

P·A·R·T

발표2

한일무역마찰의 원인과 영향 그리고 대응방향

이지평(LG경제연구원)



한일 무역마찰의 원인과 영향 그리고 대응방향

이지평

2020.9.

LG 경제연구원

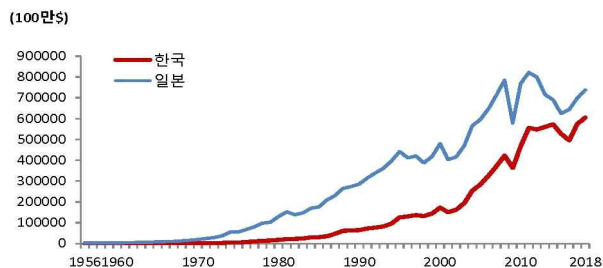
Agenda

1. 한일 관계 악화의 원인과 문제점
2. 한일 경제에 미칠 영향
3. 해결 위한 방향
4. 시사점

1. 한일 관계 악화의 원인과 문제점

수출액, 경제규모 측면에서 한일간의 경제력 격차가 급속하게 축소 되는 가운데에서 이번에 한일간의 무역 규제를 둘러싼 마찰이 발생했음.

한국 및 일본의 수출 규모 격차 축소세

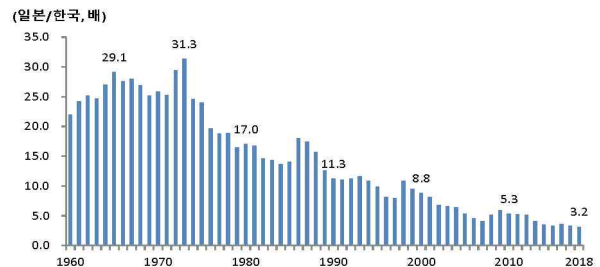


자료 : 한국 무역협회, 일본 재무성

- 일본이 장기불황 과정에서 제조업의 공동화가 진행되어 리먼쇼크 이후에도 수출의 회복세가 더딘 상황임.
- 한국도 작년부터 수출이 극도의 부진을 보이고 있으나 반도체와 함께 EV, 배터리, OLED, 화장품 등의 수출 신유망 품목이 확대 추세에 있음.

Lee, Jipyong

한일 경제규모 격차의 급격한 축소세



주 : 미국 달러 환산 기준, 경상GDP 규모 비교

자료 : 한국은행, The World Bank

- 과거 30대 1 수준이었던 한일 간의 경제규모 격차가 3대1 정도로 축소, 1인당 소득 측면에서 한국이 점차 일본을 능가할 추세를 보이고 있음.
- 일본 내에서는 한국에게 일방적으로 양보하면 안 된다는 여론 형성

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일본정부, 수출규제를 통해 한국 산업을 위협

한일 관계의 악화 추이

- 2018.10.18. : 한국대법원이 일본제철에 징용공에 대한 배상 판결 - 일본 정부의 강력한 비판
- 12.21. : 한국 해군과 일본 자위대 사이에 레이더 발사 여부와 관련된 분쟁 - 실무협의 중 아베 정권이 정보 공개 비판
- 2019. 2.8. : 문희상 국회의장, 위안부 문제 해결에 천황의 사과 필요 발언 - 일본 외무부 장관 경고 발언
- 3.12. : 아소 일본 재무부장관, 국회 금융위원회에서 한국 보복 구체적 검토 발언, 관세, 송금정지, 비자정지 등 언급
- 3.25. : 미쓰비시중공업의 특허권 압류
- 7.4. : 일본, 한국에 대해 반도체 등 관련 3품목 수출규제
- 8.2. : 일본, 한국을 백색국가(현 A그룹)에서 제외 각의 결정
- 8.22. : 한국, GSOMIA(한일군사정보보호협정)파기 통보
- 8.28. : 일본, 한국의 백색 국가 제외 조치 시행
- 9.11. : 한국, 일본의 수출규제를 WTO에 제소
- 11.22 : 한일군사정보보호협정(GSOMIA)의 파기 유보 및 WTO 제소 정치, 일본도 수출규제 문제와 관련한 협의 입장 표명
- 12.4. : 한일 무역 당국자간 대화, 3년만에 재개
- 12.20. : 일본 수출규제 3개 품목 중 포토레지스트의 규제를 완화
- 2020.6.2. : 산업통상자원부, 일본을 WTO 제소하는 절차 재개 발표 : 무역당국자간 대화로 한국이 △ 비전략물자 관리 법체제 정비 △ 무역관리 조직 보강 △ 한일간 무역 대화 등 일본측 요구 다 충족했음에도 불구하고

- 일본측은 강제징용 문제 등은 이미 해결된 것이라는 입장에서 한국에 대해 심하게 분노
- 한국 국민은 기존의 한일협정에 기초한 관계에 불만, 인권을 중시한 사법부의 판결의 파장, 한일관계의 구조적 불안정성
- 일본은 강제징용 문제에서 일본기업 재산에 대한 압류가 이루어지면서 보복을 결정, 경매될 경우 추가보복 가능성

한일 관계 불안정성 장기화

- 한국의 민주화, 한일 역사 인식차, 일본의 우경화, 한반도 평화 프로세스에 대한 일본의 경계 등 고려하면 한일 관계는 상당기간 불안정성을 면치 못할 가능성

정치 및 외교적 목적 위해 일본이 무역을 수단으로 활용

- 불확실성이 거의 없다고 믿었던 일본 산업의 공급 안정성에 불확실성 발생, 중요분야에서 일본제품에 거의 100% 의존하는 것의 위험성 역제 필요성 대두

대일 의존 품목의 대체 가능성

- 일본에 대한 한국의 무역의존도가 낮아져 왔으나 아직도 의존하고 있는 분야의 경우 기술 및 상업성 측면에서 일본제품에서 탈피하는데 어려움 존재하나 지난 1년 동안 국산화 성과 보여

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역사문제와 무역 및 안보 연결한 일본의 조치는 불안을 야기

무역 보복의 문제점

강제징용과 무역 연계

- 일본정부는 일본기업과 피해자 사이의 강제 징용 문제에 개입하여 일본기업이 배상을 하지 못하도록 압력 행사
- 강제징용 문제와 관련이 없는 무역을 연계해서 한국정부를 압박해서 양보를 유도

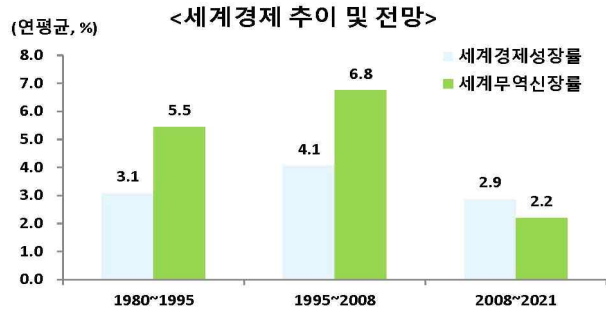
안보 문제 연계

- 한국이 일본제 불화 수소 등 무기에 쓰이는 위험 물질을 북한으로 보냈다는 근거 없는 정보를 자민당 등을 중심으로 제기해 일본 국민여론으로서 확산시킴.
- 이러한 여론전과 함께 한국에 대한 보복 조치의 근거로서 안보 문제를 연계 - 이는 한국 정부의 GSOMIA 폐기 주장을 야기

양국민의 불신 고조

- 일본의 무역보복은 한국 산업, 경제에 미칠 위협으로서 국민 감정을 악화시키며, 과거의 역사문제와 달리 일본에 대한 반발과 일본 제품 불매 운동의 장기화로 연결됨.
- 보복의 정당성 확보하려는 일본 정부, 당국의 대한국 강경 발언 및 언론 유도, 자민당의 사실 왜곡 발언 등으로 일본인의 한국에 대한 인식 왜곡

보호주의와 Slow Trade 촉진 우려



자료 : IMF World Economic Outlook Database, 2019.10., IMF World Economic Outlook, 2020.6. Update

- 글로벌화와 함께 세계경제 성장을 견인해 왔던 세계 무역 신장률은 2008년 리먼쇼크 이후 정체, 2017년에는 5.7%로 회복했으나 2018년 3.6%, 2019년은 0.9%, 2020년에는 코로나 위기도 겹쳐 -11.9%로 하락전망(IMF, 2020.6)
- 무역분쟁 심화의 배경에는 각국의 포퓰리즘 도약이 있으며, 일본의 무역규제나 한국에 대한 혐한, 한국의 일본제품 불매운동 등의 충돌은 중장기적으로 양국 기업에게 부담으로 작용하고 세계적 보호주의도 촉진하는 폐해 야기

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2. 한일 경제에 미칠 영향

한일 분업의 불안정성 확대

공급사슬 불안

- 코로나19로 나타난 세계적인 공급 사슬 불안에 선행하는 형태로 한일간의 첨단 제조업의 공급사슬에 불안정성을 초래, 세계 IT업계에 대한 우려가 일시적으로 나타남.
- 한일 간 상호 불신 확대, 한국의 소재, 부품, 장비 국산화로 한일간 경제협력이 위축되는 압력 발생

경제성장 위축 효과

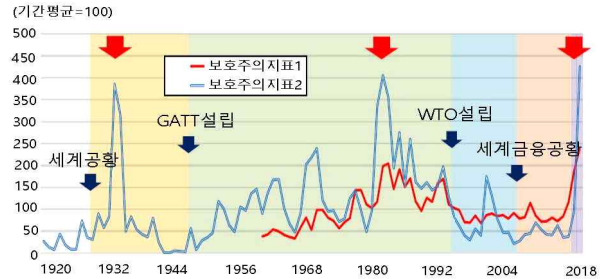
- 정치적인 분쟁으로 한일 산업 및 기업 간 협력이 위축됨으로써 그동안 한일 제조업이 OLED, 반도체 등 신제품 개발에 협력해 왔던 관계가 악화 우려
- 양국간 투자, 무역이 중장기적으로 위축되고 한일 기업이 서로 신규 협력 사업에 소극적 자세를 보임으로써 양국경제에 부정적 영향 발생 가능성

보호주의 확산

- 정치, 안보, 경제, 통상, 외교를 결합하여 자국의 경제적 이익이나 정치적 목적을 극대화하려는 자국 중심적인 행동이 확산될 우려
- 세계 비즈니스 환경의 투명성, 공정성 하락, 정치 및 외교 리스크 확대에 따른 기업 부담(재고, 생산지 조정 등) 확대, 기업투자 위축 효과

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글로벌화의 후퇴 문제



주 : 지표1은 The Washington Post, The New York Times, 닷케이, 요미우리, Le Monde, The Guardian에 나온 보호주의 관련 단어의 기사 건수. 지표2는 닷케이, 요미우리의 기사 건수 기준임.

자료 : 일본 경제산업성

- 과거 2번의 보호주의 파고는 세계대전, GATT, WTO 설립이나 미일 마찰에서의 일본 추격 약화 등으로 역전
- 2008년 글로벌 금융위기는 G20의 효과도 겹쳐 보호주의 확산이 억제되어 왔으나 트럼프 등장 이후 보호주의 가속화, 한일 마찰은 이러한 반글로벌 추세를 가속화시키는 요인으로서 작용

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<참조> Global Supply Chain에 미칠 위험

<휴대폰>



2018년 18억대 출하

<PC>



2018년 2.6억대 출하

<서버>



2018년 860억 달러 출하

미국, 중국, 일본, 동남아, 유럽 등 관련 산업(소프트웨어 등), 연계 산업(전산업, 관공서 등)이 영향을 받는 구조



<한국의 DRAM>

2018년 한국기업의 세계시장 점유율 72.4%, 생산 차질 발생 시 휴대폰, PC, 서버 등의 생산 차질로 파급되어 막대한 충격 발생

<한국의 반도체 소재, 장치 대일 의존도(%)>

포트레지스트 93.2%, 불화수소 41.9%, 에폭시 수지 87.4%, 인산 95.9%, 실리콘 웨이퍼 52.8%, 포트마스크 74.6%, 마스크 브랜크스 65.5%, 레지스트 도포 장치 98.7%, 드라이 에칭 장치 38%

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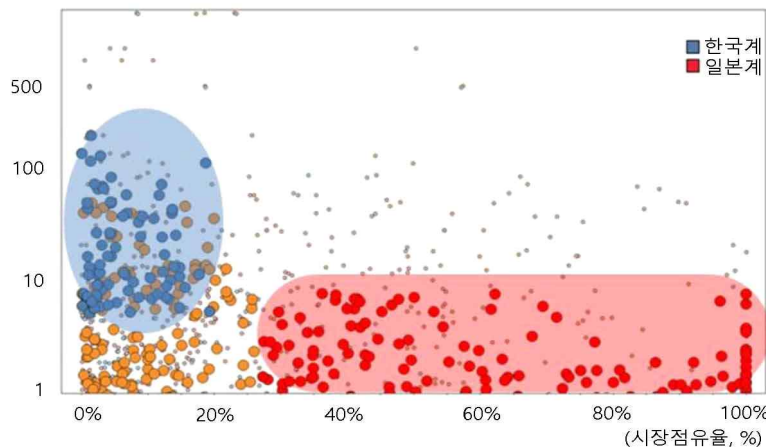
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한일 서플라이 체인의 중요성

범용품이 강한 한국과 틈새 고기술분야에 강한 일본의 제조업

한일간 품목 포지셔닝 비교

(시장규모, 조원)



자료 : 산업통상자원부, 대외의존형 산업구조 탈피를 위한 「소재·부품·장비 경쟁력 강화대책」 발표, 2019.8.5.

Lee, Jipyong

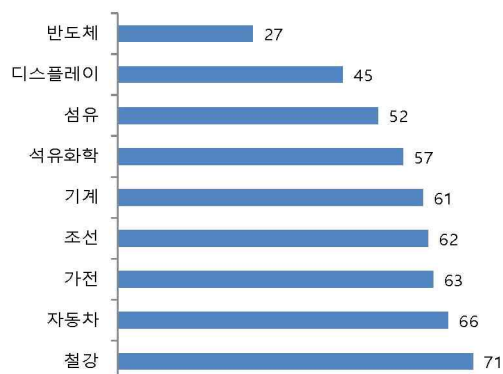
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- 일본은 시장크기는 작아도 오랜 기술축적을 통해 수많은 품목에서 높은 시장점유율을 갖고 있는 구조
- 한국·일본의 공동 생산품목 931개 중 세계시장 점유율 50% 이상 일본품목은 309개
- 한국은 시장은 크지만, 기술난이도가 상대적으로 낮은 범용 제품위주로 성장
- 기술축적에 시간이 걸려 진입장벽이 높은 핵심 품목시장에 진출하기 쉽지 않았던 측면, 대기업과 중소기업의 분업이 부진했던 측면도 존재
- 기술적으로 가능해도 한국 기업으로서는 시장규모가 작고 일본의 선행기업이 있는 품목에 대한 진출을 주저하기도 함.

한국 산업의 자체 조달비율이 60% 수준, 반도체는 27%

한국 주요산업의 소재·부품·장비의 낮은 자체 조달률

한국의 업종별 자체조달 비율(%)



자료:제조업 현황 (산업연구원,2018), 산업통상자원부, 대외의존형 산업구조 탈피를 위한 「소재·부품·장비 경쟁력 강화대책」 발표, 2019.8.5.

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- 2001년부터 2017년까지 소재·부품·장비 자체 조달률은 60%중반에서 크게 개선 없이 정체
- 특히 반도체는 30% 미만에 그치고 있음.
- 반도체는 600여개 이상 공정에서 수백여 개의 소재와 장비가 필요하나, 일본 기업과의 거래에 의존해 국내산 조달 수준은 27%에 불과
- 차세대반도체산업인 시스템반도체는 세계 시장의 3% 수준이며, 핵심 소재를 중심으로 해외 의존도가 높은 상황

한일분업 구조는 첨단산업의 성장을 뒷받침, 신뢰 악화 우려

소재·부품·장비 對日교역추이

(단위 : 억\$)

구분		'01	'10	'15	'16	'17	'18
소재 부품 장비	수 출	64	145	131	136	143	148
	수 입	192	453	309	328	387	371
	무역수지	-128	-308	-178	-192	-244	-224

자료 : 산업통상자원부, 대외의존형 산업구조 탈피를 위한 「소재·부품·장비 경쟁력 강화대책」 발표, 2019.8.5.

