**APPENDICES**

Appendix I: Countries

|  |  |  |
| --- | --- | --- |
| **List of countries under the study** | | |
| Algeria | Eswatini | Mozambique | |
| Angola | Gabon | Namibia | |
| Benin | The Gambia | Niger | |
| Botswana | Ghana | Nigeria | |
| Burkina Faso | Guinea Bissau | Rwanda | |
| Cameroon | Guinea | Senegal | |
| Central African Republic | Kenya | Sierra Leon | |
| Chad | Liberia | South Africa | |
| Comoros | Madagascar | Sudan | |
| Congo Republic | Malawi | Tanzania | |
| Cote d’Ivoire | Mali | Togo | |
| Democratic Rep. of Congo | Mauritius | Tunisia | |
| Egypt | Morocco | Uganda | |

Appendix II: Definition of Variables

|  |  |
| --- | --- |
| Variable | Definition |
| LNGDP | Log of Real Gross Domestic Product per capita |
| BMYGE | Broad Money/ GDP x Government Effectiveness |
| BMYRQ | Broad Money/ GDP x Regulatory Quality |
| BMYRL | Broad Money/ GDP x Rule of Law |
| BMYCC | Broad Money/ GDP x Control of Corruption |
| BMYVA | Broad Money/ GDP x Voice and Accountability |
| BMYPS | Broad Money/ GDP x Political Stability and Absence of Violence |
| PCYGE | Credit to Private Sector /GDP x Government Effectiveness |
| PCYRQ | Credit to Private Sector /GDP x Regulatory Quality |
| PCYRL | Credit to Private Sector /GDP x Rule of Law |
| PCYCC | Credit to Private Sector /GDP x Control of Corruption |
| PCYVA | Credit to Private Sector /GDP x Voice and Accountability |
| PCYPS | Credit to Private Sector /GDP x Political Stability and Absence of Violence |
| DCYGE | Domestic Credit /GDP x Government Effectiveness |
| DCYRQ | Domestic Credit /GDP x Regulatory Quality |
| DCYRL | Domestic Credit /GDP x Rule of Law |
| DCYCC | Domestic Credit /GDP x Control of Corruption |
| DCYVA | Domestic Credit /GDP x Voice and Accountability |
| DCYPS | Domestic Credit /GDP x Political Stability and Absence of Violence |
| GSYGE | Gross Domestic Savings /GDP x Government Effectiveness |
| GSYRQ | Gross Domestic Savings /GDP x Regulatory Quality |
| GSYRL | Gross Domestic Savings /GDP x Rule of Law |
| GSYCC | Gross Domestic Savings /GDP x Control of Corruption |
| GSYVA | Gross Domestic Savings /GDP x Voice and Accountability |
| GSYPS | Gross Domestic Savings /GDP x Political Stability and Absence of Violence |
| BDYGE | Bank Deposit /GDP x Government Effectiveness |
| BDYRQ | Bank Deposit /GDP x Regulatory Quality |
| BDYRL | Bank Deposit /GDP x Rule of Law |
| BDYCC | Bank Deposit /GDP x Control of Corruption |
| BDYVA | Bank Deposit /GDP x Voice and Accountability |
| BDYPS | Bank Deposit /GDP x Political Stability and Absence of Violence |
| GCF | Gross Fixed Capital Formation |
| TOP | Trade Openness |
| INF | Inflation |
| FDI | Foreign Direct Investment |
| EXP | Total Government Expenditure |

Appendix III: Pairwise Correlation analysis

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | LNGDP | BMYGE | BMYRQ | BMYRL | BMYCC | BMYVA | BMYPS | PCYGE | PCYRQ | PCYRL | PCYCC | PCYVA | PCYPS | |
| LNGDP | 1.000 | 0.394 | 0.269 | 0.333 | 0.256 | 0.103 | 0.174 | 0.405 | 0.337 | 0.362 | 0.271 | 0.213 | 0.207 |
| GCF | 0.339 | 0.105 | 0.015 | 0.066 | 0.072 | -0.023 | 0.083 | 0.041 | 0.003 | 0.048 | 0.034 | -0.032 | 0.104 |
| TOP | 0.293 | 0.126 | 0.097 | 0.158 | 0.152 | 0.123 | 0.244 | 0.090 | 0.075 | 0.167 | 0.115 | 0.060 | 0.253 |
| INF | -0.125 | -0.027 | -0.044 | -0.035 | -0.026 | -0.013 | -0.047 | -0.003 | -0.012 | 0.001 | 0.010 | 0.004 | -0.007 |
| FDI | -0.139 | -0.122 | -0.103 | -0.088 | -0.053 | 0.007 | 0.004 | -0.095 | -0.084 | -0.077 | -0.049 | -0.016 | 0.008 |
| EXP | 0.385 | 0.244 | 0.172 | 0.170 | 0.269 | 0.143 | 0.186 | 0.196 | 0.151 | 0.118 | 0.220 | 0.148 | 0.119 |

