**APPENDICES**

*Shaken, not Stirred: Comparing the Effectiveness of Pure and Hybrid Inflation Targeting*

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**Appendix 1. Country classification by inflation targeting regime**

| Country       | Year | Inflation targeting type, IMF regime-based classification | Inflation targeting type, classification using cluster analysis | Exchange rate volatility (normalized) | International reserves volatility (normalized) |
|---------------|------|----------------------------------------------------------|-----------------------------------------------------------|--------------------------------------|-----------------------------------------------|
| Albania       | 2013 | Hybrid                                                   | Pure                                                      | -0.174                               | -0.261                                        |
| Albania       | 2014 | Hybrid                                                   | Pure                                                      | -0.174                               | -0.231                                        |
| Albania       | 2015 | Hybrid                                                   | Pure                                                      | -0.174                               | -0.040                                        |
| Albania       | 2016 | Hybrid                                                   | Pure                                                      | -0.174                               | -0.190                                        |
| Armenia       | 2013 | Hybrid                                                   | Pure                                                      | -0.174                               | -0.260                                        |
| Armenia       | 2014 | Hybrid                                                   | Pure                                                      | -0.169                               | -0.237                                        |
| Armenia       | 2015 | Hybrid                                                   | Pure                                                      | -0.134                               | -0.192                                        |
| Armenia       | 2016 | Hybrid                                                   | Pure                                                      | -0.174                               | -0.223                                        |
| Australia     | 2013 | Pure                                                     | Hybrid                                                   | -0.174                               | -0.234                                        |
| Australia     | 2014 | Pure                                                     | Pure                                                      | -0.174                               | -0.256                                        |
| Australia     | 2015 | Pure                                                     | Pure                                                      | -0.174                               | -0.191                                        |
| Australia     | 2016 | Pure                                                     | Pure                                                      | -0.174                               | -0.242                                        |
| Brazil        | 2013 | Hybrid                                                   | Pure                                                      | -0.174                               | -0.200                                        |
| Brazil        | 2014 | Hybrid                                                   | Hybrid                                                   | -0.174                               | 0.620                                         |
| Brazil        | 2015 | Hybrid                                                   | Hybrid                                                   | 10.143                               | -0.237                                        |
| Brazil        | 2016 | Hybrid                                                   | Hybrid                                                   | -0.174                               | -0.230                                        |
| Canada        | 2013 | Pure                                                     | Pure                                                      | -0.174                               | -0.247                                        |
| Canada        | 2014 | Pure                                                     | Pure                                                      | -0.164                               | -0.186                                        |
| Canada        | 2015 | Pure                                                     | Pure                                                      | -0.174                               | -0.202                                        |
| Canada        | 2016 | Pure                                                     | Pure                                                      | -0.174                               | -0.260                                        |
| Chile         | 2013 | Pure                                                     | Pure                                                      | -0.174                               | 4.209                                         |
| Chile         | 2014 | Pure                                                     | Pure                                                      | 0.360                                | -0.234                                        |
| Chile         | 2015 | Pure                                                     | Hybrid                                                   | -0.174                               | -0.221                                        |
| Chile         | 2016 | Pure                                                     | Pure                                                      | -0.174                               | -0.244                                        |
| Colombia      | 2013 | Hybrid                                                   | Pure                                                      | -0.174                               | -0.198                                        |
| Colombia      | 2014 | Hybrid                                                   | Pure                                                      | -0.174                               | -0.126                                        |
| Colombia      | 2015 | Hybrid                                                   | Pure                                                      | -0.174                               | -0.251                                        |
| Colombia      | 2016 | Hybrid                                                   | Hybrid                                                   | -0.174                               | -0.139                                        |
| Czech Republic| 2013 | Pure                                                     | Pure                                                      | -0.174                               | -0.252                                        |
| Czech Republic| 2014 | Hybrid                                                   | Pure                                                      | -0.174                               | 0.042                                         |
