  |    |
| 1987 | X      | X  |    |         |    | X  |        |    |    |       |    |    |                          |    |    |       |    | X  |       |    | X  |      | X  |    |
| 1988 |        |    |    |         |    |    |        |    |    |       | X  |    |                          |    |    |       | X  | X  |       |    | X  |      |    |    |
| 1989 |        |    |    |         |    |    |        | X  |    |       | X  |    |                          |    |    |       |    | X  |       |    | X  |      |    |    |
| 1990 |        |    | X  |         |    |    |        | X  | X  | X     | X  |    |                          |    | X  |       |    |    |       |    |    |      |    |    |
| 1991 |        |    | X  |         |    |    |        |    |    |       |    |    | X                        | X  | X  |       |    |    |       |    |    |      |    |    |
| 1992 |        |    |    |         |    |    |        |    |    |       |    |    | X                        | X  | X  |       |    |    | X     | X  | X  |      |    |    |
| 1993 |        |    |    |         |    |    |        |    |    |       |    |    |                          | X  | X  |       |    |    | X     | X  | X  | X    | X  | X  |
| 1994 | X      | X  |    |         |    |    |        |    | X  |       |    |    | X                        | X  | X  |       | X  |    |       |    | X  |      |    | X  |
| 1995 | X      | X  | X  |         |    |    |        |    | X  |       |    |    | X                        | X  | X  |       |    |    |       |    | X  |      |    | X  |
| 1996 |        |    |    |         |    |    |        |    |    |       |    |    |                          |    | X  |       |    |    |       |    |    | X    | X  |    |
| 1997 |        |    |    |         |    |    |        |    |    |       |    |    |                          |    |    |       |    |    |       |    |    |      |    | X  |
| 1998 |        |    |    |         |    |    |        |    |    |       |    |    |                          |    |    |       |    |    |       |    |    |      |    | X  |
| 1999 |        |    |    |         |    |    |        |    |    |       |    |    |                          |    |    |       |    |    |       |    |    |      |    | X  |
| 2000 |        |    |    |         |    |    |        |    |    |       |    |    |                          |    |    |       |    |    |       |    |    |      |    | X  |
| 2001 |        |    |    |         |    |    |        |    |    |       |    |    |                          |    |    |       |    |    |       |    |    |      |    | X  |
| 2002 |        |    |    |         |    |    |        |    |    |       |    |    |                          |    |    |       |    |    |       |    |    |      |    | X  |
| 2003 |        |    |    |         |    |    |        |    |    |       |    |    |                          |    |    |       |    |    |       |    |    |      |    | X  |
| 2004 |        |    |    |         |    |    |        |    |    |       |    |    |                          |    |    |       |    |    |       |    |    |      |    |    |

NOTE: ni: ninsolv;

bi: binsolv;

ck: Caprio and Klingebiel (1997)

**Table A3.1: Banking Instability and Deposit Insurance: Baseline Model**

| Variables          | (1)                    | (2)                    | (3)                     | (4)                    |
|--------------------|------------------------|------------------------|-------------------------|------------------------|
|                    | <i>nbrun</i>           | <i>nbrun</i>           | <i>nbrun</i>            | <i>nbrun</i>           |
| <i>gdpr</i>        | -0.0652*<br>(0.0145)   | -0.0638***<br>(0.0145) | -0.0639***<br>(0.0145)  | -0.0621***<br>(0.0146) |
| <i>rir</i>         | -0.0042<br>(0.0038)    | -0.0038<br>(0.0037)    | -0.0117**<br>(0.0055)   | -0.0032<br>(0.0037)    |
| <i>inflatn</i>     | -0.0001<br>(0.0002)    | -0.0001<br>(0.0002)    | -0.0002<br>(0.0002)     | -0.0001<br>(0.0002)    |
| <i>m2fxres</i>     | -0.00002<br>(0.00005)  | -0.00003<br>(0.00005)  | -0.00003<br>(0.00005)   | -0.00002<br>(0.00005)  |
| <i>crgdp</i>       | 0.0019<br>(0.0024)     | 0.0020<br>(0.0024)     | 0.0025<br>(0.0024)      | -0.0016<br>(0.0031)    |
| <i>xrdepr</i>      | -0.0121***<br>(0.0038) | -0.0127<br>(0.0038)    | -0.0110***<br>(0.0040)  | -0.0126***<br>(0.0038) |
| <i>gdppc</i>       | -2.35e-06<br>(0.00001) | -0.00003<br>(0.00002)  | -4.70E-06<br>(0.00001)  | -8.81e-06<br>(0.00001) |
| <i>dinsur</i>      | -0.1028<br>(0.1795)    | -0.3404<br>(0.2245)    | -0.0896<br>(0.1809)     | -0.4423*<br>(0.2555)   |
| <i>gdppcdinsur</i> |                        | 0.00004*<br>(0.00002)  |                         |                        |
| <i>rirdinsur</i>   |                        |                        | 0.0150742**<br>(0.0074) |                        |
| <i>crgdpdinsur</i> |                        |                        |                         | 0.0075<br>(0.0039)     |
| Observations       | 1944                   | 1944                   | 1944                    | 1944                   |
| No. of Countries   | 94                     | 94                     | 94                      | 94                     |