Appendix III: Pairwise Correlation analysis (continued)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | DCYGE | DCYRQ | DCYRL | DCYCC | DCYVA | DCYPS | GSYGE | GSYRQ | GSYRL | GSYCC | GSYVA | GSYPS |
| LNGDP | 0.399 | 0.341 | 0.351 | 0.285 | 0.254 | 0.233 | -0.173 | -0.187 | -0.159 | -0.173 | -0.212 | -0.035 |
| GCF | 0.075 | 0.042 | 0.065 | 0.047 | -0.002 | 0.095 | -0.122 | -0.142 | -0.122 | -0.126 | -0.177 | -0.022 |
| TOP | -0.138 | -0.170 | -0.085 | -0.094 | 0.012 | -0.019 | 0.279 | 0.292 | 0.230 | 0.192 | 0.045 | 0.375 |
| INF | 0.014 | 0.010 | 0.020 | 0.025 | 0.015 | 0.011 | -0.093 | -0.116 | -0.117 | -0.107 | -0.111 | -0.144 |
| FDI | -0.242 | -0.238 | -0.232 | -0.207 | -0.121 | -0.170 | 0.249 | 0.210 | 0.202 | 0.169 | 0.088 | 0.142 |
| EXP | 0.226 | 0.183 | 0.168 | 0.216 | 0.198 | 0.151 | 0.155 | 0.112 | 0.138 | 0.188 | 0.157 | 0.197 |

Appendix III: Pairwise Correlation analysis (continued)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | BDYGE | BDYRQ | BDYRL | BDYCC | BDYVA | BDYPS | GCF | TOP | INF | FDI | EXP |
| LNGDP | 0.252 | 0.221 | 0.255 | 0.233 | 0.194 | 0.215 |  |  |  |  |  |
| GCF | 0.029 | 0.009 | 0.019 | 0.023 | -0.019 | 0.032 | 1.000 |  |  |  |  |
| TOP | -0.372 | -0.383 | -0.319 | -0.307 | -0.142 | -0.283 | 0.291 | 1.000 |  |  |  |
| INF | 0.011 | 0.007 | 0.010 | 0.014 | 0.010 | 0.003 | -0.094 | -0.020 | 1.000 |  |  |
| FDI | -0.203 | -0.200 | -0.217 | -0.208 | -0.186 | -0.188 | 0.152 | 0.264 | 0.033 | 1.000 |  |
| EXP | 0.132 | 0.114 | 0.126 | 0.165 | 0.159 | 0.136 | 0.277 | 0.285 | -0.153 | 0.037 | 1.000 |

