KIEP 대외경제정책연구원
Korea Institute for International Economic Policy

TPP and Korea's choice

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1 Overview of TPP

➢ What is Trans-Pacific Partnership (TPP) ?

- The **TPP** is a proposed trade agreement between twelve Pacific Rim countries concerning a variety of matters of economic policy
- Member countries: Brunei, Chile, New Zealand, Singapore, Australia, Canada, Japan, Malaysia, Mexico, Peru, the United States, and Vietnam
- This agreement was reached on 5 October 2015 after 5 years of negotiations.
- Among other things, the TPP seeks to lower trade barriers such as tariffs

➢ Potential participants of TPP (PTPP)

- South Korea showed interest in entering the TPP, but did not join yet. Due to her high trade dependency, Korea will take part in the second wave of TPP.
- Other countries and regions interested in TPP membership include Taiwan, Thailand, and so on.
- China is not likely to join the negotiation at this moment. However, if FTAAP (China supports) would be established by enlargement of TPP, we can regard this case as China's joining TPP

➢ Simulation design

- Dynamic GTAP database: V8.1 (reference year of 2004)
  - 5 regions: KOR(kor), TPP(Aus, Nzl, Jpn, Mys, Sgp, Vnm, Can, Usa, Mex, Chl, Per), PTPP(Chn, Twn, Tha), EU, ROW
  - 2 sectors: GOODS, SVC
  - 4 endowments: Sklab, UnSklab, capital, land
  - 5 periods: 2004~2010, 2011~15, 2016~20, 2021~25, 2025~2030

- Projections for world CGE Model baselines by Chappuis and Walmsley (2011)
  - GDP, population, skilled labor, and unskilled labor (CEPII)

- Base
  - **swap** qgdp = afereg ;
  - **Shock** <year> qfactsup(*"UnSklab"*,REG) = **select from file** tot.har **header** *"GROW"* ;
    Shock <year> qfactsup(*"SkLab"*,REG)= **select from file** tot.har **header** *"GROW"* ;
    Shock <year> pop = **select from file** pop.har **header** *"GROW"* ;
    shock <year> qgdp = **select from file** gdp.har **header** *"GROW"* ;

- Policy 1 (2016~2020)
  - **tshock** tms(*"GOODS"*, *"TPP"*, *"TPP"*) = **select from file** taxshb.har **header** *"RTMS"* ;

1 Potential impacts of TPP

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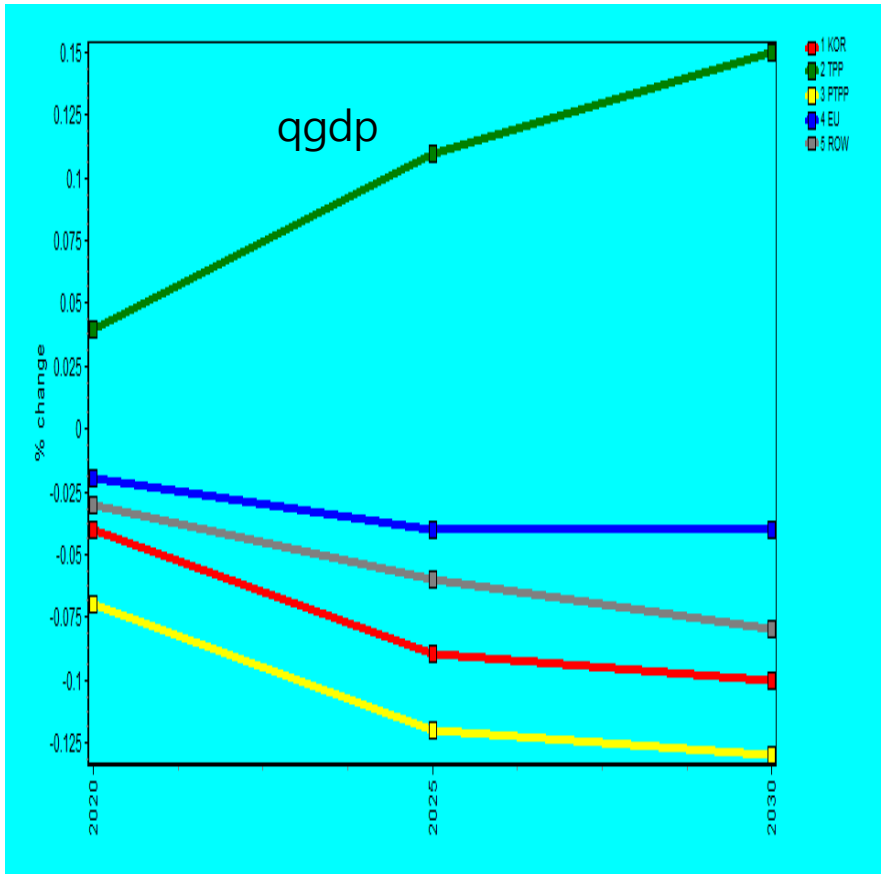
- TPP members can expect positive economic growth
- Elimination of tariffs among TPP ⇒ more production ⇒ demand for capital ↑ ⇒ rental and ROR ↑ ⇒ more investment (investment inflow from global Trust)



