

## Annex C. The Results of the Measurements of Vector Autoregressive (VAR) models

**Table C.1.** Test for Lag Length Criteria

| Lag                                      | LogL      | LR        | FPE              | AIC              | SC               | HQ               |
|------------------------------------------|-----------|-----------|------------------|------------------|------------------|------------------|
| For the period of 2000Q1–2007Q4 quarters |           |           |                  |                  |                  |                  |
| 0                                        | –512.5502 | NA        | 7.72e+12         | 38.1889          | 38.3329          | 38.2317          |
| 1                                        | –491.7209 | 35.4870*  | 3.24e+12         | 37.3127          | 37.88859*        | 37.4839          |
| 2                                        | –481.8250 | 14.6606   | 3.12e+12         | 37.2463          | 38.2542          | 37.5460          |
| 3                                        | –470.2008 | 14.6379   | <b>2.77e+12*</b> | <b>37.0519*</b>  | 38.4917          | <b>37.4800*</b>  |
| For the period of 2009Q1–2015Q1 quarters |           |           |                  |                  |                  |                  |
| 0                                        | –386.7498 | NA        | 1.32e+14         | 41.0263          | 41.1754          | 41.0515          |
| 1                                        | –382.5292 | 6.6641    | 2.22e+14         | 41.5294          | 42.1259          | 41.6303          |
| 2                                        | –378.3381 | 5.2941    | 4.03e+14         | 42.0356          | 43.0794          | 42.2123          |
| 3                                        | –367.0630 | 10.6817   | 4.05e+14         | 41.7961          | 43.2873          | 42.0485          |
| 4                                        | –339.0239 | 17.70892* | 9.60e+13         | 39.7920          | 41.7306          | 40.1201          |
| 5                                        | –305.7723 | 10.5005   | <b>3.03e+13*</b> | <b>37.23919*</b> | <b>39.62514*</b> | <b>37.64299*</b> |

**Table C.2.** Pairwise Granger Causality Tests

|                                                   |     |             |        |
|---------------------------------------------------|-----|-------------|--------|
| Pairwise Granger Causality Tests                  |     |             |        |
| Sample: 2000Q1 2007Q4                             |     |             |        |
| Lags: 3                                           |     |             |        |
| Null Hypothesis:                                  | Obs | F–Statistic | Prob.  |
| GDP_2000_2007 does not Granger Cause EX_2000_2007 | 29  | 0.33726     | 0.7985 |
| EX_2000_2007 does not Granger Cause GDP_2000_2007 |     | 3.28261     | 0.0399 |
| IM_2000_2007 does not Granger Cause EX_2000_2007  | 29  | 1.41898     | 0.2640 |
| EX_2000_2007 does not Granger Cause IM_2000_2007  |     | 5.46440     | 0.0058 |
| IM_2000_2007 does not Granger Cause GDP_2000_2007 | 29  | 0.91484     | 0.4499 |
| GDP_2000_2007 does not Granger Cause IM_2000_2007 |     | 2.24348     | 0.1116 |

|                                                          |     |                |               |
|----------------------------------------------------------|-----|----------------|---------------|
| Pairwise Granger Causality Tests                         |     |                |               |
| Sample: 2009Q1 2015Q1                                    |     |                |               |
| Lags: 3                                                  |     |                |               |
| Null Hypothesis:                                         | Obs | F–Statistic    | Prob.         |
| GDP_2009_2015 does not Granger Cause EX_2009_2015        | 22  | 0.76740        | 0.5299        |
| <b>EX_2009_2015 does not Granger Cause GDP_2009_2015</b> |     | <b>2.62492</b> | <b>0.0886</b> |
| IM_2009_2015 does not Granger Cause EX_2009_2015         | 22  | 0.35196        | 0.7884        |
| EX_2009_2015 does not Granger Cause IM_2009_2015         |     | 6.78950        | 0.0041        |
| IM_2009_2015 does not Granger Cause GDP_2009_2015        | 22  | 0.88518        | 0.4711        |
| GDP_2009_2015 does not Granger Cause IM_2009_2015        |     | 8.17483        | 0.0018        |