

Trade Liberalization for Food Sector in SEA

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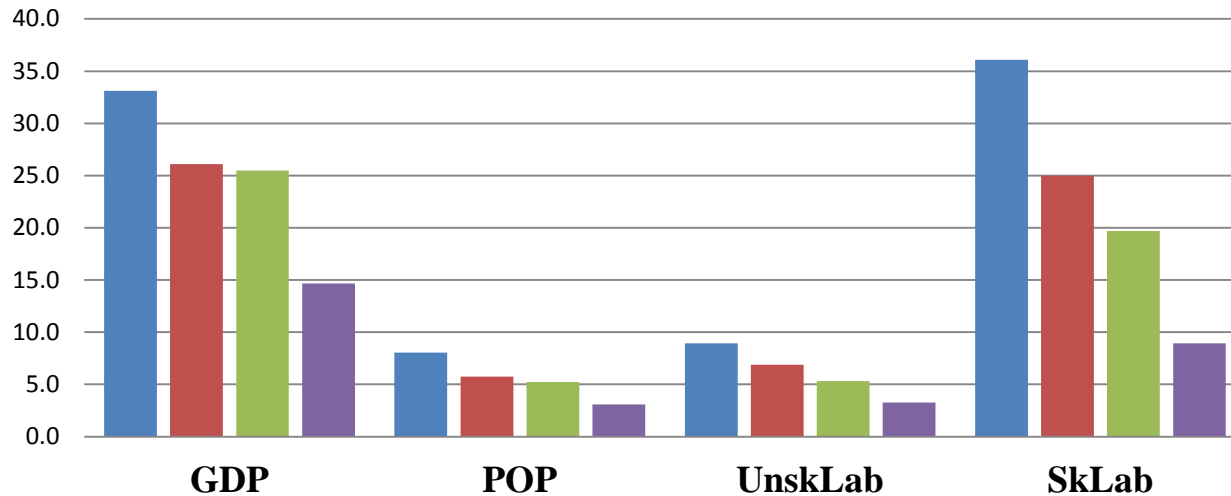
Simulation design

- **Aggregation: 12 regions, 5 goods**
- **2001 – 2020 in 4 periods:**
 - **2001-07, 2007-12, 2012-17, 2017-20**
- **Baseline and Policy Closure**
- **Baseline and Policy Shocks**
- **Key results**
 - **Base vs Policy**
 - **Macro and Sectoral**

Review: baseline and policy shocks

Baseline shocks: SEA

Total % change per period



- **Policy shocks:**

- $\text{txs}(\text{"Food"}, \text{SEAsia}, \text{NSEAsia}) = 0$

- $\text{tms}(\text{"Food"}, \text{NSEAsia}, \text{SEAsia}) = \downarrow$

What do we expect...

- **Liberalization of food sector in SEA will lead to (relative to baseline):**
 - **GDP: Increase**
 - **Rental: Increase & down (diminishing)**
 - **Pcgds: Increase & stable**
 - **ROR: Increase & down**
 - **qcgds: Increase & stable**
 - **qk: Increase steadily**