TPP	2020	2025	2030
qcgds	0.8	0.75	0.57
qk	0.1	0.29	0.39
rental	0.48	0.29	0.15
rorge	0.07	0.08	0.03
rorga	0.19	0.07	0

TPP	2020	2025	2030
wqh	0.25	0.21	0.18
wqhf	0.31	0.36	0.38
wqht	-0.03	-0.39	-0.59
wqtf	1.68	3.41	4.32

Note: all variables are evaluated based on difference between Policy and Base

II Korea's choice

➢ **Which one is better? becoming a first mover vs joining together but later**

- Joining solely: benefit the fruits early but pays high entry costs
- Joining together (with china): takes time but expects more bargaining power

➢ **Simulation design**

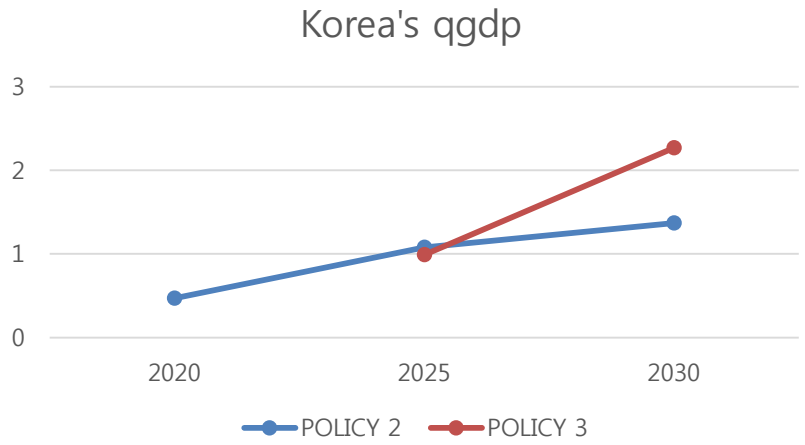
- Same database and business-as-usual scenarios
- Base
  - **swap** qgdp = afereg ;
  - **Shock** <year> qfactsup(*"UnSklab"*,REG) = **select from file** tot.har **header** *"GROW"* ;
    Shock <year> qfactsup(*"SkLab"*,REG)= **select from file** tot.har **header** *"GROW"* ;
    Shock <year> pop = **select from file** pop.har **header** *"GROW"* ;
    shock <year> qgdp = **select from file** gdp.har **header** *"GROW"* ;
  - **shock** tms(*"GOODS"*,*"TPP"*,*"TPP"*) = **select from file** taxshb.har **header** *"RTMS"* ;