Standard errors given in parentheses

\*\*\*p&lt;0.01, \*\*p&lt;0.05, \*p&lt;0.1

**Table A3.2: Banking Instability and Deposit Insurance: Baseline Model**

| Variables          | (1)                     | (2)                    | (3)                     | (4)                      |
|--------------------|-------------------------|------------------------|-------------------------|--------------------------|
|                    | <i>ninsolv</i>          | <i>ninsolv</i>         | <i>ninsolv</i>          | <i>ninsolv</i>           |
| <i>gdpdr</i>       | -0.0524***<br>(0.0164)  | -0.0524***<br>(0.0164) | -0.0524***<br>(0.0163)  | -0.0500***<br>(0.0164)   |
| <i>rir</i>         | -0.0227***<br>(0.0069)  | -0.0227***<br>(0.0069) | -0.0193***<br>(0.0071)  | -0.0216***<br>(0.0070)   |
| <i>inflatn</i>     | -0.0003<br>(0.0003)     | -0.0003<br>(0.0003)    | -0.0003<br>(0.0003)     | -0.0003<br>(0.0003)      |
| <i>m2fxres</i>     | 0.0015<br>(0.0017)      | 0.0015<br>(0.0017)     | 0.0016<br>(0.0016)      | 0.0014<br>(0.0017)       |
| <i>crgdp</i>       | 0.0072<br>(0.0072)      | 0.0072***<br>(0.0027)  | 0.0071***<br>(0.0027)   | 0.0045<br>(0.0035)       |
| <i>xrdepr</i>      | -0.0117**<br>(0.0053)   | -0.0117**<br>(0.0053)  | -0.0111**<br>(0.0052)   | -0.0122**<br>(0.0053)    |
| <i>gdppc</i>       | -0.00004**<br>(0.00002) | -0.00004<br>(0.00002)  | -0.00004**<br>(0.00002) | -0.00004***<br>(0.00002) |
| <i>dinsur</i>      | 0.1204<br>(0.1888)      | 0.1173<br>(0.2289)     | 0.0531<br>(0.1942)      | -0.1503<br>(0.2775)      |
| <i>gdppcdinsur</i> |                         | 6.35e-07<br>(0.00003)  |                         |                          |
| <i>rirdinsur</i>   |                         |                        | -0.0255<br>(0.0167)     | ()                       |
| <i>crgdpdinsur</i> |                         |                        |                         | 0.0058<br>(0.0043)       |
| Observations       | 1821                    | 1821                   | 1821                    | 1821                     |
| No. of Countries   | 89                      | 89                     | 89                      | 89                       |

Standard errors given in parentheses

\*\*\*p&lt;0.01, \*\*p&lt;0.05, \*p&lt;0.1

**Table A3.3: Banking Instability and the Generosity of Deposit Insurance**

| Variables             | (1)                    | (2)                    | (3)                    | (4)                    |
|-----------------------|------------------------|------------------------|------------------------|------------------------|
|                       | <i>nbrun</i>           | <i>nbrun</i>           | <i>ninsolv</i>         | <i>ninsolv</i>         |
| <i>gdpcr</i>          | -0.0686*<br>(0.0410)   | -0.0680*<br>(0.0410)   | -0.0257<br>(0.0450)    | -0.0229<br>(0.0445)    |
| <i>rir</i>            | 0.0015<br>(0.0065)     | 0.0015<br>(0.0064)     | -0.0612***<br>(0.0220) | -0.0622***<br>(0.0219) |
| <i>inflatn</i>        | 0.0004<br>(0.0009)     | 0.0003<br>(0.0009)     | -0.0107<br>(0.0090)    | -0.0105<br>(0.0088)    |
| <i>m2fxres</i>        | -6.42e-06<br>(0.00005) | -7.47e-06<br>(0.00005) | 0.0040<br>(0.0144)     | 0.0064<br>(0.0144)     |
| <i>crgdp</i>          | 0.0045<br>(0.0038)     | 0.0036<br>(0.0042)     | 0.0105**<br>(0.0044)   | 0.0073<br>(0.0053)     |
| <i>xrdepr</i>         | -0.0101<br>(0.0099)    | -0.0110<br>(0.0100)    | -0.0240*<br>(0.0139)   | -0.0235*<br>(0.0137)   |
| <i>gdppc</i>          | 5.20e-06<br>(0.00002)  | 7.28e-06<br>(0.00002)  | -0.00004*<br>(0.00002) | -0.00003<br>(0.00003)  |
| <i>guarantee</i>      | 0.4376<br>(0.3738)     |                        | 0.1518<br>(0.4342)     |                        |
| <i>crgdpguarantee</i> |                        | 0.0041<br>(0.0049)     |                        | 0.0062<br>(0.0053)     |
| Observations          | 545                    | 545                    | 550                    | 550                    |
| No. of Countries      | 45                     | 45                     | 46                     | 46                     |