Appendix IV: Pairwise Dumitrescu Hurlin Panel Causality Tests

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Direction** | **Zbar-Stat.** | **Prob.** | **Direction** | **Zbar-Stat.** | **Prob.** |
| LNGDP **→** BDYCC | 5.11524\*\*\* | 3.00E-07 | BDYCC **→** LNGDP | 0.43805 | 0.6613 |
| LNGDP **→** BDYRL | 4.84539\*\*\* | 1.00E-06 | BDYGE **→** LNGDP | 0.90861 | 0.3636 |
| LNGDP **→** BDYGE | 6.15782\*\*\* | 7.00E-10 | BDYPS **→** LNGDP | 0.8173 | 0.4138 |
| LNGDP **→** BDYPS | 3.28621\*\*\* | 0.001 | BDYRL **→** LNGDP | 1.84152\* | 0.0655 |
| LNGDP **→** BDYRQ | 4.66086\*\*\* | 3.00E-06 | BDYRQ **→** LNGDP | 0.59424 | 0.5524 |
| LNGDP **→** BDYVA | 2.1245\*\* | 0.0336 | BDYVA **→** LNGDP | 0.82501 | 0.4094 |
| LNGDP **→** BMYCC | 3.97662\*\*\* | 7.00E-05 | BMYCC **→** LNGDP | 3.75546\*\*\* | 0.0002 |
| LNGDP **→** BMYGE | 6.66134\*\*\* | 3.00E-11 | BMYGE **→** LNGDP | 1.88212\* | 0.0598 |
| LNGDP **→** BMYPS | 3.4778\*\*\* | 0.0005 | BMYPS **→** LNGDP | 2.93006\*\*\* | 0.0034 |
| LNGDP **→** BMYRL | 3.96635\*\*\* | 7.00E-05 | BMYRL **→** LNGDP | 4.43571\*\*\* | 9.00E-06 |
| LNGDP **→** BMYRQ | 6.2897\*\*\* | 3.00E-10 | BMYRQ **→** LNGDP | 2.13334\*\* | 0.0329 |
| LNGDP **→** BMYVA | 4.76544\*\*\* | 2.00E-06 | BMYVA **→** LNGDP | 2.25722\*\* | 0.024 |
| LNGDP **→** DCYCC | 4.83104\*\*\* | 1.00E-06 | DCYCC **→** LNGDP | 1.27252 | 0.2032 |
| LNGDP **→** DCYGE | 7.1012\*\*\* | 1.00E-12 | DCYGE **→** LNGDP | 1.33186 | 0.1829 |
| LNGDP **→** DCYPS | 4.37568\*\*\* | 1.00E-05 | DCYPS **→** LNGDP | 1.74469\* | 0.081 |
| LNGDP **→** DCYRL | 4.40491\*\*\* | 1.00E-05 | DCYRL **→** LNGDP | 2.77605\*\*\* | 0.0055 |
| LNGDP **→** DCYRQ | 5.69867\*\*\* | 1.00E-08 | DCYRQ **→**LNGDP | 1.06524 | 0.2868 |
| LNGDP **→** DCYVA | 4.01906\*\*\* | 6.00E-05 | DCYVA **→** LNGDP | 1.19696 | 0.2313 |
| LNGDP **→** GSYCC | 4.75699\*\*\* | 2.00E-06 | GSYCC **→** LNGDP | -1.0399 | 0.2984 |
| LNGDP **→** GSYGE | 8.22995\*\*\* | 2.00E-16 | GSYGE **→** LNGDP | 0.091 | 0.9275 |
| LNGDP **→** GSYPS | 9.53309\*\*\* | 0.0000 | GSYPS **→** LNGDP | 0.40618 | 0.6846 |
| LNGDP **→** GSYRL | 5.70364\*\*\* | 1.00E-08 | GSYRL**→** LNGDP | 1.10352 | 0.2698 |
| LNGDP **→** GSYRQ | 7.10013\*\*\* | 1.00E-12 | GSYRQ **→** LNGDP | 0.12981 | 0.8967 |
| LNGDP **→** GSYVA | 8.90117\*\*\* | 0.0000 | GSYVA **→** LNGDP | 1.30315 | 0.1925 |
| LNGDP **→** PCYCC | 6.45008\*\*\* | 1.00E-10 | PCYCC **→** LNGDP | 0.11191 | 0.9109 |
| LNGDP **→** PCYGE | 6.81236\*\*\* | 1.00E-11 | PCYGE **→** LNGDP | 2.52828\*\* | 0.0115 |
| LNGDP **→** PCYPS | 3.89501\*\*\* | 0.0001 | PCYPS **→** LNGDP | -0.28335 | 0.7769 |
| LNGDP **→** PCYRL | 5.38969\*\*\* | 7.00E-08 | PCYRL **→** LNGDP | 2.29556\*\* | 0.0217 |
| LNGDP **→** PCYRQ | 3.68526\*\*\* | 0.0002 | PCYRQ **→** LNGDP | 1.8233\* | 0.0683 |
| LNGDP **→** PCYVA | 4.60556\*\*\* | 4.00E-06 | PCYVA **→** LNGDP | -0.2299 | 0.8182 |

*Note: The superscripts \*\*\*, \*\* and \* denote the statistical significance at 1%, 5% and 10% levels, respectively.*