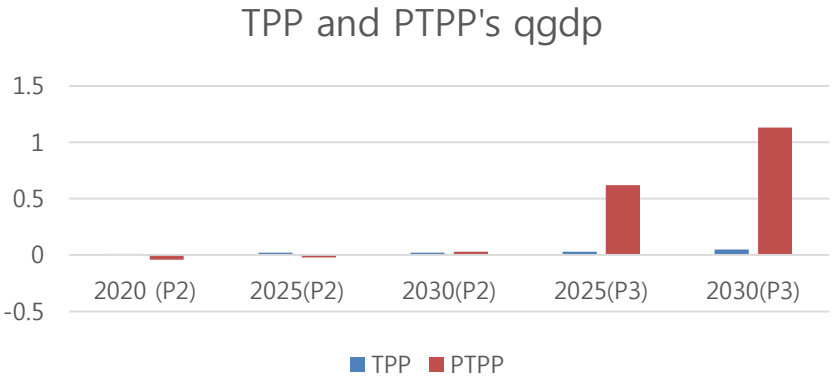
- Policy 2 (2016~2020)
  - **tshock** tms(*"GOODS"*,*"KOR"*,*"TPP"*) = **select from file** taxshp.har **header** *"RTMS"* ;
  - **tshock** tms(*"GOODS"*,*"TPP"*,*"KOR"*) = **select from file** taxshp.har **header** *"RTMS"* ;

- Policy 3 (2021~2025)
  - **tshock** tms(*"GOODS"*,*"KOR"*,*"TPP"*) = **select from file** taxshp.har **header** *"RTMS"* ;
  - **tshock** tms(*"GOODS"*,*"TPP"*,*"KOR"*) = **select from file** taxshp.har **header** *"RTMS"* ;
  - **tshock** tms(*"GOODS"*,*"PTPP"*,*"TPP"*) = **select from file** taxshp.har **header** *"RTMS"* ;
  - ……..

II Korea's choice

- Joining together will bring more economic benefits in the long run
- More trade liberalization can increase TPP's growth rates also
- Same things happen in Korea: Elimination of tariffs ⇒ demand for capital ↑ ⇒ rental and ROR ↑ ⇒ more investment (investment inflow from global Trust)





	POLICY 2			POLICY 3	
KOR	2020	2025	2030	2025	2030
wqh	0.73	0.61	0.51	2.29	2.59
wqhf	1.62	2.46	2.7	4.71	7.31
wqht	-1.21	-2.15	-1.93	-1.45	-2.99
wqtf	1.65	2.5	2.74	4.77	7.42

	POLICY 2			POLICY 3	
KOR	2020	2025	2030	2025	2030
qcgds	5.05	4.87	3.42	11.58	13.37
qk	0.72	1.92	2.49	1.46	4.37
rental	1.94	0.82	0.05	5.77	4.04
rorge	0.32	0.27	0.03	0.83	1
rorga	1.03	0.28	-0.16	2.48	1.18

Note: all variables are evaluated based on difference between Policy and Base

Looking deeper into impact of POLICY 3

Welfare decomposition

	alloc	endwNA; tech; pop; pref	tot	IS	nf_equit	Total
KOR	**12,065**	0	**11,718**	**-2,383**	2,581	23,981
TPP	15,623	0	**25,127**	378	**6,016**	47,144
PTPP	**40,608**	0	21	257	2,151	43,037
EU	-12,250	0	-9,938	203	967	-21,019
ROW	-22,092	0	-27,252	-5,645	-1,785	-56,773

Note: Base assumes the enforcement of TPP between 2016 and 2020.
Policy includes Kor and PTPP's participation in TPP between 2021 and 2025.

Looking deeper into impact of POLICY 3 (cont.)

➢ **Welfare decomposition: Allocation (commodity), TOT, Capital ownership**

Allocation	Capital	Goods	Services	Total
KOR	1,621	**5,688**	4,760	12,065
TPP	**2,623**	**12,258**	790	15,623
PTPP	458	**35,243**	**4,856**	40,608
EU	-4,084	-6,672	-1,426	-12,250
ROW	-6,017	-13,178	-2,910	-22,092

TOT	KOR	TPP	PTPP	EU	ROW	Total
GOODS	7,597	17,501	**41**	-4,837	-19,060	1,243
SVC	4,123	7,626	**-20**	-5,101	-8,193	-1,564

NTE	K_location	HHLD_TRUST	TRUST_FIRM	Total
KOR	15,586	-6,922	-6,084	2,581
TPP	13,036	**3,599**	-10,619	6,016
PTPP	51,635	-21,324	-28,160	2,151
EU	-26,977	12,063	15,881	967
ROW	-43,752	6	41,961	-1,785