Standard errors given in parentheses

\*\*\*p&lt;0.01, \*\*p&lt;0.05, \*p&lt;0.1

**Table A3.4: Banking Instability and Deposit Insurance Coverage**

| Variables        | (1)                    | (2)                     |
|------------------|------------------------|-------------------------|
|                  | <i>nbrun</i>           | <i>ninsolv</i>          |
| <i>gdpr</i>      | -0.1155**<br>(0.0510)  | -0.0712<br>(0.0515)     |
| <i>rir</i>       | -0.0014<br>(0.0067)    | -0.06476***<br>(0.0227) |
| <i>inflatn</i>   | 0.0008<br>(0.0009)     | -0.0084<br>(0.0086)     |
| <i>m2fxres</i>   | 0.0158<br>(0.0214)     | -0.0006<br>(0.0156)     |
| <i>crgdp</i>     | 0.0067<br>(0.0055)     | 0.0158***<br>(0.0053)   |
| <i>xrdepr</i>    | -0.0106<br>(0.0114)    | -0.0160<br>(0.0143)     |
| <i>gdppc</i>     | -7.52e-06<br>(0.00003) | -0.00007**<br>(0.00003) |
| <i>fxcoverd</i>  | -0.1312<br>(0.4841)    | -0.2672<br>(0.4107)     |
| <i>intbank</i>   | 0.5547<br>(0.5518)     | 0.2283<br>(0.4249)      |
| Observations     | 497                    | 527                     |
| No. of Countries | 39                     | 41                      |

Standard errors given in parentheses

\*\*\*p<0.01, \*\*p<0.05, \*p<0.1

**Table A3.5: Banking Instability and Deposit Insurance Legal Environment**

| Variables              | (1)                   | (2)                    | (3)                     | (4)                     |
|------------------------|-----------------------|------------------------|-------------------------|-------------------------|
|                        | <i>nbrun</i>          | <i>nbrun</i>           | <i>ninsolv</i>          | <i>ninsolv</i>          |
| <i>gdpr</i>            | -0.0785<br>(0.0527)   | -0.0808<br>(0.0530)    | -0.0716<br>(0.0572)     | -0.0631<br>(0.0571)     |
| <i>rir</i>             | 0.0012<br>(0.0070)    | 0.0010<br>(0.0071)     | -0.0416<br>(0.0294)     | -0.0520*<br>(0.0286)    |
| <i>inflatn</i>         | 0.0006<br>(0.0010)    | 0.0007<br>(0.0010)     | -0.0082<br>(0.0097)     | -0.0088<br>(0.0093)     |
| <i>m2fxres</i>         | 0.0114<br>(0.0207)    | 0.0247<br>(0.0245)     | -0.0015<br>(0.0174)     | 0.0062<br>(0.0198)      |
| <i>crgdp</i>           | 0.0068<br>(0.0053)    | 0.0029<br>(0.0073)     | 0.0200***<br>(0.0059)   | 0.0173***<br>(0.0062)   |
| <i>xrdepr</i>          | -0.0114<br>(0.0120)   | -0.0100<br>(0.0122)    | -0.0280*<br>(0.0163)    | -0.0289*<br>(0.0164)    |
| <i>gdppc</i>           | -0.00002<br>(0.00003) | -7.81e-06<br>(0.00003) | -0.00008**<br>(0.00003) | -0.00008**<br>(0.00003) |
| <i>intervene</i>       | 0.0127<br>(0.8367)    |                        | -0.3405<br>(0.7480)     |                         |
| <i>leglcancel</i>      | 0.5789<br>(0.4891)    |                        | 0.5785<br>(0.4481)      |                         |
| <i>leglmgr</i>         | -0.0413<br>(0.4924)   |                        | 0.4978<br>(0.4865)      |                         |
| <i>intervencrgdp</i>   |                       | -0.0142<br>(0.0143)    | ()                      | -0.0106<br>(0.0110)     |
| <i>leglcancelcrgdp</i> |                       | 0.0048<br>(0.0062)     | ()                      | 0.0015<br>(0.0054)      |
| <i>leglmgrcrgdp</i>    |                       | 0.0047<br>(0.0087)     | ()                      | 0.0113*<br>(0.0066)     |
| Observations           | 411                   | 411                    | 441                     | 441                     |
| No. of Countries       | 33                    | 33                     | 35                      | 35                      |

Standard errors given in parentheses

\*\*\*p&lt;0.01, \*\*p&lt;0.05, \*p&lt;0.1



**Table A3.6: Banking Instability and the administration of Deposit Insurance Legal**

| Variables         | (1)                  | (2)                    |
|-------------------|----------------------|------------------------|
|                   | <i>nbrun</i>         | <i>ninsolv</i>         |
| <i>gdpdr</i>      | -0.0991*<br>(0.0560) | -0.0435<br>(0.0538)    |
| <i>rir</i>        | -0.0003<br>(0.0067)  | -0.0805***<br>(0.0239) |
| <i>inflatn</i>    | 0.0007<br>(0.0010)   | -0.0118<br>(0.0094)    |
| <i>m2fxres</i>    | 0.0329<br>(0.0231)   | 0.0108<br>(0.0170)     |
| <i>crgdp</i>      | -0.0036<br>(0.0073)  | 0.0016<br>(0.0065)     |
| <i>xrdepr</i>     | -0.0141<br>(0.0119)  | -0.0208<br>(0.0149)    |
| <i>gdppc</i>      | 0.00003<br>(0.00003) | -1.77e-06<br>(0.00003) |
| <i>admin</i>      | 0.1075<br>(0.3374)   | -0.2475<br>(0.2970)    |
| <i>coinsure</i>   | 1.7337*<br>(1.0130)  | 1.5596<br>(0.6861)     |
| <i>funding</i>    | 0.8670<br>(0.8307)   | 1.4398<br>(0.7289)     |
| <i>rskadj</i>     | -0.0155<br>(0.6803)  | -0.3086<br>(0.6430)    |
| <i>membership</i> | -0.1886<br>(0.7087)  | 0.0229<br>(0.5566)     |
| <i>sourcefnd</i>  | 0.3492<br>(0.5604)   | 0.0014<br>(0.4536)     |
| Observations      | 36                   | 38                     |
| No. of Countries  | 485                  | 515                    |

