**TABLE 1**: *Unit Root Tests*

|  |  |  |
| --- | --- | --- |
| **Variable** | **ADF** | **Phillips-Perron** |
| **Level** | **1st difference** | **Level** | **1st difference** |
| **B&H** |  |  |  |  |
| **lnGDPit** | *1.079343* | *-2.426940\*\** | *0.939891* | *-2.341278\*\** |
| **Croatia** |  |  |  |  |
| **lnGDPjt**  | *0.534937* | *-2.233516\*\** | *0.400239* | *-2.165668\*\** |
|  **lnRER** | *0.176731* | *-4.581269\*\*\** | *0.197474* | *-4.538738\*\*\** |
| **lnTrade Balance** | *-0.625601* | *-4.144144\*\*\** | *-0528712* | *-4.126283\*\*\** |
| **Serbia** |  |  |  |  |
| **lnGDPjt**  | *0.205231* | *-3.957354\*\*\** | *0.205990* | *-3.941829\*\*\** |
|  **lnRER** | *1.144277* | *-3.247414\*\*\** | *1.44277* | *-3.244619\*\*\** |
| **lnTrade Balance** | *0.166180* | *-2.737869\*\*\** | *0.288552* | *-2.515047\*\** |
| **FRY Macedonia** |  |  |  |  |
| **lnGDPjt**  | *0.464622* | *-0.745446\** | *0.456298* | *-2.337270\*\** |
|  **lnRER** | *2.417726* | *-2.625521\*\** | *2.256408* | *-2.565876\*\** |
| **lnTrade Balance** | *-0.858681* | *-3.902284\*\*\** | *-0.768868* | *-4.310898\*\*\** |
| **Turkey** |  |  |  |  |
| **lnGDPjt**  | *1.062980* | *-2.912247\*\*\** | *1.007180* | *-2.904358\*\*\** |
|  **lnRER** | *2.531564* | *-2.572986\*\** | *2.524039* | *-2.575148\*\** |
| **lnTrade Balance** | *-1.065925* | *-3.861435\*\*\** | *-0.982259* | *-4.473261\*\*\** |
| **Romania** |  |  |  |  |
| **lnGDPjt**  | *0.862667* | *-2.738488\*\*\** | *0.862657* | *-2.690106\*\** |
|  **lnRER** | *-4.541888* | *-51.19596\*\*\** | *-3.881546* | *-43.02610\*\*\** |
| **lnTrade Balance** | *-1.193196* | *-4.546491\*\*\** | *-1.174141* | *-5.716482\*\*\** |
| **Bulgaria** |  |  |  |  |
| **lnGDPjt**  | *1.057609* | *-2.245539\*\** | *0.899664* | *-2.152647\*\** |
|  **lnRER** | *-10.00536* | *-17.78353\*\*\** | *-6.433392* | *-24.45720\*\*\** |
| **lnTrade Balance** | *-1.984676* | *-6.099489\*\*\** | *-1.984676* | *-11.10835\*\*\** |
| **Albania** |  |  |  |  |
| **lnGDPjt**  | *1.228235* | *-2.157532\*\** | *1.063897* | *-2.183207\*\** |
|  **lnRER** | *-0.615478* | *-2.652603\*\** | *-0.615478* | *-2.690215\*\** |
| **lnTrade Balance** | *-0.740532* | *-3.340907\*\*\** | *-0.749023* | *-3.277207\*\*\** |

**Notes:** \*\*, and \*\*\* denote rejection of the null hypothesis of unit root at the 5%, and 1% significance level respectively. Critical value refers to MacKinnon (1996).