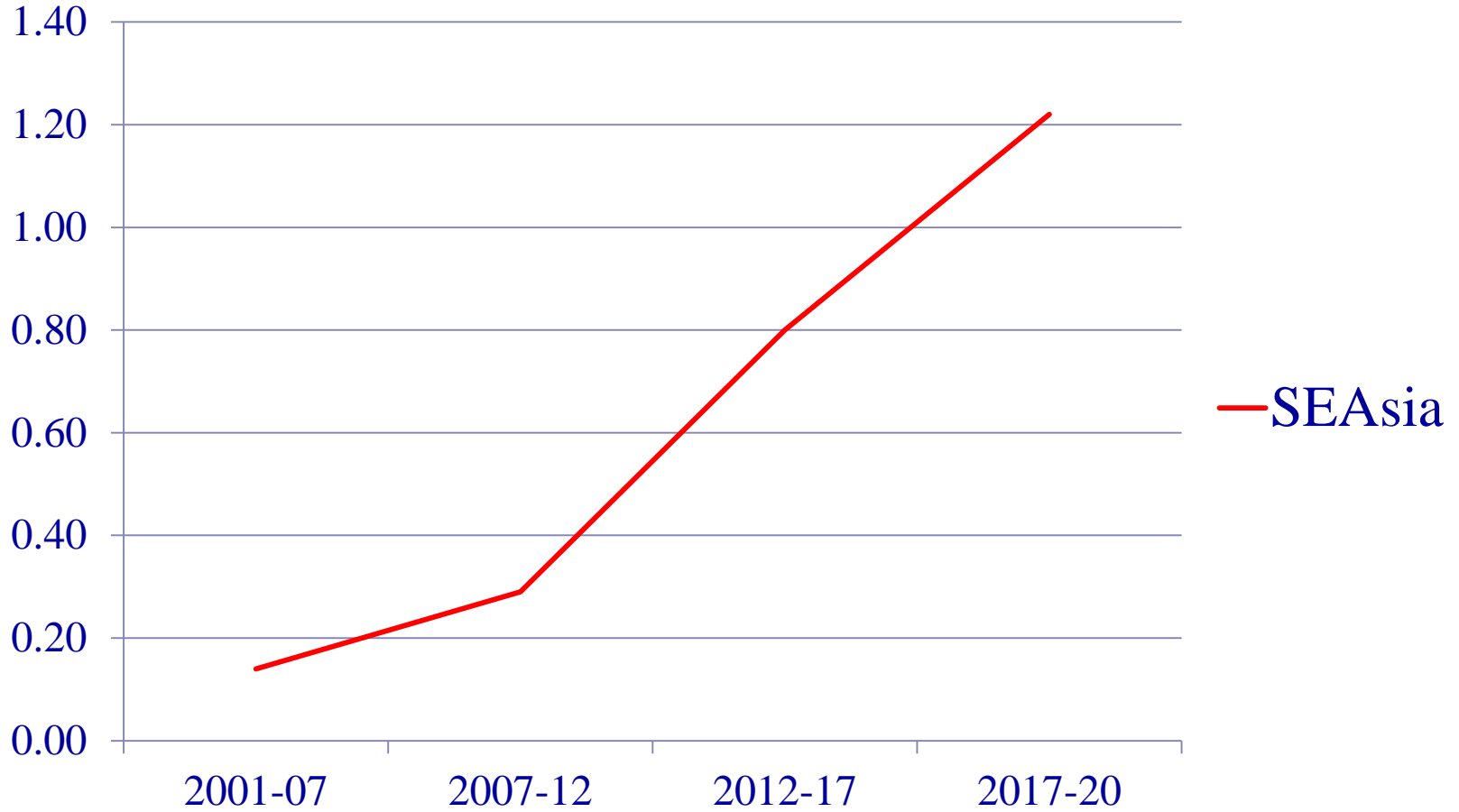
qgdp

Cumulative % change relative to baseline

qgdp	2001-07	2007-12	2012-17	2017-20
Oceania	-0.01	-0.02	-0.05	-0.07
China	-0.01	-0.02	0.03	0.03
EastAsia	0.00	0.00	-0.01	-0.01
SEAsia	0.14	0.29	0.80	1.22
India	0.06	0.00	0.07	0.04
SouthAsia	0.02	0.07	0.14	0.15
NAmerica	0.00	0.00	-0.01	-0.01
CSAmerica	0.00	0.00	0.00	-0.02
EU_27	0.00	0.00	-0.01	-0.01
Turkey	-0.02	0.02	0.09	0.08
Africa	0.00	-0.01	-0.05	-0.05
RestofWorld	0.00	0.00	0.00	0.00