| Czech Republic| 2015 | Hybrid                                                   | Pure                                                      | -0.174                               | -0.262                                        |
| Czech Republic| 2016 | Hybrid                                                   | Pure                                                      | -0.171                               | -0.226                                        |
| Dominican Republic| 2013 | Hybrid                                                   | Pure                                                      | -0.174                               | -0.188                                        |
| Dominican Republic| 2014 | Hybrid                                                   | Pure                                                      | -0.174                               | -0.068                                        |
| Dominican Republic| 2015 | Hybrid                                                   | Pure                                                      | -0.174                               | -0.260                                        |
| Dominican Republic| 2016 | Hybrid                                                   | Pure                                                      | -0.168                               | -0.194                                        |
| Georgia       | 2013 | Hybrid                                                   | Pure                                                      | 0.044                                | -0.238                                        |
| Georgia       | 2014 | Hybrid                                                   | Pure                                                      | -0.174                               | -0.265                                        |
| Country              | Year | Inflation targeting type, IMF regime-based classification | Inflation targeting type, classification using cluster analysis | Exchange rate volatility (normalized) | International reserves volatility (normalized) |
|---------------------|------|-----------------------------------------------------------|---------------------------------------------------------------|--------------------------------------|-----------------------------------------------|
| Georgia             | 2015 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.247                                        |
| Georgia             | 2016 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.241                                        |
| Ghana               | 2013 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.221                                        |
| Ghana               | 2014 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.263                                        |
| Ghana               | 2015 | Hybrid                                                    | Hybrid                                                       | -0.173                               | -0.247                                        |
| Ghana               | 2016 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.107                                        |
| Guatemala           | 2013 | Hybrid                                                    | Pure                                                         | 1.164                                | -0.250                                        |
| Guatemala           | 2014 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.252                                        |
| Guatemala           | 2015 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.256                                        |
| Guatemala           | 2016 | Hybrid                                                    | Pure                                                         | -0.163                               | -0.244                                        |
| Hungary             | 2013 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.119                                        |
| Hungary             | 2014 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.235                                        |
| Hungary             | 2015 | Hybrid                                                    | Pure                                                         | -0.174                               | 5.201                                         |
| Hungary             | 2016 | Hybrid                                                    | Pure                                                         | 0.065                                | -0.251                                        |
| Iceland             | 2013 | Hybrid                                                    | Hybrid                                                       | -0.174                               | -0.261                                        |
| Iceland             | 2014 | Hybrid                                                    | Hybrid                                                       | -0.174                               | -0.259                                        |
| Iceland             | 2015 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.166                                        |
| Iceland             | 2016 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.236                                        |
| Indonesia           | 2013 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.254                                        |
| Indonesia           | 2014 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.198                                        |
| Indonesia           | 2015 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.247                                        |
| Indonesia           | 2016 | Hybrid                                                    | Pure                                                         | -0.063                               | 2.559                                         |
| Israel              | 2013 | Pure                                                      | Pure                                                         | -0.174                               | -0.070                                        |
| Israel              | 2014 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.224                                        |
| Israel              | 2015 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.229                                        |
| Israel              | 2016 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.168                                        |
| Japan               | 2013 | Pure                                                      | Pure                                                         | -0.174                               | 0.002                                         |
| Japan               | 2014 | Pure                                                      | Pure                                                         | -0.174                               | -0.255                                        |
| Japan               | 2015 | Pure                                                      | Pure                                                         | -0.156                               | -0.150                                        |
| Japan               | 2016 | Pure                                                      | Pure                                                         | 0.959                                | -0.103                                        |