- (對日의존) '18년 對日전체 무역적자 241억달러 중 소재·부품·장비 적자가 224억달러로 대부분을 차지하고, 일본만 장기간 무역적자가 지속
- * 소재·부품·장비 교역에서 미국, 중국, EU, 일본 중 일본만 장기간 무역적자 ('01년 △128억불 → '18년 △224억불)
- 對日전체수입(546억달러) 중 소재·부품·장비 비중이 68%로 높은 상태
- * 소재·부품·장비 수입 현황 : (일본) 68.0%, (미국) 41.2%, (EU) 46.5%, (중국) 53.5%
- 앞으로 2차전지 등 첨단산업의 성장과 함께 對日 역조도 증가할 우려가 있으며, 일본의 수출규제강화조치는 산업뿐 아니라, 안보측면에서도 큰 위협이 될 수 있음.

신뢰 관계의 악화와 함께 한일 분업 협력에 부정적 영향, 한국기업은 소재 및 부품 대체 공급처 탐색, 정부 지원으로 일본제 소재 부품 국산화 노력 확대

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한국의 국산화 노력의 성과와 과제

국산화 정책 성과

반도체, 디스플레이 관련 3품목

- 디스플레이 분야에서는 LG디스플레이가 솔브레인과 협력해서 고순도 액체불화수소의 국산화
- 반도체용 기체 불화수소에서 일부 공정에서 순도를 낮추거나 일본 제품을 대체하는 기술이 개발되고 있음.
- 기술적으로 어려움이 많은 포토레지스트에서는 듀폰의 한국 투자유치에 성과를 거두었음.

대일 의존 지속

- 실리콘 웨이퍼, 공작기계 등 일본에 대한 의존도 높은 품목이 여전히 존재
- 탄소섬유 등 국산화에 성과를 보였으나 생산량 확대 등이 과제
- 한일 관계 위기로 일본정부의 수출규제 품목 확대 시에는 한국 제조업이 어려움을 겪고 경제적 충격이 발생할 수 있는 상황임.

<규제3개 품목의 대일수입 추이>

(100만 달러, %)

		대일수입액	대일수입비중
포토레지스트	규제전	127	92.3%
	규제후	141	84.9%
	증감	11.0 %	-7.4%p
불화수소	규제전	34	44.6%
	규제후	3	7%
	증감	-91.2%	-37.6%p
플루오린 폴리이미드	규제전	15	94%
	규제후	17	92.7%
	증감	13.3 %	-1.3%p

주 : 규제전은 2019년 1~6월, 규제후는 2019년 7~12월 기준임.
자료 : 한국무역협회, 일본 수출규제 1년, 3대 규제품목 수입 동향 및 對日의존형 비민감 전략물자 점검, 2020.6.

- 규제 품목 중에서 불화수소의 의존도는 뚜렷하게 하락, 한번 상실된 일본기업의 점유율 회복은 쉽지 않을 것으로 보임.
- 기술적으로 어려울 것으로 보여졌던 포토레지스트에서도 대일 의존도 하락, 일본기업의 유럽 공장으로부터의 수입 확대 효과도 작용

국산화 진전과 함께 솔브레인 등 중견 및 중소 소재, 부품, 장비 기업의 성장 기반 강화. 한국 내에서 자체적인 이노베이션 노력 강화, 차세대 반도체, 디스플레이 선진화 과정에서 한국 소재, 부품, 장비 기업의 기회 확대. 또한 일본제품 불매 운동으로 일본 여행, 일본제 맥주, 자동차, 의류 소비 급감, 단기 경제적 측면에서 한일 마찰은 일본측 피해가 컸다고 할 수 있음. 1

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3. 해결 위한 방향

개방적이고 호혜적인 양국관계·세계경제 환경 촉진

국제 통상 질서의 건전화

- 한일관계 개선, 미·중 무역 및 경제 마찰의 장기화에 대응하면서 자유로운 무역환경의 강화에 주력
- RCEP의 조기타결, WTO의 정상화
- 지구온난화 방지 위한 국제협력의 강화

비즈니스 환경의 향상

- 한일 양국의 비즈니스 환경의 개선점에 대한 대화 강화
- 양국 기업의 투자자산 보호정책 강화
- 신흥국의 경제 및 금융안정성 제고, 중국을 포함한 각국의 개방 정책, 지적재산권 강화 유도

차세대 산업 협력

- 마찰, 현안과 별도로 협력 사업은 지속적으로 강화, 한일 양국 기업이 신사업의 협력을 강화해 상호 이득을 기반으로 성장해 왔던 패턴을 유지 및 강화
- 학계, 스타트업 기업을 포함한 이노베이션 촉진하는 한일간 생태계 확장

<부분적 마찰의 파장 억제 및 관리>

- 정치 및 역사 문제의 경제적 파장 억제
 - 일본제철의 강제징용 소송 관련 4억원 내외의 자산 압류 문제 등이 연간 2,000억 달러를 넘는 한국의 반도체 및 디스플레이 수출산업에 위협을 가하고
 - 일본기업의 소재·부품·장비, 맥주, 자동차, 의류, 관광 산업에 타격을 주는 어리석은 사태를 억제
- 양국의 입장 차이 전제로 대립 문제 관리
 - 역사 문제 등에서 양국의 근본적인 입장 차이를 맞추기는 어려울 것이며, 각종 개별 현안에 대해 갈등을 관리 하면서 파장을 억제하는 데 노력 필요
 - 서로 성실한 외교 자세 필요, 보복의 명분 확보 위한 기반적인 근거 찾기 등의 편법 억제
- 인내심과 유연성 갖고 갈등 요인 대처
 - 양국이 서로의 입장 차이로 국민들이 반목하는 포퓰리즘에 기반한 감정 대립을 자제 할 필요
 - 외교적 성과는 인내가 필요한 동시에 명분과 기존 규칙에만 얽매인 자세로는 어려울 것이며, 그때 그때 상황을 개선하려는 유연성 필요

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Post Corona 대응 디지털화 등 경제협력 프로젝트 추진

기존 산업의 Digital Transformation 협력

디지털 혁신에 공동 대응

- With Corona 및 Post Corona 시대에 디지털화 가속, 디지털 기술로 무장한 도전자는 Cost, Experience, Platform 등의 새로운 가치를 기초로 모든 산업의 선행기업을 추격해 해당 산업의 가치사슬을 순식간에 파괴하는 효과를 가짐.
- 기존 제조업 등에서의 한일 강점을 활용한 협력을 통해 디지털화에 공동 대응

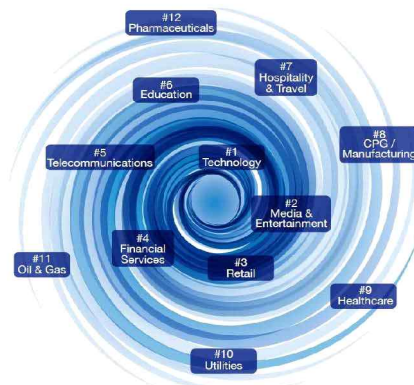
제품구조의 IoT화 공동 대처

- 기존 제품 구조의 IoT 대응 위한 설계구조의 혁신 등에서 한일 기업간에서 제조 기술의 협력에 주력
- 제조업의 서플라이 체인을 한일간에서 점차 IoT 기반화하고 이 사업 모델을 아시아로 확산해 IoT 기반 국제분업체제 촉진

기초기술 협력

- 디지털화의 기초가 될 AI, 블록체인, 양자컴퓨팅 등 차세대 기술의 기초적 분야에서 개발 협력 모색

모든 산업이 Digital Disruption의 소용돌이를 피하기 어려움



- 모든 산업이 순차적으로 디지털화의 소용돌이 속으로 돌진하면서 제품, 서비스, 밸류체인이 디지털 기술로 분해되고 Digital 기업에 의해 업계가 재편되며, 고객가치가 재분배됨.

주 : CPG는 소비자 제조업

자료 : Global Center for Digital Business Transformation, 2015

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차세대 교통 인프라 혁신 협력

안전·안심·친환경 인프라 구축을 위한 협조

CASE 혁명 한일 잠재력

- 디지털화와 함께 전자산업에 이어서 자동차 산업이 혁신되는 추세이며, 동력원도 휘발유 엔진에서 EV 등의 전동화로 대체
- Connectivity, Autonomous, Shared and Service, Electrified powertrains 동시 진행하는 CASE 혁명은 자동차 산업의 개념을 궁극적으로 혁신
- 자동차 및 부품 산업이 방대한 한일 양국이 하드웨어의 진화와 함께 AI 등 새로운 디지털 기술이나 규격, 실험경험 공유 측면에서 협력의 이점이 클 것임.

신도시 인프라 구축 과제

- EV 충전, 셰어 서비스도 활용한 자율주행차와 공공 교통 연계 등 자동차의 혁신은 새로운 도시 인프라 혁신으로 연계되고 있음.
- 안전, 안심, 크린한 가치를 높이기 위해서는 다양한 제조업, 솔루션, 인프라 혁신이 필요하며, 한 국가 차원에서 모든 과제를 해결하는 데에 어려움이 존재
- 거대 경제권을 기반한 국가가 차세대 자동차 혁신에서 궁극적으로 승리하는 데에 유리한 여건이 조성되고 있으며, 수출주도형 자동차 산업이라는 취약점이 있는 한일 양국으로서 협력체제의 구축이 중요

EV용 모터의 권선 생산 및 기술개발 한일 합작사 설립



- 2019년 9월 27일 LS그룹은 미국 자회사가 일본 후루카와전기와 글로벌 권선(巻線) 회사를 만드는 데 합의했음.
- 합작사는 연구개발(R&D) 촉진과 전략적 고객 제휴 등을 통해 향후 본격적으로 개화할 EV 분야 권선 시장 기술을 주도할 방침임. (사진=LS그룹, 출처 : 디지털투데이)

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북동아시아 경제지역 공동 활성화 통해 지방경제 활성화

경제활동과 인적 교류의 촉진

단계적인 지역공동체 구축

- 한반도와 일본, 극동 러시아, 중국을 포함한 북동아시아 지역 경제 교류 활성화에 중장기적인 차원에서 협력
- 정치적 압력 통한 비즈니스 환경 악화를 억제하고 규제완화와 함께 자유로운 사업 환경 조성
- 한반도 중단철도, 역내 자원개발 등 거대 프로젝트를 추진하면서 한일 양국의 지역간 경제적 유대 관계 강화

양국 지역 네트워크 강화

- 무역 네트워크 : 국제물류 여건의 지속적인 개선, IoT 연계, 통관 신속화, 핀테크 통한 무역금융 활성화 및 코스트 절감
- 투자 네트워크 : 역내 국가 및 양국간의 제조업 상호 투자, 합작 및 M&A 여건 개선, 스타트업 상호 투자 생태계 활성화, 투자 촉진 서비스 인프라(컨설팅, 금융, 법률 등) 강화
- 과학기술 교류 네트워크 : 양자기술, AI 등 한일 기술 프로젝트 활성화
- 인적 네트워크 : 학생, 연구자, 비즈니스맨, 공무원 교류 활성화, 정규교 교류 제도화

일중 동반자관계 복원 및 강화



- 2019년 개최된 일중 대학 포럼에 참여한 양국의 대학 학장 등
- 일본의 JST(국립연구개발법인과과학기술진흥기구)와 중국과학기술부가 주최하는 이 행사에는 교수, 연구자 등 1,200명이 참가 (중국총합연구 사쿠라 사이언스 센터)

- 영토문제 악화로 중국의 희토류 금수조치, 일본기업 습격 등의 마찰이 고조된 후 일중 관계는 개선
- 2018년 10월에 아베 총리의 중국 방문 시에 △ 첨단 기술이나 지적재산 보호 위한 회의 창설 △ 제3국에서의 인프라 공동개발 등 약 52건의 협력 결정
- 도토리현과 길림성의 협력 프로젝트에서는 제3국에서의 EV 및 자율주행 기술 활용 프로젝트가 합의되고 정기적인 정보교환, 공동실험, 대학생 등의 인재교류 등이 합의됨.

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4. 시사점 : 한일 협력의 새로운 체제 강화

갈등을 관리하면서 한일
협력 체제 강화

한일 양국의 최근 관계 악화는 양국의 정치 경제적인 상황 변화를 배경으로 하고 있으며, 기존의 한일 협력 틀에 한계가 존재. 각종 갈등 요소를 다른 분야로 파급 시키지 않고 장기적으로 관리하면서 갈등 속에서도 한일 양국이 새로운 협력 프로젝트를 확대하기 위한 적극적인 노력이 필요할 때임.

양국 협력의 상호이익의 극대화에
관한 공감대 강화와 실질적
상호이익 극대화

한일 협력의 상호이익이 크며, 이를 극대화할 것은 양국 국민, 기업에게 주는 혜택이 크다는 공감대를 강화하여 협력의 기반으로 해야 할 것임. 양국 협력프로젝트의 상호이익 극대화에 주력

자유롭고 안심할 수 있는 비즈
니스 활동을 보장

양국 정부는 각 기업의 재산을 보장하고 자유롭고 안심할 수 있는 비즈니스 활동을 보장할 필요가 있으며, 양국 산업계의 이해관계를 대변할 수 있는 기능을 강화할 필요. 양국 협력관계를 기반으로 한중일 등 아시아 역내 협력, 글로벌 통상 및 사업 환경 개선에 주력

정치 및 외교적 목적 달성 위한
경제력의 무기화 금지

양국 현안은 기본적으로 정치, 외교, 경제, 문화, 역사 문제 등에서 개별적으로 대화를 모색하면서 전문적인 지식을 기반으로 양국의 입장을 조율하면서 해결해야 할 것이며, 경제력을 무기화하는 행위 자체를 금지할 필요성 존재

Lee, Jipyong

15/15

P·A·R·T

발표3

Beyond flying geese curve: Global position of manufacturing in Japan and Korea

Yukiko Fukagawa(Waseda University)





*Beyond flying geese curse: Global position
of manufacturing in Japan and Korea*

YUKIKO FUKAGAWA, Waseda University

I

Outline

- ▶ Economic nationalism between Japan and Korea
- ▶ Global position of manufacturing: Japan and Korea
- ▶ Korea's structural dilemma
- ▶ Trade dispute nonsense (1)
- ▶ Trade dispute nonsense (2)
- ▶ Exit?