qgdp

Cum. % change relative to baseline



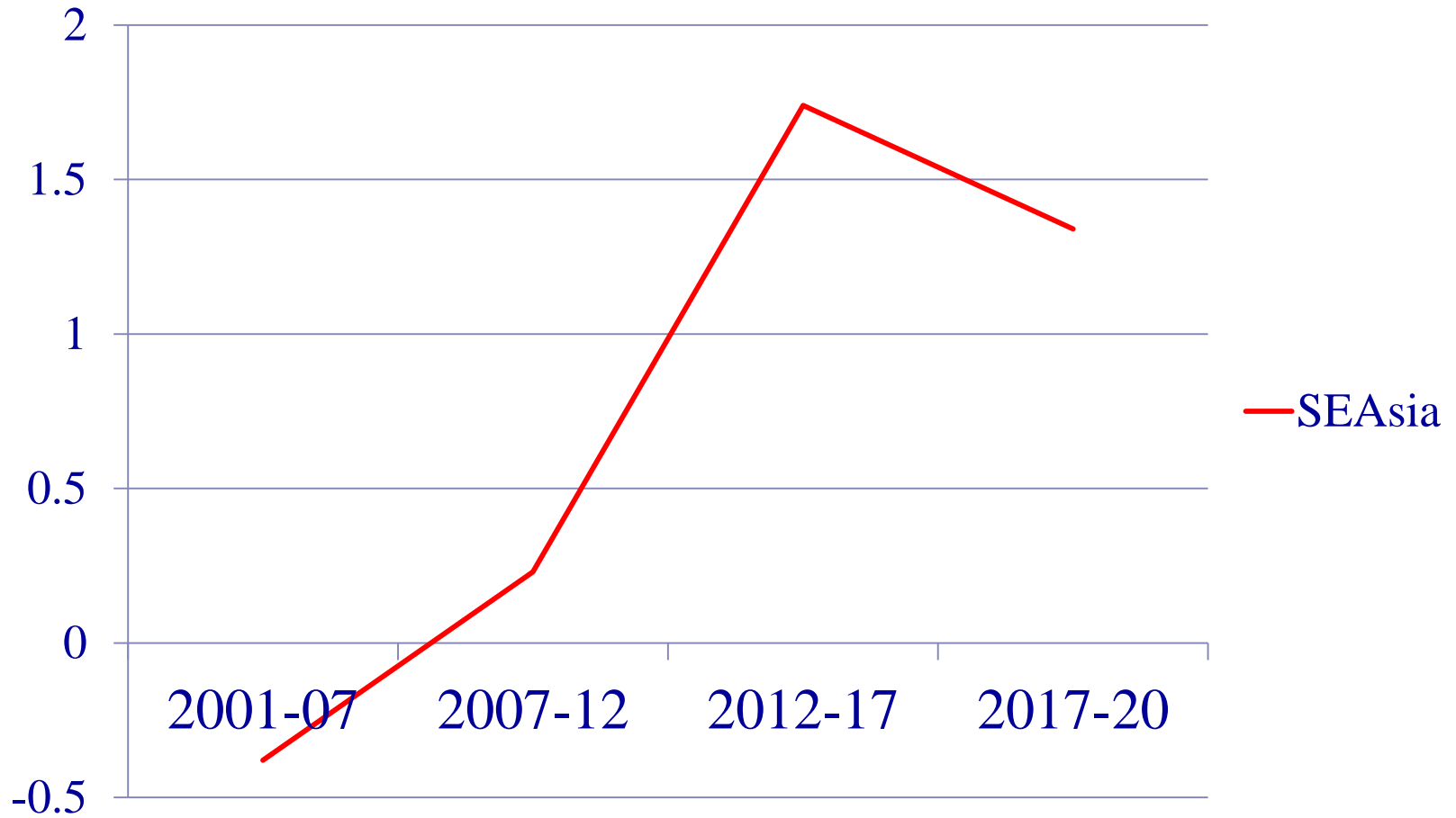
Rental price of capital ps

Cum. % change relative to baseline

	2001-07	2007-12	2012-17	2017-20
Oceania	-0.07	-0.06	-0.19	-0.15
China	-0.03	0.1	0.17	-0.15
EastAsia	0.01	0.02	0.06	0.04
SEAsia	-0.38	0.23	1.74	1.34
India	-0.02	0.12	0.07	-0.33
SouthAsia	-0.02	0.06	0.12	-0.01
NAmerica	0.03	0.01	0.01	-0.04
CSAmerica	0.05	0.02	-0.01	-0.16
EU_27	0.01	0	0.02	0.01
Turkey	0.15	0.13	0.06	-0.12
Africa	0.02	-0.09	-0.13	0.08
RestofWorld	0.02	0.02	-0.04	-0.01

Rental

Cum. % change relative to baseline



Rental price of capital in SEA

Cumulative % change relative to baseline

	2001-07	2007-12	2012-17	2017-20
qo("Food")	-5.16	0.54	9.12	11.64
qfe("Capital","Food")	-8.21	0.96	16.59	21.08
Rental	-0.38	0.23	1.74	1.34
qo("Capital")	0.02	0.10	0.89	1.80

Capital input in Food is 41% of total capital & labor use, compared to 40% of the economy average