| Korea, Republic of   | 2013 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.253                                        |
| Korea, Republic of   | 2014 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.256                                        |
| Korea, Republic of   | 2015 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.257                                        |
| Korea, Republic of   | 2016 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.108                                        |
| Mexico              | 2013 | Pure                                                      | Pure                                                         | -0.174                               | -0.260                                        |
| Mexico              | 2014 | Pure                                                      | Hybrid                                                       | -0.174                               | -0.246                                        |
| Mexico              | 2015 | Pure                                                      | Pure                                                         | -0.174                               | -0.194                                        |
| Mexico              | 2016 | Pure                                                      | Hybrid                                                       | 3.403                                | -0.260                                        |
| Moldova             | 2013 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.233                                        |
| Moldova             | 2014 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.257                                        |
| Moldova             | 2015 | Hybrid                                                    | Pure                                                         | -0.157                               | -0.209                                        |
| Moldova             | 2016 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.169                                        |
| Norway              | 2013 | Pure                                                      | Hybrid                                                       | -0.174                               | -0.241                                        |
| Norway              | 2014 | Pure                                                      | Hybrid                                                       | -0.174                               | 6.471                                         |
| Norway              | 2015 | Pure                                                      | Hybrid                                                       | 1.599                                | -0.256                                        |
| Norway              | 2016 | Pure                                                      | Hybrid                                                       | -0.174                               | -0.259                                        |
| Paraguay            | 2013 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.241                                        |
| Paraguay            | 2014 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.112                                        |
| Paraguay            | 2015 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.108                                        |
| Paraguay            | 2016 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.254                                        |
| Philippines         | 2013 | Hybrid                                                    | Pure                                                         | -0.174                               | -0.225                                        |
| Country              | Year  | Inflation targeting type, IMF regime-based classification | Inflation targeting type, classification using cluster analysis | Exchange rate volatility (normalized) | International reserves volatility (normalized) |
|----------------------|-------|----------------------------------------------------------|-------------------------------------------------------------|----------------------------------------|-----------------------------------------------|
| Philippines          | 2014  | Hybrid                                                   | Pure                                                        | -0.174                                 | -0.198                                        |
| Philippines          | 2015  | Hybrid                                                   | Pure                                                        | -0.174                                 | -0.236                                        |
| Philippines          | 2016  | Hybrid                                                   | Pure                                                        | 0.971                                  | 0.183                                         |
| Poland               | 2013  | Pure                                                     | Pure                                                        | -0.174                                 | 0.214                                         |
| Poland               | 2014  | Pure                                                     | Pure                                                        | -0.174                                 | -0.254                                        |
| Poland               | 2015  | Pure                                                     | Pure                                                        | -0.174                                 | -0.236                                        |
| Poland               | 2016  | Pure                                                     | Pure                                                        | -0.174                                 | -0.187                                        |
| Romania              | 2013  | Hybrid                                                   | Pure                                                        | -0.174                                 | 0.168                                         |
| Romania              | 2014  | Hybrid                                                   | Pure                                                        | -0.174                                 | -0.263                                        |
| Romania              | 2015  | Hybrid                                                   | Hybrid                                                      | -0.169                                 | -0.212                                        |
| Romania              | 2016  | Hybrid                                                   | Pure                                                        | 0.079                                  | -0.155                                        |
| Russian Federation   | 2015  | Hybrid                                                   | Hybrid                                                      | -0.174                                 | -0.235                                        |
| Russian Federation   | 2016  | Hybrid                                                   | Pure                                                        | -0.174                                 | -0.251                                        |