Standard errors given in parentheses

\*\*\*p&lt;0.01, \*\*p&lt;0.05, \*p&lt;0.1

**Table A4.1: Banking Instability and Deposit Insurance Coverage**

| Variables        | (1)                     | (2)                    |
|------------------|-------------------------|------------------------|
|                  | <i>bbrun</i>            | <i>binsolv</i>         |
| <i>gdpdr</i>     | -0.111***<br>(0.0427)   | -0.123**<br>(0.0477)   |
| <i>rir</i>       | 0.000637<br>(0.00644)   | -0.0467**<br>(0.0214)  |
| <i>inflatn</i>   | -0.000135<br>(0.000897) | -0.0103<br>(0.00776)   |
| <i>m2fxres</i>   | 0.0193<br>(0.0171)      | -0.0238<br>(0.0150)    |
| <i>crgdp</i>     | 0.00432<br>(0.00396)    | 0.00861**<br>(0.00409) |
| <i>xrdepr</i>    | -0.0244**<br>(0.00977)  | -0.0272**<br>(0.0128)  |
| <i>fxcoverd</i>  | -0.523<br>(0.437)       | 0.260<br>(0.479)       |
| <i>intbank</i>   | 0.45<br>-0.486          | 0.774<br>-0.504        |
| Observations     | 541                     | 563                    |
| No. of Countries | 41                      | 44                     |

Standard errors given in parentheses

\*\*\*p<0.01, \*\*p<0.05, \*p<0.1

**Table A4.2: Banking Instability and Deposit Insurance Legal Environment**

| Variables              | (1)                     | (2)                     | (3)                     | (4)                     |
|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|                        | <i>bbrun</i>            | <i>bbrun</i>            | <i>binsolv</i>          | <i>binsolv</i>          |
| <i>gdpr</i>            | -0.0738<br>(0.0450)     | -0.0660<br>(0.0466)     | -0.0893*<br>(0.0537)    | -0.0755<br>(0.0543)     |
| <i>rir</i>             | 0.00561<br>(0.00769)    | 0.00484<br>(0.00784)    | -0.0429<br>(0.0280)     | -0.0369<br>(0.0275)     |
| <i>inflatn</i>         | -0.000658<br>(0.00109)  | -0.000619<br>(0.00110)  | -0.0146<br>(0.00985)    | -0.0104<br>(0.00778)    |
| <i>m2fxres</i>         | 0.024<br>(0.0169)       | 0.0408*<br>(0.0209)     | -0.0106<br>(0.0166)     | -0.00684<br>(0.0175)    |
| <i>crgdp</i>           | 0.00765<br>(0.00501)    | 0.00771<br>(0.00883)    | 0.0126**<br>(0.00631)   | 0.0203**<br>(0.00878)   |
| <i>xrdepr</i>          | -0.0277**<br>(0.0108)   | -0.0338***<br>(0.0118)  | -0.0515***<br>(0.0159)  | 0.0575***<br>(0.0160)   |
| <i>gdppc</i>           | -2.33e-05<br>(2.52e-05) | -2.38e-05<br>(2.87e-05) | -1.90e-05<br>(3.33e-05) | -3.78e-05<br>(3.22e-05) |
| <i>intervene</i>       | -0.656<br>(0.720)       | 4.168*<br>(2.293)       | 0.695<br>(0.778)        | 2.620*<br>(1.422)       |
| <i>leglcancel</i>      | 0.940**<br>(0.461)      | 1.400*<br>(0.831)       | 0.314<br>(0.538)        | 1.471*<br>(0.811)       |
| <i>leglmgr</i>         | 0.265<br>(0.476)        | -0.359<br>(0.928)       | -0.417<br>(0.526)       | -1.337<br>(0.895)       |
| <i>intervencrgdp</i>   |                         | -0.0769**<br>(0.0362)   |                         | -0.0314<br>(0.0211)     |
| <i>leglcancelcrgdp</i> |                         | -0.000608<br>(0.00942)  |                         | -0.0123<br>(0.00901)    |
| <i>leglmgrcrgdp</i>    |                         | 0.0157<br>(0.0133)      |                         | 0.0166<br>(0.0118)      |
| Observations           | 455                     | 455                     | 465                     | 465                     |
| No. of Countries       | 35                      | 35                      | 37                      | 37                      |