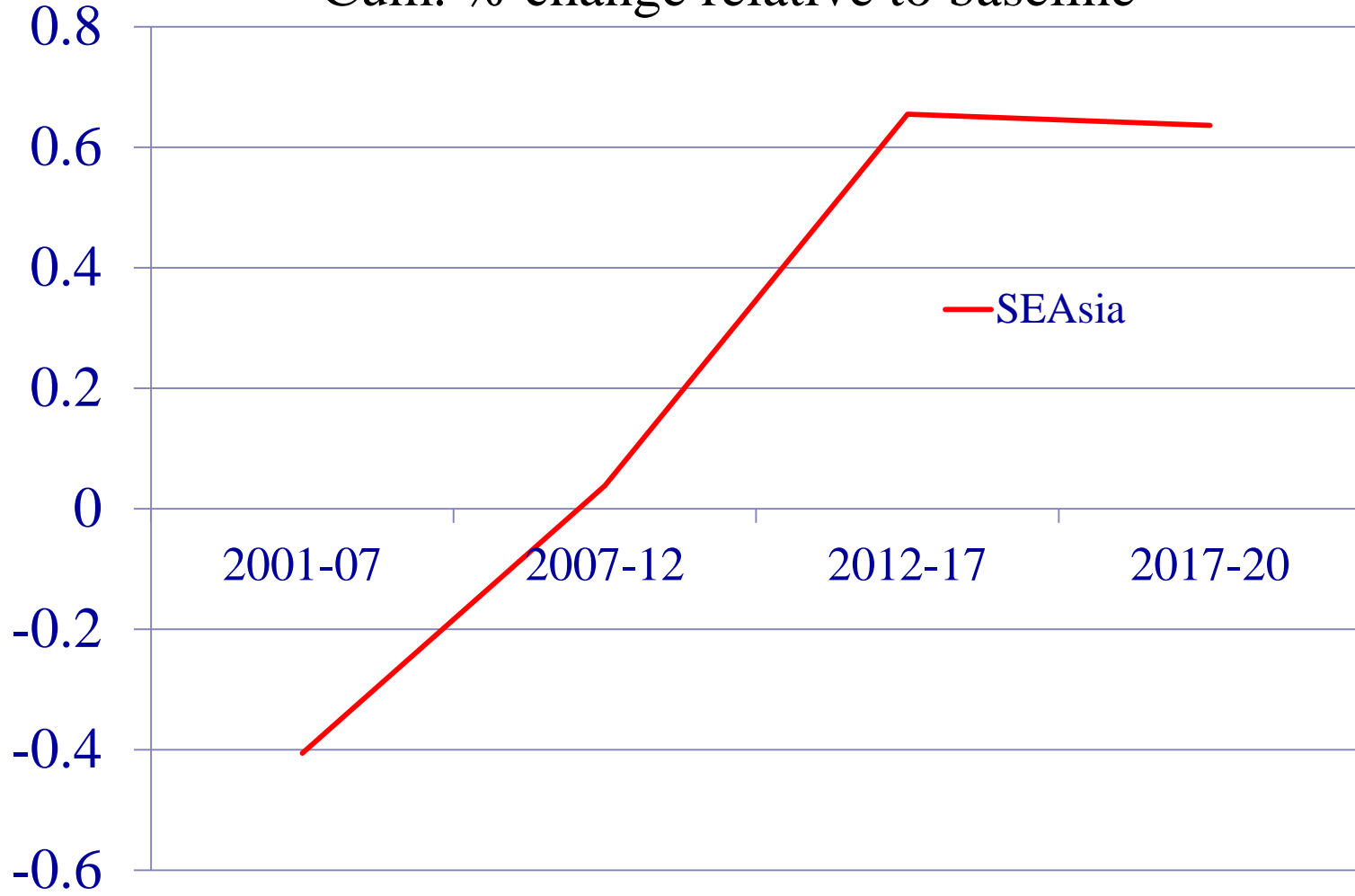
Price of capital goods pcgds

Cumulative % change relative to baseline

pcgds	2001-07	2007-12	2012-17	2017-20
Oceania	-0.039	-0.047	-0.128	-0.1
China	0.003	0.033	0.05	-0.005
EastAsia	0.012	0.008	0.034	0.028
SEAsia	-0.406	0.038	0.655	0.636
India	-0.007	0.045	0.012	-0.039
SouthAsia	-0.016	0.024	0.075	0.047
NAmerica	0.028	0.004	-0.004	-0.028
CSAmerica	0.051	0.008	-0.028	-0.089
EU_27	0.013	-0.002	0.005	0.008
Turkey	0.112	0.072	0.022	-0.013
Africa	0.022	-0.049	-0.081	-0.003
RestofWorld	0.031	0	-0.04	-0.004