▶ 2

Korea's economic nationalism for transitional justice

- ▶ J-K frictions since 2000s: Not only with the leftist Moon administration dominated by North-South Korean dialogue
- ▶ Economic nationalism in Korea: Only country achieving \$30,000 income with the population of 50 million.....
- ▶ Catch-up with Japan: Takeshima island (Lee), Comfort women (Park), Forced laborers (Moon)
- ▶ Desire to prove Moral advantage for Confucian transitional justice
(vs. Chinese order (*Kaichitujo*: 華夷秩序))
- ▶ North-South integration as an economic opportunity, not a political threat ← Sense of stagnation

▶ 3

Economic nationalism for integration

- ▶ Geopolitical ideas: Eurasia Bridge Ideas (Park), Belts Ideas (Energy-Resource, Industry-Logistics, Environment-Tourism, Moon)
- ▶ Making the “G7 economy” (Park), “Surpassing Japan” (Moon)
- ▶ Maximum opportunities with Minimum costs (Global supports, North opening)
- ▶ Great people ideologies: Korea's traditional thinking: Japan is to bother integration because of integrated Korea's excellency

▶ 4

Japan's economic nationalism for technological advantage

- ▶ Macro-policy pressures for growth (Abenomics)
→ Catching up globalization
- ▶ Slow innovation and digitalization
- ▶ Slow adaptation for the changed competition environment: From industrial linkage to global supply chain
- ▶ Standardization problems (Too small for de-jure and Less dynamic for de fact)
- ▶ Frustration against emerging countries' industrial policies (IPR, Competition policies)

▶ 5

Flying gees curse for two nationalism

- ▶ Flying gees development model in Asia (1980s to 1996): Vertical division of labor network (Korea's catch-up jump board)
- ▶ Korea's nationalism for "completing" catch-up in "all industries" in 2000s (DRAM semiconductor as the symbol)
- ▶ Japan's nationalism for basic R&D, technologies
→ Friction: Korea vs. Japan (seniors above 70s)

▶ 6

Politicized business relations: “Lost trust” vs. “Political revenge”

- ▶ Supreme court’s judgement, Foreclosure of Japanese firms’ assets (Korea) followed by the revision of export controls, starting semiconductor related materials (Japan)
- ▶ “Trust lost by the fragile rule of law” (Japan) vs. “Political revenge without grounds” (Korea)
- ▶ Different values in trust (No action for 10 months)
- ▶ Different sense in private property protection against the power (retroactive legislation for the pro-Japanese families)

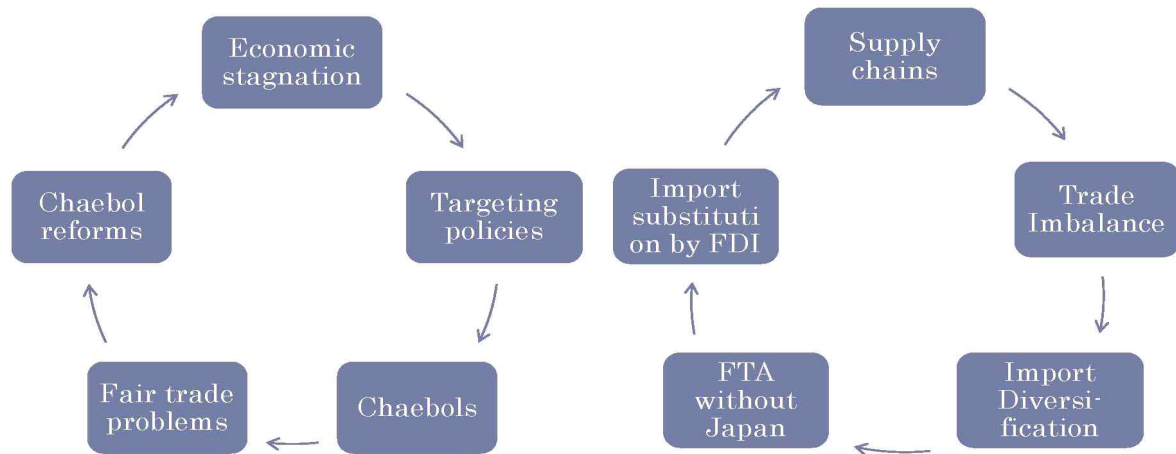
▶ 7

Myth of Korea’s dilemmas

- ▶ “Overcoming Japan” but why by copying Japan?
- ▶ Dilemma in economic policy (1): “Miraculous” industrial development → Increase in capital/ intermediate goods from Japan → Trade imbalance → Import diversification program → “IMF” reform for liberalization → Import substitution by FDI/ FTA without Japan → but better supply-chains → New import rise.....
- ▶ Dilemma (2): “Miraculous” industrial development → Targeting policies supported by gov. → Growth of Chaebols → Political/ Social claims → SME and supporting industry building → Stagnation → Chaebols again?

▶ 8

Korea's dilemma for four decades



▶ 9

Global market position (NEDO (New Energy and Industrial Technology Development Organization)(2019)

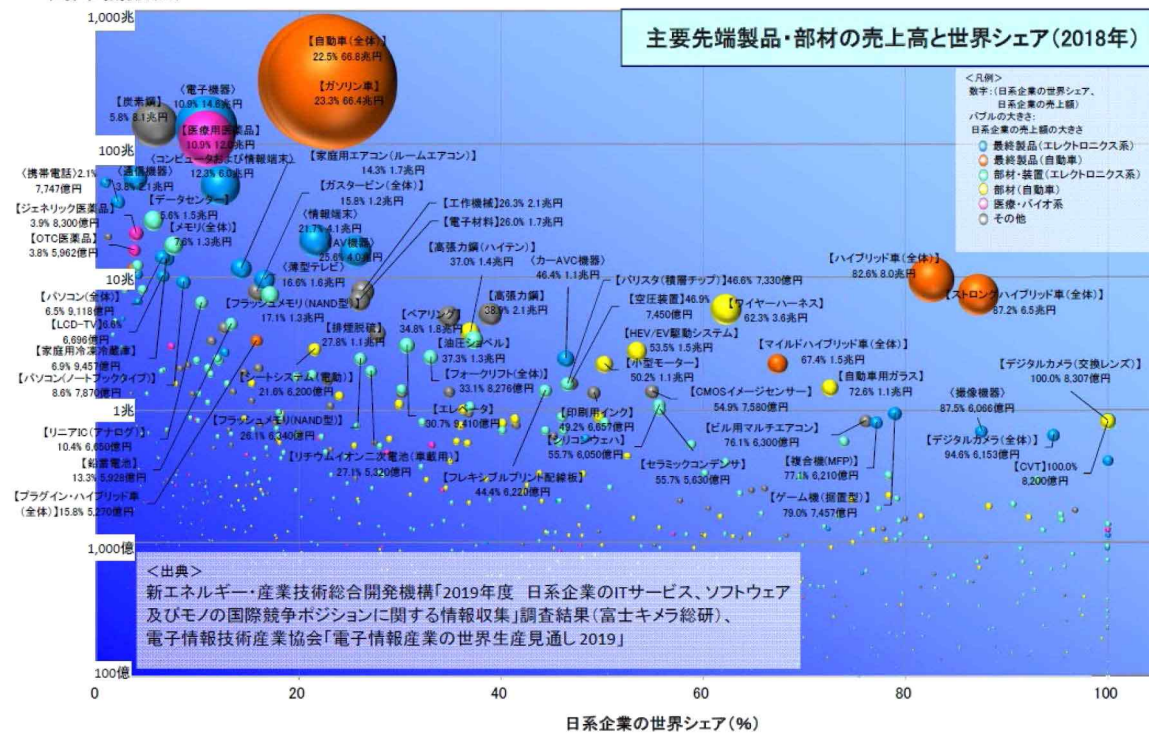
(<https://seika.nedo.go.jp/pmg/PMG01B/PMG01BG02>)

- ▶ Vertical axis: Global market size, Horizontal axis: Global share
- ▶ Items: Sales more than ¥1 trillion (Approximately \$9.2 billion)
- ▶ Orange: Auto (Final goods)
- ▶ Yellow: Auto, Material and parts (Intermediate goods)
- ▶ Blue: Electronics (Final goods)
- ▶ Green: Electronics (Intermediate goods)
- ▶ Pink: Medical care and Bio
- ▶ Grey: Others
- ▶ Number of ¥1 trillion sales, Global share of 60%

▶ 10

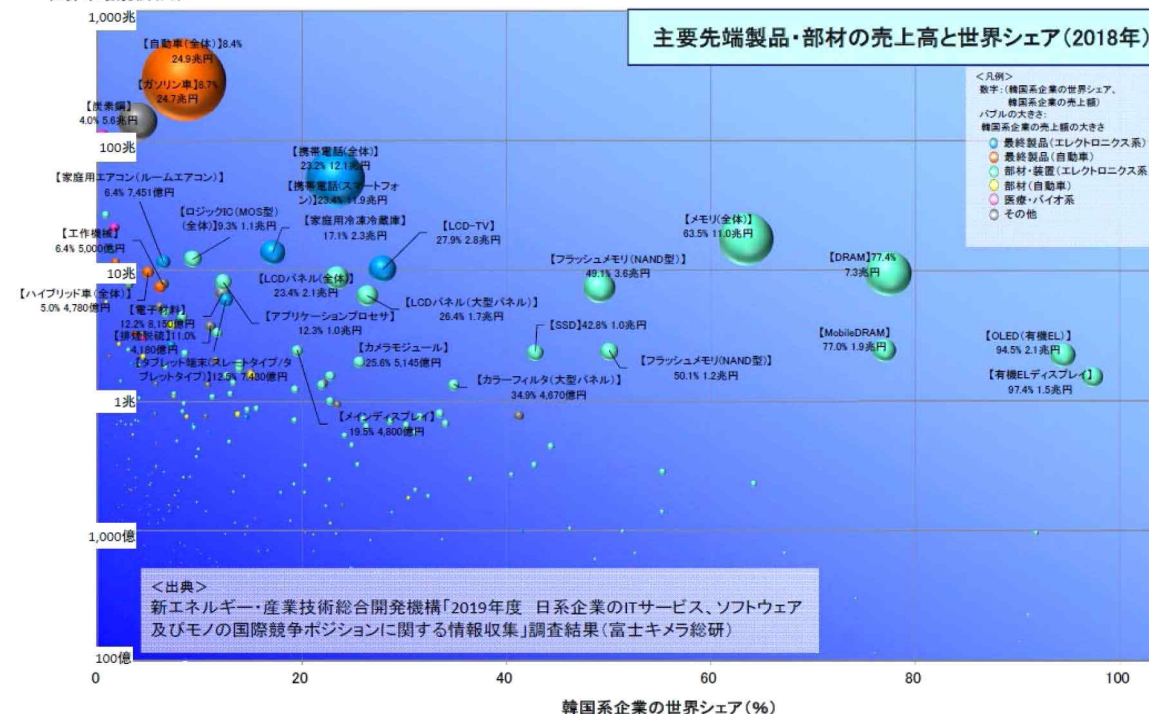
Japan

世界市場規模(円)



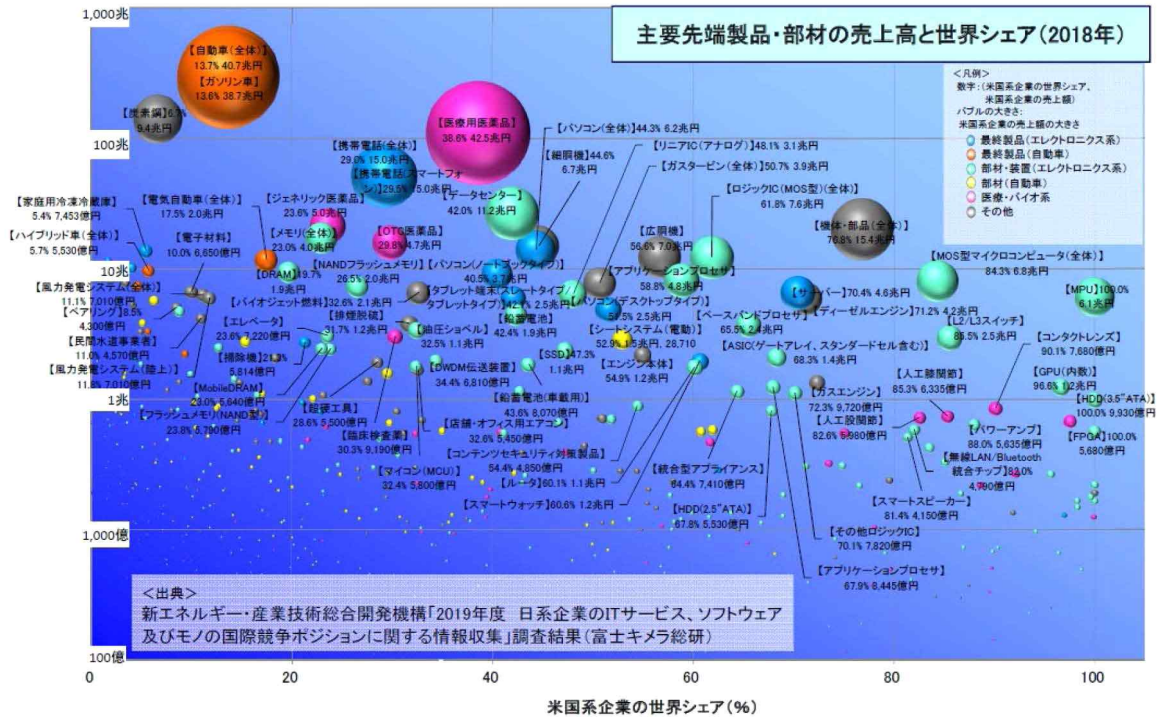
Korea

世界市場規模(円)



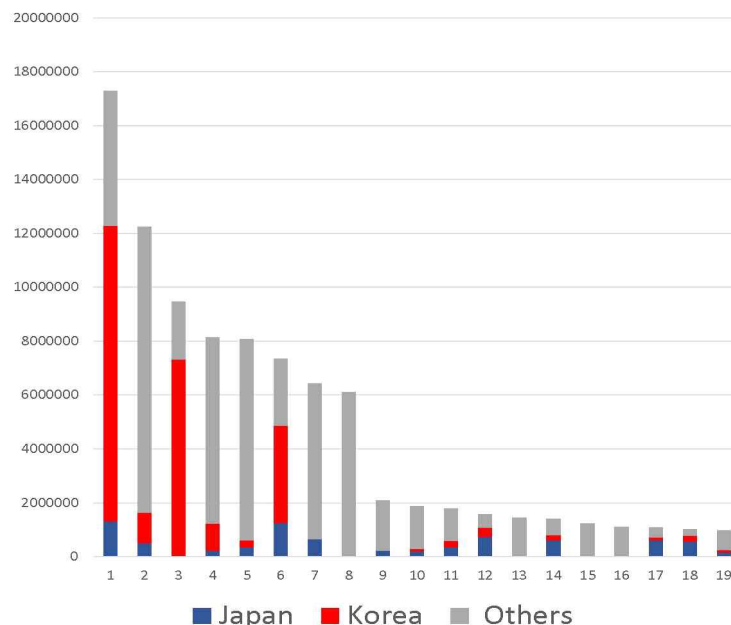
U.S.

