



South East Asia - European Union Free Trade Area An analysis using Gdyn

Linh Pham

Beatrix E. Velazquez

The Simulation

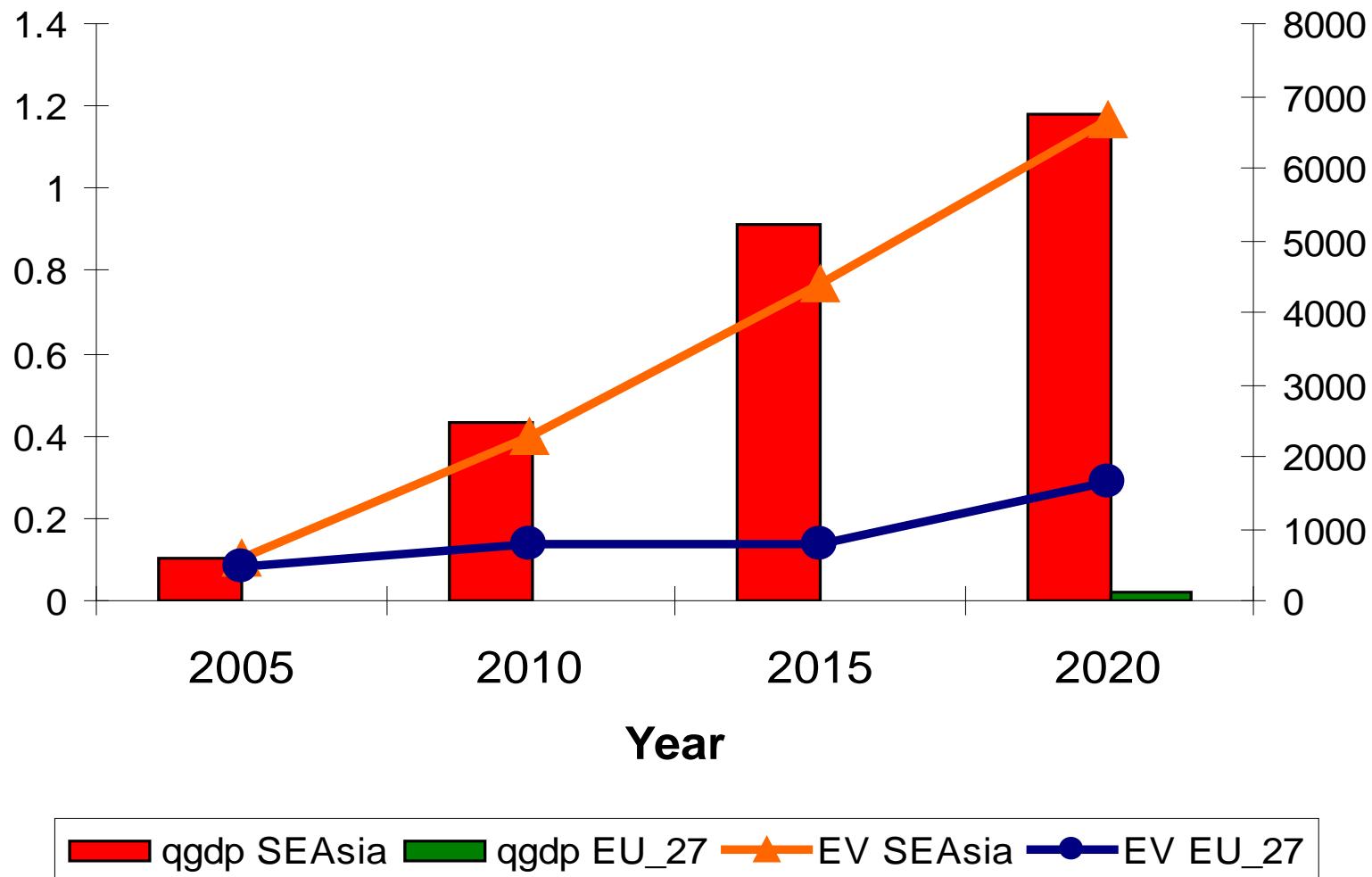
Context

- EU – SE Asia are already important trade partners
- The EU is by far the largest investor in SE Asia countries
- Long history of cooperation
- Free trade negotiations EU -individual countries

Policy shocks

- Elimination of import and exports taxes/subsidies across the board, in 4 steps (2005, 2010, 2015, 2020)