**TABLE 2**: *Cointegration Test Statistic*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Cointegration** | $$λtrace$$ | **Critical value** | $$λmax$$ | **Critical value** |
|  **Croatia** |  |  |  |  |
|  | $$H\_{0}:r=0$$ |  |  |  |  |
| **lnTrade Balance** | $$H\_{A}:r\geq 1$$$$H\_{0}:r\leq 1$$ | *80.01975\*\*\** | *47.85613* | *32.34032\*\** | *27.58434* |
| **ln GDPit** | $$H\_{A}:r\geq 2$$$$H\_{0}:r\leq 2$$ | *47.67943\*\*\** | *29.79707* | *27.40509\*\*\** | *21.13162* |
| **lnGDPjt** | $$H\_{A}:r\geq 3$$$$H\_{0}:r\leq 3$$ | *20.27434\*\*\** | *15.49471* | *14.40768\*\** | *14.26460* |
| **lnRER** | $$H\_{A}:r\geq 4$$ | *5.866656\*\** | *3.841466* | *5.866656\*\** | *3.841466* |
|  **Serbia** |  |  |  |  |
|  | $$H\_{0}:r=0$$ |  |  |  |  |
| **lnTrade Balance** | $$H\_{A}:r\geq 1$$$$H\_{0}:r\leq 1$$ | *119.1373\*\*\** | *47.85613* | *65.24986\*\*\** | *27.58434* |
| **lnGDPit** | $$H\_{A}:r\geq 2$$$$H\_{0}:r\leq 2$$ | *53.88734\*\*\** | *29.79707* | *30.31672\*\*\** | *21.13162* |
| **lnGDPjt** | $$H\_{A}:r\geq 3$$$$H\_{0}:r\leq 3$$ | *23.57071\*\*\** | *15.49471* | *19.18931\*\*\** | *14.26460* |
| **lnRER** | $$H\_{A}:r\geq 4$$ | *4.381398\*\** | *3.841466* | *4.381398\*\** | *3.841466* |
|  **Turkey** |  |  |  |  |
|  | $$H\_{0}:r=0$$ |  |  |  |  |
| **lnTrade Balance** | $$H\_{A}:r\geq 1$$$$H\_{0}:r\leq 1$$ | *87.45107\*\*\** | *47.85613* | *50.46213\*\*\** | *27.58434* |
| **lnGDPit** | $$H\_{A}:r\geq 2$$$$H\_{0}:r\leq 2$$ | *36.98894\*\*\** | *29.79707* | *17.11684* | *21.13162* |
| **lnGDPjt** | $$H\_{A}:r\geq 3$$$$H\_{0}:r\leq 3$$ | *19.87210\*\** | *15.49471* | *14.41448\*\** | *14.26460* |
| **lnRER** | $$H\_{A}:r\geq 4$$ | *5.457611\*\** | *3.841466* | *5.457611\*\** | *3.841466* |
|  **Romania** |  |  |  |  |
|  | $$H\_{0}:r=0$$ |  |  |  |  |
| **lnTrade Balance** | $$H\_{A}:r\geq 1$$$$H\_{0}:r\leq 1$$ | *77.77639\*\*\** | *47.85613* | *47.25517\*\*\** | *27.58434* |
| **lnGDPit** | $$H\_{A}:r\geq 2$$$$H\_{0}:r\leq 2$$ | *30.52122\*\** | *29.79707* | *20.26143* | *21.13162* |
| **lnGDPjt** | $$H\_{A}:r\geq 3$$$$H\_{0}:r\leq 3$$ | *10.25980* | *15.49471* | *9.973702* | *14.26460* |
| **lnRER** | $$H\_{A}:r\geq 4$$ | *0.286094\*\** | *3.841466* | *0.286094\*\** | *3.841466* |
|  **Bulgaria** |  |  |  |  |
|  | $$H\_{0}:r=0$$ |  |  |  |  |
| **lnTrade Balance** | $$H\_{A}:r\geq 1$$$$H\_{0}:r\leq 1$$ | *88.08038\*\*\** | *47.85613* | *51.18590\*\*\** | *27.58434* |
| **lnGDPit** | $$H\_{A}:r\geq 2$$$$H\_{0}:r\leq 2$$ | *36.89448\*\*\** | *29.79707* | *24.73828\*\*\** | *21.13162* |
| **lnGDPjt** | $$H\_{A}:r\geq 3$$$$H\_{0}:r\leq 3$$ | *12.15620* | *15.49471* | *7.742219* | *14.26460* |
| **lnRER** | $$H\_{A}:r\geq 4$$ | *4.413982\*\** | *3.841466* | *4.413982\*\** | *3.841466* |
|  **Albania** |  |  |  |  |
|  | $$H\_{0}:r=0$$ |  |  |  |  |
| **lnTrade Balance** | $$H\_{A}:r\geq 1$$$$H\_{0}:r\leq 1$$ | *93.44657\*\*\** | *47.85613* | *49.67437\*\*\** | *27.58434* |
| **lnGDPit** | $$H\_{A}:r\geq 2$$$$H\_{0}:r\leq 2$$ | *43.77220\*\*\** | *29.79707* | *22.82383\*\** | *21.13162* |
| **lnGDPjt** | $$H\_{A}:r\geq 3$$$$H\_{0}:r\leq 3$$ | *20.94837\*\*\** | *15.49471* | *14.81244\*\** | *14.26460* |
| **lnRER** | $$H\_{A}:r\geq 4$$ | *6.135930\*\** | *3.841466* | *6.135930\*\** | *3.841466* |

Notes: \*\*, and \*\*\* denote rejection of the null hypothesis of unit root at the 5%, and 1% significance level. Critical value refers to MacKinnon-Haug-Michelis (1999).