世界市場規模(円)



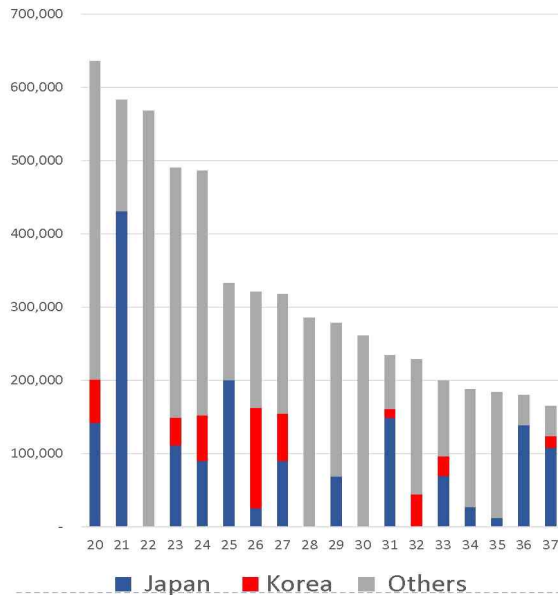
Japan and Korea in Semiconductor supply chains: (1) More than ¥970 billion (Source: Presenter's calculation from the data in page 11)

Memory (all)	1
Logic IC (MOS type) (all)	2
DRAM	3
Application processor	4
MOS type microcomputer (all)	5
Flash memory (NAND type)	6
Linear IC (analog)	7
MPU	8
ASIC (including gate array and standard cell)	9
Printed circuit board (multilayer printed wiring board)	10
Microcomputer (MCU)	11
Varistor (multilayer chip)	12
Power transistor	13
Flexible printed wiring board	14
GPU (internal number)	15
Other logic IC	16
Silicon wafer	17
Ceramic capacitors	18
Copper clad laminate (glass)	19



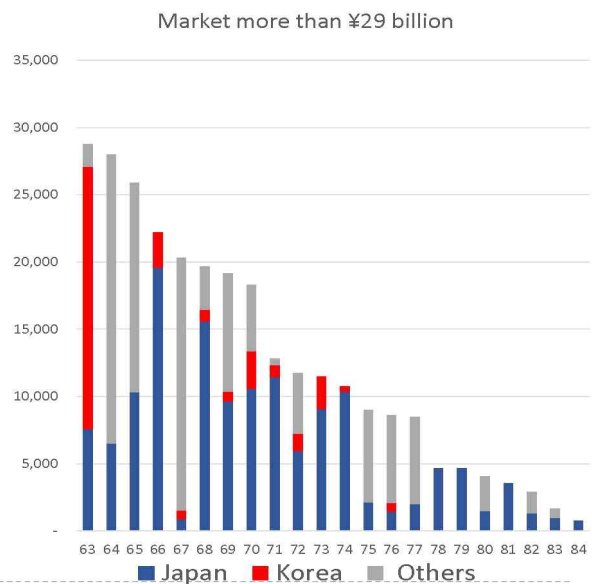
Japan and Korea in Semiconductor supply chains (2)

More than ¥636



▶ 15

More than ¥29



Japan and Korea in growing manufacturing

(Source: Presenter's calculation from the data in page 11)

	Market size 2018	Growth	Japan	Korea
Electric car	11,624,020	99.5	3.6	1.8
Plug-in hybrid vehicle	3,328,000	83.6	15.8	3.7
HEV/EV driving system	2,771,500	35.4	53.5	2.1
Mild hybrid cars	2,240,500	59.4	67.4	1.1
Lithium-ion secondary battery for cars	1,960,100	56.6	27.1	13.9
Lithium-ion secondary battery anode material	543,900	69.6	25.5	3.4
Lithium-ion secondary battery (current collector (-) material)	255,700	30.2	27.3	3.3
Lithium-ion secondary battery for saving facility	230,300	47.1	16.5	64.2
Lithium-ion secondary battery (electrolytic solution)	201,600	29.5	25.9	7.8
Lithium-ion secondary battery (current collector (-))	197,500	38.9	10.6	20.3
Lithium-ion secondary battery separator	204,500	71.8	44.1	3.3
Lithium-ion secondary battery electrolytes	120,100	71.4	44.5	2.4
Lithium-ion secondary battery current collector material (-)	114,600	95.2	10.5	22.8
Lithium-ion secondary battery current collector material (+)	37,580	40.8	22.6	17.7
Lithium-ion secondary battery cathode material	152,400	65.5	53.1	2.0
Lithium-ion secondary battery current collector material (+)	23,200	84.6	30.4	20

▶ 16

Japan and Korea in growing manufacturing (2)

Regular charger for car	159,020	66.3	2.2	0
Quick charger for car	119,400	95.9	9.0	0
Charger equipped in cars	82,900	58.9	28.1	0
Car camera (CCD+CMOS stereo)	121,100	61.9	18.9	0
Gas intensity sensor	113,300	44.2	60.2	0
Fuel cell battery car	38,350	110.9	69.9	4.2
Battery exterior Backsheet	15,600	58.1	80.8	0
materialas(fluorores in)	120,100	26.4	14.7	6.5
ADAS System (including car late control)	1,017,400	38.1	36.3	2.2
GPU	1,244,200	27.2	1.4	0
SSD	2,382,000	33.6	9.9	42.8
OLED	2,265,700	32.4	0	94.5
Ballast water purific	781,200	95	16.2	41.2
DC-DC convertor	208,300	29.5	74.7	3.1
Head mount display	207,000	139.4	45.6	0
Carbon grass fiber for windmill	203,600	27.9	11.1	0
UWB wave radar	173,000	33.3	3.4	0
Electrolytic copper	141,000	31	8.3	10.6
Head up display	129,500	34	55.7	0
Target material (MO)	24,900	33.9	34.9	4.8
Smoothing capacitc	18,900	26.4	99.5	0
Sealing material	14,050	69.3	9.8	90.2
PEFC(Electrode material)	11,853	56.4	8.5	0

“This time is different” in Korean localization?

- ▶ After all, J-K difference lies ion industrial organization!
- ▶ Localization program by Korean government: 100 items in 7 years, investing \$6.6 billion R&D subsidies, SME supports for import substitution
- ▶ Willing to take-in Chaebol concentration again? (Trust between Chaebols and SMEs >Long term design-in process with Japanese firms?)
- ▶ Competition against China in higher-value added goods while allowing time for localization partners, enough time?
- ▶ Some success but never full achievement before: Lacking sense of dynamic change

Trade Disputes nonsense (1): Bi-lateral

- ▶ Japan: Loosing the market, sacrificing SMEs
- ▶ Korea: Localization, sacrificing profits?
- ▶ Engaging in basic research by taking innovation risks?
- ▶ Suffering the allocation uncertainties for both?
- ▶ Structural difference in Number one share vs. Only one value competition, but copying it again?
- ▶ Time constraints in WTO solution?
- ▶ Bringing in the security issues to challenge WTO regime?

▶ 19

Trade disputes nonsense (2): Global

- ▶ Still sticking to hardware manufacturing?
- ▶ Technology change: IoT, AI based manufacturing, Platforms, Connected.....Ready to share information among Koreans, among multi-national firms?
- ▶ Trade regime: “Unbundling” and global supply chains may continue, but global trade go slower? → Still export-led growth in tradition?
- ▶ Competing with China, how? → Still government-led growth with the state capitalism giant?
- ▶ Financial dependence on Japan? → Still non-key currency with capital control?

▶ 20

Innovation in perception framework

- ▶ Changing perception in business realities and economic nationalism
- ▶ *From Seesaw competition to Plus-sum competition*: Reform competition, Deregulation pressures, Business environment...
- ▶ *Strategic agenda* for the market integration: Venture eco-system, Data rules for data-driven services, Social innovation, Entertainment, Services for aging societies
 - Significance of human capital quality/ volume
 - Sharing the talents: Entrepreneurs, IT workers, Civitech designers...

▶ 21

Any exit?

- ▶ Policy accountability: Experts dialogues
- ▶ Business bodies in action
- ▶ Narrowing the gap in business realities and nationalism, Re-defining the economic partnership (Media's roles)
- ▶ Political channels (Domestic politics matters)
- ▶ Reconciliation process: Education, Liberal arts and Cultures, Political commitment?
- ▶ Strategic agenda: Korea's CPTPP member, or KORUS-JUSTAG coordination, Korea's GSOMIA with Japan

▶ 22

Thank you!

P·A·R·T

발표4

한일무역마찰이 지역에 미치는 영향과 대응방안

정군우(대구경북연구원)



2020 정책포럼

한일 무역마찰이 지역에 미치는 영향과 대응방안

2020.9.5(토)

정 군 우



contents

1. 연구배경 및 목적
2. 일본의 수출규제와 對일 의존도
3. 분석방법 및 데이터
4. 분석결과
5. 결론 및 정책제언

1. 연구배경 및 목적

| 연구배경

* 무역마찰 교역국에 영향

- 무역마찰 당사국의 생산 뿐만 아니라 글로벌 밸류체인으로 연결되어 있는 모든 교역국에게 영향
- 세계 각국의 무역은 중간재를 중심으로 긴밀하게 얽혀 있고, 중간재에 대한 수요는 연쇄적으로 유발되어 자국은 물론 각국 각 산업으로 파급 → 경제관계 긴밀화 촉진

* 일본과 긴밀한 한국 경제 영향 불가피

- 중간재를 중심으로 일본과 긴밀한 경제관계를 가지고 있는 한국 → 한·일 무역마찰 영향 받을 수 밖에 없는 산업구조
- 한일 무역마찰 장기화는 중간재 교역을 통한 글로벌 밸류체인으로 연결된 양국에 모두 영향
→ 긴밀한 경제관계에 따라 유발되는 필연적 현상

| 연구목적

*한일 투입의존관계 분석을 통한 무역마찰 영향분석

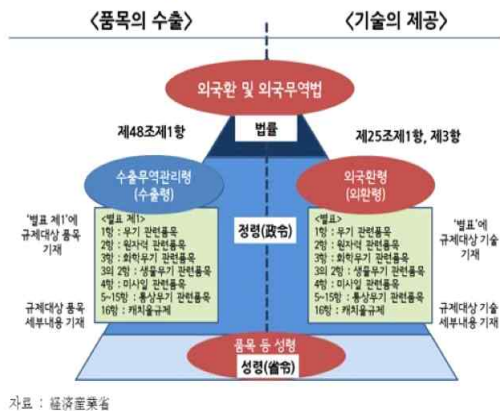
- 양국 중간재 교역이 어느 산업에 어느 정도로 이루어지고 있는가?
- 양국 국제분업 관계 분석 : 국산화율/국제분업률
- 일본으로부터의 중간재 투입이 한국 제조업에 미치는 영향
 - 일본 중간재 투입이 한국(대구경북) 제조업의 생산에 미치는 파급효과를 중심으로 분석

5

2. 일본의 수출규제와 對일 의존도

일본의 수출관리제도

- 외국환 및 외국무역법에 따라 수출관리 시행
 - (政令)각 품목의 수출/기술제공 관리, (省令)규제품목/기술 선정
- 2019년 7월 4일, 레지스트/불화수소/폴리이미드 포괄수출허가 → 개별수출허가로 전환
 - 대일 의존도가 높아 국내 생산/대체가 어려운 품목



자료: 経済産業省

▲ 일본 수출관리의 법적 체계

7



자료: 日本経済新聞

▲ 규제품목 및 주요 제조기업

일본의 리스트규제 항목

- 전략물자 통제항목
 - 민감/비민감부문
 - 모두 1,120개 하위 카테고리
- 비민감품목
 - 2~14항까지 총 857개 품목
 - 화이트리스트 국가에 대해 일반포괄수출허가 허용

1. 무기	• 총포, 폭발물, 화약류, 군용 인공위성 또는 그 부분품 등 17개
2. 원자력	• 핵연료물질, 원자로/원자로용 발전장치, 수치제어공작기계/측정장치, 로봇, 리튬, 텅스텐, 지르코늄, 레이저발진기, 충격시험기, 중성자발생장치, 삼중수소 등 52개
3. 화학무기	• 군용화학제제 원료, 화학제제용 제조기계장치 등 3개
3의2. 생물무기	• 군용세균제제 원료, 세균제제용 제조장치
4. 미사일	• 로켓/제조장치, 추진장치, 추진약/원료, 진동시험장치 등 26개
5. 첨단재료	• 불소화합물제품, 타이타늄, 세라믹분말, 불화폴리이미드 등 19개
6. 소재가공	• 수치제어공작기계, 기어제조용 공작기계, 코팅장치 등 9개
7. 전자	• 집적회로, 고전압용 콘덴서, 주파수분석기, 반도체 제조장치, 레지스트 등 23개
8. 컴퓨터	• 전자계산기

8

일본의 리스트규제 항목

9. 통신	•전송통신장치, 전자교환장치, 통신용광섬유, 설계/제조장치 등 10개
10. 센서	•수중탐지장치, 센서용 광섬유, 우주용 광학부품, 광반사율 측정장치 등 14개
11. 항법장치	•가속도계, 관성항행장치, 시험/제조장치 등 5개
12. 해양관련	•잠수정, 선박의 부분품/부속장치, 수중로봇 등 10개
13. 추진장치	•가스터빈엔진, 인공위성/우주개발용비상체, 로켓추진장치, 무인항공기 등 5개
14. 기타	•분말형태의 금속연료, 화약/폭약성분 디젤엔진, 로봇/제어장치 등 11개
15. 민감품목	•무기섬유를 이용한 성형품, 전파흡수재, 수중탐지장치, 선박방음장치 등 10개

자료 : 經濟産業省 (2020년 1월 22일 기준)

9

한국의 비민감 전략물자 對일 수입 현황

- 2018년 기준 대세계 수입의 약 36%, 대일 수입의 약 47%에 해당, 대일 수입의존도는 약 13% 수준
 - 비민감 전략물자 대일 수입규모는 약 255억 달러로 비민감 전략물자 대세계 수입액의 13.1%
 - 전 품목의 대일 수입의존도 대비 2.9% 높은 수준
- 비민감 전략물자 1,932개 HS코드 중 2019년 대일 수입규모 1백만 달러 이상, 대일 수입의존도 70% 이상인 대일 의존형 비민감 전략물자 100대 품목 선별
 - 기초유분 27.8%, 반도체 제조용장비 14.9%, 플라스틱제품 14.0% 등 전체적으로 반도체/디스플레이 제조용 장비나 기초소재류 품목이 절반 이상 차지

(자료) 한국무역협회 국제무역통상연구원

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| 반도체 소재 3품목 의존도 대구경북

- 대구 : 2019년 7월 이후 레지스트 거의 대부분 일본에서 수입, 2020년 6월 수입액 9만 9천 달러로 대일 수입의존도 100%(전년동월 대비 58.1% 증가), 불화수소 수입 0, 폴리이미드 중국 100%
- 경북 : 폴리이미드 100% 일본에서 수입, 불화수소는 일본보다 중국 수입 의존, 레지스트는 2020년 4월 2만 1천 달러로 대일 수입의존도 51.1%

▼ 반도체 소재 대일 수입의존도

(단위 : 천 달러, %)

	'19.7	8	9	10	11	12	'20.1	2	3	4	5	6
포토레지스트												
대	63	77	76	63	0	63	87	99	104	87	75	99
구	98.0	100.0	98.5	100.0	-	100.0	98.7	100.0	98.5	100.0	98.4	100.0
경	0	20	69	0	0	0	0	18	54	21	0	0
북	-	87.3	92.2	-	-	-	-	81.1	77.6	51.1	-	-
플루오린 폴리이미드												
경	13,414	15,607	17,143	19,153	21,643	24,028	2,279	3,552	5,957	8,495	9,873	11,846
북	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

주 : 상단은 월별 수입액, 하단은 월별 수입의존도
 자료 : 한국무역협회

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| 대일 의존형 비민감 전략물자 대구경북

- 대구 : 11개 품목(금속절삭가공기계)

▼ 대구경북의 대일 의존형 비민감 전략물자 현황

(단위 : 달러, %)

대 구					
HS2	HS10	MTI 6단위	對세계	對일본	對일의존도
37류	3701309930	현상하지 않은 필름	1,692,336	1,157,423	68.4
	3707901010	기타 사진영화용재료	689,505	687,065	99.6
39류	3921193090	기타 플라스틱제품	165,677	105,359	63.6
72류	7226999000	합금강냉연강판	6,728,909	6,397,304	95.1
75류	7506101000	니켈판 및 대	907,366	907,366	100.0
84류	8458910000	금속절삭가공기계	302,273	302,273	100.0
	8460120000	금속절삭가공기계	776,982	776,982	100.0
	8460220000	금속절삭가공기계	192,912	192,912	100.0
	8460241000	금속절삭가공기계	1,883,199	1,883,199	100.0
85류	8515211010	로봇형용접기	119,187	119,187	100.0
	8515311010	로봇형용접기	314,316	307,082	97.7

주 : 28류(무기화합물, 귀금속·희토류금속·방사성원소·동위원소의 유기·무기화합물), 37류(사진용 또는 영화용의 재료), 38류(각종 화학공업생산물), 39류(플라스틱 및 그 제품), 70류(유리와 유리제품), 71류(진주, 귀석·반귀석, 귀금속, 귀금속을 입힌 금속, 모조신 변장식용품, 주화), 72류(철강), 73류(철강의 제품), 75류(니켈과 그 제품), 81류(기타 비금속, 석매트, 이들의 제품), 84류(원자로·보일러와 기계류 및 이들의 부분품), 85류(전기기와 그 부분품), 90류(광학기기, 사진용기기, 영화용기기, 측정기기, 검사기기, 정밀기기)와 의료용기기 및 이들의 부분품과 부속품)