GDP and Welfare changes



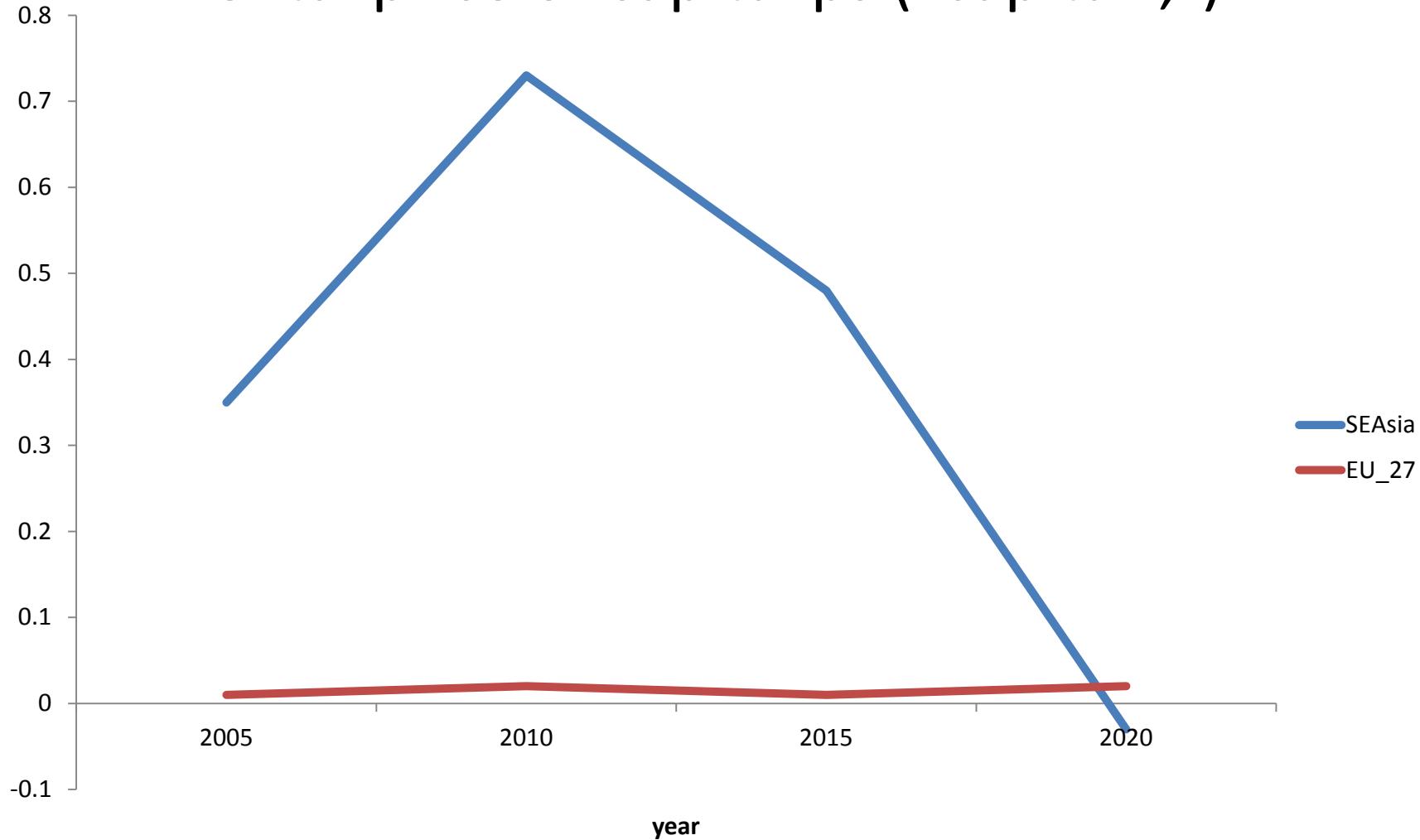
* Cum. % change – relative to baseline

Rental price of capital at SEAsia*

| South East Asia | 2001-2005 | 2005-2010 | 2010-2015 | 2015-2020 |
|-----------------------------|-----------|-----------|-----------|-----------|
| qo ("capital") | 0.11 | 0.63 | 1.55 | 2.36 |
| qfe ("Capital", "Lghtmnfc") | 2.29 | 6.25 | 11.85 | 16.33 |
| qfe ("Capital", "Mnfc") | -0.37 | -0.29 | 0.82 | 1.74 |
| qfe ("Capital", "Serv") | 0.07 | 0.47 | 1.06 | 1.75 |
| qfe ("Capital", "Food") | 0.1 | 0.35 | 1.75 | 3.34 |
| qfe ("Capital", "Extract") | -0.13 | -0.13 | 0 | 0.13 |
| qo("LghtMnfc") | 2.25 | 6.02 | 11.17 | 15.17 |