Standard errors given in parentheses

\*\*\*p&lt;0.01, \*\*p&lt;0.05, \*p&lt;0.1

**Table A4.3: Banking Instability and the Administration of Deposit Insurance**

| Variables         | (1)                     | (2)                    |
|-------------------|-------------------------|------------------------|
|                   | <i>bbrun</i>            | <i>binsolv</i>         |
| <i>gdpdr</i>      | 0.0996**<br>(0.0443)    | -0.115**<br>(0.0487)   |
| <i>rir</i>        | 0.000684<br>(0.00643)   | -0.0595***<br>(0.0223) |
| <i>inflatn</i>    | -8.29e-05<br>(0.000906) | -0.0118<br>(0.00788)   |
| <i>m2fxres</i>    | 0.0202<br>(0.0180)      | -0.000550<br>(0.0151)  |
| <i>crgdp</i>      | 0.00256<br>(0.00560)    | 0.00607<br>(0.00654)   |
| <i>xrdepr</i>     | -0.0252**<br>(0.0101)   | -0.0292**<br>(0.0131)  |
| <i>gdppc</i>      | 1.27e-05<br>(2.64e-05)  | 2.87e-06<br>(3.36e-05) |
| <i>admin</i>      | 0.138<br>(0.268)        | 0.119<br>(0.289)       |
| <i>coinsure</i>   | 0.858<br>(0.747)        | -0.312<br>(0.620)      |
| <i>funding</i>    | 1.372**<br>(0.669)      | -0.732**<br>(0.371)    |
| <i>rskadj</i>     | 0.106<br>(0.527)        | 0.0281<br>(0.594)      |
| <i>membership</i> | 0.126<br>(0.571)        | 0.254<br>(0.630)       |
| <i>sourcefnd</i>  | 0.716*<br>(0.433)       | 0.780*<br>(0.447)      |
| Observations      | 529                     | 551                    |
| No. of Countries  | 38                      | 41                     |

Standard errors given in parentheses

\*\*\*p&lt;0.01, \*\*p&lt;0.05, \*p&lt;0.1

**Table A5.1: Banking Crisis and Deposit Insurance (from bank runs data)**

| Variables            | BankC(1)               | BankC(2)                | BankC(3)                | BankC(4)                 | BankC(5)                 | BankC(6)                | BankC(7)                |
|----------------------|------------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|-------------------------|
| <i>gdpgr</i>         | -.0769***<br>(.02279)  | -.0757***<br>(.02617)   | -.0742***<br>(.02267)   | -.0777***<br>(.02301)    | -.0758***<br>(.02269)    | -.07664***<br>(.02309)  | -.07437***<br>(.02284)  |
| <i>rir</i>           | .00020<br>(.0010)      | .000188<br>(.001)       | .00019<br>(.00099)      | -.00025<br>(.00126)      | .000072<br>(.001083)     | .0002<br>(.00099)       | .000211<br>(.00099)     |
| <i>inflatn</i>       | .000055<br>(.000152)   | .000038*<br>(.000154)   | .000037<br>(.00015)     | 4.79e-06<br>(.000170)    | .000021<br>(.000169)     | .000042<br>(.00015)     | .000044<br>(.000151)    |
| <i>crgdp</i>         | .00736*<br>(.00404)    | .0078*<br>(.00406)      | .00872**<br>(.00404)    | .00796<br>(.00405)       | .00811**<br>(.00407)     | .00671<br>(.00433)      | .004017<br>(.00512)     |
| <i>m2fixes</i>       | -.000077<br>(.000255)  | -.00009<br>(.00027)     | -.00011<br>(.000283)    | -.000094<br>(.000272)    | -.00009<br>(.000269)     | -.000104<br>(.000287)   | -.000091<br>(.00027)    |
| <i>xrdepr</i>        | -.01283**<br>(.00580)  | -.0136**<br>(.00576)    | -.01380**<br>(.00579)   | -.0138**<br>(.00602)     | -.01193**<br>(.00599)    | -.01341**<br>(.00579)   | -.01361**<br>(.00579)   |
| <i>gdppc</i>         | -.00008***<br>(.00003) | -.00007***<br>(.000028) | -.00021***<br>(.000076) | -.000079***<br>(.000029) | -.000078***<br>(.000029) | -.00011***<br>(.000034) | -.00008***<br>(.000029) |
| <i>dinsur</i>        | .52237*<br>(.29916)    |                         |                         |                          |                          |                         |                         |
| <i>gdpgrdinsur</i>   |                        | -.00262*<br>(.04810)    |                         |                          |                          |                         |                         |
| <i>gdppcdinsur</i>   |                        |                         | .00015**<br>(.000071)   |                          |                          |                         |                         |
| <i>rirdinsur</i>     |                        |                         |                         | .04183<br>(.03223)       |                          |                         |                         |
| <i>inflatndinsur</i> |                        |                         |                         |                          | .00081<br>(.000579)      |                         |                         |
| <i>m2fxresdinsr</i>  |                        |                         |                         |                          |                          | .05365***<br>(.01680)   |                         |
| <i>crgdpdinsur</i>   |                        |                         |                         |                          |                          |                         | .007214<br>(.00514)     |
| Observations         | 2396                   | 2361                    | 2361                    | 2361                     | 2361                     | 2361                    | 2361                    |
| # of countries       | 96                     | 96                      | 96                      | 96                       | 96                       | 96                      | 96                      |