자료 : 한국무역협회(2019년 기준)

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대일 의존형 비민감 전략물자 대구경북

- 경북 : 21개 품목(플라스틱 제품, 철강, 반도체제조용장비)

경 북					
HS2	HS10	MTI 6단위	對세계	對일본	對일 의존도
28류	2806100000	기타 정밀화학원료	670,727	444,168	66.2
	2836991039	기타 정밀화학원료	1,550,839	923,139	59.5
37류	3707901010	기타 사진영화용재표	344,484	252,719	73.4
39류	3911103000	기타 합성수지	452,553	451,675	99.8
	3920999010	기타 플라스틱제품	24,028,285	24,028,285	100.0
	3920999090	기타 플라스틱제품	1,640,080	1,029,403	62.8
	3921191010	에틸렌중합체필름	23,311,627	23,297,234	99.9
70류	7020001012	기타 유리제품	30,773,119	30,727,429	99.9
71류	7106922000	은	194,998	175,532	90.0
72류	7224101000	기타 철강제품	764,367	764,367	100.0
	7224901000	볼륨	722,699	722,699	100.0
	7225929099	용융아연도강판	767,922	738,950	96.2
	7226999000	합금강냉연강판	2,745,489	1,634,144	59.5
73류	7306500000	합금강강관	226,570	175,765	77.6
84류	8458910000	금속절삭가공기계	1,044,209	1,044,209	100.0
	8486103019	반도체제조용장비	6,649,081	6,649,081	100.0
	8486103020	반도체제조용장비	61,050,506	59,503,991	97.5
	8486109000	반도체제조용장비	13,286,697	13,286,697	100.0
85류	8515311010	로봇형용접기	330,920	330,920	100.0
	8540791000	기타 전자관	1,271,584	688,569	54.2
90류	9031801000	선박용부품	113,571	110,906	97.7

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3. 분석방법 및 데이터

국제산업연관분석

*국제산업연관표

- 국가 간 투입구조/산출구조 → 각국의 산업이 일정기간 동안 생산한 재화와 서비스가 글로벌 산업 연관관계 속에서 어떻게 투입/분배되었는지를 행렬형식으로 나타낸 다국간 산업통합표

*국제산업연관분석

- 국제산업연관표상의 산업간 직간접적 상호의존관계를 바탕으로 특정 산업에서 최종수요의 변화가 발생하는 경우 이를 충족시키기 위해 자신은 물론 여타산업에서 발생하는 생산, 고용, 부가가치, 수출입 등의 연관관계를 수량적으로 파악하는 분석방법
 - 국가 간 수요/공급, 투입/배분 등 경제관계를 분석하는데 유용
 - 최종수요 변화에 따른 개별 산업별 생산, 고용, 부가가치, 수입 등 연쇄적인 파급효과 분석 가능

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국제산업연관표의 구조 아시아국제산업연관 데이터베이스

*행 부문

- 각국 산업부문별 재화와 서비스의 판매구성(산출)
- 중간수요와 최종수요로 구분

*열 부문

- 재화와 서비스를 생산하기 위한 비용 구성(투입)
 - 중간투입과 부가가치로 구분
- ⇒ 각국 산업부문별 투입/산출구조가 금액으로 표시

		총수요													
투입	산출	중간수요(A)				최종수요(F)				수출(L)				총산출	
		아시아	북미	유럽	기타	아시아	북미	유럽	기타	ROA	ROE	OPEC	ROW		
		(AA)	(AN)	(AE)	(AO)	(FA)	(FN)	(FE)	(FO)	(LR)	(LQ)	(LP)	(LW)		(XX)
총공급	내생국	아시아(AA)	A ^{AA}	A ^{AN}	A ^{AE}	A ^{AO}	F ^{AA}	F ^{AN}	F ^{AE}	F ^{AO}	L ^{AR}	L ^{AQ}	L ^{AP}	L ^{AW}	X ^A
		북미(AN)	A ^{NA}	A ^{NN}	A ^{NE}	A ^{NO}	F ^{NA}	F ^{NN}	F ^{NE}	F ^{NO}	L ^{NR}	L ^{NQ}	L ^{NP}	L ^{NW}	X ^N
		유럽(AE)	A ^{EA}	A ^{EN}	A ^{EE}	A ^{EO}	F ^{EA}	F ^{EN}	F ^{EE}	F ^{EO}	L ^{ER}	L ^{EQ}	L ^{EP}	L ^{EW}	X ^E
		기타(AO)	A ^{OA}	A ^{ON}	A ^{OE}	A ^{OO}	F ^{OA}	F ^{ON}	F ^{OE}	F ^{OO}	L ^{OR}	L ^{OQ}	L ^{OP}	L ^{OW}	X ^O
	외생국	ROA(CR)	A ^{RA}	A ^{RN}	A ^{RE}	A ^{RO}	F ^{RA}	F ^{RN}	F ^{RE}	F ^{RO}					
		ROE(CQ)	A ^{QA}	A ^{QN}	A ^{QE}	A ^{QO}	F ^{QA}	F ^{QN}	F ^{QE}	F ^{QO}					
		OPEC(CP)	A ^{PA}	A ^{PN}	A ^{PE}	A ^{PO}	F ^{PA}	F ^{PN}	F ^{PE}	F ^{PO}					
		ROW(CW)	A ^{WA}	A ^{WN}	A ^{WE}	A ^{WO}	F ^{WA}	F ^{WN}	F ^{WE}	F ^{WO}					
	부가가치(VV)		V ^A	V ^N	V ^E	V ^O									
	총투입(XX)		X ^A	X ^N	X ^E	X ^O									

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▲ 국제산업연관표의 구조

| 분석 데이터

*아시아국제산업연관 데이터베이스 2012년표

- 내생국 29개국, 외생국 59개국으로 구성, 각국별 산업부문은 35개로 세분화

- 내생국 : 일본, 중국, 한국

등 아시아 11개국, 미국

등 북미 3개국, 유럽 12개

국, 기타 3개국

- 외생국 : 59개로 세분되어

외생국으로부터의 투입구

조, 수요의존구조 파악

가능

구분	국가명
내생국 : 29개국	
Asia(11)	Japan(JP), China(CH), Korea(KR), Taiwan(TW), Singapore(SG), Malaysia(MY), Thailand(TH), Indonesia(ID), Philippines(PH), Vietnam(VT) and India(IN)
N. America(3)	USA(US), Canada(CA) and Mexico(MX)
Europe(12)	France(FR), Germany(GR), Austria(AT), Belgium(BG), Finland(FN), Ireland(IR), Italy(IT), Luxembourg(LX), Netherlands(NL), Portugal(PT), Spain(SP) and United Kingdom(UK)
Others(3)	Australia(AU), Brazil(BR) and South Africa(SA)
외생국 : 59개국	
HK(1)	Hong Kong
ROA(30)	Afghanistan, Bangladesh, Bhutan, Maldives, Nepal, Pakistan, Sri Lanka, Armenia, Azerbaijan, Bahrain, Brunei Darussalam, Cambodia, Macau, North Korea, Georgia, Israel, Jordan, Kazakhstan, Kyrgyzstan, Lao PDR, Lebanon, Mongolia, Myanmar, Oman, Syria, Tajikistan, Turkey, Turkmenistan, Uzbekistan and Yemen
ROE(16)	Russia, Bulgaria, Cyprus, Czech Rep., Denmark, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia and Sweden
OPEC(12)	Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, UAE and Venezuela
ROW	Rest of the World

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| 분석방법

*생산유발효과

- 투입계수(A) : 국제산업연관표를 이용하여 각국 각 산업이 자국 및 외국으로부터 투입한 중간재 투입액을 총생산액으로 나누어 계산
- 생산유발액 : 최종수요 1단위 발생에 의해 자국/외국 각 산업에 직간접적으로 유발되는 생산액
→ 단위행렬(I)에서 투입계수를 뺀 레온티에프 역행렬($B = (I - A)^{-1}$)에 최종수요를 곱하여 산출
- 생산유발액 \times 최종수요 = 생산유발효과 → 최종수요 변화에 따른 생산유발액 변화 분석

*국산화율/국제분업률

- 각국 각 산업부문의 1단위 생산에 의해 유발되는 내생국, 외생국으로의 파급총액 중 자국의 비중 → 국산화율, 외국의 비중 → 국제분업률

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| 분석대상 산업부문

*제조업을 대상으로 산업별 영향 분석

- 제조업은 18개 부문으로 분류 → 전기기계 부문은 4개로 세분(주력산업 영향 상세분석 가능)

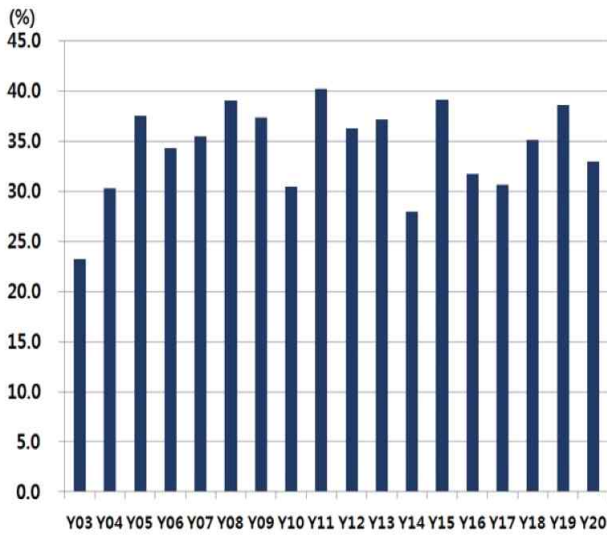
코드	부문명	코드	부문명
Y03	식료품·음료 및 담배	Y12	조립금속제품(기계 및 장비제외)
Y04	섬유 및 섬유제품·가죽 및 신발	Y13	기계 및 장비
Y05	목재 및 목재코르크제품	Y14	사무·회계 및 컴퓨터
Y06	펄프·종이 및 종이제품·인쇄 및 출판	Y15	전기기계장치
Y07	코크스·석유정제품·핵연료	Y16	라디오·TV 및 통신장비
Y08	화학제품 및 의약품	Y17	의료·정밀 및 광학기기
Y09	고무 및 플라스틱제품	Y18	자동차, 트레일러 및 세미 트레일러
Y10	기타 비금속광물제품	Y19	기타 운송장비
Y11	제1차 금속	Y20	기타 제조: 재활용(가구 포함)

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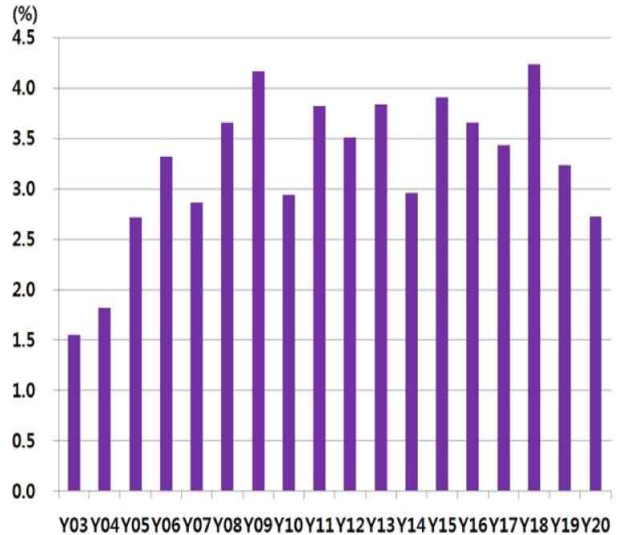
4. 분석결과

| 제조업 국산화율·국제분업률

- 한국 제조업 국산화율 낮고, 플라스틱제품과 자동차를 중심으로 일본과 국제분업 활발



▲ 한국 제조업의 국산화율(2012년표)



▲ 한국 제조업의 대일 국제분업률(2012년표)

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| 주력산업 국산화율·국제분업률

- 중간재를 중심으로 일본과 긴밀한 분업관계 유지
- 국산화율 : 컴퓨터(44.2→29.6→28.0%), 통신장비(38.1→35.5→31.7%) 등 대부분 감소 추세
- 대일 국제분업률 : 화학(3.0→3.4→3.7%), 통신장비(3.6→3.6→3.7%) 등 의존도 심화

▼ 우리나라 주력산업의 국산화율과 대일 국제분업률

(단위 : %)

부문명	2002년		2007년		2012년	
	국산화율	국제분업률	국산화율	국제분업률	국산화율	국제분업률
화학	40.0	3.0	40.8	3.4	39.0	3.7
기계장비	35.6	3.2	41.0	3.9	37.2	3.8
컴퓨터	44.2	3.4	29.6	2.9	28.0	3.0
전기기계	39.1	3.3	43.7	4.0	39.1	3.9
통신장비	38.1	3.6	35.5	3.6	31.7	3.7
의료정밀	33.4	2.5	34.1	3.3	30.6	3.4

주 : 화학(화학제품 및 의약품), 기계장비(기계 및 장비), 컴퓨터(사무회계 및 컴퓨터), 전기기계(전기기계장치), 통신장비(라디오·TV 및 통신장비), 의료정밀(의료·정밀 및 광학기기)

자료 : 각 연도별 국제산업연관분석 결과

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I 대구경북 주력산업 생산감소 규모

- 대일 의존도가 높은 부품소재 전반으로 수출규제가 확대되어 일본산 중간재 투입 비중이 10% 감소한 경우 가정
- 대구와 경북의 전산업 생산 감소 규모는 각각 2억 5천 9백만 달러, 5억 2천 6백만 달러로 산정
→ 통신장비 대구 1천 5백만 달러, 경북 3천만 달러로 가장 큼
- 부가가치 감소 규모

▼ 대구경북 주력산업 생산 감소 규모

(단위 : 백만 달러)

→ 대구 1억 1천 5백만 달러
경북 2억 3천 4백만 달러

부문명	생산 감소 규모		부가가치 감소 규모	
	대구	경북	대구	경북
화학	9.78	19.90	2.81	5.71
기계장비	11.26	22.90	4.13	8.40
컴퓨터	0.60	1.23	0.26	0.53
전기기계	3.39	6.90	1.06	2.16
통신장비	14.80	30.12	6.75	13.73
의료정밀	0.65	1.33	0.27	0.55
전산업	258.62	526.16	114.95	233.87

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5. 결론 및 정책제언

| 분석결과 요약

*한일 양국 긴밀한 국제분업 관계

- 한국은 국산화율이 낮고 일본과의 긴밀한 국제분업관계 유지
→ 전기기계, 화학, 통신장비 등을 중심으로 일본과 활발한 국제분업

*한국의 높은 대일 의존도

- 제조업 전반에서 일본 중간재 투입 의존도가 높음
- 비민감 전략물자 대일 의존도, 반도체/디스플레이 제조용 장비, 기초소재류 품목 높음
- 대구와 경북, 금속절삭가공기계, 플라스틱제품, 철강, 반도체 제조용장비 중심 의존도 높음

*일본 중간재 투입 10% 감소 시 생산감소 규모

- 대구경북 전산업 생산 각각 2억 5천 9백만 달러, 5억 2천 6백만 달러 감소
→ 통신장비 부문의 생산 감소 규모가 가장 큼

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| 정책제언

*신속하고 유연한 서플라이 체인 재편

- 대일 의존형 비민감 전략물자의 유연한 서플라이 체인 재편
- 서플라이 체인 간 신속한 정보공유, 생산관리 → 양국 거래기업 간 협력 강화

*거래기업 간 R&D 지원 강화

- 지역 중소기업과 R&D 지원기관 간 정보공유와 협력체계 구축으로 기술개발 수요 기업에 적합한 서비스 제공, 기업간 R&D 연계 투자 지원 확대

*산업기술인력 양성 통한 경쟁력 확보

- 대일 의존도 개선, 대외환경 변화에 강한 산업구조 정착을 위한 산업기술인력 양성
→ 산업기술인력은 사업체 규모가 작을수록 장년층 비중이 높고, 인력이 수도권에 집중되는 등 지역 간 양극화 극복 필요

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감사합니다!