* Cum. % change – relative to baseline

rental price of capital ps ("capital",r)*



* Cum. % change – relative to baseline

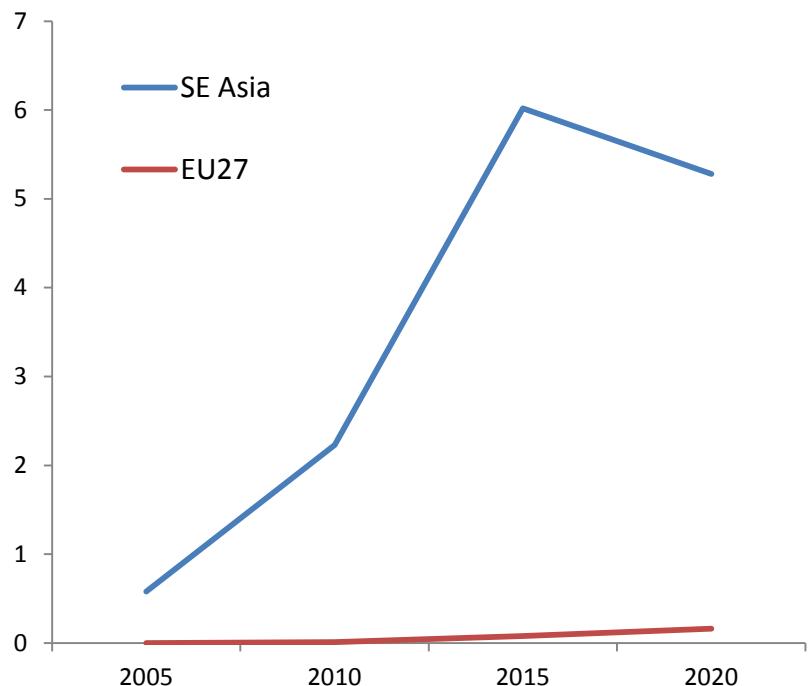
Decompose pcgds

| <i>Zero-profits condition</i> | <i>Contribution</i> |
|-------------------------------|---------------------|
| 1 e1_STC | 0 |
| 2 e2_STC | -0.049 |
| 3 profitsslack | 0 |

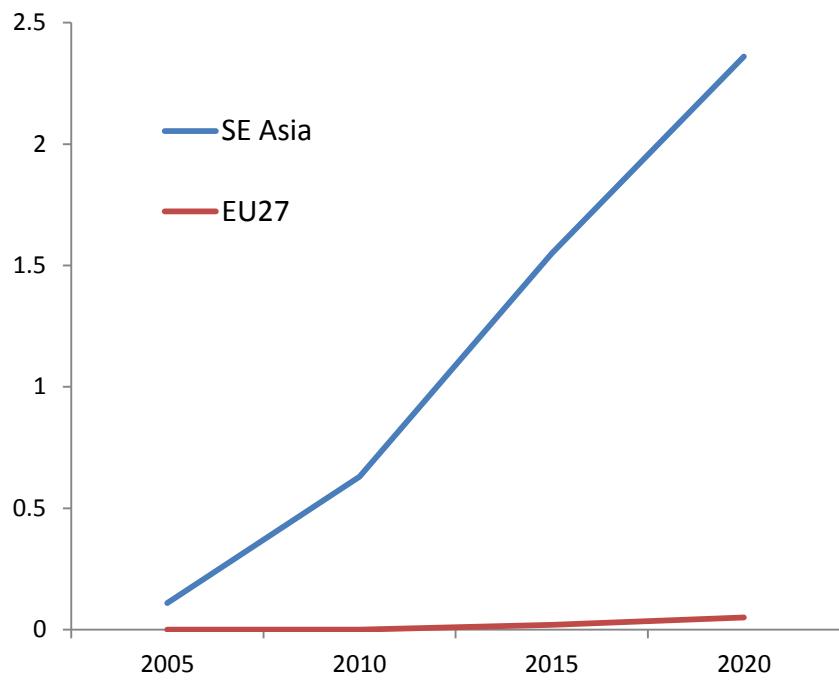
| | <i>E2_STC</i> |
|------|---------------|
| Mnfc | 0.56 |
| Serv | 0.44 |