Standard errors in parenthesis

\*\*\*p<0.01 \*\*p<0.05 \*p<0.1

**Table A5.2: Banking Crisis and generosity of Deposit Insurance (from bank runs data)**

| Variables            | BankC(1)               | BankC(2)              | BankC(3)              | BankC(4)               | BankC(5)              | BankC(6)             | BankC(7)              |
|----------------------|------------------------|-----------------------|-----------------------|------------------------|-----------------------|----------------------|-----------------------|
| <i>gdpgr</i>         | -0.9141**<br>(.03832)  | -.0989**<br>(.0399)   | -.09814**<br>(.0394)  | -.09197**<br>(.0379)   | -.09175**<br>(.0382)  | -.0929**<br>(.0391)  | -.08773**<br>(.03827) |
| <i>rir</i>           | .03649<br>(.02539)     | .03489<br>(.02331)    | .03423<br>(.0249)     | .0276<br>(.0219)       | .03562<br>(.0253)     | .04674<br>(.03048)   | .03377<br>(.02426)    |
| <i>inflatn</i>       | -.0031<br>(.00475)     | -.00323<br>(.00403)   | -.00270<br>(.00467)   | -.00236<br>(.00345)    | -.0031<br>(.00445)    | -.00340<br>(.00821)  | -.00279<br>(.00429)   |
| <i>m2fixes</i>       | -.00009<br>(.00307)    | -.000131<br>(.000314) | -.000125<br>(.00031)  | -.00014<br>(.000314)   | -.00013<br>(.00031)   | -.000068<br>(.00030) | -.00011<br>(.000308)  |
| <i>crgdp</i>         | .003011<br>(.00607)    | .00529<br>(.00596)    | .00554<br>(.00579)    | .00431<br>(.00590)     | .00474<br>(.00593)    | .00307<br>(.00608)   | -.000714<br>(.00837)  |
| <i>xrdepr</i>        | -.01303<br>(.01518)    | -.01711<br>(.01521)   | -.01257<br>(.0003)    | -.01654<br>(.0148)     | -.01404<br>(.01575)   | -.01318<br>(.01679)  | -.01326<br>(.01511)   |
| <i>gdppc</i>         | -.000057*<br>(.000033) | -.000067<br>(.00003)  | -.00009**<br>(.00004) | -.000064*<br>(.000034) | -.000066*<br>(.00003) | -.000051<br>(.00003) | -.000047<br>(.000036) |
| <i>guarantee</i>     | .54724<br>(.05446)     |                       |                       |                        |                       |                      |                       |
| <i>gdpgrgrntee</i>   |                        | .05093<br>(.0956)     |                       |                        |                       |                      |                       |
| <i>gdppcgrntee</i>   |                        |                       | .00009**<br>(.00004)  |                        |                       |                      |                       |
| <i>rirgrntee</i>     |                        |                       |                       | .06314<br>(.0775)      |                       |                      |                       |
| <i>inflatngrntee</i> |                        |                       |                       |                        | .00296*<br>(.01631)   |                      |                       |
| <i>m2fxresgrntee</i> |                        |                       |                       |                        |                       | .12296**<br>(.04904) |                       |
| <i>crgdpgrntee</i>   |                        |                       |                       |                        |                       |                      | .007427<br>(.007783)  |
| Observations         | 696                    | 696                   | 696                   | 696                    | 696                   | 696                  | 696                   |
| #of countries        | 47                     | 47                    | 47                    | 47                     | 47                    | 47                   | 47                    |

Standard errors in parenthesis

\*\*\*p<0.01 \*\*p<0.05 \*p<0.1

**Table A5.3: Banking Crisis and Deposit Insurance (from bank insolvency data)**

| Variables            | BankC(1)               | BankC(2)              | BankC(3)             | BankC(4)              | BankC(5)              | BankC(6)               | BankC(7)                |
|----------------------|------------------------|-----------------------|----------------------|-----------------------|-----------------------|------------------------|-------------------------|
| <i>gdpgr</i>         | -.0843***<br>(.02244)  | -.0777***<br>(.0254)  | -.0801***<br>(.0222) | -0.842***<br>(.02267) | -.0825***<br>(.0224)  | -.0834***<br>(.0229)   | -.0797***<br>(.02267)   |
| <i>rir</i>           | .00014<br>(.00100)     | .000148<br>(.0010)    | .000144<br>(.0099)   | -.000336<br>(0.0013)  | -4.62e-06<br>(.0011)  | .000155<br>(.00099)    | .00017<br>(.0009)       |
| <i>inflatn</i>       | .00006<br>(.00015)     | .00004<br>(.00015)    | .000042<br>(.00015)  | 5.64e-06<br>(.00017)  | .00002<br>(.000169)   | .000045<br>(.00015)    | .00005<br>(.00015)      |
| <i>m2fixes</i>       | -.00008<br>(.00026)    | -.0001<br>(.00028)    | -.00011<br>(.00029)  | -.00011<br>(.00028)   | -.000097<br>(.000276) | -.00011<br>(.00029)    | -.00009<br>(.00027)     |
| <i>crgdp</i>         | .00936**<br>(.00406)   | .0102**<br>(.0041)    | .0108***<br>(.00404) | .01038**<br>(.00406)  | .0106***<br>(.00407)  | .009294**<br>(.00431)  | .00249<br>(.005794)     |
| <i>xrdepr</i>        | -.01207<br>(.00582)    | -.0128**<br>(.00577)  | -.0131**<br>(.00581) | -.01326**<br>(.00605) | -.01125*<br>(.006016) | -.01286**<br>(.00583)  | -.01298**<br>(.00585)   |
| <i>gdppc</i>         | -0.0001***<br>(.00003) | -.0001***<br>(.00003) | -.00025<br>(.00007)  | -.0001***<br>(.00003) | -.0001***<br>(.00003) | -.00015***<br>(.00003) | -.00012***<br>(.000032) |
| <i>dinsur</i>        | .61262**<br>(.28885)   |                       |                      |                       |                       |                        |                         |
| <i>gdpgrdinsur</i>   |                        | -0.1980*<br>(0.4669)  |                      |                       |                       |                        |                         |
| <i>gdppcdinsur</i>   |                        |                       | .00016**<br>(.00007) |                       |                       |                        |                         |
| <i>rirdinsur</i>     |                        |                       |                      | .04001<br>(.03217)    |                       |                        |                         |
| <i>inflatndinsur</i> |                        |                       |                      |                       | .00087<br>(.000585)   |                        |                         |
| <i>m2fxresdinsur</i> |                        |                       |                      |                       |                       | .06433***<br>(.01758)  |                         |
| <i>crgdpdinsur</i>   |                        |                       |                      |                       |                       |                        | .01212**<br>(.05548)    |
| Observations         | 2545                   | 2545                  | 2545                 | 2545                  | 2545                  | 2545                   | 2545                    |
| # of countries       | 103                    | 103                   | 103                  | 103                   | 103                   | 103                    | 103                     |