P·A·R·T

토론1

Trade Conflicts in Business, Society and Politics between Japan and Korea and Its Implication of Solving the Problems

이중우(인제대)



Trade Conflicts in Business, Society and Politics between Japan and Korea and Its Implication of Solving the Problems

Joong-Woo Lee

Emeritus Professor of Inje University

Inviting Professor of Yonsei University

1. Introduction

Recently, a new protectionism of global trade is strongly emerged under influence of changing the American trade policy as making an effort towards anti-globalization can be seen United States of America in early the Trump administration years. In particular U.S.A. has been experienced a great deficit from the U.S.-China bilateral trade imbalance as well as the overall U.S. deficits. However, the American government is going to maintain a high taxation of trade towards Chinese import commodity so as to recover the trade deficit. Under this circumstance, there is a great deal of controversial debate about the trade conflicts which might be developed a trade war between U.S.A and China. The situation refers to the trend towards a more influenced global economic system where barriers in cross-border trade and investment are increasing.

On the other hand, the Japanese government implemented unilaterally push policies against Korean firms in 2019. This was a new trade policy of export restrictions. Consequently, Korea immediately challenged in the rule in the WTO when it was adopted. This was generally considered that the Korean firms should get an import permission for three specific materials(i.e. hydrogen fluoride 45%, photo-resist 93% and pulruorin polyimid 93.5% were imported) from Japan every time. The materials are play a significant role of manufacturing the products and equipment in semiconductor and display industry, even also developing the 4th industry revolution.

The purpose of this study describes and analyzes the trade conflicts between Japan and Korea and how the conflicts influences seriously on business, society and politics in connection with identifying a source of the trade conflicts and than making an effort towards the suggestion of an implication that the problems of trade conflicts be discontinued.

2. A Source of Trade Conflicts

To analyze a source of trade conflicts between Japan and Korea, indeed, a key

feature of the trade conflicts is identified by finding out the significant problem to make an illustrative perspective. There is one of the traditional problems is still dissolved between the two countries. It is a critical perspective on the socio-political background of the Japanese export restrictions. The main problem appeared to be that Japan showed some interests in the evaluation and the dissolution of socio-political problems in concern with their occupation. The general policy of the Japanese government was to obtain other benefits than just the trade restrictions per se, viz. trade, economic and industrial dominance, and even political relationships.

According to the Japanese point of view, there are two main reasons in implementing the trade restrictions. The first is the industry-commercial point of view that Korea is one of the fastest growing economies in a rapid expanding region. Especially, the most explosive growth industry is Korea's electronics export abroad. This view is based on the development of semiconductor industry. The Korean semiconductor industry developed a major position as holding a 73% share(Samsung 43.9% and SK Hynix 29.5%) in global market. Therefore, Japan announced it will tighten rules for high-tech exports of key materials to ratchet up pressure on Korea. The second is socio-political point of view that the Korean Top Court Ruling made the final decision on the Japanese private enterprises(Nippon Steel, Mitsubishi and Fujikoshi) should compensate for the Korean labour as a compulsory manpower draft under the Japanese colonial rule. However, the Japanese Prime Minister Abe and government answered that Japan already gave its compensation US\$ 500 million to Korea in 1965. It was included in Japan-Korea reparations funds. The Abe administration is demanding the Korean government resolve the issue of compensation for the Koreans conscripted to work in the Japanese factories and mines during the 1910-45 Japanese occupation. Furthermore, the Japanese government emphasized that the Korean Top Court's compensation order is an international diplomatic violence against Japan.

3. Trade conflicts in Business, Society and Politics

Trade conflicts is also influenced on other areas, i.e. business, society and politics. The Korean people voluntarily began to boycott Japanese goods and service when the Japanese government announced it would start to impose tougher restrictions on exports of high-tech materials on July 1, 2019 in reaction to the compensation order. Moreover, the socio-political problems turns to a question of slightly different nature from that of the other problems, and discusses the solution of the traditional Japanese politics in charge of economic policy making. Thus were in matters of Korean women being taken a way as sex slaves and Koreans killed during the atomic bombings of Hiroshima and Nagasaki or Japan forced deportation of more than 50,000 Korean to Russia's Sakhalin island need to be resolved. Consequently, Thus

events are led to carry out the Korean people's movement of voluntarily boycotting which is strongly involved by the consumers to diminish the Japanese sales revenue in Korean market. In particular almost all Japanese items are applied by influencing on their customer marketing. The result of the Japanese total sales revenue is rapidly decreased in comparison with the last year. For example, cigarette is decreased as -89%, beer -84%, beauty instrument and cosmetology devices -82%, fishing equipment -69% automobile -52%, toys -33%, processed foods -33%, cosmetic products -30%, video camera -28%, and consumer materials -23% etc.(Source: Korea Customs Service and Yonhap news@yonhap-graphics, July. 2020), The most affected Japanese firms are seen as Asahi, Shiseido, Toyota and Lexus, Japan Airline, Uniqlo, GU, Olympus, ABC-Mart, Seven-Eleven, etc. The number of their subsidiary, branch offices, agents and street stores are largely reduced, even also some Japanese firms have decided to withdraw from the Korean market.

The role of Japan's government in setting economic policy and guiding private enterprises is an important topic in discussion of nation's economic success. In general the Japanese large enterprises are tightly connected with small and medium-sized firms and cooperated each other when doing their business. The analysis of this study thus cover a wide range of problems related to Japan's international economic relations, enterprises, industry, and government economic policy. For example, The Japanese export restrictions influences on supplying the high-tech materials to the Korean manufacturing plants located in both Korea and foreign countries so as to become delay, shortage materials, diversification of supply lines, developing the local materials, price increase, quality control and discontinued plans which makes further turbulence situation in the manufacturing the American products of Apple and DELL, and the operation of global supply networks.

The number of American Economic and Industrial Associations recognized the influence of Japan's export restrictions in the case of manufacturing difficulties. They hope that the turbulence situation is not developed at the moment so as to recommend a still stand agreement to Japan and Korea. After the enforcement of export restrictions one of the expectations is that the Korean case can be conditioned as an example toward Japan is using a variety of different motives with regard to trade restrictive and disruptive measures between the membership countries.

One of the Korean diplomatic activities was performed. The Korean minister participated in the Beijing conference of Regional Comprehensive Economic Partnership(RCEP) on August, 2019 in order to explain for the irrationality of Japan's export restrictions in front of the 16 delegations (China, Japan, Indian and ASEAN countries). This might help to develop the international consensus needed to make some degree of the problem solutions regarding its trade conflicts.

Korea has been built up a stable international diplomatic relations and a long-term

political and economic relationships with Japan. Therefore, the two countries signed a joint military agreement as General Security of Military Information Agreement(GSOMIA) which was maintained. However, the trade conflicts was also influenced on diminishing the confidence degree of political and economic relationships with Japan, because of getting suspicious of the Korea's export strategic materials and military articles to North Korea. In stead of Japan's mistrust Korea is well performed the Wassenaer Arrangement(WA) which are using the WA control lists to help with their export control regimes. Consequently, Korea announced its decision to ditch a bilateral agreement with Japan on exchanging classified military information citing a "grave change" in security cooperation conditions which are attributable to Japan's export restrictions and mistrust. Nevertheless, Japan wanted to maintain the GSOMIA.

4. Implication of Solving the Problems.

The trade conflicts is why, not discontinued, when the situation becomes a little more complex as it has recently in the real of Japan-Kore economic and political relations. Japan trends to be misunderstood abroad, and misunderstandings lead to unwarranted criticism and denunciations, which often cause me as a Korean to heave a sigh. I will be gratified. Therefore, if this study goes even a little way towards bridging the communication gap between Japan and Korea. If it is rectifies even slightly the extreme imbalance in the communication flows, and if it contribute to a better understanding by Korean of the Japanese business, society and politics

This study shows that the trade conflicts is not controllable by any individual or organizations. Therefore, an overall plan of solving the problems must be required. Before implementing any plan, first of all the traditional problems must be resolved between Japan and Korea. This is a significant Korean perspective on a quick solution for it. The problems are already mentioned with regard to the three historical events under the Japan's occupation period. These are, i.e. the issues of compensation for the conscripted Koreans, the Koreans killed under atomic bombings of Hiroshima and Nagasaki, and the women were being taken a way as sex slaves, Furthermore, the Prime Minister Abe is currently being asked to make a public apology to the Korean people.

The second solution is that Korea challenged in the rule in the WTO when it was adopted. After this the Ministry of Foreign Affairs and KOTRA are going to complain of the irrationality of Japan's export restrictions in both the WTO's and the RCEP's meeting and conference. They are continuously performing the development of diplomatic activities in order to form an international consensus, The last stage is waiting for the result of WTO and it will be accepted. The third solution is that Korea must be restored the GSOMIA to develop security relations with Japan. It is necessary

for Korea to develop a long-term stable relationship with Japan. It will be influenced on building strong economic relationships and then increasing the quality of life in the future.

The problem solving process leads to different stages and coupling organizational units within the Korean firms, economic-industrial associations, professor of economics and politics, non-government parties, semi-government/private nonprofit bodies, politicians, local government, subcommittee of National Assembly, and government agencies which are required for the performance of various interaction activities in order to build up relationships with the Japanese counterparts. In particular the role of economists in government or business is mere case of many examples of differences between Japan's culture and human relations and their counterparts in Korea with the traditions. Some professors of economics at Tokyo, Hitotsubashi and Keio University are appointed by the government as members of councils or research committee, advisory bodies which discuss economic policy issues and report to the Prime Minister or some other minister. The academic economist exert only a minimal influence on Japan's economic policy, but the professor of economics express opinions and write articles in daily newspapers and non-academic weekly or monthly periodicals. They usually appear on TV discussing economic policy issues and economic prospects much more frequently in Japan than in Korea. This is essentially play economists' role always pay attention to relevant articles or the opinions of represent a sample of the public opinion, and sometime they have a great impact on public opinion. Consequently, it is obviously be unwise to answer a hypothetical question in dogmatic terms, but on the whole, a limited affirmative reply seems warranted. In order to affect economic policy even such professors would have needed to be able to speak the language used by bureaucrats and politicians to cooperate closely with general administrators. In this way the professor of economics are influenced on making economic policy.

There are other influence parties existed. A couple of small groups seem not be much interested in economic policy issues, but they have little chance of being so, their ability to collect information, analyze economic conditions, and plan policy is necessary limited. So they tend to concentrate on criticizing the government for what it does or fails to do. Nevertheless, these parties do not exert an important influence on the government economic policy, suggesting for they are chanced together with the political parties whereby the pressure groups and the general public participate in politics.

Recently, one of the most important policy issues is the revitalization of joint cooperation between local government and private sector in order to look for ways to innovate development of their own operations. Perhaps this is ever looking for new ways of partnering with the private sector. The creation of high-quality jobs is

required for the cooperation of the public and civil sectors to restructure the service industry and the redevelopment of city and renovation. Thus are fostering innovative small and medium-sized firms and reforming the labor environment. These activities are required for building the relationships with the Japanese local government and their publics and civil sectors to cooperate each other. The Korean local government is needed to develop relationships with the Japanese counterparts in order to get a high level of expertise. These relationships are also conditioned with regard to influence on the economic policy.

In order to develop the cooperations the Korean must understand about the Japanese consensus system. It is much better for the Korean to understand real activities in doing business discussions, negotiations and cooperations with the Japanese counterparts. One of the prominent characteristics of the Japanese decision-making process lies in the high value attached to full consensus on any given decision. When a meeting is held to make a decision, it must normally be unanimous. Consequently, there are much negotiation, discussion, and persuasion both formal and informal contacts must take place before the meeting at which the final decision is made.

There are some considerations in developing the relationships with Japanese actors. It is important to have realistic expectations regarding its conditions, In particular the actors' strategies are implementing in connection with the Japanese actors and influence the different stages of network development process with regard to terminate its trade conflicts.

At this moment, the network approach is presented to use of solving the problems of trade conflicts in this study. An important aspect of this are the dependencies between business and socio-political actors. To develop the networks, the resources exchanged and activities controlled by different actors have to be mobilized and coordinated. This involves social exchange for considerable periods in order to handle current activities, solve emergent problems, and secure relationships' integration in the networks. The complexity of this process is enhanced by the large business, industrial and political distance between the Japanese and the Korean actors. This study imply the importance of the Korean industrial firms, social and political actors interacting with others in the Japanese networks. The network position development is affected by different factors. The exchanges are shaped both by the activity and resources dependencies in the network and by the various actors' strategies.

The strong political and social character of networks indicates some significant aspects of how Korean business, society and politics should achieve a strong network associated with successful operations. Some such aspect are the Government, trade, industrial, and economic policy. The approach developed here has important strategic

implications for solving the current problems of trade conflicts between Japan and Korea and the management of the Korea's position in both international diplomatic and business networks.

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P·A·R·T

토론2

Near and Far Neighbors Korea and Japan

백권호(영남대)



Near and Far Neighbors Korea and Japan

Pro. Gwon Ho, Paik
(Yeungnam University)

After the COVID19 pandemic, the most difficult thing my wife has to do is to be unable to travel abroad. In particular, she is most regretful and struggling to be able to go on a trip to Japan that she used to go almost once a month as if she come back to her own house. All that stress of my wife is returned to me naturally as it is.

There are three reasons why my wife likes traveling in Japan, even thou she can't speak Japanese at all. First, it is a place where all social rules and institutions are well-observed. Whether it's a tourist sites or a metropolitan center, it's well-organized, so even if you don't know Japanese and Japanese geography well, you can enjoy traveling comfortably and happily without any stress of being foreign at all if you move according to the usual rules except in remote and dangerous areas or late at night. The second is shopping for her favorite fashion brand. In terms of quality and design, the satisfaction rate is the best. If you go to the store and buy that Japanese fashion brand in Korea, it must be too expensive almost the same volume of short-trip expenses to Japan. You will be able to compensate this travel expenses, if you goes to Japan for travel and shopping. Third, satisfaction with Japanese food. My wife, who wasn't good at sashimi when she was young, went on a trip to Japan, and since then, she has become a favorite taste for Japanese-style sashimi and sushi. The service of Japanese restaurant owners that values cleanliness and hygiene is also a part of my wife's satisfaction. Thanks to my wife's active force, I also traveled to Japan four times in 2018, and even in 2019, three times without reluctance even in situations where anti-Japanese sentiment reached its peak in Korea. I remember going on a trip to Japan three or four times a year for public or private affairs, mostly since 2015.

The reason I list these very private personal stories is that the daily life of the relationship between Korea and Japan, which I feel and experience in the private sector not long ago, is that the contents I have described are very ordinary and not special. As a discussant, what I'm trying to talk about is an effort to find a more fundamental answer to 'why'?

Perhaps it is a frank expression that anti-Japanese sentiment in Korea has been attached to generations like us who have birth before and after the Korean war like a talisman. According to some polls, 70% of Koreans share anti-Japanese sentiment. A discussant, like me who born in 1954, has grown up with parents who spoke Japanese frequently in their usual lives during his child age, and has lived without

any hesitation in saying Japanese words such as “Daguang” and “Bento”. Parents who attended high school during the colonial era of Japan were naturally communicating in Japanese when they had secret conversations that they did not want to inform their children. Nevertheless, in regular school education, vivid memories of inspiring anti-Japanese sentiment by criticizing Japan's colonial era still remain. With hostility toward the North Korean Communist Party...