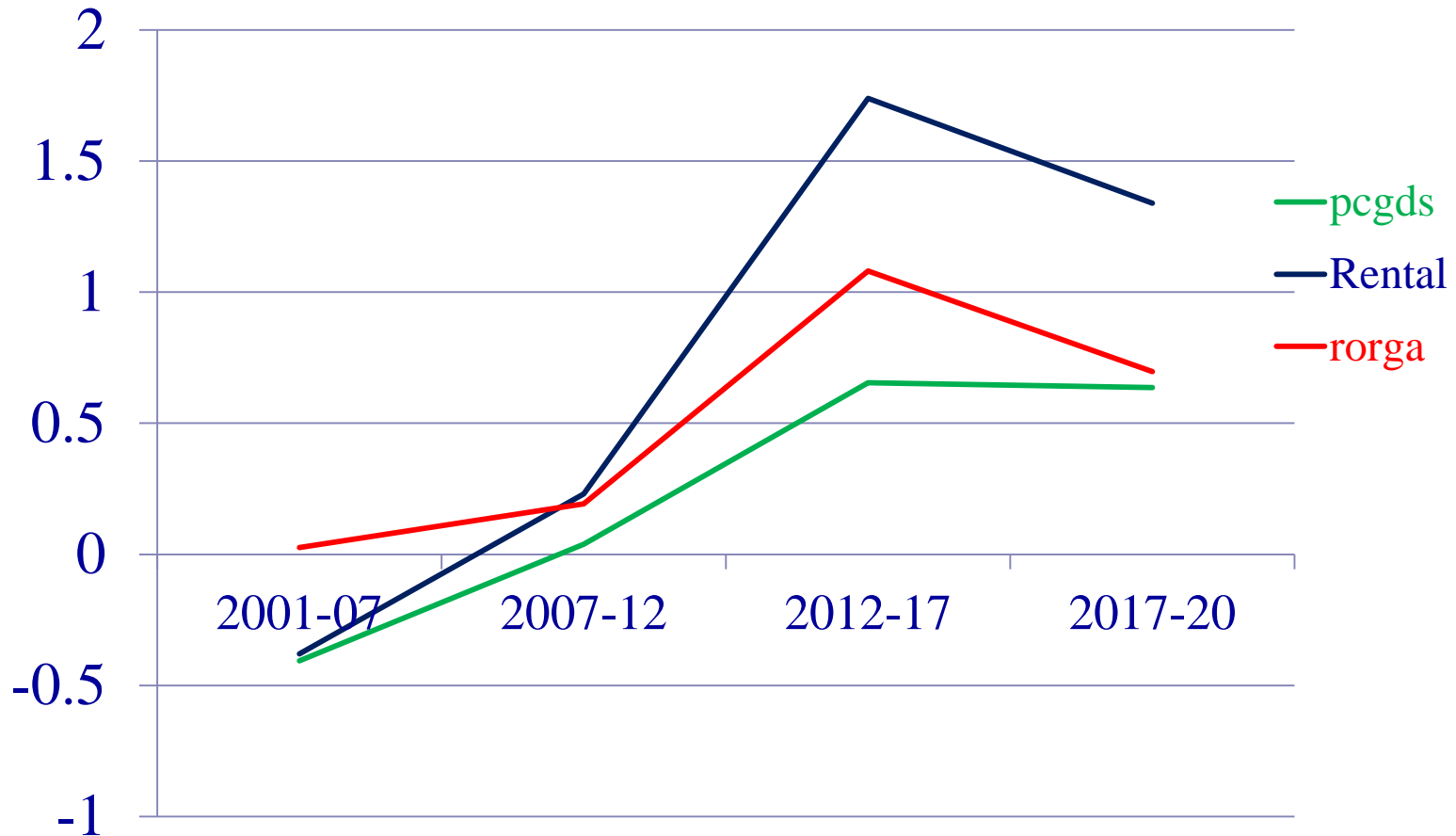
PCGDS

Cum. % change relative to baseline



rorga=rental-pcgds

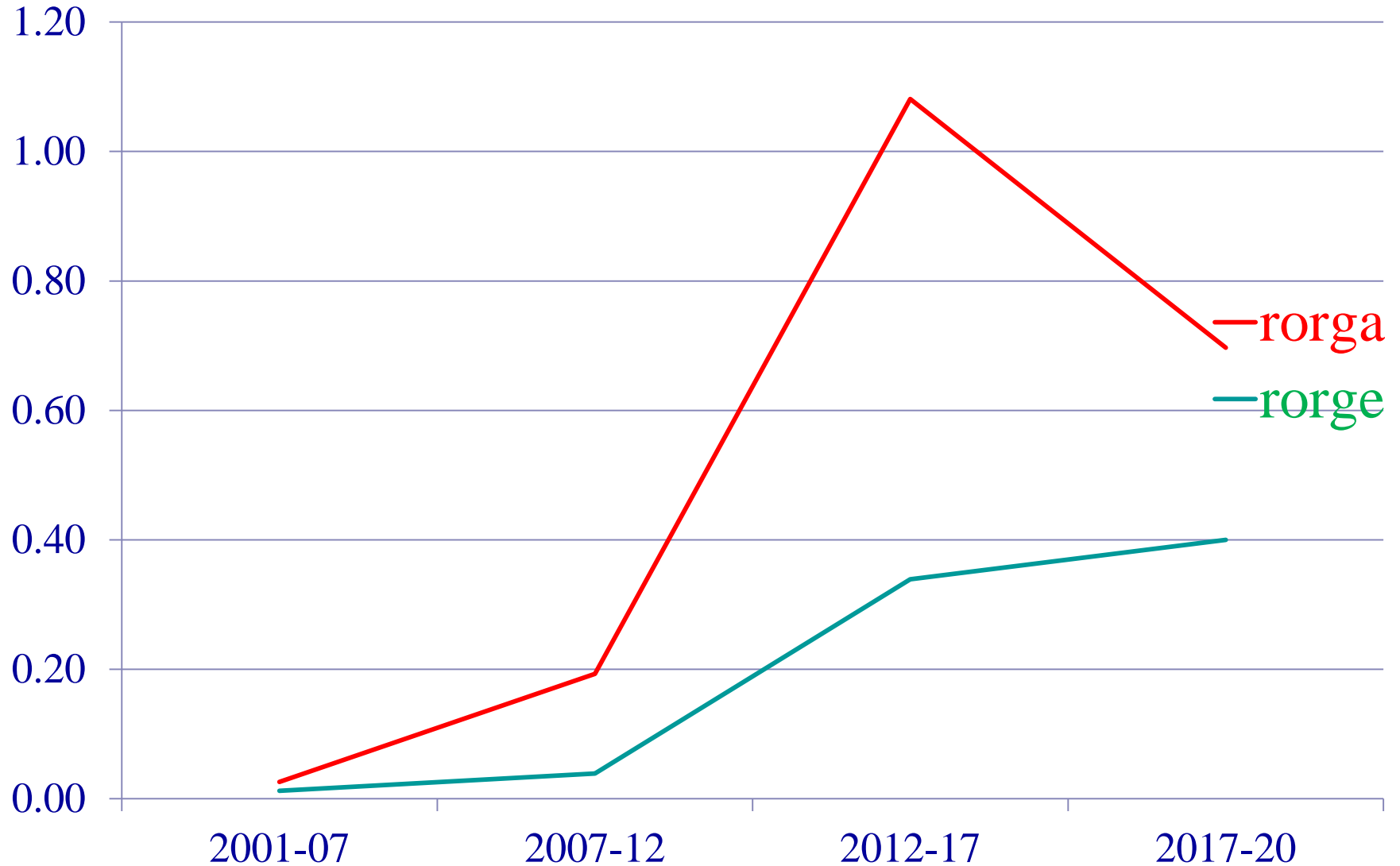
Cum. % change relative to baseline



The increasing pcgds dampens the impact of an increased rental rate on the rate of return