Standard errors in parenthesis

\*\*\*p<0.01 \*\*p<0.05 \*p<0.1

**Table A5.4: Banking Crisis and Generosity of Deposit Insurance (from insolvency data)**

| Variables            | BankC(1)              | BankC(2)              | BankC(3)              | BankC(4)               | BankC(5)               | BankC(6)                | BankC(7)               |
|----------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|-------------------------|------------------------|
| <i>gdpgr</i>         | -.1083***<br>(.03799) | -.1096***<br>(.04058) | -.1106***<br>(.0385)  | -.1091***<br>(.0377)   | -.1092***<br>(.03793)  | -.1089***<br>(.03854)   | -.1051***<br>(.03831)  |
| <i>rir</i>           | .03434<br>(.0239)     | .03359<br>(.02316)    | .03326<br>(.02387)    | .02833<br>(.02178)     | .03392<br>(.02404)     | .04313<br>(.02906)      | .032845<br>(.02335)    |
| <i>inflatn</i>       | -.00287<br>(.0044)    | -.00289<br>(.00420)   | -.00267*<br>(.00443)  | -.00243<br>(.0035)     | -.00289<br>(.00427)    | -.00321<br>(.00745)     | -.002724<br>(.00418)   |
| <i>m2fixes</i>       | -.00013<br>(.000317)  | -.000149<br>(.00032)  | -.00014<br>(.000316)  | -.000157<br>(.00032)   | -.000146<br>(.00032)   | -.00009<br>(.00031)     | -.000134<br>(.000315)  |
| <i>crgdp</i>         | .009685*<br>(.00578)  | .01081**<br>(.00532)  | .01011*<br>(.00526)   | .01043<br>(.00529)     | .01079**<br>(.00526)   | .00913<br>(.005414)     | .00649<br>(.0888)      |
| <i>xrdepr</i>        | -.01403<br>(.01515)   | -.01517<br>(.01557)   | -.01329<br>(.01508)   | -.01620<br>(.01477)    | -.01469<br>(.0157)     | -.01361<br>(.01620)     | -.01392<br>(.01498)    |
| <i>gdppc</i>         | -.00010**<br>(.00004) | -.0001***<br>(.00003) | -.0001***<br>(.00004) | -.0001***<br>(.000038) | -.0001***<br>(.000038) | -.000095**<br>(.000039) | -.000092*<br>(.000047) |
| <i>guarantee</i>     | .27219<br>(.59697)    |                       |                       |                        |                        |                         |                        |
| <i>gdpgrgrntee</i>   |                       | .00260*<br>(.09268)   |                       |                        |                        |                         |                        |
| <i>gdppcgrntee</i>   |                       |                       | .000095<br>(.00006)   |                        |                        |                         |                        |
| <i>rirgrntee</i>     |                       |                       |                       | .04251*<br>(.07038)    |                        |                         |                        |
| <i>inflatngrntee</i> |                       |                       |                       |                        | .001136<br>(.01705)    |                         |                        |
| <i>m2fxresgrntee</i> |                       |                       |                       |                        |                        | .10367**<br>(.05019)    |                        |
| <i>crgdpgrntee</i>   |                       |                       |                       |                        |                        |                         | .005134<br>(.00823)    |
| Observations         | 719                   | 719                   | 719                   | 719                    | 719                    | 719                     | 719                    |
| # of countries       | 49                    | 49                    | 49                    | 49                     | 49                     | 49                      | 49                     |