Before starting discussion, personally, I am the person who most hopes that the relationship between Korea and Japan will be restored to a normal relationship as at least 3 years before. And, I hope that everyone who participates in this conference shares the same thoughts and mind with me.

As this discussion paper is prepared without receiving the contents of the presenter, I would like to present a viewpoint that the debate thinks is more essential from the viewpoint of the debate. The debater believes that the conflict between the two countries stems from a more fundamental difference. First of all, from the Japanese standpoint, the two governments established and operated the Reconciliation Healing Foundation in 2015, and even the Japanese government remitted a fund of 1 billion yen, which the Japanese government had promised to bear, and suddenly dissolved in 2018. It would have been difficult to understand Korea's behavior of reverting to what has been done. Subsequently, the Korean Supreme Court amplified the conflict with a final decision on personal compensation for conscripts. In fact, from the perspective of actual and practical compensation for victims, the current conflict between the two countries can be seen that a basic solution has already emerged from establishing the Reconciliation and Healing Foundation, of which it is not in complete form even thou.

Nevertheless, why was it invalidated? In my point of view, three root causes can be found. First of all, the biggest factors of change are the rapid changes that have occurred around the world and the changes that these changes have spread to the Korean Peninsula and Northeast Asia. Nixon's visit to China in the 1970s, diplomatic relations between Japan and China(1972), establishment of diplomatic relations between the United States and China, and the signing of a Japan-China friendship agreement(1978) brought about a major change in world history. Under the influence of these changes, in the 1980s, Korea achieved 'democratization' in 1987 and began to promote the 'Northern Policy(北方政策)'. In the 1990s, the COMECON system of the Soviet Union and socialist countries in Eastern Europe collapsed, and Korea completed diplomatic relations between Korea and China in 1992, starting with diplomatic relations with former COMECON countries first, thereby completing the 'Northern Policy'. Subsequently, when the WTO system was launched in 1994, rapid globalization has begun.

Korea suffered from the financial crisis during this period, but in the end, by achieving continuous growth, it has grown into a mid-sized country with a per capita GDP of \$30,000. During this period, Japan experienced the so-called “lost 20 years” because of the US check, and nevertheless succeeded in establishing a solid industrial value chain system and internal qualitative change. When comparing the economic volume of Korea and Japan using the nominal economic scale statistics presented by the World Bank during the period from normalization of diplomatic relation between Korea and Japan in 1965 to 2018, Japan's gross domestic product (GDP) in 1965 was 9,950 million dollars, and 570 trillion dollars in 2018, while Korea's GDP was 3.18 billion dollars in 1965 and 1.66 trillion dollars in 2018. During this period, in terms of GDP, the relative size of Korean economy has expanded from about one-thirty to one-third of the Japanese economy. As the gap in economic size between Korea and Japan narrowed, a significant change has taken place also in the relative economic dependence structure between the two countries. In 1965, Korea's exports to Japan accounted for 25.5% and imports 37.8%, respectively, and the dependence on trade with Japan accounted for an absolute proportion, exceeding one-third of Korea's total trade volume. However, after that, the share has decreased to 7% and 12.4%, respectively, in 2012, and to 5% and 10%, respectively, in 2018, and trade dependence on Japan fell to 7% in 2018.

This means that the Korea-Japan relations have been changed fundamentally and developed so much that the so-called 1965 regime could not contain enough these changes of international political relations and economic relations between the two countries as well. The dependence on imports from Japan for core materials, parts and equipment is still important, but it has not been proved so enough to bring a decisive leverage effect on the Japanese side as shown in the result of Japan's export ban on key chemical products for semiconductors to Korea, which had appeared in the course of the spread of the Korea-Japan conflict.

When comparing only on the external scale, the Korean economy seems to have followed the Japanese economy a lot very quickly, but a completely different picture appears in the internal growth potential nevertheless. According to a recent Mail Economy Report(每經), Japan's value in terms of the asset value of machinery and equipment that determines the size of future production capacity is 2.6 times that of Korea. In addition, the share of real estate in the national wealth also decreased slightly over the past 20 years to 73.5 in Korea, while decreasing by more than 10 percentage points to 76.9% in Japan. This implies that we Korea still have a lot of precious things to study which related to sustainable developments from that of Japan's experience during last 20 years.

The second, it seems to be related to so-called “Setting up the country rightly”

movement of the current Korean government. (The expression 'Setting up the country rightly' is not formal expression, but the current government of Korea is a government that succeeds to the former Roh Moo-hyun regime and is supported by the common people, and it is said that it will create a 'World that has never been experienced' by advocating Korea, where the common people are the owners. In terms of being a committed government, I, Discussant expressed this regardless of my opinion of consent or not.) This regime is looking for the source of the spirit of independence that they pursued in the Donghak Revolution that took place at the end of the Chosun Dynasty and the independence movement during the Japanese colonial period. Both of these movements are based on the evaluation as they are led by the 'grass roots people(民草)', the common people, and the nation-building movement. In the same vein, the leading force of the Korean government, which entered the southern part of the Korean Peninsula after liberation in October 1945, is a pro-Japanese forces supported by the US troops, so it cannot be recognized in a strict sense of legitimacy. Therefore, the current conflict between Korea and Japan is, to a certain extent, intertwined with the nature of the conflict between conservative and progressive in Korea. Moreover, the main force that suppressed the Donghak Revolution was the Imperial Japanese Army, and the independence movement was also a movement for independence from the 'Japanese Empire' during World Wars I and II. It has been bound to lead to a historical reaction with Japan. The problem is that the current regime of Korea is believed that Korea's vested conservative powers are connected with Japan in terms of social network historically, which must be overcome thoroughly. Therefore, it is not easy to solve in that it is difficult for the two countries(government) to step back from each other. But fortunately, it is judged that the two countries basically do not have objections about the need to suppress the spread of Korea's domestic socio-political problems and issues to Korea-Japan diplomatic relations as much as possible.

The third reason is the difference between the two countries 'ways of thinking'. In conclusion, while Koreans value 'thought(思惟)', Japanese value 'mind(心學)'. Korea has a cultural background that emphasizes Li(理) rather than Qi(氣) as the historical background of the neo-Confucian worldview that evolved from Juja Studies(朱子學) during the 500 years of Chosun Dynasty. On the other hand, although Juja-hak was passed down, Japan rejected it due to the nature of Japan's survival environment surrounded by the ocean, and built a culture that emphasized more realistic Qi based on Yangming Studies(陽明學). The former dreamed of the realization of the 理想國家, which emphasized the principle of sage politics(君子之道), while the latter pursued a more realistic peaceful world that emphasized the righteousness of warriors(武士之義) by Shogunate system(幕府體制). And this warrior-style pragmatism served as the basis

for leading the westernization of Japan during the transition of civilization in Japan. In addition, as such cultural background formed a 'Nanhak(蘭學)', it succeeded in constructing a spiritual world unique to Japan that accepted the advanced mechanical civilization of the West and suppressed Christianity.

'Thoughts' and 'minds' may seem to be similar at first glance, the former values 'mind as a result of thought', while the latter puts more importance on 'what kind of mind' as a result regardless of thoughts or thinking themselves. Strictly speaking, it is the difference between the values philosophical difference between Japan, where the mind controls the thinking, and Korea, where the thoughts rules the mind. Therefore, Korean criticize "wrong idea" of Japanese by saying that they do not truly apologize to, because "Japan does not think they had done any wrong to Korea during the 35 years of colonial era." On the contrary, Japanese says Korean insists on an endless apology from Japan, and criticizes that Korean is doing unrealistic and asking unnecessary 'emotional commitment', and that makes even the ordinary Japanese turning to "Hate-Korean".

I think this is the difference between the fundamental ways of thinking between Korea and Japan, which cannot change or be changed. Therefore, it is necessary to understand and acknowledge the difference in the way of thinking of each other, and creatively start communication again on the basis of acknowledgement of this fundamental difference.

Summarizing the above three aspects, Korea and Japan are facing the need to establish a new relationship. The two countries are facing their historical homework on how to resolve the amplification of apparent conflict. I am confident that those who hope that the bilateral relations will continue to develop as a win-win and friendly relationship between the people of the two countries will occupy an absolute proportion. All in all, I'd like to suggest a kind of new agreement between the two countries. I think it is necessary to promote a new agreement for the sustainable development of future-oriented Korea-Japan relations. For example, it is a kind of friendship agreement for the development of future-oriented Korea-Japan relations. This should reflect the changed environment of international relations and relations between the two countries as well on the basis of the 1965 Agreement on the Normalization of diplomatic relations, and reflect the difference in the way of thinking between the two countries and the resulting difference in approaches, and should include a philosophy and concept for the true development of future-oriented bilateral relations. Of course, it will not be easy to achieve in a short time. However, I think it is time to start a kind of endeavor to recognize and share the necessity of such efforts at this academic conference that are concerned about the future of both countries and their relationship as well. Thank U.

P·A·R·T

토론3

Discussion

이형오(숙명여대)



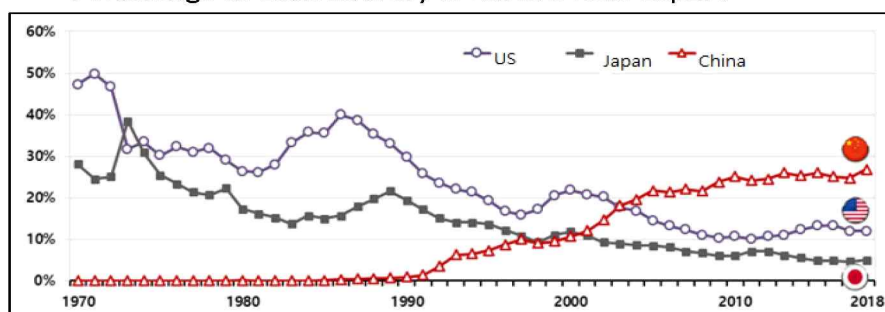
Discussion

September 5, 2020

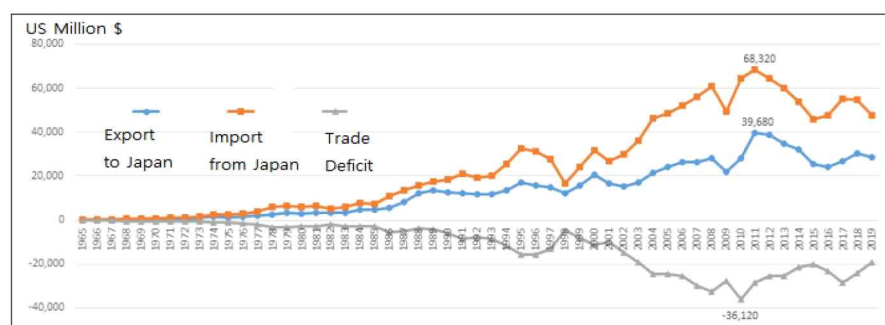
Hyungoh Lee
Division of Business Administration
Sookmyung Women's University