rorga vs. rorge in SEA

Cum. % change relative to baseline



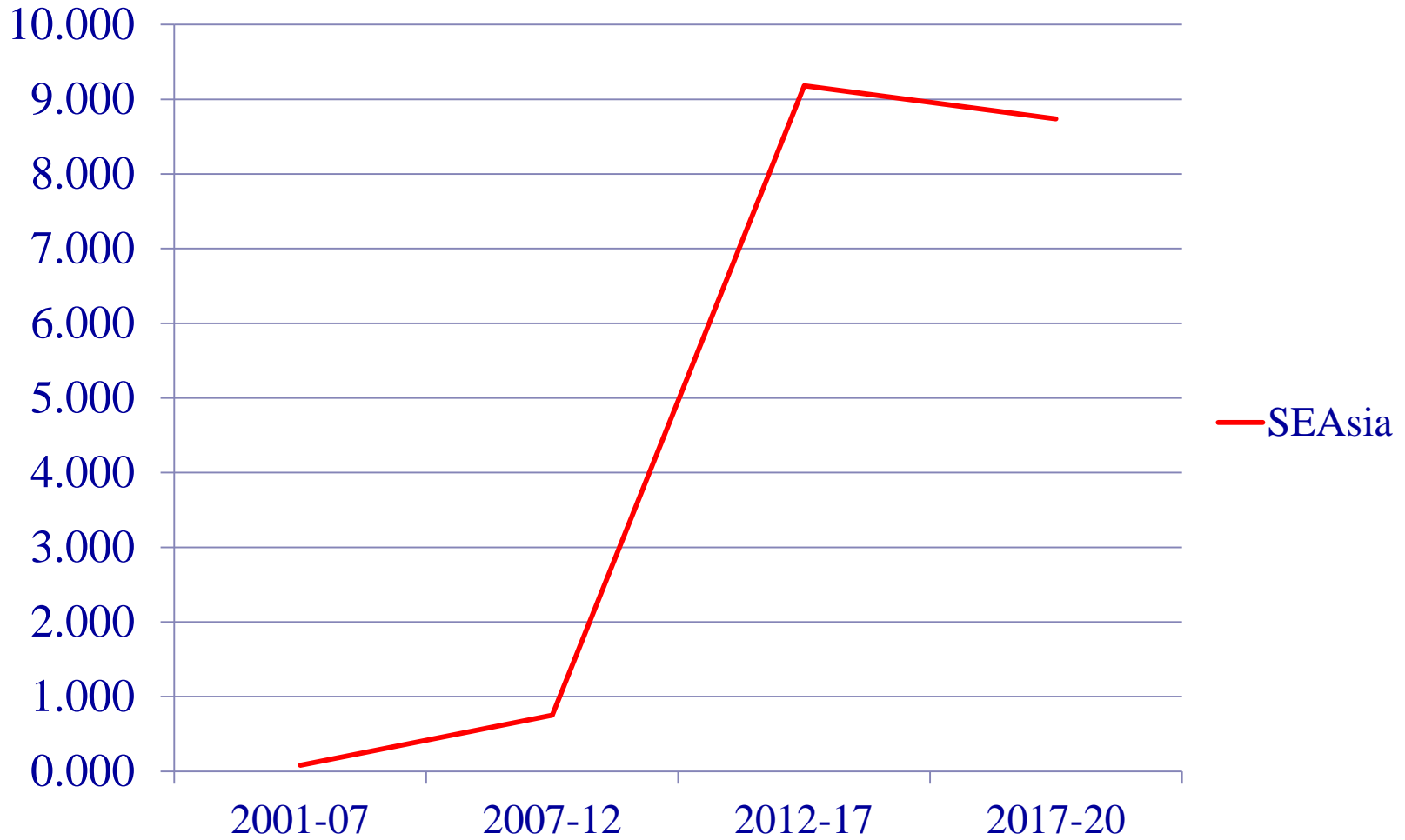
Investment (qcgds)

Cumulative % change relative to baseline

qcgds	2001-07	2007-12	2012-17	2017-20
Oceania	-0.106	-0.151	-0.493	-0.521
China	-0.099	0.209	1.888	-0.637
EastAsia	-0.028	-0.019	-0.017	0.042
SEAsia	0.082	0.751	9.179	8.736
India	-0.026	0.222	1.030	-1.309
SouthAsia	-0.003	0.056	0.146	-0.045
NAmerica	0.006	-0.026	-0.084	-0.093
CSAmerica	0.000	-0.010	-0.048	-0.267
EU_27	-0.014	-0.037	-0.086	-0.027
Turkey	0.105	0.271	0.378	-0.150
Africa	-0.012	-0.172	-0.521	-0.098
RestofWorld	-0.045	0.019	-0.141	-0.084