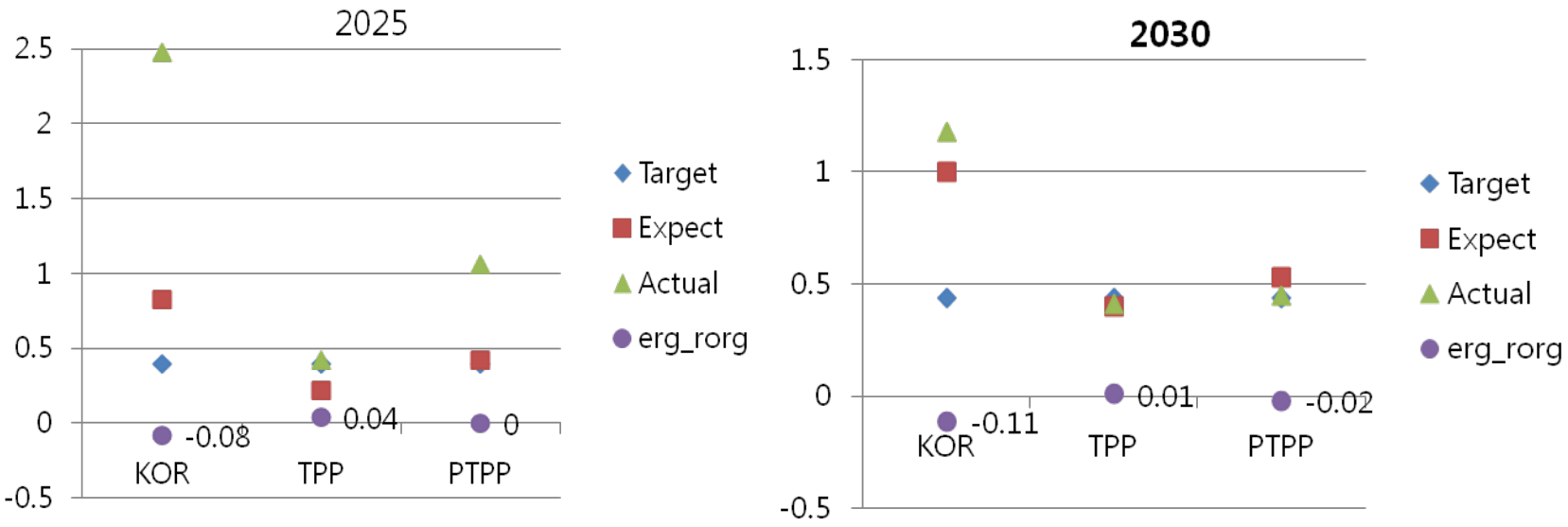
Looking deeper into impact of POLICY 3 (cont.)

Investment and Capital stock

qcgds(D)	2025	2030
KOR	11.58	13.37
TPP	0.49	0.74
PTPP	2.51	2.66
EU	-1.64	-1.73
ROW	-1.63	-1.98

qk(D)	2025	2030
KOR	1.46	4.37
TPP	0.06	0.21
PTPP	0.55	1.42
EU	-0.2	-0.6
ROW	-0.29	-0.87

Rate of return (rorg): Target (rorgt) vs. Expect (rorge) vs. Actual (rorga)



III Looking deeper into impact of POLICY 3 (cont.)

Exports

qxs[Reg,*](D)	1 KOR	2 TPP	3 PTPP	4 EU	5 ROW
KOR	-	12.0	**28.6**	-11.1	-11.3
TPP	22.4	-	**34.8**	-5.5	-5.9
PTPP	**42.1**	24.8	-	-3	-3

Imports

qxs[*,REG](D)	1 KOR	2 TPP	3 PTPP	4 EU	5 ROW
KOR	-	22.4	**42.1**	-15.3	-14.0
TPP	12.0	-	**24.8**	-3.1	-1.7
PTPP	28.6	**34.8**	-	-7.3	-6.0

Thank you

감사합니다