Standard errors in parenthesis

\*\*\*p<0.01 \*\*p<0.05 \*p<0.1



**Table A6: Instrumental Variable Estimation**

|                          | (1)<br><i>bbrun1</i>   | (2)<br><i>bbrun1</i>   | (3)<br><i>bbrun1</i> |
|--------------------------|------------------------|------------------------|----------------------|
| Second Stage Regression  |                        |                        |                      |
| <i>guarantee</i>         | 3.094***<br>(9.18)     | 2.806***<br>(3.92)     | 2.936***<br>(4.82)   |
| <i>gdpgr</i>             | -0.00361<br>(-0.06)    | -0.0511<br>(-1.27)     | -0.0387<br>(-1.04)   |
| <i>m2fxres</i>           | 0.0147**<br>(3.20)     | 0.0107<br>(1.43)       | 0.00509<br>(0.71)    |
| <i>crgdp</i>             | -0.00140<br>(-0.33)    | 0.00218<br>(0.68)      | 0.00445<br>(1.54)    |
| <i>xrdepr</i>            | 0.00652*<br>(2.25)     | 0.00585<br>(1.39)      | 0.00512<br>(1.22)    |
| <i>_cons</i>             | -0.636<br>(-0.61)      | -1.359**<br>(-2.97)    | -1.456***<br>(-4.07) |
| First Stage Regression   |                        |                        |                      |
| <i>guarantee</i>         |                        |                        |                      |
| <i>gdpgr</i>             | -0.00335<br>(-0.76)    | -0.00281<br>(-0.63)    | -0.00841*<br>(-2.00) |
| <i>m2fxres</i>           | -0.00500***<br>(-3.55) | -0.00498***<br>(-3.54) | -0.00279<br>(-1.91)  |
| <i>crgdp</i>             | 0.000777*<br>(2.20)    | 0.000717*<br>(2.01)    | 0.0001000<br>(0.24)  |
| <i>xrdepr</i>            | -0.00213*<br>(-2.30)   | -0.00203*<br>(-2.20)   | -0.00143<br>(-1.63)  |
| <i>maj</i>               | 0.000148*<br>(2.28)    |                        |                      |
| <i>checks</i>            |                        | 0.0194*<br>(2.00)      |                      |
| <i>polariz</i>           |                        |                        | 0.0430*<br>(2.53)    |
| <i>_cons</i>             | 0.130***<br>(3.95)     | 0.0602<br>(1.34)       | 0.119***<br>(3.59)   |
| Wald test of exogeneity: |                        |                        |                      |
| Prob.                    | 0.5645                 | 0.2189                 | 0.1024               |
| N                        | 532                    | 533                    | 489                  |

t statistics in parentheses

\* p&lt;0.05, \*\* p&lt;0.01, \*\*\* p&lt;0.001

**Table A7: Banking Instability and Lagged Deposit Insurance**

| Variables         | (1)                    | (2)                    | (3)                    | (4)                    | (5)                    |
|-------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
|                   | <i>bbrun</i>           | <i>bbrun</i>           | <i>bbrun</i>           | <i>bbrun</i>           | <i>bbrun</i>           |
| <i>gdpdr</i>      | -0.0608***<br>(0.0124) | -0.0642***<br>(0.0128) | -0.0663***<br>(0.0133) | -0.0680***<br>(0.0138) | -0.0726***<br>(0.0144) |
| <i>rir</i>        | -0.0070*<br>(0.0041)   | -0.0059<br>(0.0039)    | -0.0048<br>(0.0037)    | -0.0056<br>(0.0040)    | -0.0051<br>(0.0039)    |
| <i>inflatn</i>    | -0.0002<br>(0.0002)    | -0.0002<br>(0.0002)    | -0.0002<br>(0.0002)    | -0.0002<br>(0.0002)    | -0.0003<br>(0.0002)    |
| <i>m2fxres</i>    | 0.0001<br>(0.0001)     | 0.0001<br>(0.0001)     | 0.0001<br>(0.0001)     | 0.00008<br>(0.0001)    | 0.00001<br>(0.0002)    |
| <i>crgdp</i>      | 0.0024<br>(0.0022)     | 0.0023<br>(0.0022)     | 0.0026<br>(0.0023)     | 0.0025<br>(0.0023)     | 0.0023<br>(0.0024)     |
| <i>xrdepr</i>     | -0.0136***<br>(0.0037) | -0.0138***<br>(0.0038) | -0.0145***<br>(0.0038) | -0.0146***<br>(0.0039) | 0.0163***<br>(0.0040)  |
| <i>gdppc</i>      | -0.00002*<br>(0.00001) | -0.00002*<br>(0.00001) | -0.00002*<br>(0.00001) | -0.00002<br>(0.00001)  | -0.00001<br>(0.00001)  |
| <i>dinsur</i>     | -0.1319<br>(0.1553)    |                        |                        |                        |                        |
| <i>dinsur(-1)</i> |                        | -0.0586<br>(0.1597)    |                        |                        |                        |
| <i>dinsur(-2)</i> |                        |                        | -0.0594<br>(0.1696)    |                        |                        |
| <i>dinsur(-3)</i> |                        |                        |                        | -0.1873<br>(0.1781)    |                        |
| <i>dinsur(-4)</i> |                        |                        |                        |                        | 0.2595<br>(0.1962)     |
| Observations      | 1980                   | 1911                   | 1838                   | 1764                   | 1690                   |
| No. of Countries  | 96                     | 96                     | 96                     | 96                     | 96                     |

Standard errors given in parentheses

\*\*\*p&lt;0.01, \*\*p&lt;0.05, \*p&lt;0.1