| | FMSHR | pfm | 1-FMSHR | pdf | <i>FMSHR*pfm + (1-FMSHR)*pdf</i> |
|------|--------------|------------|----------------|------------|----------------------------------|
| Mnfc | 0.77 | -0.5371 | 0.23 | 0.034129 | -0.40556 |
| Serv | 0.03 | 0.012548 | 0.97 | 0.415063 | 0.404041 |

Investment: qcgds

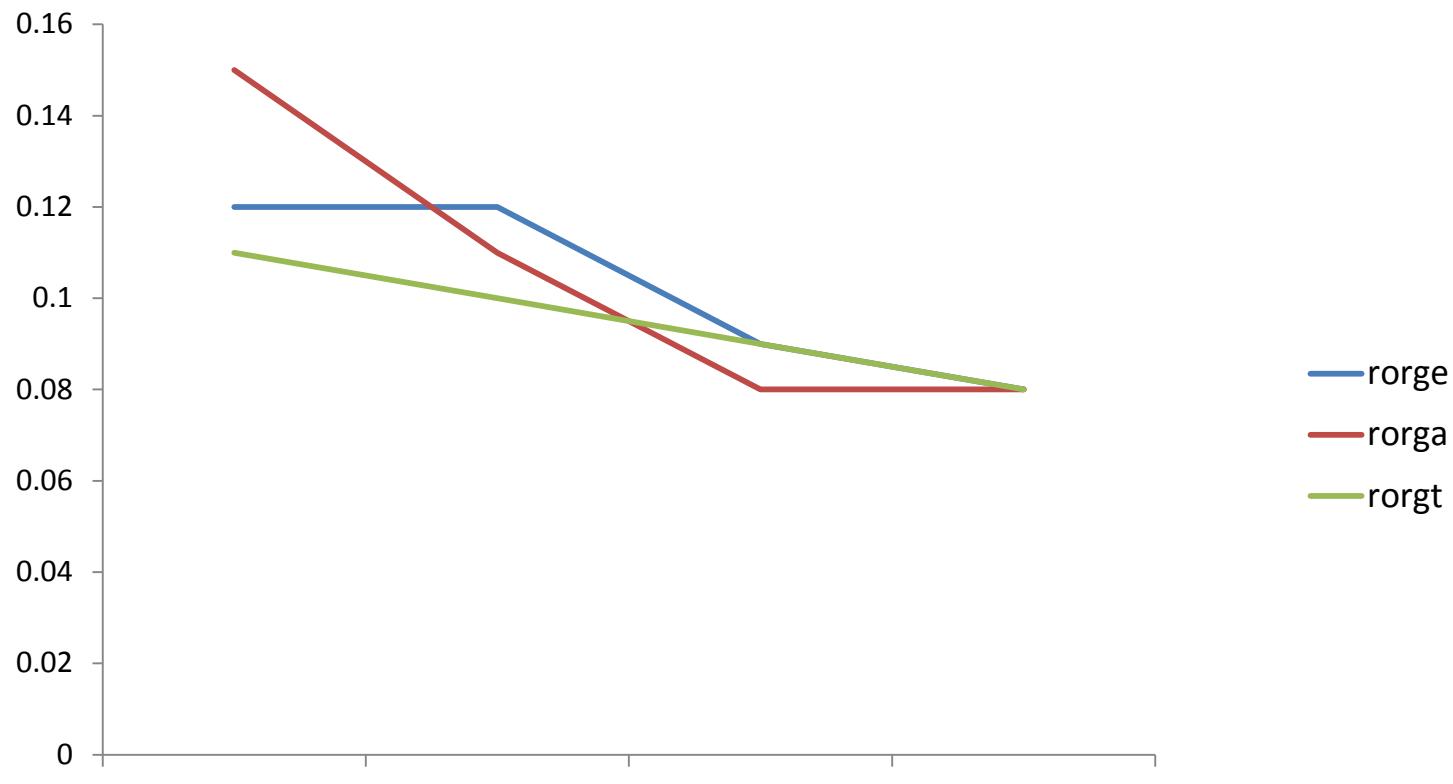


Capital stock: qk



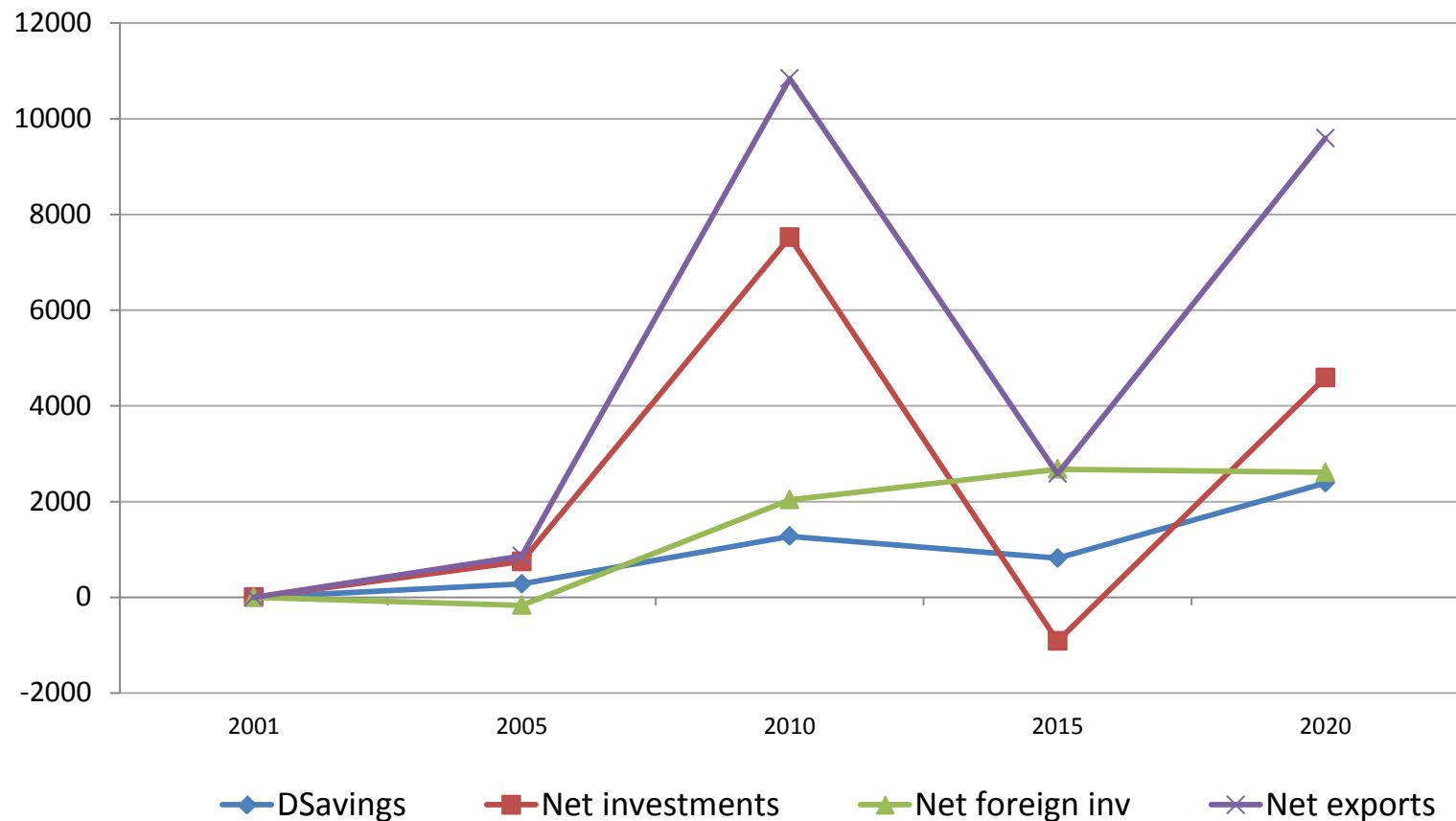
* Cum. % change – relative to baseline

Rates of return in SE Asia



* Cumulative % change relative to baseline

External Balance Condition in SE Asia

$$S-I-NFI = X-M$$


Year on year change relative to baseline in value terms