Declining Dependence of Korea on Japan in Trade

Percentage of Each Country in Korean Total Export



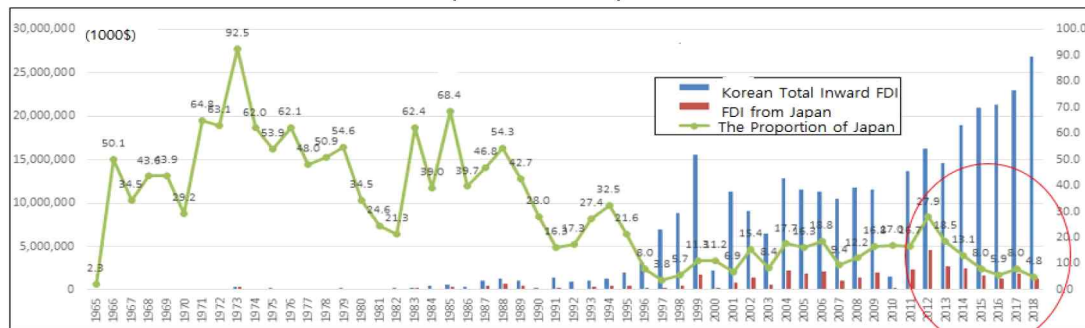
Trade between Korea and Japan



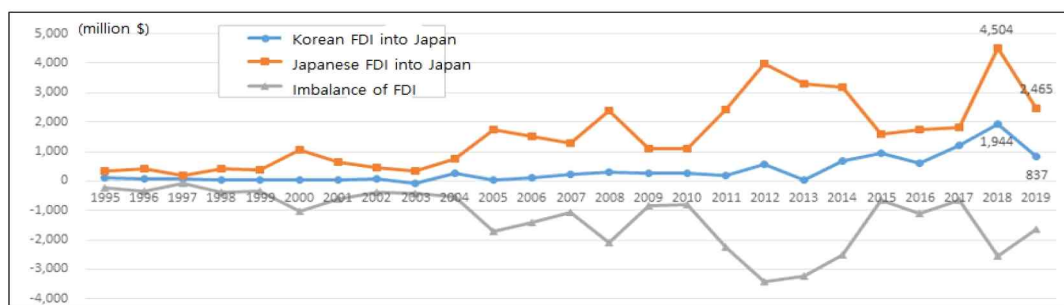
2

Declining Dependence of Korea on Japan in FDI

Korean Inward FDI and the Proportion of Japan



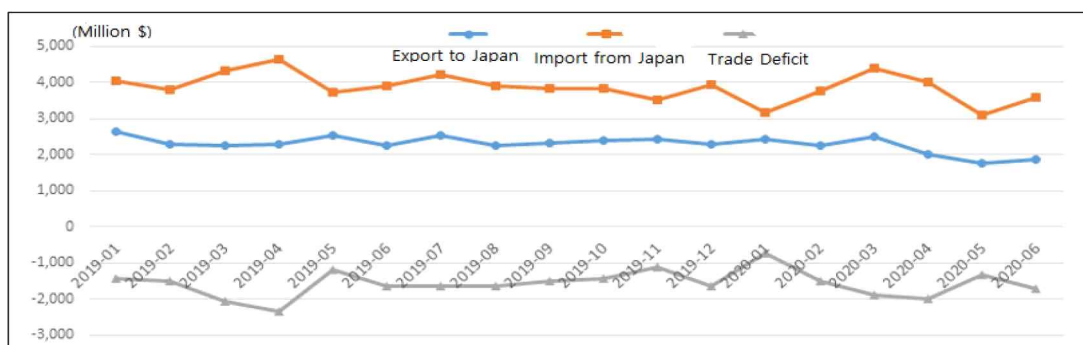
FDI between Korea and Japan



3

Impact of Recent Political Conflict on the Economy

Trade between Korea and Japan after the Political Conflict

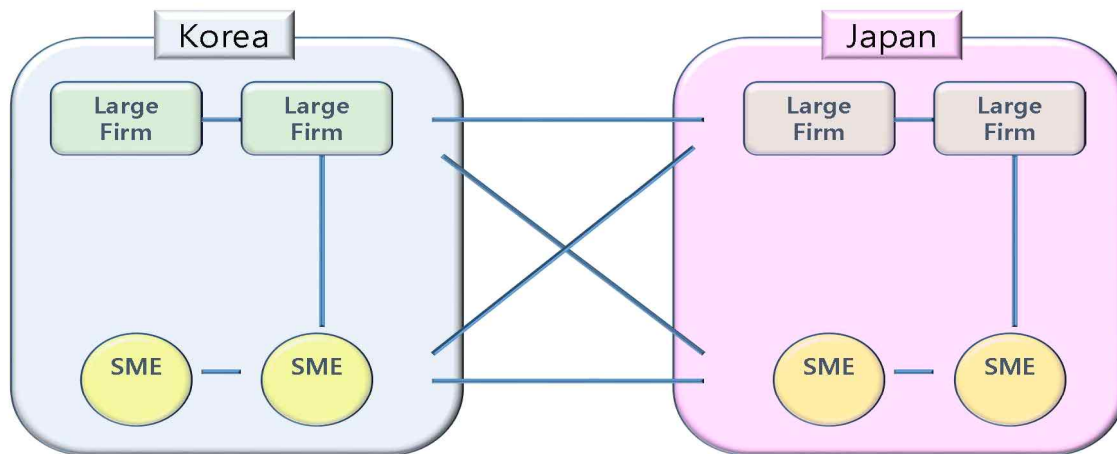


The Number of Visitors between Korea and Japan



4

Numerous Cases of Successful Cooperation between Firms

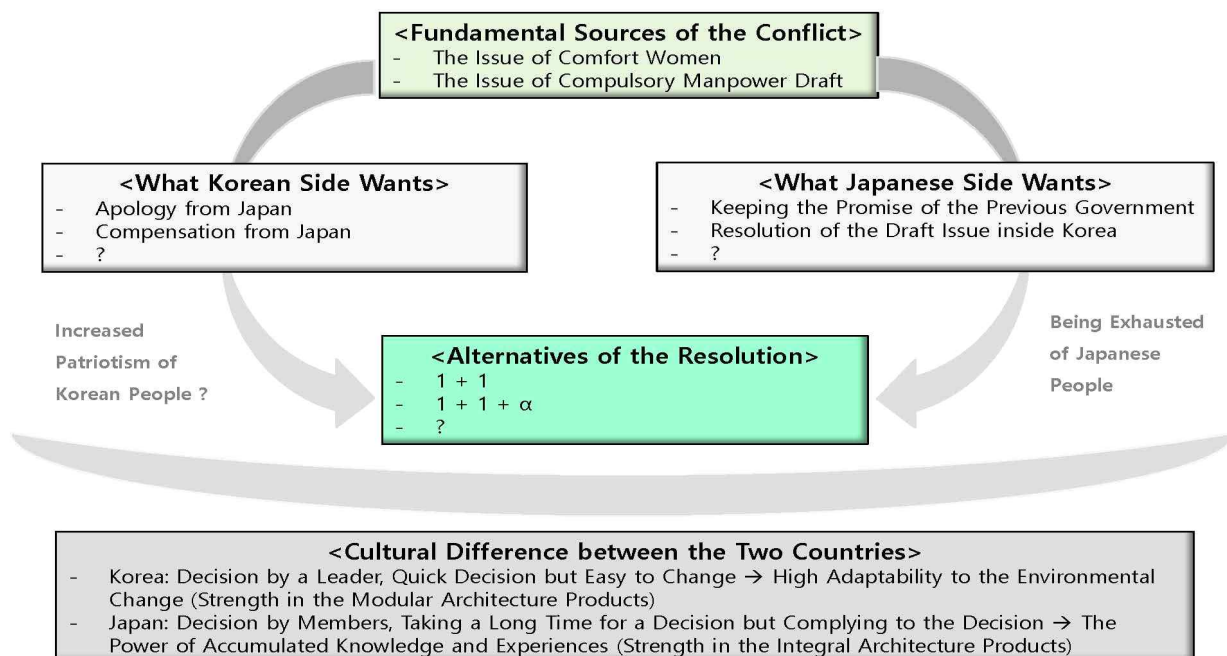


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- Cooperation between Korean and Japanese Firms
- → Business Success in the Global Market
- → Eventually Economic Success of Both Countries

5

Firstly, Resolving the Political Conflict



- Not Win-Lose Game but Lose-Lose Game
- So, Hoping for the Resolution of the Conflicts with Political Negotiation

6

Secondly, Enhancing the Cooperation between Firms

<Possible Policies for Enhancing the Cooperation>

- Finding and Diffusion of Success Cases of Cooperation between Korean and Japanese Firms
 - Study for the Success Cases
 - Diffusion of the Cases with Media and School Education
- Providing Cooperation Opportunities through Human Exchange Programs
 - Exchange Programs for the Marketing Cooperation as well as Technological Cooperation
 - Exchange Programs for Industry Associations and Eventually Firms in each Association
- Support for the M&A and FDI for Firms in Both Countries
 - Providing Information and Supporting Markets for M&A and FDI
- Exploiting Global Markets by SMEs through Cooperation between Firms in Both Countries
 - Utilizing the Network of General Trading Companies and Global Firms

7

Thank You !

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P·A·R·T

토론4

Changes in global strategy and trade structure for Japanese manufacturers

Junjiro Shintaku
(The University of Tokyo)



Changes in global strategy and trade structure for Japanese manufacturers

Junjiro Shintaku, Faculty of Economics, University of Tokyo

Japanese manufacturing, under pressure from trade friction and a strong yen, has shifted from its original export focused structure by relocating its industrial bases, and particularly its production functions, overseas. In the 1960s and 70s, Japan grew by relying on an export centered, advanced market model of exporting products made in Japan to affluent markets in Europe and North America. However, this model of development induced trade friction with its partners in each industry, with competition from Japanese exports causing particularly marked declines in US manufacturing. The resulting trade friction eventually led to negotiations between the Japanese and US governments and the adoption of voluntary restraints on exports. Trade friction between Japan and the US occurred repeatedly as Japan's exports moved from textiles in the 50s, to steel in the 60s, to color TVs in the 70s, and then to automobiles and semiconductors in the 80s. Amidst this background of trade friction, the 1985 Plaza Accord was reached to allow the value of the yen to appreciate internationally, which resulted in a rapidly strengthening currency.

Such trade friction and the strong yen spurred Japanese businesses to relocate their production bases overseas. At the time, advanced markets were still the main target markets for Japanese firms, resulting in a shift to an “overseas production/advanced market” export model for Japanese firms. At this time there were two types of overseas production. The first type was largely motivated by trade friction, and involved building of overseas production bases in large markets in Europe and North America for automobiles etc. In contrast, the second type of relocation was largely a cost motivated strategy spurred by the strong yen, and involved export to advanced markets of electronics etc. from regions with lower labor costs, including ASEAN and China.

After the financial crisis of 2008, Japan's traditional markets in Europe and North America suffered a rapid contraction in their economies, while emerging markets like China and India have shown steady growth. In light of these new circumstances, Japan has been switched from the “overseas production/advanced market” model to an “overseas production/emerging market model” as the basis of its growth in the future.

In particular, seeing trade structure in East Asia, Korea and Taiwan are also both major export destinations for Japan and Japan has a large surplus in its trade with Korea and Taiwan. Although this trend weakened slightly during 2019-2020, the trade relationship has changed little overall. At the same time, trade between Korea/Taiwan and China has shown extremely rapid growth. However, currently, Japanese firms are once again under pressure to revise their supply chain strategy in response to environmental fluctuations such as Covid 19.

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토론5

KAIB-JAIBS Joint Symposium
September 5th 2020

Takeshi Ohtowa
(Kanto Gakuin University)



KAIB-JAIBS Joint Symposium September 5th 2020

Takeshi OHTOWA
(Kanto Gakuin University)

Trade is not possible unless peace is maintained. Silence trade was the wisdom to avoid conflict which has been in practiced since long time ago. Trade is a transaction that transcend cultures, languages, currencies, payment methods, laws and business practice and overcomes geographical distances. In order to bridge the differences, internationally accepted terms such as Incoterms have become popular. In order to avoid risks, payment methods such as L/C, D/P and D/A, let alone marine insurance has been agreed and practiced worldwide. Trade has many factors that may increase transaction costs compared to domestic transactions, but nevertheless trade shows that there is a possibility that "profit" exceeding costs can be gained.

Regarding trade, various theoretical studies have been conducted and institutions have been established. However, we also know that each has its limitations. For example, the EU mentioned on its website:

The development of trade - *if properly managed* - is an opportunity for economic growth. So EU trade policy seeks to create growth and jobs by increasing the opportunities for trade and investment with the rest of the world.

We are witnessing its rapid development of World Trade System from GATT after the World War II until nowadays WTO. However, it is a fact that it is not functioning as it supposed to be. This is nothing but the loss of the WTO's basic principles of non-discrimination and liberalization. It is also a departure from the international discipline and rules of not overly intervening in the private sector. Member countries have built up a range of disciplines and rules, from trade in goods to trade in services, to investment protection and intellectual property protection. This international discipline or rule is to prevent excessive restrictions on international trade and trade activities due to regulations such as domestic law, which is the structure of international law.

Beginning with 19 GATT members in 1948, today there are more than 160 participating countries in the WTO. However, during this period, various regional trade agreements, including the FTA, have been concluded between countries.

Under such circumstances, China who has adopted the "socialist market economy" joined the WTO in 2001. After joining the WTO, China's economic growth is even more remarkable. However, in recent years, trade dispute between China and the U.S. becoming escalated and has advanced into the trade war.

Since 2013, China has been focusing on deepening the influence of the concepts, logics, values and ideologies contained in its own discussions and discourses on the international community. This leads to the view that the ultimate goal is to infiltrate the world with a value standard that replaces the universal value of the West (Naoko ETO: 2017). This goal would create a discrepancy with international disciplines and rules, such as the WTO Agreement. It may create disparities in values between nations and may lead to the disintegration of international rule and standards. In other words, this situation may be implied of an

unpeaceful situation, where trade may no longer viable then. There are conflicts and crises over narrative control.

I would like to hear opinions from the panel and the floor regarding this awareness of issues and to deepen discussions about its future development.

P·A·R·T

토론6

**Collaboration of Japan and
Korea in the areas of
product architecture
framework**

박영원
(The University of Tokyo)



Collaboration of Japan and Korea in the areas of product architecture framework

YoungWon PARK, Faculty of Economics, Saitama University/University of Tokyo

The competitive business environment of the 21st century reflects enormous change with the transition from analog to digital generation. Open supply chain in digital generation has transformed the global business environment into borderless world. The embedded mechanisms in all products using semi-conductors and software control impacted firms to adopt their product architecture from integral to modular type. Such architectural change is in a sense the primary change agent for the economic system from closed specialization to open collaborative internationalization.

Particularly, in the areas of product architecture framework Japanese firms focused their strategic attention on closed-integral industries (e.g., automobiles and electronics). At first Japanese firms applied integral architecture for their electronic products which are now manufactured by open-modular product architecture. Korean firms thus were able to accomplish rapid catch up for the open modular electronic products. Yet, in the areas of products that use closed integral architecture, the product development patterns still use analogue elements. In contrast, open modular architecture has very short product life cycle and speed is quite critical in their product development. Korean firms constructed organizational structure and decision-making processes that fit to this open modular and speed-based product and processes. This is what might explain how Korean firms have attained competitive advantage in the global market during 1990s-2000s.

Japanese firms value technological capability-based strategy while Korean firms focus on building brand value strategy based on open modular products. On the other hand, Korean firms build their competitive advantage by utilizing leadership styles and management systems that achieve a broad range of differentiation in terms of design, functionality by market segment and timely product introduction and IT integration that facilitate effective global SCM strategy implementation. In other words, the Korean growth mechanism is characterized by rapid investment decision making and organizational execution capability through cross-functional integration of product planning, development, manufacturing and marketing for global market expansion. Global learning effect is also achieved through integrative information system that standardizes product development, manufacturing, marketing and distribution.

In the digital transformation era, it is highly probably that even the current closed-integral architectural products may evolve into more open-modular architectural products. Global automobile manufacturers will adopt more open modular architecture as they produce more electrical cars with rapid digitization in the innovation processes. In this case, it is critical to understand and respond with the rapid product development and delivery in the global scale according to the changing customer requirements. Korea and Japan should collaborate mutually with comparative advantage of product architecture in the age of digital transformation.

P·A·R·T

토론7

**Expectations for future foreign
direct investment (FDI) and
human resource management
(HRM)**

**Mitsuhide Shiraki
(Waseda University)**



これからの海外直接投資と人的資源管理面での期待

国際ビジネス研究學會會長、早稻田大學教授

白木 三秀

今回のフォーラムの大きなテーマが「日韓の貿易摩擦の影響とその解決策」ということです。「貿易摩擦」は主に政治的、社会的な問題がその根源にあり、1970年代、80年代の「日米貿易摩擦」では政治的、制度的決着という長い道のりを必要としました。今回も同様にかかりの時間を要する問題かもしれません。そういった状況の中で、このような民間交流・学術交流を継続することには重要な意義があると思っております。

私のような多国籍企業やその人的資源管理を研究している者からの議論はかなり「貿易摩擦」の議論からは外れているかもしれませんが、以下のように考えております。このように両国の政治対立があると、双方の海外直接投資ならびに人的資源の交流が少なくなり、別の地域に向けられる傾向が促進されるかもしれないということです。

日韓ともに、人口が減り、国内市場の成長可能性が狭まる中、投資が海外に向けられることはやむを得ない面もあります。実際にもそのような動きが、中国やベトナムなどの地域への直接投資という形で起こっています。韓国の大メーカーが中国やベトナムなどに大きな投資を行いますと、サプライヤーである日本の素材メーカーも韓国での投資を控え、別の国に投資を行っていき、人材も同様に動いていくことが十分に考えられます。

HRMの観点では、在韓日系企業に蓄積された人材が、日本の素材メーカーの本社やベトナム拠点などへの移動ができない場合には、韓国国内で転職が余儀なくされ、人的資源の喪失につながらざるを得なくなるかもしれません。

これまでの国際人的資源管理の研究から1点だけ、指摘させていただきます。在韓日系企業における人材構成上の特徴は、設立当初からトップ・マネジメントは韓国大企業で育成された人材を据えるという形で、90%以上の企業が運営されてきました。そうでないと、おそらく順調に経営ができなかったからだと思われます。しかし、これは世界のオペレーションの中では例外中の例外です。今後は、日本本社人事のグローバル化がより進展し、韓国内部で蓄積された人材が日韓を頻繁に往来し、国籍を超え、適材適所でトップへの内部昇進が期待できる、長期的で安定的な経営が求められますし、またそれが可能になるような社会、経済的な環境の構築を期待したいと思います。

Expectations for future foreign direct investment (FDI) and human resource management (HRM)

President of JAIBS and Professor of Waseda University
Mitsuhide Shiraki, Ph.D.

The major theme of this forum is "The impact of Japan-Korea trade friction and its solutions". "Trading friction" has its roots mainly in political and social problems, and in the 1970s and 1980s "the Japan-US trade friction" required a long road of political and institutional settlement. This too may be a far to go problem as well. Under such circumstances, I think it is important for us to continue such private and academic exchanges.

Though the discussions from people like me, who have been studying multinational corporations (MNCs) and their HRM, may deviate considerably from the "trade conflict" argument, but I will show some of my ideas as follows. This political confrontation between the two countries may reduce the amount of FDI and the exchange of human resources (HR) between the two countries, and it may promote the tendency the change of direction of FDI and HR toward other regions.

In both Japan and South Korea, as the population declines and the growth potential of the domestic market shrinks, it is inevitable that investment will be directed overseas. In fact, such FDI moves are taking place in regions such as China and Vietnam. It is fully conceivable that if large Korean manufacturers make large investments in China, Vietnam, etc., Japanese raw material manufacturers/suppliers also refrain from investing in South Korea and invest in those countries, and the HR move accordingly.

From the perspective of HRM, if the HR, which have been accumulated in Japanese subsidiaries in Korea, cannot move to the headquarters of Japanese material manufacturers or Vietnamese/Chinese operations, it may be unavoidable that they will be forced to change jobs and in the end resulting in the loss of HR in Korea.

I would like to make one point from my research on international HRM. A characteristic of the HR composition of Japanese subsidiaries in Korea is that more than 90% of the companies have been operated since the establishment, with top management being Korean HR developed by large Korean companies. If they are not Koreans, it is probably because the subsidiaries there couldn't be run smoothly. But this is an exception in the worldwide operations of Japanese MNCs. Hereafter, the globalization of HRM at the Japanese corporate headquarters will progress further, and the HR accumulated within South Korea will frequently come and go between Japan and Korea. Then, the stable management in the long run is required. I would like to expect the construction of a social and economic environment that enables this.