| South Africa         | 2013  | Hybrid                                                   | Hybrid                                                      | -0.174                                 | -0.176                                        |
| South Africa         | 2014  | Hybrid                                                   | Pure                                                        | -0.174                                 | -0.177                                        |
| South Africa         | 2015  | Hybrid                                                   | Pure                                                        | -0.174                                 | -0.259                                        |
| South Africa         | 2016  | Hybrid                                                   | Pure                                                        | -0.174                                 | -0.223                                        |
| Sweden               | 2013  | Pure                                                     | Pure                                                        | -0.174                                 | -0.218                                        |
| Sweden               | 2014  | Pure                                                     | Pure                                                        | 0.543                                  | -0.254                                        |
| Sweden               | 2015  | Pure                                                     | Pure                                                        | -0.174                                 | -0.220                                        |
| Sweden               | 2016  | Pure                                                     | Pure                                                        | -0.174                                 | -0.261                                        |
| Thailand             | 2013  | Hybrid                                                   | Hybrid                                                      | -0.158                                 | -0.211                                        |
| Thailand             | 2014  | Hybrid                                                   | Pure                                                        | -0.174                                 | -0.116                                        |
| Thailand             | 2015  | Hybrid                                                   | Pure                                                        | -0.174                                 | -0.256                                        |
| Thailand             | 2016  | Hybrid                                                   | Pure                                                        | -0.174                                 | 4.972                                         |
| Turkey               | 2013  | Hybrid                                                   | Pure                                                        | 0.012                                  | -0.255                                        |
| Turkey               | 2014  | Hybrid                                                   | Pure                                                        | -0.174                                 | -0.244                                        |
| Turkey               | 2015  | Hybrid                                                   | Pure                                                        | -0.174                                 | -0.235                                        |
| Turkey               | 2016  | Hybrid                                                   | Pure                                                        | -0.174                                 | -0.191                                        |
| Uganda               | 2014  | Hybrid                                                   | Hybrid                                                      | -0.174                                 | -0.255                                        |
| Uganda               | 2015  | Hybrid                                                   | Pure                                                        | -0.174                                 | -0.240                                        |
| Uganda               | 2016  | Hybrid                                                   | Hybrid                                                      | -0.174                                 | -0.212                                        |
| Uruguay              | 2013  | Hybrid                                                   | Hybrid                                                      | -0.174                                 | -0.184                                        |
| Uruguay              | 2014  | Hybrid                                                   | Hybrid                                                      | -0.174                                 | -0.257                                        |
| Uruguay              | 2015  | Hybrid                                                   | Hybrid                                                      | -0.087                                 | -0.158                                        |
| Uruguay              | 2016  | Hybrid                                                   | Pure                                                        | -0.174                                 | -0.175                                        |

Note: The volatility of each variable was measured as annual average dispersion computed on monthly data. Then volatility was normalized and centered (as a result of which some of centered volatility values are negative).
## Appendix 2. Results of estimating supplementary model specifications for testing the robustness of the findings

| Regressor          | Model 5                          | Model 6                          | Model 7                          |
|--------------------|----------------------------------|----------------------------------|----------------------------------|
|                    | Estimation period: 2000–2016     | Estimation period: 2000–2016     | Estimation period: 2000–2016     |
|                    | Authors’ classification          | Authors’ classification          | IMF classification               |
| Hybrid IT          | 1.03** (0.40)                    | 0.98** (0.45)                    | -0.51 (0.36)                     |
| Inflation          | -0.20** (0.09)                   | -0.24** (0.11)                   | -0.13* (0.07)                    |
| Target band width  | -0.53 (0.48)                     | -0.66 (0.53)                     | 0.16 (0.28)                      |
| Exchange rate rise | -0.18 (1.74)                     | -0.003 (3.009)                   | 1.75 (2.34)                      |
| GDP growth rate    | 0.05 (0.08)                      | 0.09 (0.09)                      | 0.01 (0.07)                      |
| Constant           | 0.43 (1.05)                      | 0.18 (1.44)                      | -1.29 (0.92)                     |
| Fixed time effects | No                               | Yes                              | Yes                              |
| Pseudo-R²          | 0.08                             | 0.17                             | 0.08                             |
| Likelihood function logarithm | -84.47 | -79.07 | -124.84 |
| Marginal effect of using hybrid IT | 0.21** | 0.18** | -0.11 |

Note: Numbers in parentheses indicate robust standard errors. * and ** denote significance at 10/5/1 percent level respectively.