qcgds in SEAsia

Cum. % change relative to baseline



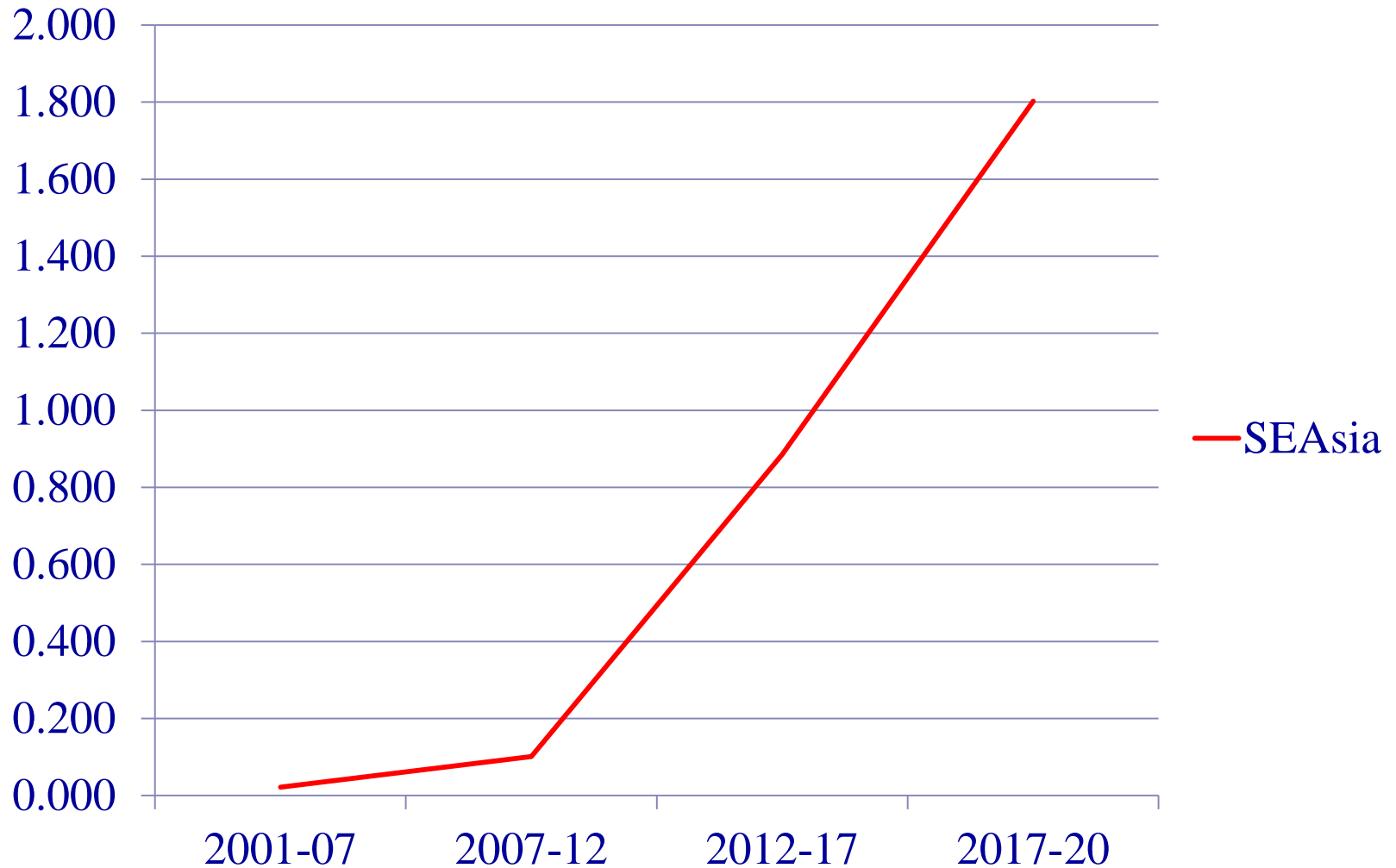
Capital stock (qk)

Cum. % change relative to baseline

qk	2001-07	2007-12	2012-17	2017-20
Oceania	-0.012	-0.052	-0.135	-0.218
China	-0.017	-0.037	0.104	0.12
EastAsia	-0.005	-0.008	-0.014	-0.008
SEAsia	0.022	0.101	0.885	1.802
India	0.001	-0.015	0.151	0.085
SouthAsia	0	0.007	0.052	0.053
NAmerica	0.001	-0.001	-0.02	-0.034
CSAmerica	0	-0.002	-0.008	-0.036
EU_27	-0.003	-0.008	-0.029	-0.035
Turkey	0.011	0.067	0.15	0.147
Africa	-0.003	-0.025	-0.158	-0.188
RestofWorld	-0.007	-0.01	-0.022	-0.04

qk in SEA

Cum. % change relative to baseline



Thank you!