**TABLE 3:** *Vector Error Correction Model Estimation for Exchange Rate Coefficient Between B&H and Trading Partners*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Croatia** | **Serbia** | **FRY****Macedonia** | **Turkey** | **Romania** | **Bulgaria** | **Albania** |
| $$∆lnREX\_{t-1}$$ | *2.0613361**(1.564431)* | *-10.335066**(-5.459448)\*\*\** | *1.1230113**(0.202327)* | *-7.4417709**(-0.339663)* | *-0.1303954**(-0.982219)* | *-0.2389896**(-2.263955)\** | *-7.8138507**(-0.90289)* |
| $$∆lnREX\_{t-2}$$ | *2.7577134**(2.265989)\*\** | *-9.9091820**(-4.902193)\*\** | *1.4233552**(0.392785)* | *-4.6087816**(-0.283685)* | *-0.6590532**(-0.658294)* | *-2.4985219**(-1.748149)* | *-9.7537206**(-1.792576)* |
| $$∆lnREX\_{t-3}$$ | *2.6345858**(2.264400)* | *-8.9782385**(-2.889095)\** | *2.4408320**(0.661691)* | *-3.6038732**(-0.183044)* | *-1.4341921**(-0.666592)* | *-9.2018044**(-1.347624)* | *-7.4395309**(-1.134793)* |
| $$∆lnREX\_{t-4}$$ | *2.5889631**(2.039898)* | *-8.7133006**(-4.191803)\** | *5.6610742**(1.322057)* | *7.1058594**(0.372008)* | *-4.3575648**(-0.139438)* | *5.6335257**(0.810602)* | *3.0161848**(0.496803)* |
| $$∆lnREX\_{t-5}$$ | *2.27734767**(0.745207)* | *-8.16968653**(-3.333399)* | *7.1992585**(2.2733462)\** | *1.9744416**(0.676240)* | *2.5488653**(1.389915)* |  | *-3.2840333**(-0.354667)* |
| $$∆lnREX\_{t-6}$$ | *7.0631558**(0.790450)* | *-7.7642983**(-1.640343)* | *5.5637830**(10.158686)\** | *5.8620985**(1.415017)* | *4.2786261**(14.271881)\*\** |  | *-1.0952429**(-0.613664)* |
| **ECt-1** | *-1312863**(0.2077)* | *-1.214322**(0.2422)* | *2.78511**(0.0132)\*\** | *0.845999**(0.4100)* | *2.046316**(0.0500)\*\** | *-3.029647**(0.0080)\*\*\** | *1.564131**(0.1373)* |
| **AdjR2** | *0.76* | *0.89* | *0.86* | *0.67* | *0.88* | *0.54* | *0.77* |
| **LM** | *8.58 (0.013)\*\** | *5.09 (0.078)* | *11.66 (0.002)\*\*\** | *9.08 (0.01)\*\** | *9.52 (0.008)\*\*\** | *2.85 (0.23)* | *6.68 (0.035)\*\** |
| **Reset** | *0.99 (0.004)* | *0.64 (0.53)\*\** | *0.90 (0.40)\*\** | *6.95(0.02)* | *0.93 (0.45)\*\** | *2.76 (0.06)\*\** | *1.58 (0.21)\*\** |
| **CUSUM** | *stable* | *stable* | *stable* | *stable* | *stable* | *stable* | *stable* |
| **CUSUMSQ** | *stable* | *stable* | *stable* | *stable* | *stable* | *stable* | *stable* |

**Notes:** \*\*, and \*\*\* denote rejection of the null hypothesis of unit root at the 5%, and 1% significance level.

**GRAPH** **1**: *The Reaction of Trade Balance to the Change of the Currency Exchange Rate*